

UNIVERSITY OF AGRICULTURAL SCIENCES, DHARWAD



STATUS REPORT



(Oct.1999 - Oct.2004)

SUBMITTED

TO

**THE ZONAL CO-ORDINATOR
TOT PROJECT- ICAR
NDRI, CAMPUS
ADAGODI, BANGALORE-30**

BY

**KRISHI VIGYAN KENDRA
HANUMANAMATTI-581 135
RANEBENNUR (Tq), HAVERI (Dt)
KARNATAKA**

UNIVERSITY OF AGRICULTURAL SCIENCES, DHARWAD

Office of the
Training Organiser,
Phone: (08373) 253524



Krishi Vigyan Kendra,
Hanumanamatti-581 135
Tq:Ranebennur Dist: Haveri

No.KVK/HMT/ /2004-05

Date:

To,
The Zonal Coordinator,
TOT Project, ICAR,
NDRI Campus,
Adugodi,
BANGALORE-30.

Sir,

Sub: Submission of status report....reg.

Ref : F.No. 3-23/ZC-TOT/2004/ 2943-3004. Dtd : Nov. 17th , 2004

With reference to the above cited subject, I am herewith submitting "STATUS REPORT" of Krishi Vigyan Kendra, Hanumanamatti for the period from (Oct,1999 to Oct, 2004). This is for your kind information and needful.

Yours faithfully,

(Training Organiser)

Encl: Report Copy

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STATUS REPORT
OF KRISHI VIGYAN KENDRA
HANUMANAMATTI
(For the period October 1999 to October 2004)

1. Name of KVK : **KRISHI VIGYAN KENDRA**
HANUMANMATTI-581135
HAVERI DISTRICT
2. KVK Code : --
3. Name of the Organization : **University of Agricultural Sciences,**
Dharwad,-580005
Address : **Krishi Nagar,Dharwad- 580, 005.**
Telegraphic Address : **UNIVAGRIS**
Fax No. : **91-036-348349**
4. Name of the Head of the Organization with Designation : **Dr. S.A.Patil ,**
Vice Chancellor ,
UAS, Krishi Nagar ,
Dharwad- 580, 005
Dr.B.S.Nadagoudar,
Director of Extension
UAS, Krishi Nagar ,
Dharwad- 580, 005
5. Name of the In-charge of the KVK with Designation : **Mr. D. S. Mallikarjunappa Gowda**
Training Organiser .
6. Address of the KVK (with Pin Code No.) : **Krishi Vigyan Kendra,**
Hanumanmatti – 581135,
Ranebennur Taluk, Haveri District,
Telephone Nos. : **08373 – 253524(O), 262531(R)**
Mobile: 94483 – 38145
7. Letter No.& Date by which KVK was sanctioned by ICAR : **No. - Dated 15.12.1976**
8. Month and year of inception of KVK : **June 1977**

2 Staff Position.

Positions	Sanctioned	Filled
Sr. Scientist.	1	1
Scientists.	6	6
Technicians.	3	3
Administrative.	2	2
Supporting.	2	2
Drivers.	2	2
Total.	16	16

Staff Position (as on 30th September 2004)

Name with Designation Including Discipline	Pay scale with present basic pay	Date of joining	Category SC/ST/OBC/ Others
Mr.D.S.Mallikarjunappa Gowda Training Organiser. (OPG) Soil & Water Cons. Engg.	12,000-16,500 10,200.00	06-10-1994	GM
Dr.S.V. Halakatti . Trg.Assoc. (Ag.Extn.Edn.) Agril.Extension Education	8,000-13,500 10,475.00	06-10-1995	GM
Dr. C.M. Sajjanar. Trg. Assoc.(Ani.Sci.) Animal Genetics and Breeding	8,000-13,500 9,925.00	14.02.1997	GM
Mr.S.M.Hiremath. Trg.Assoc. (Horti) Horticulture(Olericulture)	8,000-13,500 9,925.00	09.07.2002	GM
Mr. K .B.Yadahalli Trg.Assoc. (Pl.Path.)	8,000-13,500 9,925.00	03.10.2003	GM
Mr.T.C.Jayaprakash. Res.Assoc.(Agron.) Against Trg.Assoc(Agronomy) Agronomy	8,000-13,500 11,500.00 (Consolidated)	23.03.2004	SC
Dr. S.S. Karabhantanal, Research Associate (Ag.Ent.)	8,000-13,500 12,000.00 (Consolidated)	07.11.2003	GM
Smt.Vijayalaxmi Kamaraddi Res. Assoc. (H.Sc.) Against Trg. Asst.(H.Sci.)	5,575-10,620 11,500.00 (Consolidated)	11.11.2003	GM
Mr. H.R. Nagaraju Trg. Asst. (Soil Science)	8750.00 (Consolidated)	02.06.2004	GM
Miss. K.N. Rekha Trg.Asst.(Comp. Prog.) Computer Programmer	8750.00 Consolidated	02.06.2004	GM
Mr. A.B.Banakar. Supt.(General)	6,000-11,120 8,000.00	1.07.2003	GM
Mr. Kallappa T. Beldar. Typist	4,150-7,800 4,250.00	10.04.2003	SC
Mr. B. Ramesh Driver (LV)	3,000-5,450 3,650.00	30.05.1995	GM
Mr. C.V.Nelogal Farm Labour	3,000-5450 3,150.00	01.07.2002	GM
Mr.P.C.Kunbevin Senior Watchman	3,000-5450 4,350.00	07.06.1998	GM
Mr.K.B.Belakeri Gardener	2500-3850 3,150.00	02.11.1998	GM

