

Gokhale Education Society's  
**Krishi Vigyan Kendra, Kosbad Hill, Dist. Thane (MS)**

The Gokhale Education Society, a pioneer organization in Maharashtra started the Krishi Vigyan Kendra with the initiation of the Indian Council of Agricultural Research, New Delhi at Kosbad Hill Taluka: Dahanu Dist: Thane on 1st April 1977. This is the first Krishi Vigyan Kendra Started in Maharashtra. The Krishi Vigyan Kendra, Kosbad Hill established to meet the challenges in the sector of agriculture and allied subjects and transfer and application of agricultural technologies.

During the year 2015-16, KVK selected 2 villages namely Ganje of Palghar tehsil for the implementing agricultural activities. KVK identify their resources, problem of farming community by using PRA survey method and interaction of farmers. On the basis of this survey the training needs of farmers, farm women, rural youth and extension workers have been identified on the basis of information provided by the concern department and analyzing their job charts.

Highlights of the achievements are given below.

**1. Training programmes:**

The training needs collected during the village survey were analyze and categories on the basis of its priorities. As per the need of farmers 173 training programmes were organized ON and OFF campus and the total participants were 4418, among them 3605 were belongs to ST category. 58 & 10 training programmes organized for rural youth & extension functionaries respectively. There 1453 rural youth & 271 extension functionaries were benefited. Among them 1375 and 106 were the ST categories respectively. The training programmes organized for rural youth on the basis of their self employment generation.

**2. Sponsored training programme:**

There were 11 courses organized for practicing farmers during the year 2015-16. The total participants were 1461. Among them 1272 were belong to ST category. These programmes were sponsored by ATMA, Department of Agriculture etc. The training programmes organized on rice production, Bengal production, groundnut production, vegetable production, IPM in mango, back yard poultry, vaccination in poultry and training & exposure visit, PHT in vegetable etc.

### **3. Extension activities:**

Community participation is key for development of agriculture in Thane & Palghar district. The transfer of technology is effectively success if it is done collectively and cooperatively to the rural masses. To achieve this goal KVK has given more emphasis on extension activities. During this reporting year KVK successfully conducted 06 field days, 10 kisan *goshtis*, 01 Agril. Exhibitions, 04 agricultural video films, 12 group meetings, etc. KVK also organized 01 agriculture technology week during 29<sup>th</sup> September to 03<sup>rd</sup> October 2015 on rice, vegetable and fodder production technologies.

### **4. Other extension activities:**

KVK provide knowledge to the farmers through 18 radio & 12 TV talks, 37 popular articles including success stories published in various renowned news paper, provide 32 SMS having agricultural technology to cater their problems. Various days also organized by KVK namely World Food Day, World Women Day, Agriculture Day, World soil day etc on those particular themes.

### **5. Front Line Demonstrations:**

#### a) Oilseeds:

During kharif 2015 the FLD on Niger was conducted at Dehere & Korhtad Village of Jawhar Tehasil, The Niger Var. Phule Karla demonstrated at 05 ha. The 12 farmers were participated in this important demonstration. The variety of Niger Phule Karla gave 31.88% increase in yield over local check.

During summer 2015-16 FLD program on groundnut oil seed was conducted on 10 ha. of 25 farmers field at Peth village of Dahanu Tehasil.

#### b) Pulses:

During rabi 2014-2015 FLD program on pulses was under taken on 10 ha. of 25 farmers field at Sange, Nane villages of Wada tehsil under irrigation situations. The Bengal gram variety Vijay and well managed practices gave 77.77 % increase in yield over the local variety.

### **6. Front Line Demonstrations other than oilseed & pulses:**

Front line demonstrations other than oilseeds and pulses were also conducted in various crops like Rice, Finger millet, etc. The rice variety, Karjat- 3 and hybrid var. Sahyadri – 2 were demonstrated at 05 & 2 ha area, of 25 & 05 farmers field which gives 31.22 % and 33.85 % increase the yield respectively over local variety during kharif season. In case of Finger millet, Var. Dapoli – 1 demonstrated at Mokhada tehsil in 05 ha areas of 12 farmers field which gives 7.75% increase the yield over local variety.

The demonstration of IPM on rice shows that the pest incidence has been reduced at 15% and increases the yield up to 12.80 % by IPM. The demonstrations of IPM on sapota, Management of

Eriophyide mite in Coconut and Control of Rhinoceros beetle and Red Palm Weevil in Coconut shows that the yield increase 21.08% and 25.55%. The FLD on INM in rice gives 13.97 % increase the yield over local check. The demonstration of use of green manure crop in paddy field resulted in 14.40 % increase the yield over the local check.

Regarding FLD in Kisan Cooker, saved fuel consumption up to 36%, time saved 42.32% and cost save up to 35.42% over local method.

In case of Bhendi cutter demonstration, harvesting period and labour requirement saved upto 75% and 34% respectively.

Regarding Back yard poultry keeping demonstration resulted in increased body weight & egg production as compared to local breed.

## **7. Assessment of technology:**

Assessment of technology is the important mandate of KVK. The recently released Karjat -8 variety of rice were assessed by KVK which gives yield about 35.10 qtl/ha while local check variety of rice gives 31.60 qtl/ha i.e. 11.07% increased in yield over local check.

Regarding the assessment of management of sweet potato weevil, application of melathion as a set dipping treatment, spraying & soil application of *Beaveria basiana*@ 6.75 Kg/ha. It resulted in reduced infestation of above pest and increased yield 18.96%.

The assessment of mmanagement of anaemia in tribal toddlers results showed that use of low cost weaning food (nutrimix laddu ) increase the height and weight of the tribal toddler by 4.5% & 2.5 % respectively.

To cater the mortality problem in chilli seedling KVK assessed the technology of raising chilli seedlings in Pro tray resulted in increase the germination percentage upto 97%. It reduced seed rate by 31.25%. Also observed early peeking by 10 days and increase the yield by 8.5% over local method.

Assessment of improvement of soil fertility through green manure crop, sunhemp results to increase the paddy yield by 27.66%. It also increases the organic carbon percentage from 0.38 to 0.42. The results of assessment of nutritional management in poultry shows that reduced 10% feed cost by using ideal protein based Concentrate broiler feed along with Azolla.

## **Significant achievements of KVK Thane (2015-16)**

3. During 2015-16, KVK had conducted 204 training programme and trained 4791 farmers, rural youth and extension Personnel in agriculture and allied fields.
4. KVK had conducted large number of extension activities benefiting about 5659 farmers and other end users.
5. KVK had produced more than 53 qt. of rice seeds and 6,667 saplings/seedlings/livestock strains, besides various bio-products for availability to the 461 farmers.
6. By the efforts of KVK interventions 17 tribal farmers were became “Horticulturists”. Those tribal farmers were marginal farmers and agriculture labour. Now they have developed Sapota and mango orchard. They get regular cash income through sale of the fruits, which has improved their purchasing power. The tribal families get year round gainful employment on their lands.
7. During the year 2015-16, KVK conducts vocational training programme for rural youth on nursery, poultry, goatery and processing.
8. KVK gives more emphasis towards women empowerment through formation of Self Help Group. KVK formed 20 SHGs in Thane district under ATMA programme. Among them 05 SHGs were started enterprises with the financial assistance from lead banks.
9. KVK Kosbad Hill has been developed model of nutrition garden which consist vegetable having nutritional value, such as Brinjal, Bhendi, Cucurbits, Leafy Vegetable etc. are grown Tribal farmers having one or two gunthas upland can cultivate vegetable in Kharif season. They have also grown annual fruits crops such as Banana, Papaya, Hatga, Drumstick etc. The consumption of fruit and vegetable in their daily diet help to reduce malnutrition & earn some money by selling of excess fruits and vegetables.
10. Introduction of rainfed tuber crops like sweet potato, Yam bean, greater yam, an elephant foot in remote places of Mokhada, Jawhar, Dahanu, Talasari, Vikramgad and Vasai tehsils of Thane district to get nutritive food during the scarcity.
11. KVK has been formed 10 farmers group for the organic farming with the help of State Agril department.
12. Soil and nutrients management is the key for sustainability of the soil fertility and productivity. Considering the importance as well as the demand of the farming community the Soil & water testing laboratory has been started in 2005-06 in the KVK. 1012 soil samples & 112 water samples analysed from 60 villages of 998 farmers in year 2015-16.

13. The KVK introduced dual purpose poultry breed, known as RIR and Vanaraja which thrives well in high rainfall tract and can be reared in free -range system. In both aspects, these breed is superior to local breed. This KVK conducted back yard poultry programme in which up gradation of local birds in RIR and Vanaraja by distributing male birds and eggs in adopted villages.
14. KVK has been changed attitude of traditional framers towards the commercial chilli production technology. The farmers are grown chillies in protective cultivation by using shadenet house. The shed net house is important for increased yield potentialities of green chillies by reducing light intensity and incidence of pest and diseases. So that the farmers getting higher yield of green chillies and increased C: B ratio (ICBR) was 1: 3.5.
15. We are well known about the importance of wild date palm in tribal hilly areas. KVK has been changed attitude of tribal farmers towards the scientific cultivation of wild date palm and tapping of *Nira*. KVK had supplied 250000 wild date palm plants to farmers throughout Maharashtra state.
16. KVK has been organized Farmers study tour at Anand Agril. University, Gujarat State, for getting latest technical knowledge about dairy enterprise with the financial assistance of ATMA, 20 farmers were participated in study tour.
17. KVK had formed 17 farmers club to disseminate the agricultural technology towards the farming community at faster rate.
18. KVK had published leaflet on Sweet potato production and Bee keeping for pollination.
19. KVK has established Agriculture Technology information Centre to get the agricultural technology to the farmers, rural youths and extension functionaries at one time and one place.

## ANNUAL REPORT – 2015-16

### 1. GENERAL INFORMATION ABOUT THE KVK

#### 1.1. Name and address of KVK with phone, fax and e-mail

Address	Telephone	E mail	Website
Gokhale Education Society's Krishi Vigyan Kendra, Kosbad Hill At & Post : Kosbad Hill, Tal. Dahanu, Dist. Thane Pin 401 703	-      -	kvkkosbad439@gmail.com	www.kvkthane.com

#### 1.2 .Name and address of host organization with phone, fax and e-mail

Address	Telephone		E mail	Website
	Office	FAX		
Gokhale Education Society Prin. T. A. Kulkarni Vidyanagar, H. P. T. College, Nashik Pin: 422 005	-	-	gokhale_nsk@sancharnet.in	

#### 1.3. Name of the Programme Coordinator with phone & mobile No

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr. S. D. Nalkar		09890577525	samnalkar@gmail.com

#### 1.4. Year of sanction: 1977

### 1.5. Staff Position (as on 31<sup>st</sup> March, 2016)

Sl. No.	Sanctioned post	Name of the incumbent	Designation	Discipline	Pay Scale (Rs.)	Present basic (Rs.)	Date of joining	Permanent /Temporary	Category (SC/ST/OBC/ Others)
1	Programme Coordinator	Dr. S. D. Nalkar	Programme Coordinator	Dairy Science	37400-69000	49240	21/01/2014	Permanent	Open
2	Subject Matter Specialist	Shri. V.M. Jadhav	Subject Matter Specialist	Agril. Extension	15600-39100	29370	22/08/2002	Permanent	SC
3	Subject Matter Specialist	Shri. B. M. Kushare	Subject Matter Specialist	Agronomy	15600-39100	26630	06/10/2007	Permanent	Open
4	Subject Matter Specialist	Shri. U.G. Sahane	Subject Matter Specialist	Agril. Entomology	15600-39100	25090	24/08/2009	Permanent	Open
5	Subject Matter Specialist	Mrs. R.A. Deshmukh	Subject Matter Specialist	Home Science	15600-39100	24350	05/07/2010	Permanent	Open
6	Subject Matter Specialist	Mrs. A. D. Divate	Subject Matter Specialist	Agril. Engg (Processing)	15600-39100	22280	17/01/2014	Permanent	SBC
7	Subject Matter Specialist	<b>VACANT</b>	Subject Matter Specialist	Horticulture	-	-	-	-	-
8	Farm Manager	Shri. N.J. Choudhari	Farm Manager	-	9300-34800	27750	06/09/1984	Permanent	Open
9	Programme Assistant	<b>VACANT</b>	Programme Assistant	Horticulture	-	-	-	-	-
10	Programme Assistant	Shri. A.K. Bhoir	Programme Assistant	Soil Science	9300-34800	15670	01/10/2010	Permanent	ST
11	Accountant / Superintendent	Sou. M.R. Bhangе	Superintendent	-	9300-34800	25190	06/09/1984	Permanent	SC
12	Computer Programmer/steno	Shri. R.P. Bari	Stenographer	-	5200-20200	17270	02/11/1984	Permanent	OBC
13	Driver	Shri. S.R. Dhak	Driver	-	5200-20200	11090	01/08/2006	Permanent	ST
14	Driver	<b>VACANT</b>	Driver	-	5200-20200	-	-	-	-
15	Supporting staff	Shri. Deepak S. Wangad	Messenger	-	5200-20200	7000	01/08/2015	Permanent	ST
16	Supporting staff	Shri. Rajesh Ale	Attendant	-	5200-20200	6500	01/08/2015	-	ST

**1.6. Total land with KVK (in ha)** :

S. No.	Item	Area (ha)
1	Under Buildings	1.50
2.	Under Demonstration Units	9.50
3.	Under Crops/ Agro forestry	8.00
4.	Others	1.00
	<b>Total</b>	<b>20.00</b>

**1.7. Infrastructural Development:**

A) Buildings

S. No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Date	Plinth area (Sq.m)	Expenditure (Rs.)	Starting Date	Plinth area (Sq.m)	Status of construction
1.	Administrative Building	ICAR	1993	600	17,00,000/-	-	-	-
2.	Farmers Hostel (Women)	ICAR	1980	360	1,66,000/-	-	-	-
3.	Farmers Hostel (Man)	ICAR	1995	340	7,00,000/-	-	-	-
4.	Staff Quarters (6)	ICAR	1982	390	2,52,000/-	-		
5	Demonstration Units (2)	ICAR	1994	100	60,000/-			
6	Fencing							
7	Rain Water harvesting structures	ICAR	2007	20 ha	8,40,000/-			
8	Threshing floor	-	-	-	-	-	-	-
9	Farm godown	-	-	-	-	-	-	-

**B) Vehicles**

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Jeep (Bolero)	2008	7,00,000/-	1,63,699	Working condition
Power Tiller	1980	22,870/-	3453 hrs	Not in Working condition
Tractor (Mahindra)	1993	1,71,850/-	1367 hrs	Working condition
Motorecycle (Rajdoot)	1993	28,000/-	49592 kms	Not in working condition

### C) Equipments & AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
Video Camera Sony	1997	52,000/-	Working condition
Fax Machine	2008	8,000/-	Working condition
TV BPL Colour	1993	20,150/-	Working condition
Slide Projector	1992	13,350/-	Not in use
Computer Set with Printer (Under NATP)	2000	1,00,000/-	Not in working condition
Spiral Binding Machine	2005	4,500/-	Working condition
LCD projector	2006	1,00,000/-	Working condition
Overhead Projector	1992	12,3000/-	Not in working condition
Camera Nikon Fm2 SLR	1997	13,400/-	Not in working condition

**1.8. A). Details SAC meeting\* conducted in the year**

Sl.No.	Date	Name and Designation of Participants	Salient Recommendations	Action taken
1.	05/09/2015	Dr. S. Sudhakar, Project Director, ICAR- ATARI- zone V	KVK should conduct integrated farming system programme in tribal areas. KVK should form Tribal youth Network for their technology dissemination as well as entrepreneurship development programme	KVK conducts demonstrations on integrated farming system in tribal areas. KVK had conducted such type of demonstrations in Ganje, the adopted village of KVK. Mr. Subhash Jadhav resides at Ganje, who is doing integrated farming system which is model for other tribal farmers. KVK has been formed 'Tribal youth Network' for the technology dissemination at faster rate.
		Dr. Rajendra Reddy, Sr. Scientist, ZPD, Hyderabad	KVK should organize bee entrepreneur meeting to solve their problems	KVK had organized Bee keeping workshop at our campus. 70 bee entrepreneurs were participated in respective workshop. Shri. Rahul Sawant, Director, addressed about the success in bee keeping enterprise. Farmers were also interacted with him so that they solved their problems regarding bee keeping.
			KVK should organize demonstrations of groundnut on plastic mulch	KVK conducted demonstrations on plastic mulch
			KVK should have orchard of custard apple on instructional farm.	KVK had established orchard of custard apple on 0.35 ha areas of instructional farm with high raise bed technology and drip irrigation.
			KVK should conduct demonstrations on hydroponic system.	KVK had conducted 02 demonstrations on fodder production by hydroponics technology.
2		Dr. L. S. Chavan, Associate Director of Research, DBSKKV, Dapoli	KVK should develop strong linkages to the line department	KVK has been developed a strong linkages to line department for conducting training & demonstration programmes as well as to get funds for ATMA programme.
			KVK should develop one farmer from adopted village with adoption of integrated technologies.	KVK adopted 20 famers from Ganje, Tal. Palghar, Dist. Palghar an adopted village & intervened integrated technologies like rice production, vegetable production, back yard poultry, fodder production, Dairy technologies, jasmine production etc.
			KVK should supply	KVK has been distributed RIR,

			improved poultry birds in tribal areas.	Vanaraja, Giriraj, Kadaknath poultry birds in tribal areas of Thane district. 1000 poultry birds were distributed in such areas for the upgradation of local poultry birds. 125 tribal farmers were participated in backyard poultry keeping programme.
		Dr. L. S. Chavan, ADR, RRC, Karjat, DBSKKV, Dapoli	KVK should promote tribal farmers for using high yielding improved and hybrid varieties of vegetables	KVK had promoted tribal farmers of Palghar district towards Chilli production, Capsicum production and other cucurbitaceous vegetables production by using their high yielding improved and hybrid varieties of vegetables.
			KVK should conduct demonstration on use of plastic mulch in vegetable production for their increase yield.	KVK had conducted demonstrations on vegetable production by use of plastic mulch technology.
3		Shri. Sanjay Waghmode, Range forest Officer, Forest Department, Bordi	KVK should provide resource person on PRA survey	KVK had provided SMS Extension to conduct PRA survey of selected 02 villages from Forest department for their Green India Mission. SMS Extension also prepared their survey report and sent it to forest department for further procedure.
4		Shri. Raghu Ehad, TAO, Dahanu	KVK should participate the Vegetable kit programme is to be implemented by Agril Department to the SHGs.	KVK has been participated Vegetable Kit programme to the SHGs formed by KVK during the month of June 2014. There were 06 SHGs benefited. Vegetable Kit were provided by Agril Department as well as KVK
			KVK should develop Farmers group & it should be registered in ATMA	KVK has formed 10 farmers group & registered in ATMA
5		Mr. D. A. Gholap, District Soil Survey & Soil Testing Officer, Thane	KVK should submit proposal for micro nutrient testing by A. S Machine (Atomic Absorbtion Unit).	KVK has been submitted proposal for for micro nutrient testing by A. S Machine (Atomic Absorbtion Unit) at District Soil Survey & Soil Testing Office.
6		Dr. V. R. Mahakal, Assistant Animal Husbandry Officer	KVK should organize demonstrations on high nutritive fodder crop varieties.	KVK had demonstrated high nutritive fodder crop varieties like Phule Jaywant, BDN -16, etc.
7		Smt. V. V. Patil, Agril, Extension Officer, Panchayat sammitti, Dahanu	KVK should provide resource person on IPM & INM of rice, chill, etc	KVK had provided SMS Entomologist & Horticulturist as a resource person in various training programme organized by Agril. Department, panchayat samitee.

## **2. DETAILS OF DISTRICT (2015-16)**

### **2.1 Major farming systems/enterprises (based on the analysis made by the KVK)**

<b>S. No</b>	<b>Farming system/enterprise</b>
1	Rainfed – Rice -- & Nagli
2	Rainfed – vegetable production on upland and hilly slope
3	Irrigated – Rice – Chilli/ tomato/ brinjal, Sapota, Coconut
4	Dryland Horticulture – Mango, cashew
5	Partial irrigated – Rice – Rice, Rice – Cow pea/ Bhendi
6	Residual moisture – Rice – gram, Rice – Field bean, Rice – sesamum

### **2.2 Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)**

<b>S. No</b>	<b>Agro-climatic Zone</b>	<b>Characteristics</b>
1	North Konkan Coastal zone	<ol style="list-style-type: none"><li>1. It is different on the coastal strip where it is very humid and warm.</li><li>2. The humidity ranges from 50 to 80 per cent throughout the year.</li><li>3. The temperature ranges from 17.5 to 33.30 degree Celsius. The district gets assured rainfall of 2000 – 3500 mm from the southwest monsoon during the month of June to September.</li></ol>

<b>S. No</b>	<b>Agro ecological situation</b>	<b>Characteristics</b>
1	Coastal region	Medium black soils with well irrigation
2	Middle Hilly area	Red trap soils and rainfed condition, mostly occupied by forest land
3	Hilly track	Shallow soils, with rainfed condition
4	Plain area	Medium black soils with rainfed conditions suitable for Kharif rice
5	Hilly area of red soils	Red soils with rainfed condition and partial irrigated and mostly covered by forest land

### 2.3 Soil type/s

S. No	Soil type	Characteristics	Area in ha
1	Black soil containing sand (vertisol)	The soils are fertile and suitable for paddy, vegetable, flowers and fruit cultivation. This type of soil present in Dahanu, Palghar, Vasai and Thane tehsil.	104600
2	Red soil (Latisol)	Found in eastern region, mostly on the slopes of Mokhada, Jawhar and Talasari tehsils. On these soils mainly nagli and vari crops are cultivated.	
3	Brownish black soils	Soils mostly observed in the patches of valley lying between the coastal plain and the hilly slopes of Bhivandi, Kalyan and Shahapur tehsil, which is suitable for paddy and watermelon cultivation.	

### 2.4. Area, Production and Productivity of major crops cultivated in the district

S. No	Crop	Area (ha)	Production (Qtl)	Productivity (Qtl /ha)
1	Cereals			
	i. Paddy	138000	303300 ton	28.17
	ii. Finger millet	16000	20200 ton	7.26
2	Pulses			
3	Udid ( <i>Phaseolus mungo</i> )	5100	35 MT	7.44
4	Bengal gram	3900	25 MT	6.77
5	Red gram	3400	13 MT	4.98
6	Total Pulses	16600	60 MT	6.25
7	Fruits and vegetables	33600		
8	Condiments and Spices	700		
9	Oilseed crop	4900	13 MT	4.68
10	Medicinal plant	300		
11	Grasses	177300		
12	Tuber crop	200		

## 2.5. Weather data

Sl. No	Meteorological week No	Rainfall (mm)	No. of rainy days	Temperature		Humidity (%)
				Maximum	Minimum	
1	01	0	0	20.0	27.8	70
2	02	0	0	19.0	26.5	68
3	03	0	0	19.0	25.9	65
4	04	0	0	19.2	25.9	65
5	05	0	0	19.0	25.9	65
6	06	0	0	21.5	27.8	64
7	07	0	0	23.5	29.4	63
8	08	0	0	24.6	31.6	63
9	09	0	0	25.0	37.0	62
10	10	0	0	28.0	37.0	62
11	11	0	0	25.3	37.4	63
12	12	0	0	28.2	37.3	63
13	13	0	0	27.0	37.6	65
14	14	0	0	28.7	37.9	65
15	15	0	0	27.2	37.1	64
16	16	0	0	29.0	38.1	66
17	17	0	0	30.2	38.4	67
18	18	0	0	31.2	39.3	70
19	19	0	0	32.3	39.4	73
20	20	0	0	33.1	39.7	75
21	21	0	0	34.2	39.8	76
22	22	14	01	29.5	35.5	78
23	23	72	03	28.6	32.0	82
24	24	167.4	05	28.4	30.5	85
25	25	7.3	03	25.5	30.5	87
26	26	8.6	03	26.1	30.1	92
27	27	19.9	03	26.1	30.0	92
28	28	438.5	07	25.8	30.0	90

	Meteorological week No	Rainfall (mm)	No. of rainy days	Temperature		Humidity (%)
				Minimum	Maximum	
29	29	154.1	06	25.8	29.7	90
30	30	29.09	05	24.8	30.0	90
31	31	50.3	07	25.0	29.8	91
32	32	22.5	03	25.8	30.0	91
33	33	86.5	06	25.8	30.0	89
34	34	19.4	04	25.2	29.5	88
35	35	39.9	04	25.1	29.6	86
36	36	123.6	04	25.0	28.3	87
37	37	63.3	02	25.2	29.1	89
38	38	0	0	25.3	29.6	85
39	39	0	0	24.8	29.0	84
40	40	0	0	26.5	29.5	85
41	41	0	0	24.5	33.5	83
42	42	0	0	26.3	32.4	81
43	43	0	0	26.3	32.5	80
44	44	0	0	26.7	32.8	77
45	45	0	0	26.4	33.1	77
46	46	0	0	26.4	33.1	76
47	47	0	0	25.6	32.5	75
48	48	0	0	25.8	33.6	75
49	49	0	0	23.0	29.5	74
50	50	0	0	22.0	29.0	74
51	51	0	0	21.5	28.5	73
52	52	0	0	21.5	28.5	73
	<b>Total</b>	<b>1340</b>	<b>66</b>			

(Source- [www.imdmumbai.gov.in](http://www.imdmumbai.gov.in))

## 2.6 Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
<b>Cattle</b>			
Crossbred	5000		
Indigenous	490352	186388	
Buffalo	213456		
<b>Sheep</b>			
Crossbred			
Indigenous	1084		
Goats	231199		
Pigs	8492		
Crossbred			
Indigenous			
Rabbits			
<b>Poultry</b>			
Hens			
<i>Desi</i>	1955179		
Improved			
Ducks	1735		
Turkey and others			

## 2.6 Fisheries

Category	Area	Production	Productivity
<b>Fish</b>			
Marine	112 km	59693 MT	532 MT/ Km
Inland	8600 ha	3100 MT	0.36 MT/ha
Prawn			
Scampi			
Shrimp			

## 2.6 Details of Operational area / Villages (2015-16)

Sl.No.	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Mokhada	Mokhada	Tulyachapada	Rice	Low yield of rice & unavailability of improved seed	Seed production village Use of improved varieties of rice and Nutrient management
2	Mokhada	Mokhada	Tulyachapada	Rice	Labour shortage at Transplanting	Direct seeded rice through Drum seeder
3	Jawhar	Jawhar	Korthad	Rice	Low yield of rice	Use of improved varieties of rice and Nutrient management
4	Palghar	Palghar	Ganje/ Dhekale	Rice	Lack of knowledge about INM	INM in rice
5	Palghar	Palghar	Ganje/ Dhekale	Rice	Lack of knowledge about IPM	IPM in rice
6	Palghar	Palghar	Ganje/ Dhekale	Rice	Losses of food grain due to store pests.	Storage of food grain
7	Mokhada	Mokhada	Mokhada	Nagli	Low yield of Nagli	Use of improved varieties of Nagli
8	Jawhar	Jawhar	Korthad	Niger	Low yield of Niger	Use of improved varieties of Niger
9	Jawhar	Jawhar	Jamsar	Niger	Low yield of Niger	Integrated Nutrient Management
10	Mokhada	Mokhada	Tulyachapada	Niger	Low yield of Niger	Use of improved varieties of Niger
11	Wada	Wada	Sange	Bengal gram	Introduction of New crop in village & Low yield of Bengal gram in Taluka	Use of improved varieties of Bengal gram
12	Wada	Wada	Nane	Bengal gram	Introduction of New crop in village & Low yield of Bengal gram in Taluka	Seed treatment
13	Wada	Wada	Nane	Bengal gram	Introduction of New crop in village & Low yield of Bengal gram in Taluka	Integrated Nutrient Management & Integrated Pest Management

14	Mokhada	Mokhada	Tulyachapada	Groundnut	Introduction of New crop	Polythene Mulch Groundnut Technology Use of improved varieties of groundnut and Nutrient management
15	Dahanu	Dahanu	Vangaon	Chilli	Low yield of chilli due to pest & diseases	Integrated Pest and disease Management
16	Dahanu	Dahanu	Dhanivare	Sweet potato	Low yield under rainfed condition	Use of improved varieties of sweet potato
17	Palghar	Palghar	Ganje	Mango	Low yield of local mango trees	Upgradation of local mango trees into improved varieties.
18	Dahanu	Dahanu	Bordi/Gholwad		Low yield due to the incidence of fruit fly	Management of fruit fly through trap
19	Dahanu	Dahanu	Bordi	Sapota	Low yield of sapota due to pest & disease incidence and old orchard	Rejuvenation of old sapota orchard
20	Dahanu	Dahanu	Gholwad	Sapota	Low yield due to pest & disease incidence	Integrated pest and disease management
21	Dahanu	Dahanu	Gholwad	Sapota	Lack of knowledge about application of micro nutrients	Application of micronutrients
22	Dahanu	Dahanu	Kosbad	Sapota	Getting low price of sapota fruits	Value addition in sapota fruits
23	Palghar	Palghar	Kelve	Coconut	Low yield & poor quality of nuts due to the incidence of Eriophyide mite	Use of IPM & INM practice to control the Eriophyide mite
24	Palghar	Palghar	Kelve	Coconut	Damage the crown of young & older palm due to Infestation of Rhinoceros beetle & weevil	Use of pheromone traps
25	Palghar	Palghar	Ganje/ Dhekale	Poultry	High cost of feed	Nutritional management by using Azolla

26	Palghar	Palghar	Ganje/ Dhekale	Poultry	Low weight and less egg production in poultry	Back yard poultry
27	Dahanu	Dahanu	Kosbad	Toddlers	Malnutrition in toddlers	Health improvement of toddlers
28	Palghar	Palghar	Ganje/ Dhekale	Vegetable cultivation	Improper balance diet	Nutritional garden

## 2.7 Priority thrust areas

Crop	Thrust area
Rice	Use of improved varieties of rice
	Seed treatment of rice
	Improved method of rice cultivation
	Integrated Nutrient Management
	Integrated Pest Management
	Storage of food grain
Nagli	Use of improved varieties of Nagli
Niger	Use of improved varieties of Niger
	Improved method of Niger cultivation
	Integrated Nutrient Management
Bengal gram	Use of improved varieties of Bengal gram
	Seed treatment
	Improved method of Bengal gram
	Integrated Pest Management
Ground nut	Use of improved varieties of groundnut
	Seed treatment
	Improved method of groundnut
	Integrated Nutrient Management
Chilli	Raising of seedlings
	Improved method of chilli cultivation
	Integrated Pest and disease Management
Cucurbitaceous vegetable	Improvement in vegetable production
	Integrated Pest and disease Management
Sweet potato	Use of improved varieties of sweet potato
	Improvement in sweet potato production
Mango	Upgradation of local mango trees into improved varieties.
	Management of fruit fly through trap
Sapota	Rejuvenation of old sapota orchard
	Integrated pest and disease management
	Value addition in sapota fruits
	Application of micronutrients
Coconut	Use of IPM & INM
Poultry management	Intensive poultry management
	Backyard poultry keeping
	Reduce feed cost by using Azolla meal to poultry bird.
Self Help group	Formation and functioning of SHGs
	Entrepreneurship development
Farmers scientist <i>manch</i>	Formation and functioning of farmers scientist <i>manch</i>
	Awareness about various government schemes

### **3. TECHNICAL ACHIEVEMENTS**

#### **3.A. Details of target and achievements of mandatory activities by KVK during 2015-16**

<b>OFT (Technology Assessment and Refinement)</b>				<b>FLD (Oilseeds, Pulses, Cotton, Other Crops/Enterprises)</b>			
<b>1</b>				<b>2</b>			
<b>Number of OFTs</b>		<b>Number of Farmers</b>		<b>Number of FLDs</b>		<b>Number of Farmers</b>	
<b>Targets</b>	<b>Achievement</b>	<b>Targets</b>	<b>Achievement</b>	<b>Targets</b>	<b>Achievement</b>	<b>Targets</b>	<b>Achievement</b>
07	08	60	97	15	17	225	252

<b>Training (including sponsored, vocational and other trainings carried under Rainwater Harvesting Unit)</b>					<b>Extension Activities</b>			
<b>3</b>					<b>4</b>			
<b>Number of Courses</b>			<b>Number of Participants</b>		<b>Number of activities</b>		<b>Number of participants</b>	
<b>Clientele</b>	<b>Targets</b>	<b>Achievement</b>	<b>Targets</b>	<b>Achievement</b>	<b>Targets</b>	<b>Achievement</b>	<b>Targets</b>	<b>Achievement</b>
Farmers	150	173	4000	4418	60	85	3000	7658
Rural youth	40	58	1200	1453				
Extn. Functionaries	06	10	200	271				

<b>Seed Production (Qtl.)</b>		<b>Planting material (Nos.)</b>	
<b>5</b>		<b>6</b>	
<b>Target</b>	<b>Achievement</b>	<b>Target</b>	<b>Achievement</b>
Rice Var. Karjat – 3: 30 qtl	33 qtl	Mango (Kesar) : 3000 grafts	2000
Rice Var. Karjat-7 : 14 qtl	15 qtl	Sapota (Kalipatti) : 2000 grafts	4000
Rice Var. Karjat-8 : 4 qtl	5 qtl	Rayan seedlings : 15000	10000
Niger (Phule Karala) - 0.5qtl	1.5 qtl	Wild date palm : 50000	10000
		Custard Apple : 2000	2500
<b>Livestock</b>			
Poultry birds (RIR, Giriraj, Vanraj) : 2000	2500 poultry birds		

### 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	Awareness of INM and IPM in rice	Rice	Lack of knowledge about INM and IPM in rice	-	IPM of rice	IPM in Rice	Pest & Disease management	Demonstration IPM, Field day	Pheromen traps for Rice stem borer
2	Use of improved varieties of Rice	Rice	Low yield of Rice	-	Introduction of Karjat-3 varieties of Rice+ NM	Rice production	-	Field day	Seed of variety Karjat-3
3	Use of improved varieties of Rice	Rice	Low yield of Rice	-	Introduction of Karjat-7 varieties of Rice+ NM	Rice production	-	Field day	Seed of variety Karjat-7
4	Direct seeded rice	Rice	Unavailability of labour & delay transplanting		Direct seeded rice through drum seeder	Direct seeded rice through drum seeder	-	Field day	Drum Seeder, Var- Karjat -7 & Weedicide
5	Use of improved varieties of Rice	Rice	Low yield of Rice	Introduction of Karjat-9 varieties of Rice		Rice production	-	Field day	Seed of variety Karjat-9
6	Use of improved varieties of Niger	Niger	Low yield of Niger	-	Introduction of Phule Karala varieties of Niger + INM	Niger production	-	Field day	Seed of variety Phule Karala

### 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.
7	Diversification of Crop Introduction of New crop Groundnut in village	Groundnut	& Low yield of Groundnut in district	-	Introduction of new crop & Method.Poly mulch Groundnut Technology( variety TAG – 24 )	Polymulch Groundnut Technology	-	Field day	Polymulch,Seed of variety TAG-24
8	Changing Cropping Pattern Rice-Fallow to Rice-Bengalgram	Bengal gram	Low yield of Bengal gram in Taluka	-	FLD on Bengal gram Variety + IPM	Bengal cultivation	-	Field day	Seed of variety Digvijay + IPM inputs
9	Up gradation of local trees like mango into improved varieties	Mango	Low yield of mango	-	-	Upgradation of mango trees by side grafting and patch budding respectively	-	-	Scion of Var. Kesar & Alphanso

### 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.
10	Low yield of paddy because of pest incidence	Rice	Loss of yield due to Insect pest	-	Rice IPM	Insect pest management in rice	IPM in rice	Demonstration & Field day	Pheromone trap
11	Low quality of nuts in coconut due to Eriophyide mite	Coconut	Loss of nut	-	Control of Eriophyide mite in coconut	IPM & INM technology to control Eriophyide mite in coconut	IPM & INM in coconut	Demonstration & Field Day	Micronutrients
12	Loss of yield due to Rhinoceros beetle	Coconut	Loss of yield & tree mortality	-	Control of Rhinoceros beetle	Use of IPM Technology & Installation of trap	-	Demonstration & Field Day	Aggregation trap
13	Damage of wild date palm by Red palm weevil	Wild date palm	Damage & mortality of tree	-	Control of Red palm weevil	Use of IPM Technology & Installation of trap	-	Demonstration & Field Day	Aggregation trap
14	Loss of yield in Sapota due to insect pest and disease	Sapota	Loss of fruits due to insect & Disease	-	IPM in Sapota	IPM technology	-	Demonstration & Field Day	-

### 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.
15	Improvement in vegetable production	Cucurbitaceous vegetable	Low productivity due to local variety for cultivation.	-	-	Plant protection measures in vegetable cultivation	-	-	-
16	Rejuvenation of old orchards	Sapota	Low yield of sapota	-	Rejuvenation of old sapota orchards	Rejuvenation of old sapota orchards	Rejuvenation of old sapota orchards	Demonstrations on Rejuvenation of old sapota orchards	-
17	Improvement in Sweet potato production	Sweet potato	Low yield due to local variety	-	-	Cultivation of sweet potato	-	-	Cuttings of sweet potato var. Ashwini
18	Intensive poultry management	Poultry	Local poultry birds are low producing and vulnerable to epidemic diseases	-	-	Intensive poultry management	-	-	-
19	Improvement in poultry production	Poultry	Lack of knowledge of poultry diseases and vaccination	-	-	Proper vaccination programme	-	-	-

### 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.
20	Reduce feed cost by using Azola meal to poultry bird.	Poultry	High feed consumption cost	Nutrition management in poultry	-	-	-	-	-
21	Integrated Pest Management in Chilli	Chilli	Low yield due to severe infestation of Thrips	-	-	-Use of Different traps to control Thrips & Fruit borer. -Use of pesticides to control pest			Sticky traps, Pheromone traps, Insecticide - Imidachloprid
22	Storage of food grain	Rice	Loss of food grains due to insects and pest during storage.	-	-	Improved method of food grain storage	Improve d method of food grain storage	-	-

### 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.
23	Value addition of sapota fruit	Sapota	More production and lower market rate for sapota during winter season.	-	-	Preparation of sapota fruit products	Preparation of sapota fruit products	-	-
24	Formation and functioning of SHGs	SHGs	Lack of economic independence in women	-	-	Formation and functioning of SHGs	-	-	-
25	Awareness about various governmental schemes	Government schemes	Lack of knowledge about various governmental schemes	-	-	Awareness about various governmental schemes	-	-	-
26	Entrepreneurship development		Low income of rural youth	-	-	Entrepreneurship development	-	-	-
27	Improve the health status of malnourished toddlers	Toddlers	Anemia in adolescence tribal toddlers	Improve the health status of malnourished toddlers	-	Improve health of toddlers	-	Medical camp	

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.
28	Mechanization in Paddy Cultivation	Rice	Labour scarcity Increasing production cost Lack of mechanization in rice cultivation	Mechanization in Paddy Cultivation by Rice Transplanter	-	Farm Mechanization in rice cultivation	Awareness on Rice Transplanting Machinery	Practical demonstration on Mat Rice Nursery preparation, principles, component and Working of Rice Transplanter	-
29	The use of conoweeder in rice cultivation for weeding purpose	Rice	Labour scarcity Drudgery is involved in manual weeding Lack of mechanization in rice cultivation	Use of Conoweeder in rice cultivation	-	Awareness on new weeding implement in rice cultivation	Awareness on new weeding implement in rice cultivation	-	-
30	Value addition in finger millet	Finger millet	Low market rate for finger millet	-	-	Preparation of different value added products from finger millet	-	-	-

### 3.1 Achievements on technologies assessed and refined

#### A.1 Abstract of the number of technologies **assessed\*** in respect of crops/enterprises

<b>Thematic areas</b>	<b>Cereals</b>	<b>Oilseeds</b>	<b>Pulses</b>	<b>Commercial Crops</b>	<b>Vegetables</b>	<b>Fruits</b>	<b>Flower</b>	<b>Plantation crops</b>	<b>Tuber Crops</b>	<b>TOTAL</b>
Varietal Evaluation	01	-	-	-	-	-	-	-	01	02
Seed / Plant production	-	-	-	-	-	-	-	-	-	-
Weed Management	-	-	-	-	-	-	-	-	-	-
Integrated Crop Management	-	-	-	-	-	-	-	-	-	-
Integrated Nutrient Management	-	-	-	-	-	-	-	-	-	-
Integrated Farming System	-	-	-	-	-	-	-	-	-	-
Mushroom cultivation	-	-	-	-	-	-	-	-	-	-
Drudgery reduction	-	-	-	-	-	-	-	-	-	01
Farm machineries	-	-	-	-	-	-	-	-	-	-
Value addition	-	-	-	-	-	-	-	-	-	-
Integrated Pest Management	01	-	-	-	-	01	-	-	-	02
Integrated Disease Management	01	-	-	-	-	-	-	-	-	01
Resource conservation technology	-	-	-	-	-	-	-	-	-	-
Small Scale income generating enterprises	-	-	-	-	-	-	-	-	-	-
<b>TOTAL</b>	<b>03</b>	<b>01</b>		<b>-</b>	<b>-</b>	<b>01</b>	<b>-</b>	<b>-</b>	<b>01</b>	<b>06</b>



A.3. Abstract of the number of technologies **assessed** in respect of livestock / enterprises

<b>Thematic areas</b>	<b>Cattle</b>	<b>Poultry</b>	<b>Sheep</b>	<b>Goat</b>	<b>Piggery</b>	<b>Rabbitary</b>	<b>Fisheries</b>	<b>TOTAL</b>
Evaluation of Breeds	-	-	-	-	-	-	-	-
Nutrition Management	-	01	-	-	-	-	-	01
Disease of Management	-	-	-	-	-	-	-	-
Value Addition	-	-	-	-	-	-	-	-
Production and Management	-	-	-	-	-	-	-	-
Feed and Fodder	-	-	-	-	-	-	-	-
Small Scale income generating enterprises	-	-	-	-	-	-	-	-
<b>TOTAL</b>	-	<b>01</b>	-	-	-	-	-	<b>01</b>

## Assessment - Agronomy

- 1) Title : Varietal evaluation of Rice
- 2) Problem diagnose/defined : Low productivity of non-descript and local Rice varieties grown on Rainfed medium black Soil
- 3) Details of technologies selected for assessment :
  - T1- Farmers practice : local
  - T2- Recommended practices : Karjat-9
- 4) Source of technology : Dr.B.SK.K.V.Dapoli
- 5) Production system thematic area : Rainfed Cereals based system(Rice-Fallow)
- 6) Thematic area : Varietal Evaluation
- 7) Performance of the Technology with performance indicators : Results showed that Karjat- 9recorded highest yield (44.00q/ha),B:C ratio (1:1.18 ) compared to Local
- 8) Final recommendation for micro level situation :
- 9) Constraints identified and feedback for research : Unavailability of seed of fine rice midlate variety and more yield of k-9 than local variety .Due to deficit in rainfall maximum yield not obtained.
- 10) Process of farmers participation and their reaction : Farmers are grown karjat-9 variety and they react that karjat-9 variety given more grain yield than Local.

### 11) Results of On Farm Trial

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Rice	Rainfed	Low productivity of local fine variety	Varietal evaluation of Rice	05	1.Local	Grain yield, B:C ratio	44.00	30.06% increase in yield than Local	High yielding variety than Local, & blight attack is more
					2. Karjat-9		33.83		

Technology Assessed	*Production per unit		Net Return (Profit) in Rs. / unit	BC Ratio
11	12 Grain Yield	Straw yield	13	14
1. Local	44.00q/ha	31q/ha	- 2851	1:0.94
2. Karjat-9	33.83q/ha	40q/ha	9742	1:1.18

## Assessment (Home Science)

### OFT: I

- A. Title : Use of Bio- Fortified (Red ) Rice in daily consumption to overcome malnutrition for the women
- b. Objectives : i) To create awareness of food & nutrition requirement of the Aganvadi mahila  
ii) To prepare Bio-fortified Rice recipes.
- c. Problem identified & its intensity : Under nourishment / malnourishment of infants & adolescent girls in rural area  
Due to lack of iron, calcium, protein rich food
- d. Interventions planned : Enrichment of Bio- fortified Rice recipes
- e. Treatments  
T1- Farmers practice : Regular diet  
T2-Recommended practice : Technology assessed: T1 + Bio-Fortified Rice Recipes.
- f. Source of technology : NAU, Navsari
- g. No. of Adolescent : 15
- l. Observations/parameters of study : Weight kg – i) Initial Wt.  
ii) Final Wt. (3 month interval)  
: Hb level

Result :

Crop/ Enterprise	Farming situation	Problem definition	Title of OFT	No. of Trials	Parameters of assessment	Data on the parameter	Result of assessment
1	2	3	4	5	6	7	8
Red Rice GNR 4	Rainfed	1.Under nourishment/ malnourishment of infants & adolescent girls in tribal area 2. No used Red rice	Use of Bio- Fortified Rice in daily consumption to overcome malnutrition for the women	20	1.Weight Kg 2. Hemoglobin	34.65 10.11	1.Increase the Hemoglobin level 2.Increase the weight

Feedback from the farmer	Any refinement needed	Justification for refinement	Technology assessed	Source of technology
9	10	11	12	13
Farm women like the Red rice test and appearance. Also they like recipes on red rice like Khir , Lapsi and Bhakri.	-	-	Manual practice	Farmers practice
			Regular diet	Technology assessed: T1 + Nutrition rich Bio-Fortified Rice Recipes NAU, Navsari

Name of the Crop	No.of women	Performance parameter /indicators	Data on parameter in relation to technology demonstration		% change in the parameter	Remarks
			Local check (T1)	Demon. (T2)		
GNR-4 Red Rice	20	Weight	33.17	34.65	4.46	1.Increase the Hemoglobin level 2.Increase the weight
		Hemoglobin	9.99	10.11	1.20	

ON FARM TESTING ( Home Science )

**A. TITLE :** Use of Modified Plastic rain coat for working women in rainy days

**B. Objective:** 1.To protects form rain during working in rainy days for rice planting.  
2. Increasing working efficiency in rainy days.

**C. Problems identified:** Due to working in direct rain it reduces the working efficiency of women and adversely affects on health.

**D. Interventions planned:** Use of Modified plastic rain coat

**E. Treatments:** T1 – Use of simple plastic bag or traditional Eral to protect from rain  
T2 – Use of Modified plastic raincoat to be convenient while working in rainy days

**F. Source of Technology:** KVK Kosbad Hill

**G. Number of farm Women:** 20

**H. Observation / Parameter:**

1. Suitability & convenient of rain coat
2. Working efficiency
3. Health

Result :

Crop/ Enterprise	Farmin g situation	Problem definition	Title of OFT	No. of Trials	Technology assessed	Parameters of assessment	Data on the parameter	Result of assessment
1	2	3	4	5	6	7	8	9
Modified Plastic Rain Coat	Rainfed	Due to working in direct rain it reduces the working efficiency of women and adversely affects on health	Use of Modified Plastic rain coat for working women in rainy days	25	Farmer used Earla or plastic sit in	1. Suitability & convenient of rain coat 2. Working efficiency 3. Health	90 %  13.33  84 %	1. Using Modified Rain coat farm women's 84% health problems reduce. 2. Increasing working efficiency due to Modified rain coat. 3.98% farm women satisfied using Modified Rain coat.

Feedback from the farmer	Any refinement needed	Justification for refinement	Technology assessed	Source of technology
10	11	12	13	14
1. Farm women satisfied using Modified Rain coat. 2. They are very happy to using Modified Rain coat.	-	-	Manual practice	Farmers practice
			Use of simple plastic bag or traditional Eral to protect from rain	Use of Modified plastic raincoat to be convenient while working in rainy days Kvk Kosbad Hill

Name of the implement	No.of farm women	Performance parameter /indicators	Data on parameter in relation to technology demonstration		% change in the parameter	Remarks
			Local check (T1)	Demon. (T2)		
Modified Plastic Rain Coat	20	Health	14.2	2.25	84%	1. Using Modified Rain coat farm women's 84% health problems reduce. 2. Increasing working efficiency due to Modified rain coat. 3.98% farm women satisfied using Modified Rain coat.
		Working efficiency / Labor requirement per Ha	Decrease 60 labor / Ha	Increase 52 labor /Ha	13.33	
		Suitability and convenient	2	20	90%	

## Assessment - Plant Protection

- 1) Title : Management of Sweet Potato weevil in sweet potato
- 2) Problem diagnose/defined : Heavy loss of tubers & low market value due to tuber damaged by weevil (*Cylas formicarius*)
- 3) Details of technologies selected for assessment : Use of Malathion for set dipping, Spraying of malathion and Soil application of *Beaveria bassiana* and Installation of Water trap
  - T1- Farmers practice : No use of insecticide or any plant protection measures
  - T2- Recommended practices :
    - 1.At the time of planting Vine dip into malathion 0.05 %
    - 2.Soil application of *Beaveria bassiana* on bund at 30 & 60 days after planting
    - 3.Installation of Water trap @ 16 per Acre
- 4) Source of technology : Dr.B.S.K.K.V.Dapoli
- 5) Production system thematic area: Irrigated vegetable crop
- 6) Thematic area :
- 7) Performance of the Technology with performance indicators : Results showed that use of insecticide & bio agents decrease the loss of tubers and increase the good quality of tuber yield (13.9 T /ha), B:C ratio was 1:2.40 and Incremental Cost Benefit ratio was 1 : 6.38
- 8) Final recommendation for micro level situation : Malathion @ 0.05 % should be use at planting for vine dipping. Also use the bio- agents like *Beauveria bassiana* @ 6.75 Kg / ha. Installation of water trap @ 16 per acre. This decreases the per cent infestation of Sweet potato weevil damage and increase the market value of tubers.
- 9) Constraints identified and feedback for research: Unavailability of bio agents i.e. *Beaveria bassiana* in local market.
- 10) Process of farmers participation and their reaction : Farmers are ready to use insecticide like malathion and also ready to apply bio agents & trap when they shown result.

11). Results of On Farm Trial

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Sweet Potato	Irrigated	Loss of good quality tubers and market value due to sweet Potato weevil damage	Management of sweet potato weevil	20	1. Local practices 2. Set dipping in Malathion @ 0.05%, Soil application of <i>Beaveria bassiana</i> @ 6.75 Kg/ha. Installation of Water trap	Yield, B:C ratio	T1 : 10.5 T/ha  T2: 13.9 T/ha	18.96 % increase in yield than Local	By application of <i>Beaveria bassiana</i> & Use of water trap, very less infestation of weevil was observed. Therefore marketable tubers get more.

Technology Assessed	Production per unit		Net Return (Profit) in Rs. / unit	BC Ratio	Incremental Cost Benefit Ratio
	12 Tuber Yield	13 Fodder Yield			
11			14	15	16
3. Local Practice	10.5 T/ha	4.1 T/ha	67,708/-	1 : 2.8	
4. Treatment	13.9 T/ha	4.5 T/ha	98,114/-	1 : 3.39	

Market Price of 1 Kg Tuber is Rs. 10/- (10500 x 10= Rs. 1,05,000/- Return from Local Practice)

(13900 x 10= Rs. 1,39,000/- Return from Treatment)

Cost of cultivation of local practice Rs. 37,500/- and Treatment is 40,945/-

Market Price of 1 Kg Fodder is Rs. 3/- (4000 Kg x Rs 2/- = Rs 8,000/-)

**Discipline: Horticulture**

**OFT: I.**

- a. Title : Raising Chilli seedling in Protray
- b. Objectives : i) To minimize the seedling period in nursery  
ii) Early establishment of transplanted seedling in field  
iii) To increase the good quality of seedling  
iv) To minimize the mortality of seedling
- c. Problem identified & its intensity field. : Mortality of seedling observed at the transplanting time in drip irrigation system
- d. Description of micro-farming situation : Rabi season from October to May. Humid climate, Medium black soil condition.
- e. Interventions planned : 1. Preparation of nursery site.
- f. Treatments :  
T1- Farmers practice: : Raising of seedling on raise bed method  
T2- Recommended treatment : 1. Use of plastic protray technology for raising chilli seedling.
- g. Source of technology : IIHR
- h. No. of farmers : 5
- f. Observations/parameters of study :  
1. Seed required per ha.  
2. No of pickings.  
3. Yield per hectare.

11). Results of On Farm Trial

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Chilli F1 Hybrid 4884	Irrigated	Mortality of Seedling observed in transplanting time in drip irrigation system field Excess seed/unit area required for raising hybrid chillies.	Raising Chilli seedling in Pro- trays	5	T1.Local practices. Raised bed method T2. Use of plastic portray technology for raising chilli seedling	Seed Rate gms/ha. Percent Survival No of pickings  Yield q/ha	T1 – 240gr T2 - 165gr T1 – 73% T2 97% T1 - 6 T2 - 7 T1 – 132.2 T2 - 143.5	Survival of seedling is higher therefore Seed rate reduced by 31.25% First early picking 10days & one extra picking than the check 8.5 % increase in yield	Due to healthy seedling good establishment of crop within short period so receive early picking than raised bed method

<b>Technology Assessed</b>	<b>Production Yield Qtl/ha</b>	<b>Cost of Production/ha</b>	<b>Gross Return Rs/ha</b>	<b>Net Return (Profit) in Rs. /Ha</b>	<b>BC Ratio</b>
11	12	13	14	15	16
1. Local Practice	132.2	<b>175000</b>	489140	<b>314140</b>	1 : 2.79
2. Treatment Use of Pro tray	143.5	<b>175000</b>	530950	<b>355950</b>	1 : 3.03

Selling rate for green chilli Rs. 37 /Kg

**Discipline: Agril. Engg. (Assessment)**

**Result of On Farm Trials**

Crop/ Enterprise	Farming situation	Problem definition	Title of OFT	No. of Trials	Technology assessed	Parameters of assessment	Data on the parameter		Result of assessment
							8		
1	2	3	4	5	6	7	DBSKKV, Dapoli	Manual Weeding	9
Rice	Rainfed	1. Labour scarcity 2. 20-25 % decrease in yield due to weed 3. Drudgery is involved in manual weeding 4. Lack of mechanization in rice cultivation	Use of conoweeder in rice cultivation	4	The use of conoweeder in rice cultivation for weeding purpose	1) Width of operation (mm) 2) Field capacity (ha/h) 3) Weeding efficiency (%)	100  0.013  92.73	N/A  0.0057  100	Easy to operate conoweeder but for its operation row to row and crop to crop distance must be maintained. Plants did not get damaged as plant gets damaged in manual weeding. The drudgery involved in weeding operation by conoweeder is low as compared to manual weeding operation.