1. INTRODUCTION

DESCRIPTION OF AGRO-CLIMATIC ZONES AND FARMING SITUATIONS OF THE DISTRICT.

Haveri district is agriculturally potential district. It comes under Northern Transitional zone (ZONE-8) , which receives on an average 750 mm of rainfall between June to October. The rainfall is received with two peaks, first being in July followed by the second peak in September. Haveri district is known for its chili and minor millets cultivations. Chili is exported to Kerala for extraction of oleoresin. Haveri has total geographical area of 4.85 lakh ha with cultivated area of 3.86 lakh ha out of which 72,000 ha is irrigated (13.5%). Haveri district consists of Seven taluks spread over 674 villages . The soils are red (65%) and black (35%). Land holding pattern of the district is 1< ha (32,719), 1-2 ha (60,095), 2-4 ha (48,885), 2-10 ha (19,613) and > 10 ha (2,649).

HAVERI DISTRICT AT A GLANCE BASIC INFORMATION OF HAVERI DISTRICT

Geological Area(ha)	4,85,156
Total Number Of Talukas	07
Total Number Of Corporations	06
Total Number Of Village Panchayats	210
Total Number Of Villages	675
Total Population	12,69,200
Total Urban Population	2,03,700
Total Village Population	10,65,500
Total Cultivable Land (ha)	3,86,071
Total Irrigation Land (ha)	72,671
Total Forest Area (ha)	47,454
Normal Rainfall(mm)	752.80
Agriculture Training Schools	02
Seed Production Centers	02
Total Rainfall Gauges	27

Horticulture Scenario of Haveri District (Area in ha)

Sl. No	Taluka	Fruit Crops	Vege tables	Spices	Horticulture Crops	Flowers	Total
1	Haveri	333	1569	7217	85	106	9310
2	Hanagal	657	1218	1295	471	164	3805
3	Shiggaon	670	212	9054	257	79	10263
4	Savanur	197	375	15223	444	208	16447
5	Byadagi	471	1824	1118	460	173	4046
6	Ranebennur	808	6709	1450	510	137	9164
7	Hirekerur	1602	8708	3488	1786	626	25824
Total		4738	20615	38836	4013	1493	78859

Veterinary Institutions of Haveri District

Sl. No	Taluka	Vet. Hospitals	Vet. Dispensaries	Primary Vet. Centers	Artificial Insemination Centers	Key Village Scheme Centers	Mobile Vet. Clinics	Regional Labs.	Total
1	Haveri	1	7	8	6	1	1	--	23
2	Hirekerur	2	6	12	9	1	1	--	31
3	Hanagal	1	4	11	1	--	1	--	31
4	Ranebennur	1	5	15	--	--	1	--	18
5	Shiggaon	2	3	6	6	--	1	1	19
6	Byadagi	2	3	10	--	--	1	--	16
7	Savanur	1	1	7	--	--	1	--	10
	Total	10	29	69	22	2	7	1	140