Feedback from the farmer	Any refinement needed	Justification for refinement	Technology assessed	Source of technology	Cost of operation (Rs/Season)
10	11	12	13	14	15
Easy to operate but required practice to operate. Light in weight.	-	-	use of conoweeder in rice cultivation for weeding purpose	DBSKKV, Dapoli	1950
			Manual weeding	Framer practice	7200

Details of each On Farm Trial for assessment to be furnished in the following format

1.	Name of Technology	Use of conoweeder in rice cultivation																	
2.	Problem definition	1. Labour scarcity 2. 20-25 % decrease in yield due to weed 3. Drudgery is involved in manual weeding 4. Lack of mechanization in rice cultivation																	
3.	Details of technology selected for assessment	The use of conoweeder in rice cultivation for weeding purpose.																	
4.	Source of technology	1. Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli																	
5.	Production system and thematic area	1. Four month rainy season June to September. 2. Humid climate.																	
6.	Performance of technology with performance indicator	<table border="1"> <thead> <tr> <th>Parameter</th> <th>Conoweeder developed by DBSKKV, Dapoli</th> <th>Manual Weeding</th> </tr> </thead> <tbody> <tr> <td>1.Width of operation (mm)</td> <td>100</td> <td>N/A</td> </tr> <tr> <td>2.Field capacity (ha/h)</td> <td>0.013</td> <td>0.0057</td> </tr> <tr> <td>3. Weeding efficiency (%)</td> <td>92.73</td> <td>100</td> </tr> <tr> <td>4.Cost of operation (Rs/ Season )</td> <td>1950</td> <td>7200</td> </tr> </tbody> </table>			Parameter	Conoweeder developed by DBSKKV, Dapoli	Manual Weeding	1.Width of operation (mm)	100	N/A	2.Field capacity (ha/h)	0.013	0.0057	3. Weeding efficiency (%)	92.73	100	4.Cost of operation (Rs/ Season )	1950	7200
Parameter	Conoweeder developed by DBSKKV, Dapoli	Manual Weeding																	
1.Width of operation (mm)	100	N/A																	
2.Field capacity (ha/h)	0.013	0.0057																	
3. Weeding efficiency (%)	92.73	100																	
4.Cost of operation (Rs/ Season )	1950	7200																	
7.	Feedback, matrix scoring of various technology parameters done through farmers participation	Easy to operate conoweeder but for its operation row to row and crop to crop distance must be maintained. Plants did not get damaged as plant gets damaged in manual weeding.																	
8.	Final recommendation for micro level situation	It is used in rice cultivation only where row to row and crop to crop distance must be maintained.																	
9.	Constraints identified and feedback for research	Crops should be in cultivated in line. Not suitable for randomly planted rice seedlings.																	
10	Process of farmers participation and their reactions	Tribal farmers were ready to follow the technology as they witnessed the operation of conoweeder and realizing the benefit of weeder for weeding purpose.																	

### Result of On Farm Trials

Crop/ Enterprise	Farming situation	Problem definition	Title of OFT	No. of Trials	Technology assessed	Parameters of assessment	Data on the parameter		Result of assessment
							8	9	
1	2	3	4	5	6	7	Conoweeder developed by DBSKKV, Dapoli	Manual Weeding	9
Vegetable (Chilli)	Rainfed	3. Labour scarcity 4. 20-25 % decrease in yield due to weed 3. Drudgery is involved in manual weeding 4. Lack of mechanizati on in vegetable cultivation	Use of wheel hoe in vegetable cultivation	4	The use of wheel hoe in vegetable cultivation for weeding purpose	1) Plant damage percent 2) Field capacity (ha/h) 3) Weeding efficiency (%)	Nil 0.02 81.55	Nil 0.0060 100	Easy to operate but for its operation row to row and crop to crop distance must be maintained. Plants did not get damaged as plant gets damaged in manual weeding. The drudgery involved in weeding operation by conoweeder is low as compared to manual weeding operation.

Feedback from the farmer	Any refinemen t needed	Justification for refinement	Technology assessed	Source of technology	Cost of operation (Rs/ Season )
10	11	12	13	14	15
Easy to operate but required practice to operate. Light in weight.	-	-	use of wheel hoe in vegetable cultivation for weeding purpose	CIAE, Bhopal	3600
			Manual weeding	Framer practice	7200

Details of each On Farm Trial for assessment to be furnished in the following format

1.	Name of Technology	Use of of wheel hoe in vegetables for wedding operation															
2.	Problem definition	1. Labour scarcity 2. 20-25 % decrease in yield due to weed 3. Drudgery is involved in manual weeding 4. Lack of mechanization in vegetable cultivation															
3.	Details of technology selected for assessment	The use of wheel hoe in vegetable cultivation for weeding purpose.															
4.	Source of technology	1. CIAE, Bhopal															
5.	Production system and thematic area	1. Four month rainy season June to September. 2. Humid climate.															
6.	Performance of technology with performance indicator	<table border="1"> <thead> <tr> <th>Parameter</th> <th>CIAE, Bhopal</th> <th>Manual Weeding</th> </tr> </thead> <tbody> <tr> <td>1.Plant damage percent</td> <td>Nil</td> <td>Nil</td> </tr> <tr> <td>2.Field capacity (ha/h)</td> <td>0.02</td> <td>0.0060</td> </tr> <tr> <td>3. Weeding efficiency (%)</td> <td>81.55</td> <td>100</td> </tr> <tr> <td>4. Cost of operation (Rs/ Season )</td> <td>3600</td> <td>7200</td> </tr> </tbody> </table>	Parameter	CIAE, Bhopal	Manual Weeding	1.Plant damage percent	Nil	Nil	2.Field capacity (ha/h)	0.02	0.0060	3. Weeding efficiency (%)	81.55	100	4. Cost of operation (Rs/ Season )	3600	7200
Parameter	CIAE, Bhopal	Manual Weeding															
1.Plant damage percent	Nil	Nil															
2.Field capacity (ha/h)	0.02	0.0060															
3. Weeding efficiency (%)	81.55	100															
4. Cost of operation (Rs/ Season )	3600	7200															
7.	Feedback, matrix scoring of various technology parameters done through farmers participation	Easy to operate wheel hoe but for its operation row to row and crop to crop distance must be maintained. Plants did not get damaged as plant gets damaged in manual weeding.															
8.	Final recommendation for micro level situation	It is used in vegetable cultivation only where row to row and crop to crop distance must be maintained.															
9.	Constraints identified and feedback for research	Crops should be in cultivated in line. Not suitable for randomly planted seedlings.															
10	Process of farmers participation and their reactions	Tribal farmers were ready to follow the technology as they witnessed the operation of wheel hoe and realizing the benefit of weeder for weeding purpose.															

## **A) Assessments of technology**

### **Discipline: Animal Husbandry**

1. Title : Nutritional Management in Poultry
  2. Problem diagnose : High cost of feed
  3. Details of technologies selected for assessment :
- T1: Farmers practice : Ideal protein based Concentrate broiler feed  
T2: Recommended Practice : Ideal protein based Concentrate broiler feed along with Azolla meal
4. Source of technology : Dept. of Poultry science, Bangladesh, Agril. University, Mymensingh
  5. Production system thematic area : -
  6. Thematic area : Nutritional management
  7. Performance of the technology with performance indicator : Reduced 10% feed cost by using ideal protein based Concentrate broiler feed along with Azolla
  8. Final recommendation of micro level situation :
  9. Constraints identified and feedback for research :
  10. Process of farmers participation and their reaction:

### 1. Results of the On Farm Trials

Crop enterprise	Farming situation	Problem diagnosed	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameters	Results of assessment	Feedback from the farmers
1	2	3	4	5	6	7	8	9	10
Poultry	-	High cost of feed	Nutritional Management in Poultry	05	Ideal protein based Concentrate broiler feed along with Azolla	1. Feed consumption up to 8 <sup>th</sup> week per 10 bird  2. weight gain  3. Feed consumption ratio	T1) 41.4 Kg T2) 38.4 kg+ 3.8 Kg Azolla  T1) 23 Kg live /10 birds T2) 22.800 Kg live/10 birds  T1) 1:1.5 T2) 1:1.8	Reduced 10% feed cost by using ideal protein based Concentrate broiler feed along with Azolla	By using Azolla, reduced feed cost.

Technology assessed	Production per unit	Net Return (profit) in Rs/unit	BC ratio
11	12	13	14
T – 2: Ideal protein based Concentrate broiler feed along with Azolla	Rs. 783/- production cost per 10 birds	Rs. 356.64/-	1:1.3

### 3.2 Achievements of Frontline Demonstrations

a. Follow-up for results of FLDs implemented during previous years

List of technologies demonstrated during previous year and popularized during 2015-16 and recommended for large scale adoption in the district

S. No	Crop/Enterprise	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	Bengal Gram	Changing in Cropping Pattern	Varietal evaluation & IPM Rice-B.Gram	Training, demonstration, field days	133	530	553.20
2	Rice	Varietal Evaluation	Introduction of variety of Rice (Karjat – 3)	Training, demonstration, field days	09	38	52
3	Rice	Varietal Evaluation	Introduction of variety of Rice (Sahyadri – 2)	Training, demonstration, field days	03	40	18
4	Groundnut	Changing in Cropping Pattern	Introduction of variety of Groundnut (TAG- 24) Rice-Groundnut	Training, demonstration, field days	02	15	21
5	Niger	Varietal Evaluation	Introduction of variety of Niger (Phule Karala)	Training, demonstration, field days	03	32	18
6	Rice	Varietal Evaluation	Introduction of variety of Rice (Karjat – 7)	Training, demonstration, field days	07	41	28
7	Rice	Loss of yields due to pest & Disease	IPM	Training, demonstration, field days	01	47	20
8	Sapota	Loss of yields due to pest & Disease	IPM	Training, demonstration, field days	01	20	08
9	Coconut	Loss of yields due to pest & Disease	IPM	Training, demonstration, field days	01	20	08
10	Bhendi Cutter	Reduce the drudgery of farm women	Introduction of Bhendi cutter	Training, demonstration, field days	01	20	01
11	Grains in polyethylene bag	Loss of grain due to pest infestation	Introduction of Polyethylene grains bag	Training, demonstration, field days	03	150	-
12	Sweet potato	Varietal Evaluation & IPM	Introduction of sweet potato variety, Kamalsundari and Management of Pest Weevil by using Bioagent	Training, demonstration, field days	03	40	10

**b. Details of FLDs implemented during 2015-16 (FLD on Cereals/other Crop)**

Sr. 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	Rice	Varietal evaluation	Introduction of improved variety Karjat-3 + NM	Kharif 15	10	28	60	-	60	-
2	Rice	Varietal evaluation	Introduction of improved variety Karjat-7 + NM	Kharif 15	5	20	50	-	50	-
3	Rice	Method & Varietal evaluation	Direct seeded rice through Drum Seeder (Karjat-7 + NM & weedicide)	Kharif 15	2	2	5	-	5	-
4	Rice	Loss of Yield due to pest incidence	IPM Technology	Kharif 2014	10	20	47	-	47	
5	Rice	Imbalance application of fertilizers	INM	Kharif	5	5	12		12	-
6	Rice	Soil fertility	Improvement of soil fertility through use of green manure	Kharif	02	02	10		10	
7			Enrich composting				05	--	05	

**b. Details of FLDs implemented during 2015-16 (FLD on Pulses)**

Sr. 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	Bengal gram	Changing Cropping Pattern	Rice-Fallow to Rice-Gram (Digvijay + IPM)	Rabi 15-16	10	15	24	22	46	-

**b. Details of FLDs implemented during 2015-16 (FLD on Oilseed)**

Sr. 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	Groundnut	Changing Cropping Pattern, Introduction of new crop	Polymulch Groundnut Technology ( TAG -24 + NM,weedicide)	Summer 15-16	5	7.2	38	-	38	-
2	Niger	Crop Management Practices	Introduction of improved variety Phule Karala (whole Package)	Kharif 13	10	10	25	-	25	-

**b. Details of FLDs implemented during 2015-16 (Horticultural Crops)**

Sr. 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	Sapota	Loss of yield due to pest & disease	IPM technology	Year round 2015-16	08	08	-	20	20	-
2	Coconut	Loss of yield due to insect pests	IPM technology	Year round 2015-16	08	08	-	20	20	-

**FLD – CEREALS & Millets**

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	P	K					
Rice	Kharif 16	Rainfed	Medium Black soil	275	38.50	340	Rice	13/06/15	19/10/15	1340	66
Rice	Kharif 16	Rainfed	Medium Black soil	275	38.50	340	Rice	15/06/15	20/10/15	1340	66
Rice	Kharif 16	Rainfed	Medium Black soil	275	38.50	340	Rice	15/06/15	16/10/15	1340	66

**FLD - PULSES**

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	P	K					
Bengal gram	Rabi 15-16	Rainfed	Medium Black soil	302.45	43.10	333.0	Rice	07/11/15	19/02/16	1289	52

**FLD - OILSEED**

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	P	K					
Niger	Kharif 15	Rainfed	Light red soil	250.12	29.15	260.33	Finger millet	16/06/15	12/10/15	1340	63
Groundnut	Summer 15-16	Irrigated	Medium black	310	31.12	360.12	Rice	18/01/14	Expected 15/05/16	1340	63

**FLD – Horticultural Crops**

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	P	K					
Sapoata	Year Round	Irrigated	Medium black	139.82	18.62	340	NA	NA	NA	1340	66
Coconut	Year Round	Irrigated	Medium black	270	21	398.72	NA	NA	NA	1340	66
Sapoata	Year Round	Irrigated	Medium black	280.20	35.30	370.40	NA	NA	NA	1340	66
Sweet potato	Kharif	Rainfed	Medium	270.50	34.40	314.20	Rice	20/11/2014	20/03/15	1340	66

**Performance of FLD (Cereals & millet)**

Sr.No.	Crop	Technology Demonstrated	Variety	No. of Farmers	Area (ha.)	Demo. Grain Yield Qtl/ha			Yield of local Check Qtl./ha	Increase in yield (%)	Data on parameter in relation to technology demonstrated q/ha	
						H	L	A			Demo	Local
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Kharif Rice	Introduction of variety +NM	Karjat-3	60	28	41.50	35.00	39.20	31.40	24.34	39.20	31.40
2	Kharif Rice	Introduction of variety +NM	Karjat-7	50	20	41.20	34.50	37.80	31.12	21.50	37.80	31.12
3	Kharif Rice	Direct seeded rice through Drum Seeder	Karjat-7	5	2	40.50	35.40	37.30	38.50	79 Man days save	79 Man days save & Rs 10970 cost save	Required 79 more mandays & cost Rs 10970

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

Average Cost of production (Rs./ha)		Average Gross Return (Rs./ha) (Grain + Straw yield )		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
53115	48958	56540	45180	3425	-3778	1:1.06
53115	48958	53250	46400	135	-2558	1:1.06
42145	53115	53510	55200	11365	2085	1:1.27

**Performance of FLD (Pulses)**

Sr.No.	Crop	Technology Demonstrated	Variety	No. of Farmers	Area (ha.)	Demo. Yield Qtl/ha			Yield of Check Qtl./ha Kharif Rice	Additional Gross income over previous pattern (Rs./ha)	Data on parameter in relation to technology demonstrated Net Return Rs/ha	
						H	L	A			Demo Rice-Gram	Local check Rice-fallow
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Bengal gram	Changing Cropping Pattern Rice-Fallow to Rice-Gram	Digvijay + IPM	46	15	12.30	7.20	9.10	32.50	54600	21751	-3723

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

Average Cost of production/(Rs./ha)		Average Gross Return (Rs./ha)		Average Net Return (Profit) (Rs./ha)		Benefit-Cost Ratio (Gross Return / Gross Cost)
Demonstration Rice-Gram	Local Check Rice-Fallow	Demonstration Rice-Gram	Local Check Rice-Fallow	Demonstration Rice-Gram	Local Check Rice-Fallow	
14	15	16	17	18	19	20
79099	49973	100850	46250	21751	-3723	1:1.27

**Performance of FLD (Oilseed)**

Sr.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 q/ha	
						H	L	A			Demo	Local
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Groundnut	Polymulch Groundnut Technology Changing Cropping Pattern	TAG-24	38	7.2	Result Awaited						
2	Niger	Introduction of improved variety Phule Karala(whole package)	Phule Karala	25	10	5.2	3.50	4.30	2.90	48.27	4.30	2.90

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

Average Cost of production(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
Result Awaited						
20964	17125	25800	17400	4836	275	1:1.23

**Discipline –Horticulture  
FLD on Horticultural Crops**

Sr. 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	Sapota	Loss of yield due to pest & disease	IPM technology	Year round 2015-16	08	08		20	20	-
2	Coconut	Loss of yield due to insect pests	IPM technology	Year round 2015-16	08	08		20	20	-
3	Sweet Potato	Loss of yield due to sweet potato weevil	Soil application of <i>Beaveria bassiana</i>	Rabi 2015	02	02		20	20	-
4	Mogara	Nutrient management		Year round 2015-16						

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

Average Cost of production (Rs./ha)		Average Gross Return (Rs./ha)		Average Net Return (Profit) (Rs./ha)		Cost-Benefit Ratio
Demonstration	Local Check	Demonstration	Local Check	Demonstration	Local Check	
<b>14</b>	<b>15</b>	<b>16</b>	<b>17</b>	<b>18</b>	<b>19</b>	<b>20</b>
44850	37240	103200	60200	58350	22960	1:2.30
42600	40100	101600	77200	59000	37100	1:2.38

**Discipline- Plant Protection**

**Performance of FLD (Cereals)**

Sr.No.	Crop	Technology Demonstrated	Variety	No. of Farmers	Area (ha.)	Demo. Yield Qt/ha			Yield of local Check Qt./ha	Increase in yield (%)	Data on parameter in relation to technology demonstrated q/ha	
						H	L	A			Demo	Local
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Rice	Integrated Pest Management	Karjat-3	25	10	42.20	33.40	38.80	34.40	12.80	38.80	34.40

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

Average Cost of production/(Rs./ha)		Average Gross Return (Rs./ha)		Average Net Return (Profit) (Rs./ha)		Cost Benefit Ratio	Incremental Cost- Benefit Ratio
Demonstration	Local Check	Demonstration	Local Check	Demonstration	Local Check		
14	15	16	17	18	19	20	21
50,325	48,000	56466	51152	6141	3192	1 : 1.12	1:1.07

Rate of Rice Rs. 12/Kg

Rate of Straw Rs. 3/Kg (32 Q/ha)

**(Horticultural Crops)**

Sr.No.	Crop	Technology Demonstrated	Variety	No. of Farmers	Area (ha.)	Demo. Yield T/ha & Nuts/ha (100 coconut tree /ha)			Yield of local Check T/ha & Nuts/ ha	Increase in yield (%)	Data on parameter in relation to technology demonstrated t/ha & Nuts/ha	
						H	L	A			Demo	Local
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Sapota	IPM in Sapota	Kalipatti	20	08	19.00	15.90	17.80	14.70	21.08	<b>17.80</b>	<b>14.70</b>
2	Coconut	IPM in Coconut	Banavali	20	08	12,520	6,520	7,860	6,260	25.55	<b>7,860</b>	<b>6,260</b>

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

Average Cost of production (Rs./ha)		Average Gross Return (Rs./ha)		Average Net Return (Profit) (Rs./ha)		Incremental Cost-Benefit Ratio
Demonstration	Local Check	Demonstration	Local Check	Demonstration	Local Check	
14	15	16	17	18	19	20
77,968	65,685	1,78,000	1,47,000	1,00,032	81,315	1:1.52
47,598	42,168	55,020	43,820	7,422	1,652	1:1.06

**Discipline- Home Science  
Performance of FLD**

**FLD : 1 Grains Storage Polyethylene bag**

Name of the implement	No. of farmers	Performance parameters/ Indicators	* Data on parameter in relation to technology demonstrated		% change in the parameter	Remarks
			Local check (T1)	Demon. (T2)		
Storage of Grains in Polyethylene bag	25	% of grain damage	35.96	11.64	67.63 %	1.Reducing 67.63 % grain damage. 2.Increasing shelf life of grains
		Shelf life of grain	Decrease	Increase		

**Front Line Demonstrations**

**FLD : 2 Bhendi Cutter**

Name of the implement	No. of families	Performance parameters / Indicators	* Data on parameter in relation to technology demonstrated		% change in the parameter
			Demon.	Local check	
Bhendi cutter	20	Harvesting period kg /hr.	26	13	50 %
		Labour requirement h/q	02	03	34%

**Discipline (Soil Science)**

FLD: Soil tested based recommendation in rice

Crop	Component/ technology demonstrated	Variety	No. of farmers	Area (ha)	Yield (q/ha)				% Increas e in yield	Cost of cash inputs (Rs/ha)		Gross Returns (Rs/ha)		Additional Amount (Rs/ha)	
					Demonstration			Local Check		Demon	Local Check	Demon	Local Check	Cost	Returns
					Max	Min	Avg.	Avg.							
Rice	INM	Karjat- 3	12	5	50	36.80	42.60	35.10	13.97	13752	6042	60620	49620	<b>7710</b>	<b>11000</b>

\* Note – **Grain 1200/qtl and Straw Rs.250/qtl** (Demon. Straw 38qtl. & Local 30qtl.) Demon. = 51120+9500 = **60620** Local= 42120+7500 =**49620**

As shown in the above mentioned table:

- i. Average yield of demonstration plot: **42.60q/ha.**
- ii. Average yield of local check plot: **35.10q/ha**
- iii. The increase yield over local check: **21.36%.**

KVK: Kosbad Hill

Season: Kharif

Year: 2015-16

Crop	Component Technology Demonstration	Variety (Demonstrated/Local)	No. of Farmers	Area (ha)	Average Yield (Kg/ha)				% increase in yield
					Demonstration			Local check	
					Maximum	Minimum	Average		
Rice	INM	Demonstrated – Karjat-3 Karjat-3	12	5	50	35.80	41.60	35.10	21.36

Table 3 (b) Economics of Demonstration and Check Plots

Crop	Cost of Cash inputs (Rs/ha)		Total cost of production (Rs./ha)		Gross Returns (Rs./ ha) (Grain + Straw Yield)		C:B ratio
	Demonstration	Local check	Demonstration	Local check	Demonstration	Local check	
Rice	13752	6042	55052	47342	60620	49620	1:1.10 & 1:1.05

FLD.No.2 Improvement of soil fertility through use of green manure crops (Sunhemp)

Crop	Component/ technology demonstrated	Variety	No. of farmers	Area (ha)	Yield (q/ha)				% Incras e in yield	Cost of cash inputs (Rs/ha)		Gross Returns (Rs/ha)		Additional Amount (Rs/ha)	
					Demonstration			Local Check		Demon	Local Check	Demon	Local Check	Cost	Returns
					Max	Min	Avg.	Avg.							
Rice	Seed	Karjat- 3	10	2	44.20	33	40.50	35.40	14.40	5583	5449	57350	50230	<b>135</b>	<b>7120</b>

\* Note – **Grain 1200/qtl and Straw Rs.250/qtl** (Demon. Straw 35qtl. & Local 31qtl.) Demon. = 48600+8750 = **57350** Local= 42480+7750 =**50230**

As shown in the above mentioned table:

- i. Average yield of demonstration plot: **40.50/ha.**
- ii. Average yield of local check plot: **35.40q/ha**
- iii. The increase yield over local check: **14.40%.**

**Table 3 (b) Economics of Demonstration and Check Plots****KVK: Kosbad Hill****Season: Kharif****Year: 2015-16**

Crop	Component Technology Demonstration	Variety (Demonstrated/Local)	No. of Farmers	Area (ha)	Average Yield (Kg/ha)				% increase in yield
					Demonstration			Local check	
					Maximum	Minimum	Average		
Rice	INM	Demonstrated – Karjat-3	10	2	44.20	35.40	40.50	35.40	14.40
		Karjat-3							

Crop	Cost of Cash inputs (Rs/ha)		Total cost of production (Rs./ha)		Gross Returns (Rs./ ha) (Grain + Straw Yield)		C:B ratio
	Demonstration	Local check	Demonstration	Local check	Demonstration	Local check	
Rice	5583	5449	47179	47045	57350	50230	1:1.21 & 1:1.06

**Discipline- Agril. Engg  
Performance of FLD**

Name of the implement	crop	No. of farmers	Area (ha)	Performance parameters / Indicators	* Data on parameter in relation to technology demonstrated		% change in the parameter	Remarks
					Demon.	Local check		
Groundnut Stripper (2015-16)	Groundnut	10	5	Labour requirement	4	8	50	User friendly, easy to operate Stripping efficiency is increased by 20.51 %.
				Output capacity (Kg/h)	25	12.6	49.6	
				Stripping efficiency (%)	87	69.16	20.51	
Groundnut Stripper (2015-16)	Groundnut	10	5	Labour requirement	-	-	-	Result Awaited
				Output capacity (Kg/h)	-	-	-	
				Stripping efficiency (%)	-	-	-	
Paddy thresher cum winnower (Power operated )	Rice	15	10	Labour requirement for threshing and winnowing	9	7	22.22	Rs 2087 and Rs 1620 per season cost saving in threshing and winnowing operation respectively. User friendly, easy to operate.
				Grain output (Kg/h)	65	135	51.85	
				Threshing Efficiency (%)	96.15	98.93	2.8	
				Cost of threshing (Rs / Season)	6913	9000	23.2	
				Cost of threshing (Rs / Season )	1380	3000	54.0	
Zero energy drip irrigation system	Mogra (Jasmine )	4	0.20	Yield (q/ ha/year )	25.8	34.6	25.45	25.45% increase in yield of jasmine flower per year.

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

<b>Crop</b>	<b>Season</b>	<b>Component</b>	<b>Farming situation</b>	<b>Average yield (q/ha)</b>	<b>Local check (q/ha)</b>	<b>Percentage increase in productivity over local check</b>
		1. Seed/Variety(Whole Package)				
Rice	Kharif	Karjat-3+NM	Rainfed	40.83	31.22	30.80
Rice	Kharif	Sahyadri-2	Rainfed	43.50	32.50	33.85
Niger	Kharif	Phule Karala(Whole Package)	Rainfed	3.00	2.28	31.58
Bengal Gram	Rabi	Vijay(variety +IPM)	Rainfed	9.60	5.40	77.77
Groundnut	Summer	TAG-24 (Variety +NM)	Irrigated	Result Awaited		

## Technical Feedback on the demonstrated technologies

S. No	Feed Back
1	Karjat-3 Variety of rice having more no .of grains and tillers than local variety
2	Rust disease incidence is more on fingermillet Crop.
3	Phule karala variety of Niger having more no.of flowers and also size of flowers is more than loacal variety.
4	Karjat-7 Variety of rice having more no .of grains and tillers than local variety.
5	B.gram Variety Digvijay good for utilizing residual soil moisture and gives more yield due to life saving irrigation.We can change Cropping Pattern i.e. Rice-Fallow-fallow to Rice-Bengalgram-Fallow by utilizing residual soil moisture.
6	Karjat-9 midlate variety (fine grain) of rice given more yield than local
7	Rice-Fallow-Groundnut cropping Pattern better than Rice-fallow-Rice (Diversification of Crop)
8	Direct seeded rice is good alternative to solve the problem of labour shortage also avoid transplanting and also save the cost of production ,mandays and increases net return per hectare.

## Farmers' reactions on specific technologies

S. No	Feed Back
1	Due to Whole package yield of Karjat-3 is good than Local Variety.
2	Yield performance of Dapoli-1 is good than local variety
3	Due to Whole package Yield performance of Phule karala is good than local variety.
4	Karjat-7 Variety of rice having more yield than Local medium slenderVariety.
5	Rice-Gram cropping pattern is very good for our farming system.Due to IPM pod borer incidence is reduced and get more yield and variety Digvijay gives more yield.
6	Karjat-9 midlate variety (fine grain) of rice given more yield than local and karjat-9 variety of rice can replaced local fine grain variety wada.
7	Direct seeded rice is good alternative to solve the problem of labour shortage and drudgery while transplanting and also save the cost of production and increases net return per hectare.
8	Rice-Fallow-Groundnut cropping pattern is very good for our farming system. Polymulch Groundnut Technology given more yield and net return than other summer crop and also fulfilled our oil requirement.

## Field days & Training Programmes

	Activity	No. of activities organized	Date	Number of participants	Remarks
<b>1</b>	<b>Field days</b>				
	Bengal gram	01	15/03/2015	56	
	Summer groundnut	01	28/04/2016	49	
	Niger	01	08/10/2015	72	
	Kharif Rice (Karjat- 3)	01	10/10/2015	41	
	Finger Millet	01	06/10/2015	16	
<b>2</b>	<b>Farmers Training</b>				
	Bengal gram	01	24/11/2015	34	Seed treatment & Improved Cultivation of Bengal Gram
		01	27/11/2015	26	Improved Cultivation of Bengal Gram
		01	13/01/2016	20	Intercultural operation
		01	25/01/2016	26	IPM
	Summer groundnut	01	18/12/2015	19	Improved cultivation
		01	16/01/2016	24	Spraying of weedicide
		01	29/01/2016	28	Interculturing operation
		01	22/02/2016	14	Interculturing operation
		01	27/02/2016	16	Interculturing operation
	Niger	01	10/06/2015	50	Improved cultivation
		01	22/06/2015	39	Improved cultivation
		01	02/07/2015	25	INM in Niger
		01	02/08/2015	25	Plant Protection in Niger
	Kharif Rice	01	09/06/2015	25	Improved cultivation
		01	25/06/2015	16	INM in rice
			30/07/2015	22	IPM in rice
	Direct seeded rice	02			
	Finger millet	01	13/06/2015	20	Improved cultivation
		01	15/07/2015	14	Spraying of Pesticide
<b>3</b>	<b>Media coverage</b>	04	13/02/2016	32	Rice-Gram cropping pattern story of KVK Kosbad
		SAM TV Programme	08/12/2015	29	Conservation & improved cultivation of local variety of Niger, Ragi & Proso millet
			27/10/2015	04	Diversification of Crop –Sugarcane in Palghar district
			06/02/2016	03	Diversification of crop –Ginger in Palghar district





Management of young plants/orchards	02	-	-	-	23	10	33	23	10	33
Rejuvenation of old orchards	01	20	06	26	-	-	-	20	06	26
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	02	-	-	-	30	10	40	30	10	40
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	-	-	-	-	-	-	-	-	-	-
Soil and Water Conservation	-	-	-	-	-	-	-	-	-	-
Integrated Nutrient Management	-	-	-	-	-	-	-	-	-	-
Production and use of organic inputs	04	-	-	-	62	27	89	62	27	89





<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	01	-	-	-	20	03	23	20	03	23
Formation and Management of SHGs	03	11	03	14	16	07	23	27	10	37
Mobilization of social capital	-	-	-	-	-	-	-	-	-	-
Entrepreneurial development of farmers/youths	01	08	02	10	10	05	15	18	07	25
WTO and IPR issues	-	-	-	-	-	-	-	-	-	-
<b>XI Agro-forestry</b>										
Production technologies	-	-	-	-	-	-	-	-	-	-
Nursery management	-	-	-	-	-	-	-	-	-	-
Integrated Farming Systems	-	-	-	-	-	-	-	-	-	-
<b>TOTAL</b>	<b>38</b>	<b>120</b>	<b>38</b>	<b>158</b>	<b>327</b>	<b>193</b>	<b>530</b>	<b>438</b>	<b>230</b>	<b>668</b>
<b>(B) RURAL YOUTH</b>										
Mushroom Production	-	-	-	-	-	-	-	-	-	-
Bee-keeping	05	56	10	66	72	08	80	128	18	146
Integrated farming	-	-	-	-	-	-	-	-	-	-
Seed production	-	-	-	-	-	-	-	-	-	-
Production of organic inputs	02	38	08	46	15	-	15	53	08	61
Integrated Farming	01	-	-	-	-	10	10	-	10	10



Integrated Pest Management	-	-	-	-	-	-	-	-	-	-
Integrated Nutrient management	-	-	-	-	-	-	-	-	-	-
Rejuvenation of old orchards	-	-	-	-	-	-	-	-	-	-
Protected cultivation technology	01	12	08	20	15	05	20	27	13	40
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	03	37	02	39	18	02	20	55	04	59
Gender mainstreaming through SHGs	-	-	-	-	-	-	-	-	-	-
<b>TOTAL</b>	<b>04</b>	<b>49</b>	<b>10</b>	<b>59</b>	<b>33</b>	<b>07</b>	<b>40</b>	<b>82</b>	<b>17</b>	<b>99</b>
<b>Grand Total</b>	<b>67</b>	<b>368</b>	<b>93</b>	<b>461</b>	<b>569</b>	<b>343</b>	<b>922</b>	<b>928</b>	<b>435</b>	<b>1363</b>

**B) OFF Campus**

Thematic area	No. of courses	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	30	116	81	197	405	227	632	521	308	829
Fodder production	-	-	-	-	-	-	-	-	-	-
Production of organic inputs	-	-	-	-	-	-	-	-	-	-
<b>II Horticulture</b>										
<b>a) Vegetable Crops</b>										
Production of low volume and high value crops	08	27	04	31	126	10	136	153	14	167
Off-season vegetables	-	-	-	-	-	-	-	-	-	-
Nursery raising										
Exotic vegetables like Broccoli	-	-	-	-	-	-	-	-	-	-
Export potential vegetables	-	-	-	-	-	-	-	-	-	-
Grading and standardization	-	-	-	-	-	-	-	-	-	-
Protective cultivation (Green Houses, Shade Net etc.)	-	-	-	-	-	-	-	-	-	-
<b>b) Fruits</b>										
Training and Pruning	-	-	-	-	-	-	-	-	-	-
Layout and Management of Orchards	-	-	-	-	-	-	-	-	-	-
Cultivation of Fruit	-	-	-	-	-	-	-	-	-	-
Management of young plants/orchards	04	40	-	40	45	10	55	85	10	95



Micro nutrient deficiency in crops	-	-	-	-	-	-	-	-	-	-
Nutrient Use Efficiency	-	-	-	-	-	-	-	-	-	-
Soil and Water Testing	01	-	-	-	21	-	21	21	-	21
<b>IV Livestock Production and Management</b>										
Dairy Management	01	-	-	-	14	-	14	14	-	14
Poultry Management	06	-	-	-	65	42	107	65	42	107
Piggery Management	-	-	-	-	-	-	-	-	-	-
Rabbit Management	-	-	-	-	-	-	-	-	-	-
Disease Management	-	-	-	-	-	-	-	-	-	-
Feed management	01	-	-	-	08	06	14	08	06	14
Production of quality animal products	-	-	-	-	-	-	-	-	-	-
<b>V Home Science/Women empowerment</b>										
Household food security by kitchen gardening and nutrition gardening	03	20	-	20	11	45	56	31	45	76
Design and development of low/minimum cost diet	03	-	-	-	-	93	93	-	93	93
Designing and development for high nutrient efficiency diet	03	-	-	-	-	75	75	-	75	75
Minimization of nutrient loss in processing	-	-	-	-	-	-	-	-	-	-
Gender mainstreaming through SHGs	-	-	-	-	-	-	-	-	-	-
Storage loss minimization techniques	01	-	-	-	-	30	30	-	30	30
Value addition	02	-	10	10	20	30	50	20	40	60
Income generation activities for empowerment of rural Women	02	05	39	44	20	10	30	25	49	74
Location specific drudgery reduction technologies	02	-	-	-	15	50	65	15	50	65
Rural Crafts	-	-	-	-	-	-	-	-	-	-
Women and child care	01	-	-	-	-	20	20	-	20	20







field crops										
Integrated Pest Management	02	-	-	-	37	22	59	37	22	59
Integrated Nutrient management	-	-	-	-	-	-	-	-	-	-
Rejuvenation of old orchards	-	-	-	-	-	-	-	-	-	-
Protected cultivation technology	-	-	-	-	-	-	-	-	-	-
Formation and Management of SHGs	-	-	-	-	-	-	-	-	-	-
Group Dynamics and farmers organization	02	-	-	-	37	09	46	37	09	46
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	01	-	-	-	-	20	20	-	20	20
Production and use of organic inputs	01	20	04	24	19	01	20	39	05	44
Gender mainstreaming through SHGs	-	-	-	-	-	-	-	-	-	-
<b>TOTAL</b>	<b>06</b>	<b>20</b>	<b>04</b>	<b>24</b>	<b>93</b>	<b>52</b>	<b>145</b>	<b>113</b>	<b>56</b>	<b>169</b>
	<b>172</b>	<b>566</b>	<b>256</b>	<b>822</b>	<b>2231</b>	<b>1404</b>	<b>3635</b>	<b>2797</b>	<b>1660</b>	<b>4457</b>

Consolidated table (ON and OFF Campus)

Thematic area	No. of courses	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	01	-	-	-	17	03	20	17	03	20
Cropping Systems	-	-	-	-	-	-	-	-	-	-
Crop Diversification	-	-	-	-	-	-	-	-	-	-
Integrated Farming	-	-	-	-	-	-	-	-	-	-
Water management	-	-	-	-	-	-	-	-	-	-
Seed production	-	-	-	-	-	-	-	-	-	-
Nursery management	-	-	-	-	-	-	-	-	-	-
Integrated Crop Management	30	116	81	197	405	227	632	521	308	829
Fodder production	-	-	-	-	-	-	-	-	-	-
Production of organic inputs	-	-	-	-	-	-	-	-	-	-
<b>II Horticulture</b>										
<b>a) Vegetable Crops</b>										
Production of low volume and high value crops	08	27	04	31	126	10	136	153	14	167
Off-season vegetables	-	-	-	-	-	-	-	-	-	-
Nursery raising	-	-	-	-	-	-	-	-	-	-
Exotic vegetables like Broccoli	-	-	-	-	-	-	-	-	-	-
Export potential vegetables	-	-	-	-	-	-	-	-	-	-
Grading and standardization	-	-	-	-	-	-	-	-	-	-
Protective cultivation (Green Houses, Shade Net etc.)	-	-	-	-	-	-	-	-	-	-
<b>b) Fruits</b>										
Training and Pruning	-	-	-	-	-	-	-	-	-	-
Layout and Management of Orchards	-	-	-	-	-	-	-	-	-	-
Cultivation of Fruit	-	-	-	-	-	-	-	-	-	-
Management of young plants/orchards	05	40	-	40	53	10	63	93	10	103



Micro nutrient deficiency in crops	-	-	-	-	-	-	-	-	-	-
Nutrient Use Efficiency	-	-	-	-	-	-	-	-	-	-
Soil and Water Testing	03	-	-	-	53	-	53	53	-	53
<b>IV Livestock Production and Management</b>										
Dairy Management	01	-	-	-	14	-	14	14	-	14
Poultry Management	08	-	-	-	80	58	138	80	58	138
Piggery Management	-	-	-	-	-	-	-	-	-	-
Rabbit Management	-	-	-	-	-	-	-	-	-	-
Disease Management	-	-	-	-	-	-	-	-	-	-
Feed management	01	-	-	-	08	06	14	08	06	14
Production of quality animal products	-	-	-	-	-	-	-	-	-	-
<b>V Home Science/Women empowerment</b>										
Household food security by kitchen gardening and nutrition gardening	03	20	-	20	11	45	56	31	45	76
Design and development of low/minimum cost diet	03	-	-	-	-	93	93	-	93	93
Designing and development for high nutrient efficiency diet	04	-	-	-	-	95	95	-	95	95
Minimization of nutrient loss in processing	-	-	-	-	-	-	-	-	-	-
Gender mainstreaming through SHGs	-	-	-	-	-	-	-	-	-	-
Storage loss minimization techniques	02	-	-	-	-	40	40	-	40	40
Value addition	03	-	10	10	20	45	65	20	55	75
Income generation activities for empowerment of rural Women	02	05	39	44	20	10	30	25	49	74
Location specific drudgery reduction technologies	03	-	4	4	15	58	73	15	62	77
Rural Crafts	-	-	-	-	-	-	-	-	-	-
Women and child care	01	-	-	-	-	20	20	-	20	20







field crops										
Integrated Pest Management	02	-	-	-	37	22	59	37	22	59
Integrated Nutrient management	-	-	-	-	-	-	-	-	-	-
Rejuvenation of old orchards	-	-	-	-	-	-	-	-	-	-
Protected cultivation technology	01	17	02	19	09	04	13	26	06	32
Formation and Management of SHGs	-	-	-	-	-	-	-	-	-	-
Group Dynamics and farmers organization	02	-	-	-	37	09	46	37	09	46
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	02	-	-	-	-	42	42	-	42	42
Production and use of organic inputs	04	57	06	63	37	03	40	94	09	103
Gender mainstreaming through SHGs	-	-	-	-	-	-	-	-	-	-
<b>TOTAL</b>	<b>11</b>	<b>74</b>	<b>08</b>	<b>82</b>	<b>120</b>	<b>80</b>	<b>200</b>	<b>194</b>	<b>88</b>	<b>282</b>
<b>Grand Total</b>	<b>214</b>	<b>793</b>	<b>330</b>	<b>1123</b>	<b>2527</b>	<b>1644</b>	<b>4171</b>	<b>3320</b>	<b>1974</b>	<b>5294</b>

**Vocational training programmes for Rural Youth**

Crop / Enterprise	Date	Training title*	Thematic Area	Duration (days)	No. of Participants			Self employed after training			Number of persons employed else where
					Male	Female	Total	Type of units	Number of units	Number of persons employed	
Nursery Management	04.09.2015	Nursery management	Nursery Management	07	15	-	15	02	02	04	01
Poultry	14.11.2015	Intensive poultry management	Poultry Management	30	24	-	24	01	08	08	04
Goat	08.12.2015	Intensive Goat Management	Goat Management	05	11	15	26	01	04	06	02
Vegetable cultivation	08.10.2015	Chillies production technology	Vegetable Cultivation	05	29	-	29	03	16	24	03
Value addition	17.03.2016	Preparation of sapota products	Value addition	07	-	28	28	02	09	10	02
Mushroom	16.12.2015	Mushroom production technology	Mushroom Production	04	06	09	15	02	02	02	02
					<b>85</b>	<b>52</b>	<b>137</b>	<b>11</b>	<b>41</b>	<b>54</b>	<b>14</b>

**E) Sponsored Training Programmes**

Sr. No.	Date	Title	Discipline	Thematic area	Duration	Client (PF/R/Y/EF)	No. of Courses	No. of participants									Sponsoring agency	Amount of fund received (Rs)
								Others			SC/ST			Total				
								M	F	T	M	F	T	M	F	T		
1	05/06/15 to 07/06/15	Awareness of new agril. technologies (KVK Baramati)	Agri Extension	Awareness programmes	03	PF	01	-	-	-	-	12	12	-	12	12	ATMA	24,000/-
2	12/06/15 to 30/06/15	Back yard Keeping	Animal Husbandry	Back yard Poultry	05	PF	03	-	-	-	80	30	110	80	30	110	ATMA	2,64,000/-
3	July to September 2015	CROPSAP	Plant Protection	IPM & INM	04 months	PF	12	38	24	62	127	92	219	165	116	281	Department of Agriculture, Govt of Maharashtra State	30,000/-
4	10/10/15	Vegetable production	Horticulture	Vegetable production	10	PF	05	-	-	-	138	62	200	138	62	200	ATMA	50,000/-
5	1/10/15 to 03/05/16	National Food Security Mission on Bengal gram	Agronomy	Awareness & improvement about pulses production in district	-	PF	10	106	65	171	318	163	481	424	228	652	Department of Agriculture, Govt of Maharashtra State	1,50,000/-
6	10/11/15 to 16/11/15	Back yard Keeping	Animal Husbandry	Back yard Poultry	07	PF	01	-	-	-	53	18	71	53	18	71	ATMA	1,40,000/-
7	13/12/15	Fodder production	Animal Husbandry	Integrated crop management	02	PF	01	-	-	-	29	12	41	29	12	41	ATMA	44,000/-
8	18/01/16	IPM on Sweet potato weevil	Plant protection	Integrated pest management	05	PF	01	-	-	-	21	09	30	21	09	30	ATMA	29,000/-

9	29/02/16	Awareness on PPV & FR	Agronomy	Awareness on PPV & FR	01	PF	01	-	-	-	97	39	136	97	39	136	PPV & FR	80,000/-
10	22/03/16	Awareness of new agril. technologies	Agri Extension	Awareness programmes	01	PF	01	26	12	38	48	34	82	74	46	120	ATMA	36,000/-
11	28/03/16	Farmers Scientist interaction	Agri Extension	Group dynamics	01	PF	01	-	-	-	32	08	40	32	08	40	ATMA	20,000/-
	16/03/16	Cashew production technology	Horticulture	Fruit production	06	PF	02	-	-	-	45	15	60	45	15	60	Cashew Development Board	1,08,000/-
		Mushroom Production technology	Home Science	Entrepreneurship Development programme	05	RY	01	03	-	03	07	02	09	10	02	12	YCMOU	25,000/-
							<b>40</b>	<b>173</b>	<b>101</b>	<b>274</b>	<b>995</b>	<b>496</b>	<b>1491</b>	<b>1168</b>	<b>597</b>	<b>1765</b>		<b>10,00,000/-</b>



Soil test campaigns	08	200	60	260	30	25	55	230	85	315
Farm Science Club Conveners meet	02	21	-	21	-	-	-	21	-	21
Self Help Group Conveners meetings	03	20	10	30	-	-	-	20	10	30
Mahila Mandals Conveners meetings	01	-	23	23	-	-	-	-	23	23
Celebration of important days (specify)	-	-	-	-	-	-	-	-	-	-
World food day	01	38	42	80	02	04	06	40	46	86
International women day	01	02	33	35	02	-	02	04	33	37
Agril Day	01	37	07	44	11	07	18	48	14	62
Brest feeding Week	07	-	150	150	-	-	-	-	150	150
Technology Week ( 29 <sup>th</sup> September to 03 <sup>rd</sup> October 2015)	01	216	83	299	08	03	11	224	86	320
Nutrition week (01 <sup>st</sup> to 7 <sup>th</sup> September 2015)	01	23	76	99	-	04	04	23	80	103
<b>Total</b>	<b>240</b>	<b>3158</b>	<b>2273</b>	<b>5431</b>	<b>154</b>	<b>81</b>	<b>235</b>	<b>3312</b>	<b>2354</b>	<b>5676</b>







**(A). Kisan Mobile Advisory Services****No.of registered farmers of KVK : 5000**

Major group	Category	Crop/ Enterprise	Thematic Area	Date	Name of the Message	No. of Message	No. of Farmers								
							Others			SC/ ST			Total		
							Male	Female	Total	Male	Female	Total	Male	Female	Total
Field crop	Cereal crops	Rice	Integrated Crop Management	16/04/15	Maintain water level	01	58	32	90	100	30	130	158	62	220
Field crop	Oil seed crops	Summer Groundnut	Integrated Crop Management	25/04/15	Weeding is required	01	45	-	45	150	20	170	195	20	215
Field crop	Cereal crops	Rice	Integrated Crop Management	19.5.15	Direct sowing of rice save labour	01	100	20	120	200	35	235	300	45	345
Field crop	Cereal crops	Rice	Integrated Crop Management	26.5.15	Direct sowing of rice save labour	01	100	26	126	150	50	200	250	76	326
Field crop	Cereal crops	Rice	Integrated Crop Management	02.6.15	Apply Thiram for rice seed treatment	01	40	20	60	111	50	161	151	70	221
Field crop	Cereal crops	Rice	Integrated Crop Management	02.6.15	Prepare raise bed for healthy rice nursery	01	30	06	36	120	30	150	150	36	186
Field crop	Weather	Rice	Integrated Crop Management	11.6.15	Expected rainfall today	01	30	10	40	100	50	150	130	60	190
Field crop	Weather	Rice	Integrated Crop Management	02.7.15	Expected rainfall today	01	42	09	51	24	-	24	66	09	75
Field crop	Cereal crops	Rice	Integrated Crop Management	22.07.15	Transplanting is to be done by one to two seedling per hill	01	40	09	49	100	20	120	140	29	169
Field crop	Weather	Rice	Integrated Crop Management	06.08.15	Expected rainfall today	01	40	20	60	111	50	161	151	70	221
Field crop	Cereal crops	Rice	IPM	21.08.15	Spraying of insecticides	01	30	06	36	120	30	150	150	36	186
Horticulture crop	Vegetables	Cucumber	IPM	10.09.15	Use trap for fruit fly	01	90	46	136	-	-	-	90	46	136
Poultry	Cereal	Livestock	Livestock	16.09.15	Vaccinate	01	-	-	-	70	-	70	70	-	70

	crops				Fowl pox in poultry birds											
Field crop	Cereal crops	Rice	IPM	21.09.15	Spraying of insecticides	01	70	30	100	-	-	-	70	30	100	
Horticulture crop	Vegetables	Bitter gourd	Vegetable production	08.10.15	Prepare tillage for bitter gourd	01	40	20	60	40	20	60	80	40	120	
Field crop	Cereal crops	Weather	Weather information	10.10.15	Cloudy weather, apply Bavistin for Powdery mildew @ 20ml in 10 lit water	01	50	-	50	50	20	70	100	20	120	
Poultry	Cereal crops	Enterprise	Livestock	13.10.15	Vaccinate Fowl pox in poultry birds	01	40	-	40	70	20	90	110	20	130	
Field crop/ Horticulture	Rice/ vegetables	Marketing	Market information	21.10.15	Facility for direct marketing through MACP	01	50	-	50	80	10	90	130	10	140	
Horticulture crop	Vegetables	Chilli	Vegetable production	05.11.15	Select Phule Jyoti var. of chilli crop to get more yield & income	01	40	-	40	75	-	75	115	-	115	
Poultry	Cereal crops	Livestock	Livestock	11.11.15	Mixing of Azolla 10% in feed	01	-	-	-	60	40	100	60	40	100	
Field crop	Vegetables	Govt. Scheme	Awareness	19.11.15	Apply for Poly house scheme at TAO Office under NHM	01	50	25	75	50	10	60	100	35	135	
Horticulture crop	Vegetables	Weather	Weather information	25.11.15	Cloudy weather, apply insecticide for control of aphids	01	50	10	60	50	25	75	100	35	135	
Livestock	Goat	Meat	Deworming in Goat	03.12.15	Apply Albendazol	01	-	-	-	50	30	80	50	30	80	
Field crop	Pulse crop	Bengal gram	INM	15.12.15	Use of biofertilizers	01	50	40	90	-	-	-	50	40	90	
Horticulture crop	Vegetables	Chilli	Weather	24.12.15	Cloudy weather, apply insecticide for control of aphids	01	-	-	-	85	50	135	85	50	135	

Horticulture crop	Vegetable	Weather	Weather information	16.01.16	Cloudy weather, apply Imidachloprid @10ml in 10lit water for chilli thrips	01	30	10	40	50	10	60	80	20	100
Livestock	Goat	Enterprise	Deworming in Goat	03.01.16	Apply Albendazol	01	-	-	-	70	30	100	70	30	100
Field crop	Pulse crop	Bengal gram	IPM	15.01.16	Use of Phromen trap	01	-	-	-	50	40	90	50	40	90
Horticulture	Sapota	Sapota	Awareness	28.01.16	Sapota mahostav	01	50	20	70	80	20	100	130	40	170
Horticulture	Sapota	Sapota	Awareness	01.02.16	Sapota mahostav	01	50	25	75	50	-	50	100	25	125
Field crop	Cereal crop	rice	Healthy Seedling	14.02.16	Prepare healthy seedlings by dapog method	01	30	-	30	35	-	35	65	-	65
Livestock	Poultry	Enterprise	Livestock	03.02.16	Vaccinate local poultry bird	01	-	-	-	80	50	130	80	50	130
Field crop	Cereal crop	Groundnut	INM	12.03.16	Apply recommended fertilizer dose	01	60	10	70	75	25	100	135	35	170
Extension activity	Awareness	International Women Day programme	Awareness about international Women day	06/03/16	Attend Women day programme	01	-	50	50	-	75	75	-	125	125
Horticulture crop	Vegetable	Weather	Weather information	16.01.16	Cloudy weather, apply Imidachloprid @10ml in 10lit water for chilli thrips	02	50	30	80	60	-	60	110	30	140
<b>Total</b>						<b>35</b>	<b>1355</b>	<b>474</b>	<b>1829</b>	<b>2516</b>	<b>840</b>	<b>3356</b>	<b>3871</b>	<b>1304</b>	<b>5175</b>

**(B). Details of SMSs**

<b>Content category</b>	<b>No. of Messages</b>	<b>No. of Farmers</b>	<b>Feedback from farmers</b>
Crop Production	10	1891	Increased crop production
Crop Protection	06	853	Timely controlled pest & diseases of crops
Livestock & Fisheries Advisory	07	875	Conducted de – worming in goat at proper time
Weather Advisory	08	996	SMS regarding weather and crop protection helps to save crops from cloudy weather & pest diseases incidence
Market information	01	140	Received fair rate to sapota fruit
Events information	03	420	
Inputs availability			
Others (specify)			
<b>Total</b>	<b>35</b>	<b>5175</b>	

### Details on Technology Week Celebrations

Period of Technology Week observed	Types of Activities	No.of Activities (No./Qty)	No. of beneficiaries			Related crop/livestock technology
			Male	Female	Total	
29 <sup>th</sup> September to 03 <sup>rd</sup> October 2015	Group Discussion	05	44	18	62	Pulses Production technology, Summer rice production technology, Floriculture, Vegetable production technology, Back yard Poultry
	Lectures organized	06	90	26	116	Floriculture, Vegetable production technology, Back yard Poultry, IPM, INM
	Exhibition/Fair	03	70	39	109	
	Farm Visit					
	Diagnostic activities	03	12	-	12	
	Extension Literature provided (No.)	500 copies				
	Supply of Seeds (q)	-				
	Supply of Planting materials (No.)	250 grafts of mangoes & Sapota				
	Supply of fingerlings	-				
	Supply of Livestock material (No.)	-				
	Total number of farmers visited the technology week			<b>216</b>	<b>83</b>	<b>299</b>
No.of other agencies involved (Agril Department)	-		<b>08</b>	<b>03</b>	<b>11</b>	
	<b>Total</b>		<b>224</b>	<b>86</b>	<b>320</b>	