Live Stock population of Haveri District

Sl No	Taluka	Cattle	C.B. Cattle	Buffaloes	Total	Sheep	Goat	Pigs	Total	Poultry Birds
1	Haveri	43434	6806	20018	70258	51343	26373	670	148644	399973
2	Hirekerur	66379	7695	28792	102866	14701	26027	474	144068	190907
3	Hanagal	61286	1945	16183	79414	23347	16698	574	120033	165012
4	Ranebennur	41002	3060	28504	72566	103686	34078	394	210724	316296
5	Shiggaon	40315	3425	10479	54219	24877	9572	458	89126	142594
6	Byadagi	32480	3948	11265	47693	11806	13608	171	73278	105148
7	Savanur	29746	2172	10753	42671	16982	11084	268	71005	96634
	Total	314642	29051	125994	4693687	246742	130440	3009	856878	1416564

Area Under Cultivation of Different Crops

Sl No	Details	2004-05 (Area in ha)	2003-04 (Area in ha.)
1	Cereals	186086	176518
2	Oil Seeds	23568	25408
3	Cotton	32183	25187
4	Pulses	36089	35650
5	Sugarcane	1189	3239
6	Chili	417	3200
7	Onion	2325	8500

Sl No	Crop	2004-05 (Area in ha)	2003-04 (Area in ha.)
1	Maize	115581	87436
2	Sorghum	27984	22807
3	Paddy	26862	50425
4	Minor Millets	15659	13270
5	Ragi (Sole crop)	400	1901
6	Bajra	50	639
7	Groundnut	16566	18654
8	Sunflower	794	1130
9	Sesamum	1806	1925
10	Niger	1988	2557
11	Soybean	452	393
12	Castor	200	415
13	Greengram	22933	21044
14	Redgram	8324	8505
15	Cowpea	3557	8505
16	Blackgram	848	1490

STATEMENT SHOWING THE RAINFALL MONTH WISE, TALUKWISE, 2003-04

		DISTRICT : HAVERI					REPORTING DATE : 31-7-2004				
TALUKA		Jan 04	Feb 04	March 04	April 04	May 04	June 04	July 04	Aug 04	Sept 04	From Jan-03 to 31-07-04
Haveri 1	Normal	3.1	2.3	7.7	44.5	82.4	93.8	164.9	98.30	90.70	398.7
	2002	0	54.5	0	25.6	11.8	103.1	34.5	-		229.5
	2003	0	0	50.3	69.8	0	33.2	58	29.00	7.70	211.3
	2004	0	0	8.6	86.6	123.6	80.9	50.3	92.30	19.40	350
Byadgi 2	Normal	0.5	0	3.7	40.9	77.8	89.4	146.6	94.2	90.80	358.9
	2002	0	43.4	0	38.2	133.4	86.0	35.6	177.60	19.80	336.6
	2003	0	0	22.4	72.4	0	15.6	41.4	61.70	41.70	151.8
	2004	0	0	27.6	87	105.6	69	60.2	104.2	38.20	349.4
Hangal 3	Normal	1.9	1.1	5.8	38.6	70.2	142.0	283.0	151.20	73.10	542.6
	2002	0	7.5	0	98.5	21.2	148.3	59.6	-		335.1
	2003	0	7.5	0	94.5	8.0	125.5	147.5	-		383
	2004	0	0	0	126.9	190.5	183.1	81.5	192.10	7.50	582
Hirekerur 4	Normal	1.0	3.2	3.8	37.8	74.3	100.1	209.1	114.40	86.80	429.3
	2002	0	21.6	0	43.2	33.3	140.7	71.2	115.40	30.00	310
	2003	0	3.8	3.8	92.1	12.2	45.4	110.9	73.65	22.40	268.2
	2004	0	0	20.0	44.2	109.4	101.2	60.2	193.59	5.70	335
Ranebennur 5	Normal	2.0	1.9	5.6	37.5	77.5	69.4	98.8	71.01	86.00	292.7
	2002	0	0	0	117.7	20.0	48.4	39.2	31.10		225.3
	2003	0	80.6	0	20.1	104.3	94.3	31.1	36.40		330.4
	2004	0	0	0	149.39	90.5	71.8	81.3	-	34.80	392.9
Savanur 6	Normal	1.1	2.1	2.9	29.9	89.4	84.5	129.2	87.10	88.90	339.1
	2002	0	4.5	0	7.0	69.5	148.7	29.7	71.70	19.90	259.4
	2003	0	0	63.4	42.2	4.4	53.9	55.9	32.00	11.60	219.8
	2004	0	0	0	73.8	86.5	108.6	55.7	110.20	17.00	334.6
Shiggaon 7	Normal	1.7	1.1	3.6	38.8	70.4	90.8	168.9	106.20	81.10	375.3
	2002	0	17.6	0	60.8	49.6	161.8	84.1	-		373.9
	2003	0	0	0.3	69.4	0	112.6	78.6	78.28	40.87	260.9
	2004	0	0	0	83.9	136.9	115.6	79.6	185.50	27.50	416
District Average	Normal	1.61	1.67	4.73	38.29	77.43	95.71	171.50	-	-	390.9
	2002	0	32.81	0	41.91	60.44	126.13	49.40	-	-	310.7
	2003	0	1.61	23.11	76.39	3.51	64.13	75.46	-	-	244.2
	2004	0	0	8.03	93.10	121.86	104.31	66.97	-	-	394.3
% of rainfall to		0	0	170	243	157	109	39	-	-	101