**Production and supply of Technological products**  
**SEED MATERIALS**

Sl. No.	Crop	Variety	Quantity (qtl.)	Value (Rs.)	Provided to No. of Farmers
<b>CEREALS</b>	<b>Rice</b>	<b>Karjat -3</b>	<b>35</b>	<b>122500</b>	<b>190</b>
		<b>Karjat -7</b>	<b>13</b>	<b>45500</b>	<b>75</b>
		<b>Karjat -8</b>	<b>5</b>	<b>17500</b>	
<b>OILSEEDS</b>	<b>Niger</b>	<b>Phule Karala</b>	<b>1.80</b>	<b>18000</b>	<b>80</b>
<b>PULSES</b>	<b>Bengal gram</b>	<b>Vijay</b>	<b>1</b>	<b>5000</b>	<b>-</b>
<b>VEGETABLES</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
	<b>Total</b>			<b>208500</b>	<b>345</b>

**SUMMARY**

Sl. No.	Crop	Quantity (qtl.)	Value (Rs.)	Provided to No. of Farmers
1	<b>CEREALS</b>	<b>53.00 qtl</b>	<b>185500/-</b>	<b>265</b>
2	<b>OILSEEDS</b>	<b>1.80 qtl</b>	<b>18,000/-</b>	<b>80</b>
3	<b>PULSES</b>	<b>1.0 qtl</b>	<b>5000/-</b>	<b>-</b>
4	<b>VEGETABLES</b>	<b>-</b>	<b>-</b>	<b>-</b>
5	<b>FLOWER CROPS</b>			
6	<b>OTHERS</b>			
	<b>TOTAL</b>	<b>55.80 qtl</b>	<b>208500/-</b>	<b>345</b>

### PLANTING MATERIALS

Sl. No.	Crop	Variety	Name of the product (Slips/cuttings/seedlings etc)	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
<b>FRUITS</b>	Sapota	Kalipatti	Grafts	3500	105000	19
	Mango	Kesar	Grafts	3200	96000	56
	Rayan	Local	Seedlings	20000	200000	-
	Custard Applle	Balanagar	Grafts	2000	20000	100
<b>SPICES</b>						
<b>VEGETABLES</b>	-	-		-	-	-
<b>FOREST SPECIES</b>	Wild date palm	Local		70000	700000	785
<b>ORNAMENTAL CROPS</b>						
<b>PLANTATION CROPS</b>						
Tuber Crop	Sweet potato	Kamal Sundari		700	275	30
<b>Others (specify)</b>						

<b>SUMMARY</b>
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Sl. No.	Crop	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
1	FRUITS	8700	204000	168
2	VEGETABLES	-	-	-
3	SPICES	-	-	-
4	FOREST SPECIES	70000	700000	785
5	ORNAMENTAL CROPS			
6	PLANTATION CROPS			
7	TUBER CROPS – Sweet Potato	700	275	30

<b>BIO PRODUCTS</b>
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Sl. No.	Product Name	Species	Quantity		Value (Rs.)	Provided to No. of Farmers
			No	(kg)		
	<b>BIOAGENTS</b>	-	-	-	-	-
	<b>BIOFERTILIZERS</b>	-	-	-	-	-
	<b>BIO PESTICIDES</b>	-	-	-	-	-

**SUMMARY**

Sl. No.	Product Name	Species	Quantity		Value (Rs.)	Provided to No. of Farmers
			No	(kg)		
1	BIOAGENTS	-	-	-	-	-
2	BIO FERTILIZERS	-	-	-	-	-
3	BIO PESTICIDE	-	-	-	-	-
	<b>TOTAL</b>	-	-	-	-	-

**LIVESTOCK**

**SUMMARY**

Sl. No.	Type	Breed	Quantity		Value (Rs.)	Provided to No. of Farmers
			Nos	Kgs		
1	CATTLE					
2	SHEEP & GOAT					
3	POULTRY	RIR	400	-	51936	268
		Vanraj	1000	-	150000	194
4	QUAIL					
5	OTHERS					
	<b>TOTAL</b>		<b>1400</b>	<b>-</b>	<b>201936</b>	<b>462</b>

### 3.6. Literature Developed/Published (with full title, author & reference)

(A) KVK News Letter ((Date of start, Periodicity, number of copies distributed etc.) -

#### (B) Literature developed/published

Item	Title	Authors name	Publication & Day of Publish
Research papers	Entrepreneurship development of tribal women through KVK activities	Shri. Vilas Jadhav, Dr. Nalkar S. D.	
	Use of ICT in KVK	Shri. Vilas Jadhav, Shri. U. G. Sahane	
	Rural Development through Agro Tourism	Shri. Vilas Jadhav	
	Impact of KVK activities for women development	Shri. Vilas Jadhav	
	Entrepreneurial behavior of Floriculturist in Thane district	Shri. Vilas Jadhav	
Technical reports			
Popular Articles			
	Planning of Kharif Season	Shri. Vilas Jadhav	Dahanu Times 14/05/2015
	Contingency planning for Rice Cultivation	Shri.B.M.Kushare	Dahanu Times 15.07. 2014
	Contingency planning for Rice Cultivation	Shri.B.M.Kushare	Palghar Mitra 23.07. 2014
	Direct seeded (Aerobic) rice for late sowing	Shri.B.M.Kushare	Agrowon Daily 30.07.2014
	Used of Drum seeder in rice Cultivation.	Shri.B.M.Kushare	Agrowon Daily 01.08.2014
	Control of Fruitfly by Traps	Shri U.G.Sahane	Agrowon Daily 17 May 2014
	Importance of Birds in insect control	Shri U.G.Sahane	Agrowarta Weekly June 2014
	Increase production & Quality of Sapota by Rejuvenation	Shri U.G.Sahane	Agrowon Daily 16 July 2014
	Protection from Rain through Girija Raincoat	Shri U.G.Sahane	Agrowon Daily 4 Aug 2014
	Multiuse of Mahua tree for Entrepreneurship development	Shri U.G.Sahane	Agrowon Daily 12 Aug 2014
	Clean the place: Protect your Health	Shri U.G.Sahane	Agrowon Daily 12 Oct 2014
	Imporance of Cleaniness & Fertilizer management in Sapota Orchard	Shri U.G.Sahane	Agrowon Daily 26 Oct 2014
	Tribal people Protects their culture through Warli painting	Shri U.G.Sahane	Agrowon Daily 07 Dec 2014
	Use pheromen traps to control	Shri U.G.Sahane	Agrowon Daily

	fruitfly		22 Jan 2015
	Look after proper flowering stage in Sapota	Shri U.G.Sahane	Agrowon Daily 26 Feb 2015
	Vegetable Guide	Shri U.G.Sahane	Agrowon Daily 03 Mar 2015
	Control of Mango fruit fly by traps	Shri U.G.Sahane	RCF Patrika March 2015
	Processing on Sapota	Mrs. R.A. Deshmukh	Agrowon Daily
	Importance of Breast feeding	Mrs. R.A. Deshmukh	Agrowon Daily
	Use of Polytunnel for leafy vegetable in rainy season	Mrs. R.A. Deshmukh	Agrowon Daily
	Importance of Yam bean in Diet	Mrs. R.A. Deshmukh	Agrowon Daily
	Aonla Processing	Mrs. R.A. Deshmukh	Krushidoot Magazine
Farmer's Success Story	Value Addition of Sapota (Farmer Jyoti Patil, Kosbad)	Shri U.G.Sahane	Agrowon Daily 03 Mar 2016
	Success story of Okra Growers in Murbad Tehasil	Shri U.G.Sahane	Agrowon Daily 03 Mar 2016
	Agro tourism in Tribal Area (Farmer- Subhash Save, Dahanu)	Shri U.G.Sahane	Agrowon Daily 03 Mar 2016
	Oil Production from Mahua tree- (Farmer- Raghunath Padavi, Javhar)	Shri U.G.Sahane	Agrowon Daily 03 Mar 2016
	Develop the Model farm from Advance Technology- (Farmer Devendra Raut, Narpad, Dahau)	Shri U.G.Sahane	Agrowon Daily 03 Mar 2016
	Establishment of Dairy farm (Farmer Digambar Gharat, Parol Tal- Vasai)	Shri U.G.Sahane	Agrowon Daily 03 Mar 2016
	Experiments of Multicropping by young farmer (Farmer Nikunj Thakkar, Dahanu)	Shri U.G.Sahane	Agrowon Daily 03 Mar 2015
	Integrated farming in tribal area (Farmer Subhodh Kadu, Waghadi, Dahanu)	Shri U.G.Sahane	Agrowon Daily 03 Mar 2015
	Mogara Farming (Farmer Antu Dhadi, Dahanu)	Shri U.G.Sahane	Agrowon Daily 03 Mar 2015
	Identification of Calocasia as a cash crop given by Tribal farmer (Farmer Eknath Shende, Ambernath)	Shri U.G.Sahane	Agrowon Daily 03 Mar 2015
<b>Total</b>	<b>35</b>		
Leaflets/folders	Back yard Poultry	Dr.M.R.Kondhari	1000
	Direct seeded Rice Cultivation	B.M. Kushare	1000
	Agriculture & Rural Devlopement	V.M. Jadhav	1000

	by Shetkari mandal		
	IPM in Chilli	U.G.Sahane	1000
	Improved Cultivation of Wild date palm	J.B.Save	1000
	Improved Cultivation of Groundnut	B.M. Kushare, V.M.Jadhav	1000
	Improved Cultivation of Niger	B.M. Kushare, J.B.Save	1000
	Sweet Potato production technology	J.B.Save, V. M. Jadhav	1000
	Inventory of Nursery owners/ Agro service Centres in Thane Distirct	Dr. M. R. Kondhari, V. M. Jadhav	500
	Fodder production technology	Dr. S. D. Nalkar Shri. V. M. Jadhav	500
<b>Total</b>	<b>12</b>		
<b>Grand TOTAL</b>	<b>47</b>		

**C) Details of Electronic Media Produced**

<b>S. No.</b>	<b>Type of media (CD / VCD / DVD / Audio-Cassette)</b>	<b>Title of the programme</b>	<b>Number</b>
01	CD on RIR & Black Astrolorp poultry bird	-	100
02	Bee Keeping	-	100
03	Preparation of Nagli products	-	100

### 3.7. Success stories/Case studies, if any (two or three pages write-up on each case with suitable action photographs)

#### 1. Collective marketing of Flowers through Common Interest Group

Floriculture or *Fulsheti*, has emerged as an alternative source of livelihood for small and marginal farmers. The income for these farmers, who were entirely dependent on agriculture, was very low because of dwindling natural resources and fragmented landholdings. To augment their income, 'fulsheti' — the model of floriculture suitable for small and marginal farmers — has been successfully tried in the predominantly tribal pockets of Jawhar, Vikramgad, Dahanu, Talasari and Palghar talukas of the Thane district in Maharashtra. Floriculture was adopted because of the various advantages associated with it, such as limited (or less) based farming, and management is easier, not to forget the permanent income opportunity from selling the flowers. The fulsheti model took shape while working with the tribal community in Thane. It includes the cultivation of 200 jasmine plants on 500 sq. m (0.05 ha) of land, with an investment of Rs. 3,000. The collective marketing of flowers through common-interest groups ensures a net income of around Rs. 27,000 a year

#### Details of the Jasmine cultivation model

Particulars Details

- |                              |   |
|------------------------------|---|
| 1. Plot size                 | : 500 sq. m                                   |
| 2. Crop                      | : Jasmine(Mogra)                              |
| 3. Variety                   | : Arabian Nights, locally known as Bangalori  |
| 4. Nature of the crop        | : Perennial                                   |
| 5. Plant life                | : 12 Years                                    |
| 6. Avg. no. of plants        | : 200 in 500 sq.m                             |
| 7. Commencement of income    | : 6 months after plantation                   |
| 8. Harvesting interval       | : Daily                                       |
| 9. Avg. production per day   | : 700 gms                                     |
| 10. Avg. production per year | : 189 kg                                      |
| 11. Avg. gross income        | : Rs. 30,240 received in one year at Rs160/kg |

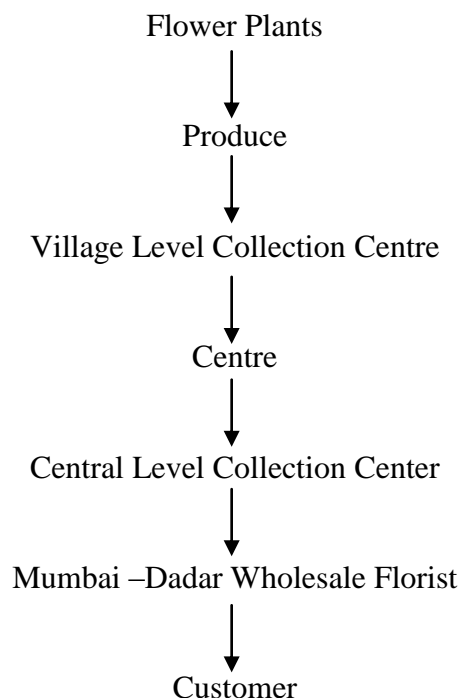
In Jawhar, Vikramgad, Dahanu, Talasari and Palghar talukas — dominated by the tribal communities of the Kokna, Warli, Mahadeo Koli and Katkari tribes — families are predominantly dependent on agriculture. The low quality of land and lack of awareness regarding modern farming practices and money for investment leads to low productivity of crops in these areas. Availability of irrigation, rabi cultivation is almost non-existent, while during monsoons, crops such as paddy, finger millet, proso millet (warai) and niger (khursani) are grown.

As a result of such subsistent nature of farming, many families in this region have been forced to migrate to nearby towns for survival after the Holi festival in March. This large-scale migration has a negative impact on the family's health and the children's education. Malnutrition among women and children is very high. Despite its proximity to Mumbai, India's commercial capital, these areas have shortage of basic amenities such as hospitals, schools, roads and electricity.

KVK, Kosbad Hill, Dist, Thane adopted Ganje Dhekale village of Palghar taluka for the implementation of various agril programmes. It is in these villages, the Eklavya Pushpa Utpadak Sangh was formed with efficient collective marketing and support from KVK. Representatives of the villagers form the management committee of these organizations. Initially they collected Rs.

500/- membership fee for the federation, and the other criterion is that the member has to be a tribal farmer and should have an interest in jasmine cultivation. The process begins with having harvested the flowers by 6.30 am, which are then brought to the village collection centres. The produce from each member is weighed and packed in jute sacks; it is then collected from the village bus stands and transported to Dadar in Mumbai by either bus or train. One or two members accompany the produce for safeguarding it from damage during transportation. The secretary of Eklavya Sangh keeps a record of income and expenditure to arrive at cost per kg of the flower to be paid to the producers.

## FLOWER SUPPLY CHAIN



The rates of flowers in the market vary daily on the basis of demand and supply. The traders pay the Sangh every month based on the prevailing rates for each day. The amount received from the trader is deposited in the Sangh's bank account. Members are paid on a monthly basis after deducting the expenditure incurred on marketing. Each member contributes Rs. 10 per kg of flower sold, towards the sustainability fund of the Sangh — which is, in turn, used to purchase input material for cultivation. The input material is provided to the members at a cost. About 1,904 farmers are involved in floriculture as an income-generation activity in Thane. Over the years, the farmers have earned more than Rs. 2 crore from selling jasmine. Not only has this money helped improve the quality of life, education and health of the farmers but also helped them build their asset base by constructing homes and wells, buying vehicles and other agricultural implements to aid floriculture. Working in groups has improved the social interactions among farmers by developing their communication skills and also helped in developing leadership skills at the community level. Exposure to the markets in Mumbai has boosted the confidence of the members who are now experimenting with other flowers varieties such as marigold, gaillardia, rose and tuberose.

The sustainability of this model is definite because the plants are hardy and even in the most unfavourable conditions there is scope for some nominal income. Since there is a demand for flowers throughout the year, it can be categorized as a perennial source of income that helps

sustaining the interest of the farmers. This initiative has successfully been replicated by 1,200 tribal families of Thane district. The formation of common interest groups and their federation at the taluka level has effectively democratized the process and brought in total transparency. Collective marketing has allowed small producers to sell their flowers, enabling producers to realize better incomes from collective bargaining due to higher volumes involved.

## **2. Sweet success of Kallu Wangad – A tribal entrepreneur**

### **1. Introduction:**

An entrepreneur is a person who organizes and maintains an enterprise undertaking assuming the risk for the sake of profit or is an economic man who strives to maximize his profits by innovation. However, the entrepreneur is not a simple innovator, they are men with a will to act to assume risk and to bring about a change through organization of human efforts.

In case of Tribal entrepreneurs are known to be involved in bee keeping since a long time. In the last two decades bee keepers makers and planners have started realizing the importance of mobilizing the tribal youth for bee keeping as a self-employment. Studies in tribal youth in bee keeping and agriculture started emerging. Thus, it helped to make invisible tribal entrepreneur to become a more and more visible. Such studies on tribal are of extreme importance, to get an insight about their role in bee keeping the motivation factor, the financial difficulties, information seeking and managerial skills in such activities. Thus the present study was taken up with the specific objective of conductivity and in depth case study of tribal youth entrepreneur in bee keeping farming.

### **Methodology**

The pilot survey of the area around Kosbad Hill village was made to identify tribal youth entrepreneur in Bee keeping who had already trained. One of young farmer i.e. Shri. Kallu wangad could be identified who had running bee unit efficiently. Thus it was decided to take up a case study on his bee activities. The study used an open-ended interview schedule as well as observation method as a tool to conduct case study.

### **Process documentation**

Shri. Kallu Wangad, a young enthusiastic hard working farmer resides at Kosbad Hill village in Dahanu tehsil of Thane district in Maharashtra. After completion of 10<sup>th</sup> standard education, he had undergone training for Bee keeping course at KVK, Kosbad Hill. After completion of one-month duration of training course, he started bee keeping unit from 05 Bee colonies.

Shri. Kallu Wangad started his beekeeping vocation by initially capturing bee colonies of local bee species *Apis cerana indica* available in his locality and then setting them up in his own apiary at his native village of Kosbad Hill and nearby areas. By that time, he also took training in beekeeping from the KVK Thane and the Khadi and Village Industries Board (KVIB) for learning scientific beekeeping and better bee management practices.

### **3.1 Information about Bee keeping activities**

**3.1.1 Location** –The Bee keeping unit is located in Kosbad Hill village, Taluka – Dahanu, Thane District, Maharashtra. The residence surrounded with agriculture fields, few shrubs owned by the family.

#### **3.1.2 Bee keeping activities:**

Mr. Kallu Wangad took interest in beekeeping after he completed his S.S.C when he was working as a carpenter. His interest in beekeeping was triggered by a beekeeper, Mr. Rajesh Wangad, his nephew who approached him to make beehives and who also gave him practical knowledge about the subject. There is a Bee keeping unit having size about 10 colonies, the entire activities managed by him.

Basically he is from carpenter family, took initiative for the preparation of bee boxes along with capturing bee colonies. He started this work. He provides the bee boxes along with bee colonies of *Apis cerana indica* for the farmers of Thane as well as other districts of Maharashtra state.

He is also engaged in maintaining and consulted to 165 farmers towards the bee hives of surrounding Palghar, Dahanu and Talasari tehsils of Thane district.

#### **3.1.3 Employment pattern:**

Shri. Kallu Wangad and his family working in Bee keeping regularly. He did not require hiring labour. Preparation of bee boxes, collection of bee colonies, and maintenance of bee boxes of surrounding areas, etc work doing by him. Administration of as when required are doing by him and his wife.

#### **3.1.3. Out puts and Outcome:**

After successful running the various activities of bee keeping gives on average income of Rs. 20000/- per month. So that he produced the amount of Rs. 2,24,000/- during the year 2012 and got net benefit of Rs. 1,30,000/-.

#### **3.1.4. Impact:**

Today he is maintaining 1250 bee colonies and has been identified as a bee-breeder by the Khadi Village Industries Commission and works as a Master trainer of KVK for its mission for bee colonies multiplication and supply to beekeepers. He also helps over 165 beekeepers in Palghar, Dahanu and Talasari tehsil of Thane and other districts. His tiny bee-box manufacturing unit supplies 5,000 bee-boxes and other accessories every year to the beekeepers and other agencies.

#### **3.1.5. Future prospects:**

It is the fact that tribal youth can manage bee keeping enterprise. Although he got formal training but with interest and determination one can achieve success. It is suggested that unemployed member of the family first takes up their enterprise on a small scale reinvesting the profits are innovative and the household can live an income earned from the farm. This success story is a small beginning towards the role of tribal youth in bee keeping. There is need to conduct vocational training to the tribal youth in the traditional bee keeping as well as organized exposure visits in commercial bee entrepreneurs so that planners could be direct their programmer towards the neglected tribal youth for getting self employment.

### **3.8 Give details of innovative methodology/technology developed and used for Transfer of Technology during the year:**

**Farmers Scientist *manch*:** KVK Thane has been formed four tehsil wise Farmers Scientist manch for the technology transfer & its adoption by proper coordination between University Scientists, officers of line departments and farmers.

#### **Objectives of Farmers Scientist *manch*:**

1. Coordination between university Scientists, officers of line departments & farmers
2. Implemented various Agril. Schemes for integrated socio- economic development of farmers.
3. Motivate towards new technology to the farmers.
4. To decides strategies of research & extension on the basis of farmer's problems
5. To create awareness & motivate to adoption of new technology

#### **Functioning of Farmers Scientist *manch*:**

1. KVK organizes a monthly meeting of farmers with concerned university scientists to solve their seasonal farming problems with proper demonstrations of particular technology.
2. Give priority to the members of manch for KVKs, universities training & demonstrations programmes.
3. Invites members of manch in Seminars, exhibitions, Shivar pheri, etc which organized by KVK or university.
4. KVK provides information to the members of manch about the marketing & post harvest technology.

**3.9 Give details of indigenous technology practiced by the farmers in the KVK operational area which can be considered for technology development (in detail with suitable photographs)**

<b>S. No.</b>	<b>Crop / Enterprise</b>	<b>ITK Practiced</b>	<b>Purpose of ITK</b>
1	Rice	Use of bin for food grain storage & neem ( <i>Azadiracta indica</i> ) and Karanj ( <i>Pongamia pinnata</i> ) leaves are mixed for protection from store grain pest.	Food grain storage

After harvesting, good and healthy seeds are selected with care to store them for next season. To store grains, a storage structure, i.e. bin is used. Tribal people of village Ashta of Dahanu tehsil, dist. Thane of Maharashtra state use bin locally called as *Kanagi*, a grain storage structure made of bamboo. Ashta village is situated in hilly areas where bamboo is easily available. Therefore bamboo strips are used to prepare bin for grain storage. The bin is 5 feet high with 4 feet diameter and has 15 – 18 quintals storing capacity. The farmers having varies size of store bins.

For preparation of bin at least 30 bamboo sticks are required. Inside the house, the *pacca* floor is prepared by farmers with the use of cow dung slurry. On the *pacca* floor, bin is structured. The teak leaves are spread on the surface of *pacca* floor. The inside of bin is covered by teak leaves. Slurry of cow dung and gomutra (cattle urine) are smeared inside with the coating of fine ash. Such coating is provided to absorb moisture and repel stored grain pests. On the top of it paddy straw and teak leaves are spread to cover the surface and seal the bin with the mixture of cow dung, urine and soil.

Such type of bin is cheap, suitable for all weather, moisture proof, resistance to rodent damage, easy to shift and covers less space in house. At the time of rice grain storage, neem (*Azadiracta indica*) and Karanj (*Pongamia pinnata*) leaves are mixed.

### **3.10 Indicate the specific training need analysis tools/methodology followed for**

- Identification of courses for farmers/farm women

KVK identified their problems, needs etc through PRA survey method, group discussion with farmers, interview of farmers. On that basis KVK has been organized programmes for farmers.

- Rural Youth

KVK is engaged in formation of groups/ SHGs of rural youth. Keeping their interest & needs of SHGs / groups KVK planned to organized courses for their self employment.

- In- service personnel

KVK is strongly linkages with the line departments. With the help of their interest, need KVK have been planned to organize courses for in- service personnel.

### **3.11 Field activities**

i.	Number of villages adopted	: 02
ii.	No. of farm families selected	: 100
iii.	No. of survey/PRA conducted	: 01

### 3.12. Activities of Soil and Water Testing Laboratory

Status of establishment of Lab :

1. Year of establishment : 2005
2. List of equipments purchased with amount :

Sl. No.	Name of the Equipment	Qty.	Cost Rs.
1	Flame Photometer	1	50,639/-
2	Digital Conductivity Tds meter	1	16,378/-
3	pH System	1	13,947/-
4	Micro Controller	1	53,739/-
5	Electric Top pan Balance	1	12,161/-
6	Electric chemical Balance	1	93,973/-
7	Air Dryer	1	
8	Computer	1	42,100/-
9	Computer Printer	1	1,780/-
10	Water analyzer	1	57,706/-
11	Microscope	2	3,470/-
12	Dessecting Microscope	2	1,550/-
13	Grinder	1	16,694/-
14	Pulverizer	1	8,000/-
15	Penetrometer	1	7,040/-
16	Autoclave	1	13,500/-
17	Flask shaker	1	43,200/-
18	Double Distillation	1	16,500/-
19	Hot Plate	1	3,240/-
20	Distillation unister	2	25,200/-
21	Binocular Microscope	1	3,900/-
22	Laboratory Stirrer	1	4,240/-
23	Analytical Chemical Balance	1	2,860/-
24	Soxlet Extraction Heater	1	6,600/-
25	Laboratory Oven	1	5,450/-
26	Water Steal Distillation	1	3,870/-
27	Universal Centrifuge machine	1	2,410/-
28	Metalab Micro Kjeldal	1	7,270/-
29	Laboratory Blender	1	3,065/-
	<b>TOTAL</b>	<b>35</b>	<b>4,66,778/-</b>

3. Details of samples analyzed so far :

Details	No. of Samples	No. of Farmers	No. of Villages	Amount realized
Soil Samples	1012	998	60	1,51,800
Water Samples	112	101	46	5,600
Plant Samples	-	-	-	-
Petiole Samples	-	-	-	-
<b>Total</b>	<b>1112</b>	<b>1099</b>	<b>106</b>	<b>1,57,400</b>

### 3.13. Activities under rainwater harvesting

Date	Nature of Activity	Title	Client (PF/R Y/EF)	No. of Courses	No. of Participants including SC/ST			No. of SC/ST Participants			Total Participants		
					Male	Female	Total	Male	Female	Total	Male	Female	Total
12/05/15	Training	Awareness about rain water harvesting structures	PF	1	-	-	-	12	10	22	12	10	22
29/05/15	Demonstration	Farm Ponds and utility	PF	1	25	05	30	-	-	-	25	05	30
10/06/15	Training	Awareness about rain water harvesting structures Awareness about rain water harvesting structures	PF	1	-	-	-	15	-	15	15	-	15
21/10/15	Training	Awareness about rain water harvesting structures	PF	1	-	-	-	18	02	20	18	02	20
14/10/15	Training	Awareness and motivation of RWH	PF	1	-	-	-	13	04	17	13	04	17
16/12/15	Training	Awareness and motivation of RWH	PF	1	-	-	-	23	05	28	23	05	28
06/02/16	Training	Awareness and motivation of RWH	PF	1	24	-	24	-	-	-	24	-	24
18/03/16	Training	Awareness and motivation of RWH	PF	1	-	-	-	14	08	22	14	08	22
		<b>Total</b>			<b>49</b>	<b>05</b>	<b>54</b>	<b>95</b>	<b>29</b>	<b>124</b>	<b>144</b>	<b>34</b>	<b>178</b>

## IMPACT :

### 4.1. Impact of KVK activities (Not to be restricted for reporting period).

Sl.No.	Name of Specific Technology/Skill transferred	No. of Participants	% of Adoption	Change in Income	
				Before Training (Rs./Unit)	After Training (Rs./Unit)
1	Intensive poultry Management	24	67.20	3500	6800
2	Goat Management	26	54.36	4000	7400
3	Improved practices for chillies production	29	56.00	5000	14000
4	Preparation of Chiku product	28	22.00	2000	8000
5	Nursery Management	15	66.66	2800	4500

**Cases of large scale adoption**  
**(Please furnish detailed information for each case)**

**A. Sapota rejuvenation**

Thane district is well known for horticultural district. The area under fruits and vegetables is about 8718 ha. Among them 4964 ha area is under Fruit cultivation. Out of them 81% under sapota cultivation. It means Sapota cultivation affects economy of this district. But now a day's farmers get decreases the yield of sapota trees due to their old orchards. Keeping this view, KVK provide training & demonstrations to the sapota growers on rejuvenation of sapota orchards with the help of State Agril. Departments & Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli. Now the 1627 farmers of Thane district were adopted this rejuvenation technology at own orchards and getting satisfactory yield.

**B. Upgradation of local poultry birds.**

In rural area and mostly in tribal belt, rich or poor, most of the families are found of keeping poultry birds for eggs and meat purpose. Generally, the amount received through selling the eggs or birds goes to the ladies in the house. The birds are of local type and they are reared by free- range system and not properly cared. These bird's are poor in weight and poor in laying. The poultry breed, known as RIR, Vanraj & *Kadakhath* thrives well in high rainfall tract and can be reared in free –range system. More over, this breed is dual purpose. In both aspects, this breed is superior to local breed. This KVK every year taking a programme of up gradation of local birds in RIR, Vanraj by distributing male & female birds in adopted villages.

### **C. Introduction of high yielding Bengal gram Var. Vijay in Wada tehsil of Thane district:**

Bengal gram is important pulse crop of Thane District. The PRA survey of tribal village Sonale of Wada tehsil have reflected various problem in Bengal gram production such as

- 100 Low productivity (6.50 quintal / ha.)
- ii. Non availability of improved variety seed.
  - 100 Indiscriminate use of organic and inorganic fertilizer.
  - 100 Lack of knowledge about plant protection measures.

In order to overcome the above mentioned problems the FLD programme was organized on Bengal gram in the village Sonale of Wada tehsil since last three years. High yield, drought resistant Vijay variety was included in the programme. Farmers comes under this programme were introduced the package of practices before implementation of FLD programme.

KVK intervened them towards the improved variety, seed treatment, package of practices, INM, IPM, marketing etc.

KVK also conducted field days, training programmes, method demonstrations etc for improve their awareness and motive to the farmers.

During the field visit of District Collector & Superintendent of District Agril. Officer at Sonale village and saw the farmers field where the FLD programme were conducted, they decided to conduct Bengal gram programme in whole tehsil. Hence, this Bengal gram production technology spread over the district. The crop mostly cultivated by using residual soil moisture after harvesting of paddy crop in Thane district. During this year, rabi 2012-13, the Vijay variety of Bengal gram cultivated in 133 villages of Wada tehsil at 530 farmers field on residual soil moisture and it covered 553.20 ha. But this year early cessation of monsoon and therefore residual soil moisture is less in soil as compared to previous year.

As the most of the beneficial farmers having initial stage to cultivate Bengal, they got satisfactorily yield. The total yield is about 2212.80 quintal.

### 4.3 Details of impact analysis of KVK activities carried out during the reporting period

-

## 5.0 LINKAGES

### 5.1 Functional linkage with different organizations

Sl. No.	Name of Organization	Nature of Linkage
1	SAU, Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli (MH).	Training and Research, joint diagnostic survey
2	Integrated Tribal Development Project	Various Schemes for Tribal people, conducting of training programmes.
3	Diocesan Board of Social Service, Mumbai	Identification of target groups for implementing the KVK activities such as training, OFT, demonstrations
4	All India Radio	Broadcasting of Agricultural Programme.
5	Khadi and Village Industry Commission	Training for Rural Youth, identification of target groups for implementing the KVK activities such as training, demonstrations
6	Department of Conservation of Forest	Village survey, Training programme on soil & water conservation
7	Life Science Society, Saphale. Dist: Thane	Training for Rural Youth, joint implementation of programme for increasing productivity of crops/enterprises
8	Agriculture Deptt. Of State Govt.	Training and Demonstration, joint implementation of programme for increasing productivity of crops/enterprises, contribution received for infrastructure development
9	Horticulture Deptt. Of State Govt.	Training and Demonstration, identification of target groups for implementing the KVK activities such as training, OFT, demonstrations
10	Stree shakti Sanghatana, Mumbai.	Self help group training and demonstrations, identification of training needs
11	Gyanmata Sadan, Talasari, Thane	Training and Demonstration
12	Adivasi Jivan Vikas Kendra, Bahare, Thane	Training and Demonstration
13	Adivasi Sahaj Shikshan Parivar, Maswan, Thane.	Self help group training and demonstrations
14	Maharashtra Centre for Entrepreneurship Development	Self help group training and demonstrations
15	Vanvasi Kalyan Ashram, Dahanu	Self help group training and demonstrations
16	Mahila Arthik Vikas Mahamandal	Self help group training and demonstrations
17	SAM Marathi Channel	To Recording & Broadcasting of Farmers Success Stories
18	Yashawantrao Chavan Maharashtra Open University Nashik.	Distance Education in Agriculture and Horticulture.

**5.2 List special programmes undertaken by the KVK, which have been financed by State Govt./Other Agencies**

Name of the scheme	Date/ Month of initiation	Funding agency	Amount (Rs.)
Assistance for Agril Extension	June 2013	ATMA	22,10,000/-
CROPSAP	June 2013	Agril. Department	30,000/-
Landscape Gardening	August 2013	BARC, Mumbai	36,000/-

**5.3 Details of linkage with ATMA**

a) Is ATMA implemented in your district **Yes**

S. No.	Programme	Nature of linkage	Remarks
1	Conducted Training & demonstrations on rice, Nagli, Bengal gram, Groundnut & Niger	Conduct Training & Demonstrations	Conducted FLD on rice, Nagli, Bengal gram, Groundnut & Niger during Kharif 2013 & Rabi 2015-16
2	Back yard Poultry keeping	Conduct Training & Demonstrations	Conducted Back yard poultry keeping training & demonstration at Adopted villages.
3	Training & Exposure visit	Conducted training & Exposure visit	Conducted training & exposure visit for agril. Entrepreneurs at NAU, Gujrat
4	Technology Dissemination	Literature development	Developed two leaflets on Sweet potato & Bee keeping

**5.4 Give details of programmes implemented under National Horticultural Mission**

S. No.	Programme	Nature of linkage	Constraints if any
-	-	-	-

**5.5 Nature of linkage with National Fisheries Development Board**

S. No.	Programme	Nature of linkage	Remarks
-	-	-	-

## 5. PERFORMANCE OF INFRASTRUCTURE IN KVK

### 6.1 Performance of instructional farm (Crops) including seed production

Sl. No.	Demo Unit	Year of estt.	Area	Details of production			Amount (Rs.)		Remarks
				Variety	Produce	Qty.	Cost of inputs	Gross income	
1	Fruit Nursery	1990	1.00 ha	Kesar	Graft	2800	61600	126000	-
				Sapota	Side Grafts	3200	57600	144000	1200 grafts balance stock
				Khirani	Root stock	10000	18000	50000	In stock will be utilize for sapota grafts
				Wild date palm	Seedlings	50000	200000	4,00000/-	
2	Vermiculture	1995	50 Sq m	<i>Uridrilus ugeni</i>	Vermiculture	60 Kg	2000	5000	
					Vermicom post	2600 Kgs	5500	13000	
3	Bee Keeping	2006	06 boxes	<i>Apis cerena</i>	Honey & Colony	06 kg	1200	3000	
4	Poultry	1985	100 Sq m	RIR	Chicken and breeding cock	1000	80000	100000	
				Vanraj	Chicken and breeding	400	3200	40000	
				Giriraj	Chicken and breeding cock	1000	80000	100000	

5	Mushroom	2014	388 Sq m	Oyster mushroom	Mushroom	90 kg	10000	18000	
6	PHT	2012	750 Sq m	Sapota	Sapota chips	108 kg	13000	21600	
				Aamla	Aamla candy	72 kg	8000	12960	

### 6.2 Performance of instructional farm (Crops) including seed production

Name Of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Type of Produce	Qty. Kgs	Cost of inputs	Gross income	
<b>Cereals</b>									
Rice	20/06/15	10/10/15	1.00	Karjat -3	Seed	3500	51020	122500	
					Straw	3000		7500	
	18/06/15	30/10/15	0.2	Karjat -9	Seed	500	10204	17500	
					Straw	400		1000	
	19/06/15	08/10/15	0.5	Karjat -7	Seed	1300	25510	45000	
					Straw	1000		2500	
Oil seed									
Niger	18/06/15	09/10/15	0.40	Phule Karla	Seed	180	6000	18000	
<b>Pulses</b>									
Begalgram	5/12/15	15/03/15	0.10	Digvijay	Seed	100	3000	5000	
<b>Vegetables</b>									
Sweet Potato	14/12/2015	08/04/15	0.10	Kamal sundari	Green	3500	22000	70000	
<b>Others (specify)</b>									

**6.3 Performance of production Units (bio-agents / bio pesticides/ bio fertilizers etc.,)**

Sl. No.	Name of the Product	Qty	Amount (Rs.)		Remarks
			Cost of inputs	Gross income	
-	-	-	-	-	-

**6.4 Performance of instructional farm (livestock and fisheries production)**

Sl. No	Name of the animal / bird / aquatics	Details of production			Amount (Rs.)		Remarks
		Breed	Type of Produce	Qty.	Cost of inputs	Gross income	
1	Poultry	RIR	Chicken and breeding cock	1000	80000	150000	
		Vanraj	Chicken and breeding	400	3200	40000	
		Giriraj	Chicken and breeding cock	1000	80000	150000	

## 6.5 Utilization of hostel facilities

Accommodation available (No. of beds): 30

Months	Title of the training course/Purpose of stay	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
April 2015				
	IPM in Mango	33	66	
	Health and nutrition of farm women	20	40	
	Fruit processing	15	30	
<b>Total</b>		<b>68</b>	<b>136</b>	
May 2015				
	IPM in Sapota	33	66	
	SREP	07	14	
<b>Total</b>		<b>40</b>	<b>80</b>	
June 2015	Mat nursery for paddy	10	20	Farmers engaged in paddy cultivation.
<b>Total</b>		<b>10</b>	<b>20</b>	
July 2015	Saguna Rice Technology (SRT)	13	26	
	Formation & Functioning of SHG	27	54	
	Back yard poultry keeping	26	52	
	Importance of Drip Irrigation system	19	38	
<b>Total</b>		<b>85</b>	<b>170</b>	
August 2015	Back yard poultry keeping	13	26	
	Formation & Functioning of SHG	12	24	
<b>Total</b>		<b>25</b>	<b>50</b>	
September 2015				
	Tribal youth Network	36	72	
	Back yard poultry	13	26	

	Green house technology	39	78	
<b>Total</b>		<b>88</b>	<b>176</b>	
October 2015				
	Back yard Poultry	41	82	
	Candle making	27	54	
	Fruit processing	24	48	
<b>Total</b>		<b>92</b>	<b>184</b>	
November 2015				
	Back yard poultry	30	60	
	Grain storage	26	52	
<b>Total</b>		<b>56</b>	<b>112</b>	
December 2015				
	Goat production	11	22	
	Value addition in Sapota	20	40	
	Threshing of paddy by use of power operated paddy thresher cum winnower	40	80	
<b>Total</b>		<b>71</b>	<b>142</b>	
January 2016				
	IPM in Vegetables	34	68	
	Friends of coconut - harvesting of coconut by coconut climber	20	120	
<b>Total</b>		<b>54</b>	<b>188</b>	
February 2016				
	Back yard poultry	30	60	
	Fruit processing	55	110	
	Mushroom production	10	20	
	Low cost recipes and Awareness on Health and Nutrition Programme	70	140	
<b>Total</b>		<b>165</b>	<b>330</b>	

March 2016				
	IPM in Vegetables	21	42	
	Cashewnut production	30	60	
		51	102	
<b>Total</b>		<b>34</b>	<b>68</b>	
<b>Grand Total</b>		<b>788</b>	<b>1656</b>	

## 6.6 INTERVENTION ON DROUGHT MITIGATION

### A) Introduction of alternate crops/varieties

State	District	Name of the KVK	Type of KVK (SAU/ NGO/ ICAR)	Name of Crop	Category (Oilseeds/ Pulses/ Cereals/ Vegetable crops/ Fruits/Fodder/ Spices/ Cash crops)	Name of tolerant variety	Area (ha)	Number of beneficiaries

### b) Farmers-scientists interaction on livestock management

Livestock components	Number of interactions	No. of participants	Number of animal health camps organized	No. of animals	No. of farmers
Dairy enterprise	01	70			
Back yard poultry	04	125	01	610	55
Goat enterprise	02	22			

### c) Large scale adoption of resource conservation technologies (if any)

Name of resource conservation technology / Crops/cultivars introduced	Area (ha)	Number of farmers
Direct seeded rice through drum seeder	10	25

**6.7. Insert Reports of Special Programmes/Projects tables (Date and report)**

- 1. Soil Testing and Soil Health Card Distribution**
- 2. PPV & FR Act**
- 3. TSP**
- 4. ARYA**
- 5. NICRA**
- 6. Jai Kisan Jai Vigyan**
- 7. Farmers First**
- 8. Kisan Sammelan**
- 9. Any Other (Specify)**

## 7. FINANCIAL PERFORMANCE

### 7.1 Details of KVK Bank accounts

Bank account	Name of the bank	Location	Account Number
With Host Institute	-	-	-
With KVK	Central Bank of India, Kosbad Hill	Kosbad Hill	
KVK Main A/c	Central Bank of India, Kosbad Hill	Kosbad Hill	2340482367
Revolving Fund A/c	Central Bank of India, Kosbad Hill	Kosbad Hill	2340433498
Poultry A/c	Central Bank of India, Kosbad Hill	Kosbad Hill	2340433501
Horticulture Unit	Central Bank of India, Kosbad Hill	Kosbad Hill	2340436262
FLD Oilseed	Central Bank of India, Kosbad Hill	Kosbad Hill	-
FLD Pulses	Central Bank of India, Kosbad Hill	Kosbad Hill	-

### 7.2 Utilization of funds under FLD on Oilseed (Rs. In Lakhs)

Item	Released by ICAR		Expenditure		Balance as on 1 <sup>st</sup> April 2015
	Kharif 2015	Summer 2015-16	Kharif 2015	Summer 2015-16	
Inputs	-	193592		193592	-
Extension activities	-	984	-	984	-
TA/DA/POL etc.	-	-	-	-	-
<b>TOTAL</b>	-	200000	-	200000	-

### 7.3 Utilization of funds under FLD on Pulses (Rs. In Lakhs)

Item	Released by ICAR		Expenditure		Balance as on 1 <sup>st</sup> April 2015
	Kharif 2015	Rabi 2015-16	Kharif 2015	Rabi 2015-16	
Inputs	-	106650	-	106650	-
Extension activities	-	2625	-	2625	-
TA/DA/POL etc.	-	-	-	-	-
<b>TOTAL</b>	-	112500	-	112500	-

### 7.4 Utilization of funds under FLD on Cotton (Rs. In Lakhs)

Item	Released by ICAR	Expenditure	Unspent balance as on 1 <sup>st</sup> April 2015
	Kharif 2015-16	Kharif 2015-16	
Inputs	-	-	-
Extension activities			
TA/DA/POL etc.			
<b>TOTAL</b>			

**7.5 Utilization of KVK funds during the year 2015-16 (up to March, 2016)**

<b>S. No.</b>	<b>Particulars</b>	<b>Sanctioned</b>	<b>Released</b>	<b>Expenditure</b>
<b>A. Recurring Contingencies</b>				
1	<b>Pay &amp; Allowances</b>	10843000/-	10843000/-	10843000/-
2	<b>Traveling allowances</b>	200000/-	200000/-	200000/-
3	<b>Contingencies</b>	800000/-	800000/-	800000/-
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	176250/-	176250/-	176250/-
B	POL, repair of vehicles, tractor and equipments	183750/-	183750/-	183750/-
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	137611/-	137611/-	137611/-
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	53411/-	53411/-	53411/-
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	120329/-	120329/-	120329/-
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	60222/-	60222/-	60222/-
G	Training of extension functionaries	36126/-	36126/-	36126/-
H	Maintenance of buildings/Farm	20500/-	20500/-	20500/-
I	Honorarium	2000/-	2000/-	2000/-
J	Library	9801/-	9801/-	9801/-
H	TSP Component	22,00,000/-	22,00,000/-	22,00,000/-
	<b>Total (A)</b>	<b>14043000/-</b>	<b>14043000/-</b>	<b>14043000/-</b>
<b>B. Non recurring Contingencies</b>				
1	<b>Works</b>	1,00,000/-	1,00,000/-	1,00,000/-
2	<b>Equipments including SWTL &amp; Furniture</b>	-	-	-
3	<b>Vehicle</b> (Four wheeler/Two wheeler, please specify)	-	-	-
4	<b>Library</b> (Purchase of assets like books & journals)	-	-	-
	<b>TOTAL (B)</b>	<b>1,00,000/-</b>	<b>1,00,000/-</b>	<b>1,00,000/-</b>
<b>C. Revolving Fund</b>				
	<b>GRAND TOTAL (A+B+C)</b>	<b>14143000/-</b>	<b>14143000/-</b>	<b>14143000/-</b>

**7.5 Utilization of KVK funds during the year 2014-15 (up to March, 2015)**

S. No.	Particulars	Sanctioned	Released	Expenditure
<b>A. Recurring Contingencies</b>				
1	<b>Pay &amp; Allowances</b>	90,00,000/-	90,00,000/-	90,00,000/-
2	<b>Traveling allowances</b>	1,25,000/-	1,25,000/-	1,25,000 /-
3	<b>Contingencies</b>	<b>17,60,000/-</b>	<b>17,60,000/-</b>	<b>17,60,000/-</b>
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	3,30,000/-	3,30,000/-	3,30,000/-
B	POL, repair of vehicles, tractor and equipments	1,30,000/-	1,30,000/-	1,30,000/-
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	40,000/-	40,000/-	40,000/-
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	10,000/-	10,000/-	10,000/-
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	90,000/-	90,000/-	90,000/-
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	50,000/-	50,000/-	50,000/-
G	Training of extension functionaries	10,000/-	10,000/-	10,000/-
H	Maintenance of buildings/Farm	50,000/-	50,000/-	50,000/-
I	Fodder technology demonstration	40,000/-	40,000/-	40,000/-
J	Library	5,000/-	5,000/-	5,000/-
k	TSP Component	10,05,000/-	10,05,000/-	10,05,000/-
<b>TOTAL (A)</b>		<b>108.85 /-</b>	<b>108.85 /-</b>	<b>108.85 /-</b>
<b>B. Non-Recurring Contingencies</b>				
1	<b>Works</b>	-	-	-
2	<b>Equipments including SWTL &amp; Furniture</b>	-	-	-
3	<b>Vehicle</b> (Four wheeler/Two wheeler, please specify)	-	-	-
4	<b>Library</b> (Purchase of assets like books & journals)	-	-	-
<b>TOTAL (B)</b>		-	-	-
<b>C. REVOLVING FUND</b>				
<b>GRAND TOTAL (A+B+C)</b>		<b>108.85/-</b>	<b>108.85/-</b>	<b>108.85 /-</b>

**7.5 Status of revolving fund (Rs. in lakhs) for the three years**

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 of each year
April 2013 to March 2014	19,99,458/-	11,69,541/-	18,29,906/-	13,39,093/-
April 2014 to March 2015	13,39,039/-	10,52,169/-	13,79,819/-	10,11,443/-
April 2015 to March 2016	10,11,443/-	24,22,944/-	14,97,770/-	19,36,617/-

**1.0. Training/Capacity building programme attended by the KVK staff during the year under report (01.04.2014 to 31.03.2015)**

S.No.	Name of the training programme	Name of the Institute	Duration		Name of the staff along with designation
			From	To	
1	Pest & Disease Control of Greenhouse Cultivated Crops	Mahatma Phule Krishi Vidyapeeth Rahuri	18 Sept 2014	19 Sept 2014	Shri. U.G. Sahane SMS (Plant Protection)
2	Orientation Programme for New Recruited PC	NAARM	10 Nov 2014	24.11.2014	Dr. S.D. Nalkar, Programme Coordinator
3	Agro-Ecosystem Analysis and Ecological Engineering for Pest management	National Institute of Plant health Management, Hyderabad	10 Dec 2014	30 Dec 2014	Shri. U.G. Sahane (Plant Protection)
4	Seed Production Technology	Dr.BSKKV, Dapoli	21 Jan 2015	23.01.2015	Prof. B. M. Kushare, SMS (Agronomy)
5	Eco –Friendly pest and Disease Management	Directorate of Extension Education, Mahatma Phule Krishi Vidyapeeth Rahuri	3 March 2015	5 March 2015	Shri.U.G.Sahane (Plant Protection)
6	Protected Cultivation for Vegetable Crops	Precision Farming Development Centre, Mahatma Phule Krishi Vidyapeeth Rahuri	10 March 2015	11 March 2015	Shri.U.G.Sahane (Plant Protection)

**9.0 Please include information which has not been reflected above (write in detail).**

**9.1 Constraints**

(a) Administrative:

1. Infrastructure facility such as Auditorium for 300 farmers is required.
2. Upgradation of old staff as new staffing pattern of KVK.

(b) Financial:

1. Non recurring finance for new demonstration units should be given such as Dairy Farming, Goat Farming and help for the renovation of old demonstration units as well as Hostel building.
2. As our KVK located in hilly and tribal area, so in order to work more effectively two motor cycle to be provided.

# Annexures

## District Profile - I

### 1. General census

#### 1.1 Area and population

The total geographical area of the district is 9387 sq.km. The population of the district as per the 2001 census was 81.31 lakhs. The rural population was 22.29 lakh (27.42%) and that of the urban was 59.02 lakhs (72.58%). The density of population per sq.km. was 549. The sex ratio (male to female) was 857. The economic classification of population showed that 37.37 per cent of the total population was workers. Among these 30.75 per cent were agricultural workers.

#### 1.2 Demographic setting

There are 15 tahsils in Thane district. tahsilwise tribal population is given in following Table. The total population of Thane district according to 2001 census was 81.31 lakhs and tribal population was 11.99 lakhs, which was 14.75 per cent of total population. Tribal population in Mokhada, Talasari and Jawhar was 90.56 per cent, 88.58 per cent and 90.00 per cent respectively. In rural area of Thane district total population was 22.29 lakhs and tribal population was 10.47 lakhs which was 47.00 per cent of total population in rural area.

## TRIBAL POPULATION OF THANE DISTRICT

Sr.No.	Tahsil	Total population	Total tribal population	Per cent tribal population	Total population in rural area	Total tribal population in rural area	Per cent tribal population in rural area
1	Thane	2486941	48739	1.96	0	0	0.00
2	Vasai	795863	81272	10.21	277262	68058	24.55
3	Palghar	454635	140732	30.95	343934	126545	36.79
4	Dahanu	331839	215162	64.84	273991	204354	74.58
5	Talasari	121217	107379	88.58	121217	107379	88.58
6	Jawhar	111039	99932	90.00	99741	96347	96.60
7	Mokhada	67319	60964	90.56	67319	60964	90.56
8	Wada	142753	75185	52.67	128467	71146	55.38
9	Bhiwandi	945582	73419	7.76	269153	66435	24.68
10	Shahapur	273304	89997	32.93	231741	81781	35.29
11	Murbad	170267	38518	22.62	154446	37687	24.40
12	Kalyan	1276614	34894	2.73	83102	10141	12.20
13	Ulhasnagar	473731	3533	0.75	0	0	0.00
14	Vikramgad	114254	103223	90.35	114254	103223	90.35
15	Ambarnath	366501	26341	7.19	64749	13651	21.08
	Total	8131859	1199290	14.75	2229376	1047711	47.00

### 1.3. Location

Thane district forms a part of north Konkan region lies between the Sahyadri hills in the East and the Arabian sea in the West. It has a coastal line of about 112 km. The district lies between 72° 45' and 73° 45' East longitude and 18° 42' and 20° 20' North latitude. Its East-West spread is 101 km. and the north-south length is about 140 km.

### 1.4. Boundaries

The district has a mostly triangular shape. Pune and Ahmadnagar districts are on the East, Nashik district on its East and Northeast, Gujarat and centrally administered area of Dadara Nagar Haveli on the North, Arabian sea on the West boundaries, while Greater Bombay and Raigad on the South.

### 1.5. Topography

On the basis of its topography, the district is divided into three parts as follows:

i) The eastern portion having Sahyadri ranges, which comprises mainly forest area.

The central region covering mainly paddy area, and

Western parts of the coastal area along with its 15 to 20 km. nearby area of coastal region where horticultural plantation, fodder production and vegetable cultivation are being practiced.

## **1.6. Soils**

Soils constitute the physical basis of an agricultural enterprise and play a very vital role in the agricultural economy of the region. The soils of Thane district are conveniently divided into three categories viz.,

### **1.6.1. Black soil containing sand (Vertisol)**

This type of soil is present in Dahanu, Palghar, Vasai and Thane tahsils. These soils are fertile and suitable for paddy, vegetables, flowers and fruit cultivation.

### **1.6.2. Red soil (Latisol)**

Found in eastern region, mostly on the slopes of Mokhada, Jawhar and Talasari tahsils. On these soils mainly *Nagli* and *vari* crops are cultivated.

### **1.6.3. Brownish black soils**

This type of soil is mostly observed in the patches of valleys lying between the coastal plain and the hilly slopes of Bhivandi, Kalyan and Shahapur tahsils, which is suitable for paddy and watermelon cultivation.

Soils of these broad groups are found in a several grades, depending on their location and admixture of different rocks. Locally, these are known as rice soils, *varkas* soils, garden soils and *khar* and *kharvat* soils.(Saline soils)

## **1.7. Climate and rainfall**

Climatic conditions in the district are strongly influenced by its geographical conditions. It is distinctly different on the coastal strip where it is very humid and warm. On the other hand, the climate on the eastern slopes and the plains at the foot slopes is comparatively less humid. The humidity of the district ranges from 50 to 80 per cent throughout the year. On an average, the temperature ranges from 17.5° to 33.3° centigrade.

Rainfall is most dominant single weather parameter that influences plant growth and crop production because of its uncertainty and variable nature. The district gets assured rainfall of 2000-3500 mm, from the south-west monsoon during the months of June to September. Generally, the highest rainfall is recorded in the month of July. It is less towards the north than south.

## **1.8. Area and population**

The total geographical area of the district is 9387 sq.km. The population of the district as per the 2001 census was 81.31 lakhs. The rural population was 22.29 lakh (27.42%) and that of the urban was 59.02 lakhs (72.58%). The density of population per sq.km. was 549. The sex ratio (male to female) was 857. The economic classification of population showed that 37.37 per cent of the total population was workers. Amongst these 30.75 per cent were agricultural workers.