Rainfall (mm) Data of Haveri District 2003-04 and 2004-05

Sl. No	Month	Normal Rain Fall	2004-05	2003-04
1.	January	1.61	-	00.00
2.	February	1.67	-	00.74
3.	March	4.73	8.03	14.24
4.	April	38.29	93.10	69.56
5.	May	77.43	121.86	09.34
6.	June	95.71	104.31	53.66
7.	July	171.50	66.97	60.81
8.	August	390.90	-	56.15
9.	September	-	-	27.08
10.	October	-	-	199.45
11.	November	-	-	00.00
12.	December	-	-	00.00
Total			394.30	491.03

Note: Normal rainfall of the Haveri district was 719.54 mm. Actual rainfall during 2003-04 was 491.03 mm which is less than 228.51.mm and that of 2004-05 is 325.24 mm which is less than 719.54 mm of normal rainfall.

Total Land with KVK (in ha.)

Sl.No	Item	Area (ha)
A.	Under Buildings.	1.60
B.	Under Demonstration Units.	0.20

Infrastructure facilities available (Land, Building and Equipments).

A) Building:

- 1) The KVK was established in the buildings transferred from Rural Institute, Hanumanamatti (RIH), Main Administrative Building (400 Sq. Mt.) was constructed with ICAR grants of Rs.24.628 lakhs during the year 1999.2000. The building was inaugurated by Dr. P.Das, D. D. G.(Extension) ICAR , New Delhi on 6th October 2000.
- 2) The Framers Hostel (305 Sqmt) Construction started during 15th March 2004. Now the Progress is upto RCC roof level
- 3) The soil testing laboratory is sanctioned. Now Purches of equipment's and chemical is under progress

Sl No	Name of building	Stage						
		Complete				Incomplete		
		Start Date	Completion Date	Plinth area	Cost Rs.	Start Date	Plinth area	Cost
1.	Administrative building	1999-2000	2000-2001	400	24.63	-	-	-
2.	Farmers Hostel	Up to RCC Roof Level	-	305	20.54	15th March	-	-
3.	Staff Quarters(6)	-	-	-	-	-	-	-
4.	Demonstration Units (2)	-	-	-	-	-	-	-

Vehicles, Equipments and AV aids

Type of Vehicle	Year of purchase	Purchase value (Lakhs)	Total Kms run so far	Present condition	Name of equipment	Year of purchase	Purchase Value (Rs.)	Present condition
Tempo trax (Judo)	Dec. 2002	4.50	49,000	Good	1. Computer with Accserious	2003	80,000.00	Good
					2) Fax machine	2004	25,000.00	Good

2. THRUST AREAS IDENTIFIED IN THE DISTRICT

1. Depletion of under ground water
2. Low soil fertility & poor water quality.
3. Necrosis in sunflower.
4. Murda Complex in chilli.
5. Bud necrosis in Groundnut
6. Root rot in Groundnut .
7. Heliothis in Cotton.
8. Leaf redding in Cotton.
9. Spingid moth greengram.
- 10.Mite in Coconut.
- 11.Heliothis in redgram.
- 12.Bacterial blight in Paddy.
- 13.Blast in Paddy.
- 14.Shoot and fruit borer in Brinjal.
- 15.Early blight in Tomato.
16. Purple blotch in Onion.
- 17.Diamond bacce moth and head borer in Cabbage & Cauliflower.
18. Semilooper in Castor
19. Pod borer in Bengalgram.
20. Rhizoctonia in redgram.
21. Rust problem in Soybean.
22. Whitening and Damping of chilli.
23. Blight in Chrysanthamum and Onion.