### 1.9. Land utilization

The total geographical area of district is 955800 ha. of which, more than one-third (36.91%) of the area is under forests. Uncultivable land constitutes 5.80 per cent of the total geographical area, while the proportion of cultural wasteland is 1.54 per cent. The net area sown is only about 39.95 per cent. Due to inadequate irrigation facilities, area sown more than once is only 1.78 per cent. Therefore, the gross cropped area is only 381809 ha. with cropping intensity 101.78 per cent. The land utilization pattern of the district is given in following table

#### Land utilization pattern in Thane district

Sr. No.	Land use category	Area in '00 ha.	Percentage to total geographical area
1.	Total geographical area	9558	100.00
2.	Area under forests	3303	36.91
3.	Land put to non-agril. uses	581	6.18
4.	Barren land and land not suitable for cultivation	545	5.80
5.	Permanent grazing and other pastures	401	4.27
6.	Land under miscellaneous trees, crops and grooves	229	2.43
7.	Cultural waste	145	1.54
8.	Current fallow	145	1.54
9.	Other fallow	156	1.66
10.	Saline soils	208	2.17
11.	Net area sown	3714	39.95
12.	Area sown more than once	68	1.78*
13.	Gross cropped area	3819	101.78*

\* Figures are percentage to net area sown

**Source:** Socio-economic Review and District Statistical Abstract of Thane district (2005)

### 1.10. Cropping pattern

The cropping pattern followed in Thane district is presented in following Table

**Cropping pattern of Thane district**

Sr. No.	Crops	Area (ha.)	Percentage to gross cropped area
1.	<b>Cereals</b>		
	a) Paddy <i>Oriza sativa</i>	154000	36.37
	b) Other cereals	35700	8.43
	Total cereals	189700	44.80
2.	<b>Pulses</b>		
	a) Red gram <i>Cajanus cajan</i>	3400	0.80
	b) Bengal Gram <i>Cicer arentinum</i>	3900	0.92
	c) Field bean <i>Dolichos lablab</i>	2600	0.61
	d) Udid <i>Phaseolus mungo</i>	5100	1.20
	e) Other pulses	1660	0.39
	Total pulses	16660	3.93
3.	Total food grains	206360	48.74
4.	Condiments and Spices	700	0.16
5.	Fruits and Vegetables	33616	7.93
6.	Total food crops	240676	56.84
7.	Total fiber crops	200	0.04
8.	Total oil seeds	4900	1.15
9.	Total medicinal and drug plant	300	0.07
10.	Grasses	177300	41.87
11.	Other non-food crops	300	0.07
12.	Total non-food crops	180049	42.52
13.	Total net cropped area	375000	88.57
14.	Area sown more than once	6726	1.58
15.	Gross cropped area	423376	100.00

From Table 3, it can be seen that the percentage of area under cereals to gross cropped area was 47.84 per cent, while the area under pulses was only 2.46 per cent. Thus, the total area under food grains (cereals and pulses) was 50.30 per cent. The total food crops occupy an area of 52.81 per cent, while the remaining 47.15 per cent area was under non-food crops. Among cereals, paddy occupied largest area (39.49%) of the gross cropped area. Thus, it can be concluded that the cereals dominate cropping pattern of the district.

The gross cropped area of Thane district is 3, 81,809 ha in which the proportion of area irrigated by wells and other sources are 2.88 and 2.57 per cent, respectively. The maximum proportion of gross irrigated area is under fruit crops and vegetable crops, which is 59.67 per cent.

### **1.11. Livestock**

Livestock is an integral part of agriculture and consists of cattle, buffaloes, sheep, goats, pigs and poultry. Together, they contribute to a considerable extent to the agricultural economy. As per 1992 livestock census, the livestock population in Thane district was 10.10 lakhs. The total livestock population of Thane district, cattle, buffalo, sheep and goat species form 53.11 per cent, 17.76 per cent, 0.07 per cent and 20.27 per cent, respectively. The total population of poultry and other birds was 17.31 Lakhs.

### **1.12. Fisheries**

Thane is one of the marine districts of the state. The marine fishing is practiced all over the coastline of 112 km. in the district. Total fish production in 2000-2001 was 76,132 metric tones. The fishing trade flourished in the district, as there is always demand for fish at Mumbai market. Fishing trade is increasing gradually and still has a vast potential.

## **Agro-eco system Analysis of the focus/target area - II**

### **2.1 Names of villages, focus area, target area etc.**

The villages namely Ganje Dhekale, Tal. Palghar is having light to medium black soils. *Pucca* and *Kaccha* roads have been constructed as per the need. The temperature during the year ranges to a maximum 36- 40<sup>0</sup> C in summer and the minimum is of 15 -20<sup>0</sup> C in winter season.

The topography of the village is undulating and there are wide differences in fertility status. The major forest trees in the village are Ain, Teak, Moh, etc. The main rainy season during the year is June to September.

### **2.2 Survey methods used (survey by questionnaire, PRA, RRA, etc.)**

PRA method used for the village survey. Participatory Rural Appraisal (PRA) can be described as a semi-structured way of learning with the participation of rural people. It is relatively quick and ensures the participation of local people along with the multidisciplinary study team involve in the process of studying the Strengths, Weaknesses, Opportunities and Threats associated with the agricultural farming so that a need based action plan and interventions can be planned by the development personnel.

#### **2.1 Rapport building and climate setting**

On arrival at the village Ganje Dhekale the team members have informally discussed with the villagers and the key persons and other villager respectable. The aim of the visit and the objectives has been appraised to make them aware about the programme, so that proper understanding and rapport can be built upon. Formal introduction of team members to the villagers have been done.

#### **2.2 Collection of basic information**

On successful building up of relationship, the team members have interacted with the villagers to collect the basic information related to the village such as location of the village, demographic profile, village topography, soil, climate, various institutions available in the village, type of farming, cropping pattern, livestock, farm machineries, irrigation, production and productivity details, etc. The above background information was collected informally for the sake of forming a suitable idea by the team members and also to check the secondary source of information about the village collected from the *Talathi* and *Gramsevak* office.

#### **2.3 Transect walk**

The team members along with the villagers have undertaken a cross sectional walk along the village and its fields. This was done to know about the anatomy of the village and its socio-economic and cultural settings. The transect walk helped the team to observe the

farming situation, prevailing land use pattern, soil conditions, crops, livestock and other micro-elements related to farming. This has revealed a holistic view of the village and its farming setup.

#### 2.4 Participatory mapping

Participatory observations and recording through villages have been done to know and record the social structure, the resource and technological availability in the village. This exercise has helped to understand the village society and its resources through the participation of the villagers. The villagers indicating the arrangements of various institutions in the village have drawn the social map. The villagers drew the map on the card sheet with the help of colour sketch pens provided by the scientists. This has helped the team to analyze the social structure and its function linkage existing in the village.

The villagers have been involved in analyzing their own resources such as the land, its usage pattern, soil type, cropping pattern, irrigation, roads, communication channels etc. this has helped to gain first hand knowledge about accessibility to the villagers.

#### 2.5 Time line analysis

The history of the village depicting various important events has been obtained with the help of village elders by recollecting their chronological occurrence. Through this, the team has come to know about the adoption and discontinuance of various innovations pertaining to agriculture, horticulture, animal husbandry and plant protection measures etc.

#### 2.6 Production trend analysis

The production and the productivity changes with respect to various agricultural, horticultural and animal husbandry, output have been obtained from the villagers to analyze the production and productivity trends over the year for projecting future estimates.

#### 2.7 Seasonality analysis

Seasonality mapping has been done to know about the cultivation of various crops in different seasons and the labour availability. This also gives information on disease and insect pest incidences, livestock productivity, peaks and declines, demand and supply of various farm and dairy products and different horticultural practices in the village.

#### 2.7 Wealth ranking

Wealth ranking has been done to know about the economic structure of the village and the value criteria of the villagers with respect to the various materialistic things related to prosperity and poverty.

#### 2.8 Gender issue

Relevant information on division of labour among male and female with respect to agricultural & domestic operations have been obtained to know about the gender issues in agriculture.

## 2.9 Venn diagram

The importance of various resources available to the villagers and their accessibility has been recorded in the Venn diagram.

## 2.10 The matrix ranking

The matrix ranking have been done with respect to agriculture, horticulture and animal husbandry to know about the preferences of the villagers about various innovations available and adopted by them.

## 3. Findings of the study

### 3.1 Village profile

The village Ganje Dhekale selected for the study is located about 68 kms from eastern side of Dahanu. The villages namely Haloli, Kuda are the neighboring villages. The village has a functional panchayat and the population of the village is 3474. The male population is 1876 and female is 1598. The number of households in the village is 452. The village occupies all *pacca* and *kaccha* houses. The detail of the demographic profile is given in the Table No. 1 for reference.

From the Table 1 it is inferred that the village has a Ashram (Residential) school, 04 Primary school.

The village is having the facility of primary health centre. Veterinary dispensary, market, Banks, TAO office, BDO office; etc at Palghar tehsil located 18 kms away. The village structure having mono class i.e. Scheduled tribe. The total literacy percent is about 39.60 per cent. Among them male is about 54 per cent while in female it is 26 per cent. Total cropped area in the village is 198.09 ha. out of which 108.16 ha. is rainfed, 89.93 ha. is irrigated and 07.42 ha. land is barren. Major population in the village is Scheduled tribe.

Table 1 : The profile of the village Agawan

<i>Sr. No.</i>	<i>Particulars</i>	<i>Observations</i>
01.	Location	30 Kms from Palghar
02.	Post office	Ganje/ Dhekale
03.	Primary school	Yes
04.	Residential Ashram school	Yes
05.	Temples	1
06.	BDO Office	Palghar
07.	TAO Office	Palghar
08.	Village Panchayat	Yes
09.	Primary Health Centre	Yes
10.	Grain Market	Manor
11.	Advisory services	State Department (Agriculture), KVK, Panchayat Samitee

12.	Total Population	3474
	Male	1876
	Female	1598
13.	Scheduled Caste	-
	Scheduled Tribe	3474
14.	Literacy	39.67 per cent
	Male	941 (54 per cent)
	Female	438 ( 26 per cent)
15.	No. of farm Families	709
16	Total Geographical area	1860.40 ha
16.	Total Cropped area	197.93 ha
	Barren	7.24 ha
	Kharland ( <i>Khajan</i> )	-
	Irrigated	89.93 ha
	Rainfed	108.16 ha
17.	Irrigation facility	
	Wells	29
	Bore well	12
18.	Live stock	
	Buffaloes	20
	Local Breed cattle	200
	Exotic Breed cattle	-
	Goat	537
	Desi birds	437
19.	Farm Machinery	
	Tractor/Power tiller	09
	Electric Motors	12
	Threshing Machine	34
	Oil engine	42
20.	T.V.	37
	Telephone	18
21.	Pucca house	68
	Kaccha house	384

### 3.2 Agro-Eco-System analysis

The village Ganje Dhekale is having light to medium black soils. *Pucca* and *Kaccha* roads have been constructed as per the need. The temperature during the year ranges to a maximum 36- 40<sup>0</sup> C in summer and the minimum is of 15 -20<sup>0</sup> C in winter season.

The topography of the village is undulating and there are wide differences in fertility status. The major forest trees in the village are Ain, Teak, Moh, behda, palas, aonla,umber, tad palm etc. The main rainy season during the year is June to September. Soil water table is going down year by year. Wandri river flows near the village. The partial canal irrigation of Wandri project available from December to April month.

### 3.3 Resource mapping

The village agriculture scenario can be divided into two parts i.e. Irrigated and rainfed. Around the village, during monsoon season, farmer's fields are located and they grow traditionally vegetable crops for home consumption like gourds, bhendi, ambadi, yam etc. The major fruit crops of Mango, cashew are cultivated on the east side of the village, the soils are medium black to light trap and this belt is irrigated. Paddy is the major crop grown in this village as rainfed crops as well as irrigated. There are naturally grown trees like. Ain, Teak, Moh, behda, palas, aonla,umber, tad palm, etc. The village has a less number of animal populations. In cattle, almost all are of local breed i.e. *Dangi*. Some farmers are also rearing the poultry birds of local breed as backyard poultry.

The Wandri river flows across the village. The partial canal irrigation by Wandri project is also available in the village from December to April month.

### 3.4 Analysis of Social Structure and Village Mapping

In the village Ganje Dhekale there are 709 families and about 90.42 percent belong to Scheduled tribe and remaining population comprises Other backward class. Most of the community is engaged in farming. Some of the houses in the village are Kaccha and the within village link kaccha roads are constructed and connected. The average life span is 60 years and marriages are performed within the caste. Family planning concept is seen only among the literates. Both genders are using different methods of birth control/family control but majority is of Female. Very rigid social system and no concept of inter caste marriage can be seen in the village. Love marriages are not encouraged.

### 3.5 Technological Analysis and Mapping

As analysis of various technologies that farmers are caring out and the results are presented hereunder.

## Agriculture

Paddy: Ratna, kudai, Gujrat 11, Kolpi

## Horticulture

Cucurbitaceous vegetables: Local

Bhendi: Local

## Animal Husbandry

Cows: Local (Dangi)

Poultry: Local

Buffaloes: Local,

Goat: Local

Fishery:

Fish: Local

The farmers are using the traditional varieties of paddy. Introduction of improved varieties arises as intervention point. It can be inferred from the data that farmers are using traditional varieties crop. In case of vegetable crop, awareness about new improved varieties of vegetable to reduce the cost of production and increase the profit margin should be the intervention point. The breeds of cows, goat and poultry are local causing low productivity.

### 3.6 Time analysis

Time analysis was done to know about various sequences of events that have been occurred in the village. In addition general important events that have taken place also recorded from the memory of the village elders. The details of the time analysis done for the village are given in the table for reference.

From table it is inferred that the water available from Wandri project was in the year 1988, facing stem borer & *bagya* pest since 2005, The farmers are using chemical fertilizers since 1995.

Table 2: Time Line

<i>Sr.No.</i>	<i>Year</i>	<i>Event</i>
01.	1987	Electricity
02.	1988	Wandri dam / project
03	1988	Radio
04	1990	Television set
05	1992	Motor cycle
06	1999	Bus
07	2001	Chemical fertilizers
08	2005	Electrical pumps
09	2006	Construction of roads

10	2006	Telephone
11	2005	Cell phones
12	2005	Stem Borer, Bagya pest
13	2009	Solar Deep
14	2010	Mogara cultivation
15	2011	Dish T.V
16	2011	Mobile Phones

### 3.7 Gender Issue

The village Ganje Dhekale has a population of 3474 with a male to female ratio of 1000:931. The gender issue have discussed as under.

- i. Decision making
- ii. Agricultural related activities
- iii. Resource controlling

As regards to domestic works, all the work ranging from food preparation to family planning as well as child education and care is done by women folk. Women folks are doing activities like feeding, cleaning the sheds of animals, dung cake making and weeding.

Most of the decision-making about agriculture and other activities are taken by men folk. Agricultural produce marketing, purchasing the agricultural inputs, extension contacts, and pesticide spraying etc. activities are performed by men folk.

Market visits for domestic purpose are undertaken by both genders. Important decisions regarding social issues like marriages are taken after a thorough mutual interaction. The family planning is practiced by both genders. Some agricultural operations are done by both genders *viz.* nursery raising, sowing, transplanting, harvesting, winnowing, storage, etc.

### 3.8 Venn Diagram Analysis

Village Ganje Dhekale is located about 30 kms from Palghar city. The preference analysis of the farmers through Venn diagram showed that the farmers have related KVK, Kosbad Hill, state department of agriculture, Gramsevak and neighbors as the main source of information with respect to Agricultural technologies. They are related with Palghar, Manor with respect to commercial activities such as purchase of agricultural inputs, marketing of the produce, College education, and bank facility. Taluka Agriculture Office and Block Development office are also the source of information for the farmers, which is located at Palghar. They also collect information about different agricultural schemes of state and central government from these offices. Some farmers are availing facility from Tribal Development Department, Dahanu. Post office, Primary Health Centre, Primary school and a Residential Ashram school upto 7<sup>th</sup> standard is located in the village itself. Other facility like Veterinary dispensary is located at Manor at 20 km away.

### 3.9 Wealth Ranking

The wealth ranking has been done to get an idea about the economic structure of the village. The wealth ranking provides an idea about the prevailing wealth structure present among the village. This also helps to know about the villagers value system with respect to wealth and economy. The wealth ranking revealed that 59.84 percent of the family belongs to Below Poverty Line.

The value criteria for richness perused by the villages were occupying more than 10 acres of land, Vegetable cultivator, a motorcycle, gold ornaments and a big *pucca* house.

Middle class means less than 10 acres of land, rainfed agriculture a small *pucca* house. Poor category families are having less than 2 acres rain fed land or mostly landless labors that often temporarily migrate to other places.

### 3.10 Seasonality Analysis

Seasonality analysis has been done to get the information about various activities performed in the major crops i.e. Paddy. Major crops grown in the village are Paddy.

Paddy is the main crop in the village. Almost all the activities in Kharif season are related to paddy. The activities like nursery preparation is done in the month of May- June, Transplanting is done in June- July. Other practices like weeding, top dressing is done in July-August. Harvesting and threshing is done in the month of October to November.

After the Kharif season the farmers grow paddy where the canal irrigation available. The employment to the landless labour is available in Kharif season only, after some of the farmers are engaged in jasmine production and remaining tribals are migrate to nearby cities in Mumbai, Thane etc for searching the job.

### 3.11 Matrix Ranking

The matrix analysis has been conducted through the following procedure. The facilitator asked to express their preference with the help of matchsticks for each parameter according to their preference.

According to discussion, the farmers stated that insect pest problem in rice, mango, vegetables crops are common. The farmers were asked to state the problems; accordingly the problems were enlisted and ranked on the basis of frequency and intensity of the problem.

The farmers stated that, Stem borer and *Bagya* pest in rice is very severe. Some farmers having mango orchards and facing the problem of Fruit fly, hoppers etc. The problems of FMD disease in animals were perceived by many of the farmers and Ranikhet disease on poultry birds was occurred. Due to malnutrition in toddler causing weight loss, Lack of availability of urea brickets for paddy cultivation. Low yields of eggs and slow body weight in traditional birds, Unavailability of improved seed in agronomical crops, Low productivity of milking animals and no cross breed cows, Lack of low level mechanization for drudgery reduction. Green fodder shortage for cattle feed are the major problems perceived by the farmers. The general matrix ranking showing score and rank is shown in table 3.

Table 3: General Matrix Ranking

<i>Sr. No</i>	<i>Problem</i>	<i>Distribution</i>	<i>Intensity</i>	<i>Score/ Rank</i>
01.	<i>Stem Bore Bagya pest on rice</i>	●●●●●●●●	●●●●●●●●	21 I
02	<i>Bagya pest on rice</i>	●●●●●●●●	●●●●●●●●	21 I
02	Unavailability of improved seed in rice	●●●●●●●●	●●●●●●●●	21 I
03	Lack of knowledge about various. Agril. Scheme	●●●●●●●	●●●●●●●●	18 IV
04	Lack of knowledge about vegetable cultivation	●●●●	●●●●●●●●	13 IX
05.	Mango fruit fly	●●●●●●	●●●●●●●●●●●●	20 II
06.	Low yield & low price of jasmine	●●●●●●	●●●●●●●●●●●●	20 II
07	Lack of knowledge about Self help group	●●●●●●	●●●●●●●●●●●●	19 III
08	Lack of availability of urea brickets	●●●●●●●●	●●●●●●●●	17 V
09	FMD in problems in animals	●●●	●●●●●●●●	11 IX
10	Green fodder shortage	●●●●	●●●●●●●●	12 VIII
11	Malnutrition in toddlers	●●●●●●	●●●●●●	10 X
12	Low productivity of milking animals	●●●●●●	●●●●●●	12 VIII
13	Low yields in traditional birds	●●●●●●●●	●●●●●●●●	16 VI
14	Lack of low level mechanization	●●●●●●●●	●●●●●●●●	13 VII
15	Lack of knowledge about post harvest technology	●●●●●●●●	●●●●●●●●	13 VII

Gokhale Education Society's Krishi Vigyan Kendra Kosbad Hill Dist : Thane

DATA BASE

Taluka: Palghar      Village: Ganje Dhekale      Farming Situation: : Medium Black Soil to Light red

Crop	June	July	August	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March.	April	May	Varieties	Productivity Kg/ha.	Potential Kg/ha.	
Rice ( Irrigated)							Canal irrigated rice 89.93 ha.					Ratna, Kudai	1450	4000		
Rice ( Rainfed)	168.93 ha.													Ratna, Kudai	2800	4500
Mogra														Sujimallige	6 tonnes	12 tonnes

**Crop wise Specific Constraints, Potential identified and their strategies**

CROP	SPECIFIC CONSTRAINTS	POTENTIALS IDENTIFIED	STRATEGIES
Rice	<ul style="list-style-type: none"> <li>i. Use of local varieties like dangi which is low yield.</li> <li>ii. Poor quality of rice seedlings</li> <li>iii. Delay transplanting</li> <li>iv. Incidence of pest and diseases like stem borer, late blight</li> </ul>	<ul style="list-style-type: none"> <li>i. Cultivation of improved varieties of rice</li> <li>ii. Cultivation of cucurbitaceous vegetables on upland soil during rainy season.</li> </ul>	<ul style="list-style-type: none"> <li>i. Use of improved and high yielding varieties of rice.</li> <li>ii. Provide knowledge about IPM/ INM on rice production.</li> </ul>
Vegetables	<ul style="list-style-type: none"> <li>1. Unavailability of quality seeds.</li> <li>2. Lack of technical knowledge.</li> <li>3. Unavailability of sufficient irrigation in the month March to May.</li> <li>4. Stray cattle destroys the crops during rabi season</li> </ul>	<ul style="list-style-type: none"> <li>1. Scope for taking Vegetable type Tur and field beans.</li> <li>2. Scope for production of sweet potatoes as rainfed crops on up land and hilly slope.</li> <li>3. Pre rabi planting of vegetable crops like brinjals and bhindi.</li> </ul>	<ul style="list-style-type: none"> <li>1. Composting of farm waste by vermiculture</li> <li>2. Encourage planting sweet potato as rainfed crop on uncultivated sloppy land.</li> <li>3. Encourage preseason planting of rabi vegetables.</li> <li>4. Nursery techniques for raising hybrid vegetables.</li> <li>5. Protect crops from pest and diseases as per recommendations.</li> <li>6. Encouraging making live fencing either by glyricidia</li> <li>7. Efficient use of available water to increase production.</li> </ul>
Floriculture	<ul style="list-style-type: none"> <li>i. Low yield of Jasmine crop</li> <li>ii. Low market price</li> </ul>	Improving the yield of jasmine through Nutritional management Community market	<ul style="list-style-type: none"> <li>i. Application of water soluble fertilizer</li> <li>ii. Formation of Group for marketing</li> </ul>
Live stock Production	No good breeds for milk and meat production.	Scope for poultry enterprise as well as buffalo and goat keeping.	<ul style="list-style-type: none"> <li>1. Preparation of low cost feed from available material.</li> <li>2. Encourage rearing pigs for pork production.</li> <li>3. Buffalo for milk production.</li> <li>4. Rearing goats of genuine breed for meat production.</li> </ul>

## Annexure : 2 Details of Training Achievement

Date	Clientle	Title of Training Programme	Discipline	Thematic Area	Duration	Venue (Off/ On Campus)	Number of Particiapnts			Number of Sc/ST			Total number of participants		
							Male	Female	Total	Male	Female	Total	Male	Female	Total
2/4/2013	PF	Summer rice production	Agronomy	Integrated crop management	2	OFF	-	-	-	14	2	16	14	2	16
4/4/2013	PF	Intercultural operation in groundnut	Agronomy	Integrated crop management	2	OFF	-	-	-	13	4	17	13	4	17
30/04/13	PF	Groundnut production Field day	Agronomy	Integrated crop management	2	OFF	-	-	0	24	7	31	24	7	31
22/05/13	PF	Summer rice production	Agronomy	Integrated crop management	2	OFF	-	-	0	16	7	23	16	7	23
28/05/13	PF	Finger millet production	Agronomy	Integrated crop management	2	OFF	-	-	0	3	10	13	3	10	13
22/06/13	PF	Summer rice production	Agronomy	Integrated crop management	2	OFF	0	0	0	16	7	23	16	7	23
28/06/13	PF	Finger millet production	Agronomy	Integrated crop management	2	OFF	0	0	0	3	10	13	3	10	13
10/7/2013	PF	INM in Rice	Agronomy	Integrated crop management	2	OFF	0	0	0	21	10	31	21	10	31
17/07/13	PF	INM in Rice	Agronomy	Integrated crop management	2	OFF	0	0	0	26	8	34	26	8	34
25/07/13	PF	INM in Rice	Agronomy	Integrated crop management	2	OFF	0	0	0	18	21	39	18	21	38
31/07/13	PF	Niger production	Agronomy	Integrated crop management	2	OFF	0	0	0	4	19	23	4	19	23
9/8/2013	PF	Nagli Production	Agronomy	Integrated crop management	2	OFF	0	0	0	-	12	12	-	12	12
22/08/13	PF	INM in Rice	Agronomy	Integrated crop management	2	OFF	0	0	0	2	18	20	2	18	20
3/9/2013	PF	Rice production	Agronomy	Integrated crop management	2	OFF	0	0	0	18	9	27	18	9	27
6/9/2013	PF	Finger millet	Agronomy	Integrated crop	2	OFF	0	0	0	7	15	22	7	15	22

		production		management											
25/09/13	PF	Rice production	Agronomy	Integrated crop management	2	OFF	0	0	0	25	-	25	25	-	25
27/09/13	PF	Rice production	Agronomy	Integrated crop management	2	OFF	0	0	0	-	32	32	-	32	32
3/10/2013	PF	Rice production	Agronomy	Integrated crop management	2	OFF	0	0	0	12	5	17	12	5	17
5/10/2013	PF	Finger millet production	Agronomy	Integrated crop management	2	OFF	0	0	0	7	15	22	7	15	22
25/10/13	PF	Rice production	Agronomy	Integrated crop management	2	OFF	0	0	0	21	6	27	21	6	27
19/11/13	PF	Bengal gram production	Agronomy	Integrated crop management	2	OFF	27	5	32	3	-	3	30	5	35
22/11/13	PF	Sweet corn production	Agronomy	Integrated crop management	2	OFF	0	0	0	25	7	32	25	7	32
29/11/13	PF	Sweet corn production	Agronomy	Integrated crop management	2	OFF	0	0	0	18	11	29	18	11	29
2/12/2013	PF	Bengal gram production	Agronomy	Integrated crop management	2	OFF	0	0	0	7	37	44	7	37	44
13/12/13	PF	Bengal gram production	Agronomy	Integrated crop management	2	OFF	0	0	0	41	5	46	41	5	46
20/12/13	PF	Groundnut production	Agronomy	Integrated crop management	2	OFF	0	0	0	20	30	50	20	30	50
26/12/13	PF	Summer rice production	Agronomy	Integrated crop management	2	OFF	0	0	0	15	12	27	15	12	27
28/12/13	EF	Dry land Mission	Agronomy	Dry Land Technologies	2	ON	28	3	31	6	3	9	34	6	40
15/01/13	PF	Bengal gram production	Agronomy	Integrated crop management	2	OFF	16	0	16	3	-	3	19	3	22
17/01/13	PF	Bengal gram production	Agronomy	Integrated crop management	2	OFF	28	0	28	-	-	-	28	-	28
23/01/13	PF	Sweet Corn	Agronomy	Integrated crop management	2	OFF	0	0	0	18	18	36	18	18	36
25/01/13	PF	Bengal gram production	Agronomy	Integrated crop management	2	OFF	0	0	0	23	2	25	23	2	25
28/01/13	PF	Summer rice	Agronomy	Integrated crop	2	OFF	0	0	0	20	-	20	20	-	20

		production		management											
12/2/2014	PF	Sweet Corn	Agronomy	Integrated crop management	2	OFF	0	0	0	18	18	36	18	18	36
24/02/14	PF	Bengal gram production	Agronomy	Integrated crop management	2	OFF	0	0	0	24	10	34	24	10	34
26/02/14	PF	Summer rice production	Agronomy	Integrated crop management	2	OFF	0	0	0	20	-	20	20	-	20
8/3/2014	PF	Bengal gram production	Agronomy	Integrated crop management	2	OFF	0	0	0	17	10	27	4	3	7
19/03/14	PF	Summer Groundnut	Agronomy	Integrated crop management	2	OFF	0	0	0	11	9	20	11	9	20
22/03/14	PF	Sweet Corn	Agronomy	Integrated crop management	2	OFF	0	0	0	12	14	26	12	14	26
28/03/14	PF	Summer rice production	Agronomy	Integrated crop management	2	OFF	0	0	0	17	11	28	17	11	28