PROBLEMS IN ANIMAL SCIENCES

1. Although the district has good scope for dairy activities, only a few commercial dairies exist in the district.
2. A large number of Dairy Co-operative Societies (DCS) are defunct. Despite tie up arrangement, some the DCS are not deducting the loan installment from the proceeds of the milk supplied by the farmers and remitting to the bank.
3. The facilities and activities relating to breeding are good given adequate importance. The facilities available are also under utilized.
4. There are no quality control arrangements in respect of livestock and poultry feed produced.
5. There is no diagnostic laboratory for poultry diseases. Farmers therefore depend on outstation laboratories for the purpose.
6. More than one lakh livestock were affected by feeding of stunted/ weathered sorghum fodder.

PROGRAMMES OF KVK HANUMANAMATTI

To fulfill the mandates, KVK has taken up from time to time the following programmes.

- Trainings (On and Off Campus)
- Front Line Demonstrations
- On Farm Testing
- Extension Activities
- Success Stories
- Impact Studies

3. TRAININGS

Trainings were organised looking in to the needs of the farmers, farm women, rural youths and school dropouts based upon adoption gaps noticed during the survey. Both On and Off campus trainings were conducted with a duration ranging from 2 to 3 days.

Monthly schedules are being printed and circulated among village panchayat and Taluka level officials of different departments for attracting more number of trainees for Various training programmes. Tips are given over AIR and press media and also good number of group meetings are organised at village levels to attracts needy farmers for campus training programmes. Many times trainings were organised based on the request and need of the various rural institutions. After the training programmes, followup visits are being made to the villages to persue the adoption of various technologies. In consequent of visits, the impact of the trainings based on the extent of adoption is documented.

DETAILS OF TRAINING PROGRAMMES

TRAINING ACHIEVEMENTS : 1999-2000

(On-Campus and Off –Campus)

Sl. No	Discipline Practicing Farmers/ farm women	On-Campus					Off-Campus					Grand Total
		No.of Trainings	Category			Total	No.of Trainings	Category			Total	
			Male	Female	SC/ST			Male	Female	SC/ST		
1	Crop Production	1	35	0	7	35	0	0	0	0	0	35
2	Horticulture	0	0	0	0	0	3	34	77	14	111	111
3	Animal Science	4	87	16	30	103	10	293	204	110	497	600
4	Home Science	2	6	50	8	56	7	13	242	14	255	311
5	Agril. Engineering	3	63	2	10	65	1	35	10	5	45	110
6	Plant Protection	0	0	0	0	0	4	315	30	13	345	345
7	Integrated	25	698	304	217	1002	32	4510	1051	963	5561	6563
8	Agril. Extension	1	5	0	0	5	0	0	0	0	0	5
	Total	36	894	372	272	1266	57	5200	1614	1119	6814	8080

TRAINING ACHIEVEMENTS : 2000-2001

On-Campus and Off-Campus

Sl. No	Discipline Practicing Farmers/ farm women	No.of Trainings	Category			Total		No.of Trainings	Category			Total
			Male	Female	SC/ST				Male	Female	SC/ST	
1	Crop Production	0	0	0	0	0	0	0	0	0	0	
2	Horticulture	0	0	0	0	0	4	88	15	18	103	
3	Agril. Engineering	0	0	0	0	0	2	85	10	0	95	
4	Animal Science	9	72	74	28	146	3	40	60	15	100	
5	Plant Protection	1	25	0	0	25	2	80	5	20	85	
6	Agril. Extension	4	23	61	40	84	3	34	74	47	108	
7	Home Science	1	0	20	0	20	4	19	122	63	141	
8	Integrated	17	648	254	286	902	15	551	576	85	1127	
	Total	32	768	409	354	1177	33	897	862	248	1759	

TRAINING ACHIEVEMENTS PRACTICING FARMERS/FARM WOMEN: 2001-2002
On-Campus and Off -Campus

Sl. No	Discipline Practicing Farmers/ farm women	On-Campus					Off-Campus					Grand Total
		No.of Trainings	Category			Total	No.of Trainings	Category			Total	
			Male	Female	SC/ST			Male	Female	SC/ST		
1	Crop Production	4	131	9	13	140	6	153	44	0	197	337
2	Horticulture	2	24	17	0	41	11	230	70	0	300	341
3	Agril. Engineering	4	161	26	16	187	3	65	0	0	65	252
4	Animal Science	9	82	56	22	138	12	227	131	10	358	496
5	Plant Protection	2	40	0	4	40	14	377	67	10	444	484
6	Agril. Extension	3	13	56	4	69	6	77	93	0	170	239
7	Home Science	10	1	222	33	223	18	131	393	62	524	747
8	Integrated	1	40	0	2	40	3	65	30	0	95	135
	Total	35	492	386	94	878	73	1325	828	82	2153	3031

**DETAILS OF TRAINING PROGRAMMES (ON AND OFF CAMPUS):
2001-2002**

A. ON- CAMPUS : FOR PRACTICING FARMERS/FARM WOMEN

Sl. No	Title of the Course	Duration in Dyas	Number of Participants			Total
			Male	Female	SC/ST	
1	Crop Production					
	Pre sowing Taining on Improved technologies in cereals, oil seeds and pulses	2	25	0	4	25
	Improved Production Technology in cotton	2	45	5	5	50
	Improved Production Technology in cotton	2	46	4	1	50
	Improved Production Technology in cotton	2	15	0	3	15
Total		8	131	9	13	140
2	Horticulture					
	Integrated Horticulture Taining	5	0	14	0	14
	Improved cultivation practices	2	24	3	0	27
	Total		7	24	17	0
3	Agril. Engineering					
	Soil and water Conservation techniques in dry land	2	13	0	3	13
	Soil and water Conservation techniques in dry land	1	59	12	4	71
	Soil and water Conservation techniques in dry land	1	46	5	6	51
	Soil and water Conservation techniques in dry land	1	43	9	3	52
	Total		5	161	26	16
4	Plant Protection					
	Intergrated pest management in cotton	1	15	0	2	15
	Preparation of Vermicompost	1	25	0	2	25
	Total		2	40	0	4

5	Agril. Extension Education.					
	Maintance of Records for SHG	3	11	14	0	25
	Maintance of Records for SHG	2	0	17	0	17
	Maintance of Records for SHG	2	2	25	4	27
	Total	7	13	56	4	69
6	Animal Science					
	Day today management of dairy farm	2	3	10	0	13
	Mangement of Dairy farm animals During summer	2	14	6	4	20
	Diseases of cattle and their control measures	2	16	22	11	38
	Diseases cow and buffaloes and their control measures	2	2	2	0	4
	Scientific management of Poultry farm	2	6	0	1	6
	Day today management of dairy farm	2	3	0	0	3
	Day today management of dairy farm	2	7	0	1	7
	Day today management of dairy farm	1	28	5	5	33
	Scientific management of Poultry farm	2	3	11	0	14
		Total	17	82	56	22
7	Home Science					
	Lambani kasuti	2	0	35	15	35
	Importance of perparation and nutritive value of food of weaning babies	2	0	25	0	25
	Preparation of Agarbatti	2	1	41	8	42
	Preparation of Agarbatti	2	0	11	0	11
	Tailoring	1	0	4	1	4
	Preparation of Wax candles	1	0	10	1	10
	Preparation of Wax candles	2	0	24	4	24
	Preparation of Wax candles	1	0	12	0	12
	Formation and maintenaces of SHG	1	0	40	0	40
Income generating activites for self hlep groups	1	0	20	4	20	
	Total	15	1	222	33	223

B. OFF- CAMPUS : FOR PRACTICING FARMERS/FARM WOMEN

Sl. No	Title of the Course	Duration in Days	Number of Participants			Total
			Male	Female	SC/ST	
1	Crop Production					
	Organic farming	1	20	30	0	50
	Cultivation practices of oilseeds	1	40	0	0	40
	Organic farming	1	25	0	0	25
	Improved Production of minor millets	1	25	4	0	29
	Cultivation practices of minor millets	1	18	5	0	23
	Cultivation practices of minor millets	1	25	5	0	30
	Total	6	153	44	0	197

Sl. No	Title of the Course	Dur. in Dyas	Number of Participants			Total
			Male	Female	SC/ST	
2	Horticulture					
	Cultivation practices of watermelon	1	20	0	0	20
	Cultivation practices of banana	1	20	0	0	20
	Cultivation practices of Horticulture Crops	1	20	0	0	20
	Improved Cultivation practices in Chilli	1	35	0	0	35
	Preservation of fruits and vegetables	1	0	30	0	30
	Intercropping system in coconut	1	10	30	0	40
	Methods of propagation of fruit	1	15	35	0	50
	Management of chilli and Tomato rops	1	30	0	0	30
	Nursery management in coconut	1	25	0	0	25
	Fertilizer management in banana	1	25	0	0	25
	Cultivation practices in banana	1	30	0	0	30
Total		11	230	95	0	325