Date	Clientle	Title of Training Programme	Discipline	Thematic Area	Duration	Venue (Off/ On Campus)	Number of Particiapnts			Number of Sc/ST			Total number of participants		
							Male	Female	Total	Male	Female	Total	Male	Female	Total
3/4/2013	PF	Vegetable cultivation	Horticulture	Vegatable production	2	OFF	19	4	23	-	-	-	19	4	23
4/4/2013	RY	Mogra production	Horticulture	Commercial Floriculture	2	OFF	0	0	0	12	-	12	12	-	12
23/04/13	RY	Mogra production	Horticulture	Commercial Floriculture	2	ON	0	0	0	7	-	7	7	-	7
9/5/2013	PF	Vegetable cultivation for kharif	Horticulture	Vegatable production	2	OFF	26	5	31	0	0	0	26	5	31
11/5/13	PF	Integrated Nutrition management in chilli	Horticulture	Production of High Value crop	2	OFF	21	-	21	0	0	0	21	-	21
9/6/2013	PF	Vegetable cultivation for kharif	Horticulture	Vegatable production	2	OFF	26	5	31	0	0	0	26	5	31
11/06/13	PF	Integrated Nutrition management in chilli	Horticulture	Vegatable production	2	OFF	21	-	21	0	0	0	21	-	21
25/07/13	RY	Jasmine Plantation	Horticulture	Commercial Floriculture	2	OFF	0	0	0	21	1	22	21	1	22
14/07/13	PF	Kharif Cucumber production	Horticulture	Production of High Value crop	2	OFF	0	0	0	23	51	74	23	51	74
25/08/13	RY	Jasmine Plantation	Horticulture	Commercial Floriculture	2	OFF	0	0	0	20	-	20	20	-	20
12/8/13	PF	Kharif Cucumber production	Horticulture	Vegatable production	2	OFF	0	0	0	13	40	53	13	40	53
4/9/2013	RY	Nursery Management	Horticulture	Nursery managemnt	2	OFF	15	0	15	-	-	-	15	-	15
27/09/13	PF	Jasmine production	Horticulture	Commercial Floriculture	2	OFF	0	0	0	19	-	19	19	-	19

04/10/13	RY	Upgradation of mango	Horticulture	Plant Propagation technique	2	ON	0	0	0	10	-	10	10	-	10
11/10/13	PF	Bhendi cultivation	Horticulture	Vegatable production	2	OFF	0	0	0	29	-	29	29	-	29
18/10/13	PF	Sweet Potato Production	Horticulture	Vegatable production	2	OFF	0	0	0	21	-	21	21	-	21
12/11/13	RY	Upgradation of mango	Horticulture	Plant Propagation technique	2	ON	0	0	0	10	-	10	10	-	10
16/11/13	PF	Vegetable cultivation	Horticulture	Vegatable production	2	OFF	0	0	0	29	-	29	29	-	29
18/11/13	PF	Sweet Potato Production	Horticulture	Vegatable production	2	OFF	0	0	0	21	-	21	21	-	21
29/11/13	PF	Vegetable production	Horticulture	Vegatable production	2	OFF	0	0	0	18	11	29	18	11	29
13/12/13	PF	Vegetable cultivation	Horticulture	Vegatable production	2	OFF	0	0	0	11	9	21	11	9	21
18/12/13	PF	Sweet Potato Production	Horticulture	Vegatable production	2	OFF	0	0	0	21	-	21	21	-	21
13/01/13	PF	Vegetable cultivation	Horticulture	Vegatable production	2	OFF	0	0	0	14	7	21	14	7	21
18/01/13	RY	Commercial Chilli production	Horticulture	Production of High Value crop	2	OFF	0	0	0	17	-	17	17	-	17
12/2/14	PF	Vegetable cultivation	Horticulture	Vegatable production	2	OFF	11	2	13	13	-	13	24	2	26
19/02/14	RY	Commercial Chilli production	Horticulture	Production of High Value crop	2	OFF	0	0	0	19	-	19	19	-	19
12/3/14	PF	Vegetable PHT	Horticulture	PHT	2	ON	7	0	7	13	-	13	20	-	20
19/03/14	RY	Commercial Chilli production	Horticulture	Production of High Value crop	2	OFF	0	0	0	19	-	19	19	-	19

Date	Clientle	Title of Training Programme	Discipline	Thematic Area	Duration	Venue (Off/ On Campus)	Number of Particiapnts			Number of Sc/ST			Total number of participants		
							Male	Female	Total	Male	Female	Total	Male	Female	Total
3/4/2013	PF	IPM in Chill	Plant Protection	Integrated Pest Management	2	OFF	35	0	35	-	-	-	35	-	35
16/04/13	EF	Organic pesticide	Plant Protection	Organic Pesticides	2	OFF	0	0	0	16	8	24	16	8	24
18/04/13	PF	Mango fruit fly management	Plant Protection	Integrated Pest Management	2	OFF	0	0	0	16	-	16	28	-	28
20/04/13	PF	IPM in coconut	Plant Protection	Integrated Pest Management	2	OFF	0	0	0	10	-	10	10	-	10
26/04/13	PF	IPM in Capsicum	Plant Protection	Integrated Pest Management	2	OFF	20	0	20	-	-	-	20	-	20
9/5/2013	PF	IPM chilli	Plant Protection	Integrated Pest Management	2	OFF	26	5	31	-	-	-	26	5	31
13/05/13	PF	Plant insecticides	Plant Protection	Organic Pesticides	2	ON	0	0	0	28	3	31	28	3	31
22/05/13	PF	Coconut Rhinoceros beetle control	Plant Protection	Integrated Pest Management	2	OFF	11	0	11	-	-	-	11	-	11
7/6/2013	PF	IPM chilli	Plant Protection	Integrated Pest Management	2	OFF	26	5	31	-	-	-	26	5	31

11/6/2013	PF	Plant insecticides	Plant Protection	Integrated Pest Management	2	ON	0	0	0	28	3	31	28	3	31
24/06/13	PF	Coconut Rhinoceros beetle control	Plant Protection	Integrated Pest Management	2	OFF	11	0	11	-	-	-	11	-	11
11/7/2013	EF	Climate change	Plant Protection	Climate Change	2	ON	15	0	15	3	-	3	18	-	18
22/07/13	PF	Plant protection in Kharif vegetables	Plant Protection	Integrated Pest & Disease Management	2	OFF	0	0	0	29	17	46	29	17	46
25/07/13	PF	IPM in rice	Plant Protection	Integrated Pest Management	2	OFF	0	0	0	32	3	35	32	3	35
30/07/13	PF	IPM in mogra	Plant Protection	Integrated Pest Management	2	OFF	10	0	10	-	-	-	10	-	10
3/8/2013	EF	Climate change	Plant Protection	Climate Change	2	ON	14	0	14	7	-	7	21	-	21
11/8/2013	PF	Plant protection in Kharif vegetables	Plant Protection	Integrated Pest & Disease Management	2	OFF	15	13	28	11	8	19	26	21	47
17/08/13	PF	Plant protection in Kharif vegetables	Plant Protection	Integrated Pest & Disease Management	2	OFF	14	8	22	9	12	21	23	20	43
22/08/13	PF	IPM in rice	Plant Protection	IPM	2	OFF	0	0	0	2	18	20	2	18	20

4/9/2013	PF	IPM rice	Plant Protection	Integrated Pest Management	2	OFF	0	0	0	24	8	32	24	8	32
20/09/13	PF	Rice IPM	Plant Protection	Integrated Pest Management	2	OFF	0	0	0	14	3	17	14	3	17
25/09/13	PF	Rice IPM	Plant Protection	Integrated Pest Management	2	OFF	0	0	0	11	4	15	11	4	15
27/09/13	PF	IPM in rice	Plant Protection	Integrated Pest Management	2	OFF	0	0	0	18	10	28	18	10	28
30/09/13	PF	IPM in rice	Plant Protection	Integrated Pest Management	2	OFF	0	0	0	12	6	18	12	6	18
7/10/2013	PF	IPM rice	Plant Protection	Integrated Pest Management	2	OFF	0	0	0	22	-	22	22	-	22
11/10/2013	PF	Rice IPM	Plant Protection	Integrated Pest Management	2	OFF	0	0	0	42	-	42	19	-	19
14/10/13	PF	IPM in Nagli	Plant Protection	Integrated Pest Management	2	OFF	0	0	0	14	8	22	14	8	22
15/10/13	PF	Vegetable IPM	Plant Protection	Integrated Pest Management	2	OFF	0	0	0	38	9	47	38	9	47
17/10/13	PF	Vegetable IPM	Plant Protection	Integrated Pest Management	2	OFF	0	0	0	29	-	29	29	-	29

15/11/13	PF	IPM Coconut	Plant Protection	Integrated Pest Management	2	OFF	19	-	19	-	-	-	19	-	19
18/11/13	PF	Vegetable IPM	Plant Protection	Integrated Pest Management	2	OFF	0	0	0	31	6	37	31	6	37
26/11/13	PF	Vegetable IPM	Plant Protection	Integrated Pest Management	2	OFF	0	0	0	22	4	26	22	4	26
6/12/2013	PF	IPM in floriculture	Plant Protection	Integrated Pest Management	2	OFF	0	0	0	23	-	23	23	-	23
12/12/2013	PF	IPM coconut	Plant Protection	Integrated Pest Management	2	OFF	0	0	0	20	-	20	3	-	3
20/12/13	PF	Vegetable IPM	Plant Protection	Integrated Pest Management	2	OFF	0	0	0	17	-	17	17	-	17
8/1/2013	PF	IPM in Chilli	Plant Protection	Integrated Pest Management	2	OFF	0	0	0	25	-	25	25	-	25
13/01/13	PF	IPM Vegetable	Plant Protection	Integrated Pest Management	2	OFF	0	0	0	38	-	38	38	-	38
20/01/13	RY	Vegetable IPM	Plant Protection	Integrated Pest Management	2	OFF	0	0	0	31	6	37	31	6	37
22/01/13	PF	Vegetable IPM	Plant Protection	Integrated Pest Management	2	OFF	0	0	0	18	3	21	18	3	21

24/01/13	PF	Vegetable IPM	Plant Protection	Integrated Pest Management	2	OFF	0	0	0	24	11	35	24	11	35
3/2/2014	PF	IPM in Forest plants	Plant Protection	Integrated Pest Management	2	OFF	0	0	0	23	7	30	23	7	30
7/2/2014	PF	IPM in Sapota	Plant Protection	Integrated Pest Management	2	OFF	0	0	0	12	-	12	-	-	-
12/2/2014	PF	Vegetable IPM	Plant Protection	Integrated Pest Management	2	OFF	0	0	0	24	12	36	24	12	36
14/02/14	PF	Vegetable IPM	Plant Protection	Integrated Pest Management	2	OFF	0	0	0	29	8	37	29	8	37
25/02/14	EF	Organic Pesticides	Plant Protection	Organic Pesticides	2	ON	8	2	10	8	2	10	16	4	20
11/3/2014	PF	IPM in Okra	Plant Protection	Integrated Pest Management	2	OFF	21	4	25	19	1	20	40	5	45
14/03/14	PF	IPM in Sapota	Plant Protection	Integrated Pest Management	2	OFF	10	6	16	-	-	-	10	6	16
15/03/14	PF	Pest management Home Garden	Plant Protection	Integrated Pest Management	2	OFF	5	30	35	-	-	-	5	30	35
17/03/14	EF	Energy Saving in Spraying Machines	Plant Protection	Use of Sprayers & Dusters	2	OFF	9	8	17	21	8	29	30	16	46
23/03/14	PF	Home garden	Plant	IPM	2	OFF	4	28	32	-	-	-	4	28	32

Date	Clientle	Title of Training Programme	Discipline	Thematic Area	Duration	Venue (Off/ On Campus)	Number of Particiapnts			Number of Sc/ST			Total number of participants		
							Male	Female	Total	Male	Female	Total	Male	Female	Total
10/4/2013	RY	Intensive poultry management	AHDS	Poultry Management	2	OFF	0	0	0	8	6	14	8	6	14
16/04/13	PF	Poultry vaccination	AHDS	Poultry Management	2	OFF	0	0	0	-	9	9	-	9	9
8/5/2013	RY	Intensive poultry management	AHDS	Poultry Management	2	OFF	0	0	0	13	-	13	13	-	13
12/5/2013	PF	Poultry vaccination	AHDS	Poultry Management	2	OFF	0	0	0	-	17	17	-	17	17
8/6/2013	RY	Intensive poultry management	AHDS	Poultry Management	2	OFF	0	0	0	13	-	13	13	-	13
12/6/2013	PF	Poultry vaccination	AHDS	Poultry Management	2	OFF	0	0	0	-	17	17	-	17	17
13/07/13	RY	Goat Keeping	AHDS	Goat Management	2	OFF	0	0	0	11	-	11	11	-	11
18/07/13	PF	Fodder production	AHDS	Fodder production	2	OFF	0	0	0	-	13	13	-	13	13
20/07/13	RY	Poultry vaccination	AHDS	Poultry Management	2	OFF	0	0	0	4	16	20	4	16	20
8/8/2013	RY	Goat vaccination	AHDS	Goat Management	2	OFF	0	0	0	11	-	11	11	-	11
16/08/13	PF	Fodder production	AHDS	Fodder production	2	OFF	0	0	0	-	16	16	-	16	16
25/08/13	RY	Poultry vaccination	AHDS	Poultry Management	2	OFF	0	0	0	9	8	17	9	8	17
14/09/13	RY	Intensive poultry management	AHDS	Poultry Management	2	OFF	0	0	0	24	-	24	24	-	24

21/09/13	PF	Poultry vaccination	AHDS	Poultry Management	2	OFF	0	0	0	-	13	13	-	13	13
8/10/2013	RY	Goat management	AHDS	Goat Management	2	OFF	0	0	0	11	15	26	11	15	26
15/10/13	PF	Back yard Poultry Keeping	AHDS	Back Yard Poultry Management	2	OFF	0	0	0	9	20	29	9	20	29
18/10/13	PF	RD Vaccination in Birds	AHDS	Poultry Management	2	OFF	0	0	0	5	15	20	5	15	20
4/11/2013	RY	Goat management	AHDS	Goat Management	2	OFF	0	0	0	8	3	11	8	3	11
13/11/13	PF	Back yard Poultry Keeping	AHDS	Back Yard Poultry Management	2	OFF	0	0	0	11	7	18	11	7	18
2/12/2013	RY	Poultry vaccination	AHDS	Poultry Management	2	OFF	0	0	0	19	23	42	19	23	42
5/1/2013	PF	Poultry vaccination	AHDS	Poultry Management	2	OFF	0	0	0	19	23	42	19	23	42
12/1/2013	EF	Animal Husbandry	AHDS	Dairy Management	2	ON	0	0	0	26	3	29	26	3	29
5/2/2014	RY	Poultry vaccination	AHDS	Poultry Management	2	OFF	0	0	0	19	23	42	19	23	42
12/2/2014	EF	Animal Husbandry	AHDS	Dairy Management	2	ON	0	0	0	26	3	29	26	3	29
24/03/14	RY	Dairy management	AHDS	Dairy Management	2	OFF	0	0	0	19	-	19	19	-	19

Date	Clientle	Title of Training Programme	Discipline	Thematic Area	Duration	Venue (Off/ On Campus)	Number of Particiapnts			Number of Sc/ST			Total number of participants		
							Male	Female	Total	Male	Female	Total	Male	Female	Total
3/4/2012	PF	Formation of farmers club	Agril Extension	Group Dynamic	2	OFF	0	0	0	11	-	11	11	-	11
25/04/12	RY	Formation of SHG	Agril Extension	Formation & Management of SHGs	2	OFF	0	0	0	14	8	22	14	8	22
3/5/2013	PF	Formation of SHG	Agril Extension	Formation & Management of SHGs	2	ON	0	0	0	0	13	13	-	13	13
19/05/13	RY	Agril. Enterprises	Agril Extension	Entprenurship development	2	ON	0	17	17	0	0	0	-	17	17
3/6/2013	PF	Formation of SHG	Agril Extension	Formation & Management of SHGs	2	ON	0	0	0	0	13	13	-	13	13
19/06/13	RY	Agril. Enterprises	Agril Extension	Entprenurship development	2	ON	0	17	17	0	0	0	-	17	17
9/7/2013	PF	SHG formation	Agril Extension	Formation & Management of SHGs	2	ON	0	0	0	-	13	13	-	13	13
16/07/13	EF	PRA	Agril Extension	PRA Survey method	2	OFF	0	0	0	26	-	26	11	-	11
30/07/13	RY	SHG	Agril Extension	Formation & Management of SHGs	2	ON	0	0	0	12	-	12	12	-	12
7/8/2013	PF	SHG formation	Agril Extension	Formation & Management of SHGs	2	ON	0	0	0	-	16	16	-	16	16

9/8/2013	EF	PRA	Agril Extension	PRA Survey method	2	OFF	0	0	0	21	-	21	7	-	7
28/08/13	RY	Various Govt. Schemes	Agril Extension	Government Schemes	2	OFF	0	0	0	-	17	17	-	17	17
4/9/2013	PF	Group formation	Agril Extension	Formation & Management of SHGs	2	OFF	0	0	0	19	3	22	19	3	22
13/09/13	RY	Agril. Enterprises	Agril Extension	Entreprenurship development	2	ON	-	14	14	-	-	-	-	14	14
14/10/13	PF	Group formation	Agril Extension	Formation & Management of SHGs	2	OFF	0	0	0	14	5	19	14	5	19
23/10/13	RY	Group Formation	Agril Extension	Formation & Management of SHGs	2	OFF	0	0	0	9	2	11	9	2	11
3/11/2013	PF	Group formation	Agril Extension	Formation & Management of SHGs	2	ON	0	0	0	-	10	10	-	10	10
12/11/2013	RY	Group Formation	Agril Extension	Formation & Management of SHGs	2	OFF	0	0	0	13	-	13	13	-	13
19/12/13	RY	Group Formation	Agril Extension	Formation & Management of SHGs	2	OFF	0	0	0	17	3	20	17	3	20
13/01/13	PF	Group Formation	Agril Extension	Formation & Management of SHGs	2	OFF	0	0	0	11	-	11	11	-	11
13/01/13	PF	Group Formation	Agril Extension	Formation & Management of SHGs	2	OFF	0	0	0	27	-	27	27	-	27

22/01/13	RY	Group Formation	Agril Extension	Formation & Management of SHGs	2	OFF	0	0	0	29	5	34	29	5	34
8/2/2014	PF	Group Formation	Agril Extension	Formation & Management of SHGs	3	OFF	0	0	0	19	-	19	19	-	19
8/3/2014	PF	Group Formation	Agril Extension	Formation & Management of SHGs	2	OFF	0	0	0	-	19	19	-	19	19
14/03/14	PF	Group Formation	Agril Extension	Formation & Management of SHGs	2	ON	0	0	0	38	-	38	38	-	38

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							Male	Female	Total	Male	Female	Total	Male	Female	Total
28/03/14	RY	Food grain storage	Home Science	Food grain storage	2	OFF	0	0	0	-	27	27	-	27	27
2/04/14	RY	Drudgery reduction	Home Science	Drudgery reduction	2	OFF	0	0	0	-	32	32	-	32	32
20/04/14	RY	Fruit Processing	Home Science	Value addition	2	ON	0	0	0	-	28	28	-	28	28
10/05/14	RY	Low cost techniques for drinking water	Home Science	Low cost techniques	2	OFF	0	0	0	-	45	45	-	45	45
8/06/2014	PF	Nutrition gsrden	Home Science	Household food security by kitchen gardening & nutrition gardening	2	OFF	0	0	0	-	11	11	-	11	11
15/06/14	PF	Forest processing	Home Science	Value addition	2	ON	0	0	0	28	3	31	28	3	31
04/07/14	PF	Use of non conventional energy	Home Science	Solar cookar	2	ON	0	0	0	29	2	31	29	2	31
14/07/2014	PF	Importance of balance diet	Home Science	Preparation of iron rich recipes	2	OFF	0	0	0	-	11	11	-	11	11
27/07/14	PF	Low cost food recipes	Home Science	Value addition	2	ON	0	0	0	28	3	31	28	3	31
10/08/14	PF	Income	Home Science	Income	2	ON	0	0	0	29	2	31	29	2	31

		generating activities		generation											
22/08/2014	PF	Low cost food recipes	Home Science	Value addition	2	OFF	0	0	0	-	13	13	-	13	13
27/08/14	PF	Smokeless Chullha	Home Science	Drudgery Reduction	2	OFF	0	0	0	-	9	9	-	9	9
10/09/2014	PF	Value addition in fruits	Home Science	Value addition	2	OFF	0	0	0	-	11	11	-	11	11
22/09/2014	PF	Value addition in Milk	Home Science	Value Addition	2	OFF	0	0	0	-	10	10	-	10	10
12/10/14	PF	Nagli processing	Home Science	Value addition	2	OFF	0	0	0	-	18	18	-	18	18
23/10/2014	PF	Eradication of Malnutrition programme	Home Science	Household food security by kitchen gardening & nutrition gardening	2	OFF	0	0	0	-	41	41	-	41	41
29/10/2014	PF	Health of women	Home Science	Women & Child Care	2	OFF	0	0	0	-	20	20	-	20	20
12/11/2014	PF	Balanced diet for women and child	Home Science	Women & Child Care	2	ON	0	0	0	-	22	22	-	22	22
24/11/14	EF	Awareness of weaning food for child	Home Science	Design & development of low cost diet	2	OFF	0	0	0	-	38	38	-	38	38
29/11/14	PF	Smokless Chullha	Home Science	Drudgery Reduction	2	OFF	0	0	0	-	15	15	-	15	15
10/12/14	PF	Preparation of Chikoo products	Home Science	Value addition	2	ON	0	15	15	-	0	0	0	15	15

21/12/14	PF	Food grain storage	Home Science	Storage loss minimization technologies	2	ON	0	0	0	-	10	10	-	10	10
26/12/14	PF	Preparation of Chikoo products	Home Science	Value addition	2	ON	0	0	0	-	13	13	-	8	8
6/01/2015	PF	Child Health Nutrition	Home Science	Design & development of low cost diet	2	OFF	0	0	0	-	20	20	-	20	20
16/01/15	RY	Aonla processing	Home Science	Value addition	2	ON	0	0	0	-	30	30	-	30	30
21/01/15	PF	Nutrition Garden	Home Science	Household food security by kitchen gardening & nutrition gardening	2	OFF	0	0	0	-	15	15	-	15	15
29/01/15	PF	Child Health Nutrition	Home Science	Design & development of low cost diet	2	OFF	0	0	0	-	20	20	-	20	20
07/02/2015	PF	Sapota chips preparation	Home Science	Value addition	2	ON	0	0	0	-	20	20	-	20	20
12/02/2015	PF	Child Health Nutrition	Home Science	Design & development of low cost diet	2	OFF	0	0	0	-	18	18	-	18	18
23/02/2015	PF	Kisan Cooker	Home Science	Drudgery Reduction	2	OFF	0	0	0	-	18	18	-	18	18
8/03/2015	PF	Smoeless Chulha	Home Science	Drudgery Reduction	2	ON	0	0	0	-	19	19	-	19	19
22/03/2015	PF	Kisan Cooker	Home Science	Drudgery Reduction	2	OFF	0	0	0	-	23	23	-	23	23
29/03/15	RY	Fruit processing	Home Science	Value addition	2	OFF	0	0	0	-	32	32	-	32	32

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							Male	Female	Total	Male	Female	Total	Male	Female	Total
12/7/13	PF	Green manure - Sunhemp production	Soil Science	Soil Fertility Management	2	OFF	0	0	0	26	8	34	26	8	34
17/07/12	PF	Green manure - Sunhemp production	Soil Science	Soil Fertility Management	2	OFF	0	0	0	18	21	39	18	21	38
4/8/2013	PF	Green manure - Sunhemp production	Soil Science	Soil Fertility Management	2	OFF	0	0	0	22	5	27	22	5	27
4/9/2013	PF	Vermiwash	Soil Science	Production & use of Organic inputs	2	OFF	0	0	0	19	3	22	19	3	22
25/09/13	RY	Soil testing	Soil Science	Soil & Water Testing	2	ON	38	8	46				38	8	46
26/09/13	PF	Use of Bio fertilizer	Soil Science	Soil Fertility Management	2	OFF	0	0	0	18	10	28	18	10	28
4/10/13	PF	Green Mannuring	Soil Science	Soil Fertility Management	2	OFF	0	0	0	15	3	18	15	3	18
18/10/13	PF	Soil Testing	Soil Science	Soil & Water Testing	2	OFF	0	0	0	21	-	21	21	-	21
15/11/13	PF	Bio fertilizer	Soil Science	Production & use of Organic inputs	2	ON	0	0	0	25	-	25	25	-	25
26/11/13	PF	Soil Testing	Soil Science	Soil & Water Testing	2	ON	0	0	0	16	-	16	16	-	16
15/12/13	PF	Bio fertilizer	Soil Science	Production & use of Organic inputs	2	ON	0	0	0	25	-	25	25	-	25
26/12/13	PF	Soil Testing	Soil Science	Soil & Water Testing	2	ON	0	0	0	16	-	16	16	-	16
23/01/13	PF	Vermicompost	Soil Science	Production & use of Organic inputs	2	OFF	0	0	0	24	7	31	24	7	31

16/02/13	PF	Vermicompost	Soil Science	Production & use of Organic inputs	2	OFF	0	0	0	21	6	27	21	6	27
18/03/13	PF	Vermicompost	Soil Science	Production & use of Organic inputs	2	OFF	0	0	0	20	5	25	20	5	25

Date	Clientle	Title of Training Programme	Discipline	Thematic Area	Duration	Venue (Off/ On Campus)	Number of Particiapnts			Number of Sc/ST			Total number of participants		
							Male	Female	Total	Male	Female	Total	Male	Female	Total
12/2/2014	PF	PHT in vegetable	Agril Engg	PHT	2	OFF	0	0	0	14	3	17	14	3	17
16/02/14	RY	Sapota chips preparation	Agril Engg	Value Addition	2	ON	0	0	0	-	20	20	-	20	20
20/03/14	PF	PHT in vegetable	Agril Engg	PHT	2		0	0	0	8	15	23	8	15	23