Sl. No	Title of the Course	Duration in Dyas	Number of Participants			Total
			Male	Female	SC/ST	
3	Agriclture Engineering					
	Soil and Water conservation techniques in dry land	1	20	0	0	20
	Soil and Water conservation techniques in dry land	1	20	0	0	20
	Soil and Water conservation techniques in dry land	1	25	0	0	25
Total		3	65	0	0	65

Sl. No	Title of the Course	Duration in Dyas	Number of Participants			Total
			Male	Female	SC/ST	
4	Plant Protection					
	Pest and Diseases Managment in Horticulture crops	1	30	0	10	30
	Preparation of Vermicompost	1	35	0	0	35
	Preparation of Vermicompost	1	0	15	0	15
	Preparation of Vermicompost	1	30	10	0	40
	Preparation of Vermicompost	1	5	30	0	35
	Preparation of Vermicompost	1	25	0	0	25
	Diseases Managemnt in Oilseed Crops	1	35	0	0	35
	Diseases Managemnt in banana	1	25	0	0	25
	Diseases Managemnt in banana and Beetal vine	1	25	5	0	30
	Diseases Managemnt inCoconut and Arecanut	1	25	0	0	25
	Nematode management in Banana	1	30	0	0	30
	Seed treatment with Trichoderma in Oil seeds and Pulses	1	32	4	0	36
	Management of Red headed hairy cater piller in Groundnut and cotton	1	55	3	0	58
	Diseases Management in Banana	1	25	0	0	25
Total	14	377	67	10	444	

Sl. No	Title of the Course	Duration in Days	Number of Participants			Total
			Male	Female	SC/ST	
5	Agriculture Extension Education					
	Formation and Maintenance of Records for SHG	1	5	20	0	25
	Formation and Maintenance of Records for SHG	1	30	10	0	40
	Formation and Maintenance of Records for SHG	1	20	15	0	35
	Formation and Maintenance of Records for SHG	1	2	25	0	27
	Formation and Maintenance of Records for SHG	1	20	10	0	30
	Problems in maintenance of records SHG	1	0	13	0	13
	Total	6	77	93	0	170

Sl. No	Title of the Course	Duration in Days	Number of Participants			Total
			Male	Female	SC/ST	
6	Animal Science					
	Day today management of Dairy farming	1	12	0	0	12
	Management of crossbred cows in summer	1	15	5	0	20
	Traditional methods of rearing animals.	1	40	0	10	40
	Sheep management	1	20	0	0	20
	Management of dairy animals and cultivation of fodder crops	1	14	24	0	38
	Maintenance of milk producers cooperative societies.	1	25	15	0	40
	Care and management of new born calves	1	5	35	0	40
	Management of Dairy animals	1	25	5	0	30
	Identification of animals during heat	1	21	10	0	31
	Management of local and giriraja birds	1	15	35	0	50
	Management of Dairy animals	1	20	0	0	20
	Scientific dairy farming	1	15	2	0	17
Total	12	227	131	10	358	

Sl. No	Title of the Course	Duration in Dyas	Number of Participants			Total
			Male	Female	SC/ST	
7	Home Science					
	SHG formation	1	1	14	10	15
	Traditional methods of cooking processing and preservation	1	10	23	10	33
	Guide lines to formulate rules and regulations in SHGs	1	40	0	10	40
	Guide lines to formulate rules and regulations in SHGs	1	10	30	0	40
	Formation and Maintenance of SHGs	1	10	3	0	13
	Kutch work and lambani craft	1	1	14	0	15
	Hand embroidery	1	0	11	0	11
	Conflict management in SHGs	1	11	20	0	31
	Agarbatti preperation	1	2	25	0	27
	Agarbatti preparation	1	0	30	0	30
	Agarbatti preparation	1	1	27	0	28
	Importance of group meeting in SHGs	1	0	21	5	21
	Book keeping and records maintenance in SHGs	1	2	28	10	30
	Preparation of wax candles and agarbatti for SHGs members	1	10	30	0	40
	Duties and responsibilities of group representatives and members in SHGs	1	10	22	7	32
	Use of local resoures to overcome nutritional beficiency disorders among rural poor	1	15	35	0	50
	Preparation of candles and detergent Powder for SHG member	1	3	30	0	33
	Maintanence of records and Guidelines for formation of SHG	1	5	30	10	35
	Total	18	131	393	62	524

TRAINING ACHIEVEMENTS : 2002-2003

On Campus and Off Campus

Discipline	No.of courses	No.of Participants							No.of courses	No.of Participants							Grand Total
		Male		Female		Total		Total		Male		Female		Total		Total	
		Oth ers	SC /ST	Oth ers	SC /ST	Oth ers	SC /ST			Oth ers	SC /ST	Oth ers	SC /ST	Oth ers	SC /ST		
(A) Practicing Farmers																	
Crop Production	1	13				13		13	9	212	27	2		214	27	241	254
Horticulture	4	1		91	5	92	5	97	1	20	10			20	10	30	127
Livestock Production and Management	5	16	1	67	5	83	6	89	11	97	10	177	30	274	40	314	403
Home Science	10	24		188	10	212	10	222	5	4	-	128	25	132	25	157	379
Agril. Engineering	3	134	12	7		141	12	153	4	145	15	2		147	15	162	315
Plant Protection	1	3		4		7		7	4	50		50		100	-	100	107
Ag.Extension	2			18				18									18
Others (Integrated)	2	27	3	19	2	46	5	51	4	56		75		131	-	131	182
TOTAL	28	218	16	394	22	594	38	650	38	584	62	434	55	1018	117	1135	1785
(B) Rural Youths																	
Horticulture	1	3	-	19	3	22	3	25									25
Home Science	1	-	-	14	5	14	5	19									19
Ag.Extension	1	4		30		34		34									34
TOTAL	3	7	0	63	8	70	8	78									78
Grand Total (A+B)	31	225	16	457	30	664	46	728	38	584	62	434	55	1018	117	1135	1863

2002-2003

**DETAILS OF TRAININGS PROGRAMMES (ON AND OFF CAMPUS):
ON-CAMPUS: FOR PRACTICING FARMERS/FARM WOMEN**

Title of the Course	Dur. in days	Number of Participants			
		Male	Female	Sc/St	Total
Home Science					
Preparation of Wax candles	01	03	22	01	25
Preparation of Soap powder	01	04	07		11
Preparation of Masala powders	02		11	04	11
Scientific management of early childhood education centres	03		22		22
Tailoring Training to Rural youths			19	05	19
Formation and Management of SHG	03		26	03	26
Formation and Management of SHG	02		30		30
Preparation of candle, chalkpice and Agarbatti	02		22	05	22
Agarbathi preparation	02	06	19		25
Agarbathi preparation	02		24		24
Preparation and marketing of Agarbathi	02	08	23		31
Preparation and marketing of Agarbathi	02	03	27		30

Title of the Course	Dur. in days	Number of Participants			
		Male	Female	Sc/St	Total
Animal Science					
Scientific Dairy farming	02	02	06	02	08
Integrated animal husbandry training to Livestock man and compounderes	03	23	01		24
Sheep management	02		12	01	12
Scientific dairy management	01	13		01	13
Integrated animal husbandry training prog.to Farm Womens (WYTEP)	03		30	01	30
Scientific Dairy farming	01	01	14		15

Title of the Course	Dur. in days	Number of Participants			
		Male	Female	Sc/St	Total
Horticulture					
Integrated Horticulture training to Gardeners	02	11			11
Integrated Horticulture training to Horticulture Assistants	03	11		02	11
Mushroom cultivation	01	03	22	03	25
Mushroom cultivation	01		25		25
Mushroom cultivation	01		22		22
Mushroom cultivation	01	01	19	02	20
Integrated Horticulture training to women (WYTEP)	05		30	03	30

Title of the Course	Duration in days	Number of Participants			
		Male	Female	Sc/St	Total
Agril . Engineering					
Watershed development	01				50
Watershed development	01	26		05	26
Watershed development	01	70	07	07	77

Title of the Course	Duration in days	Number of Participants			
		Male	Female	Sc/St	Total
Agril. Extension					
Enterpreneurship development	01	04	30	05	34
Conflict management in SHGs	01		09		09
EDP Training to SHG	01		09		09

Title of the Course	Duration in days	Number of Participants			
		Male	Female	Sc/St	Total
Plant protection					
Vermicomposting	01	03	04		07

Title of the Course	Duration in days	Number of Participants			
		Male	Female	Sc/St	Total
Crop Production					
Cotton mini mission-II Training for Agriculture Assistants	03	30		02	30
Production Technology for minor millets	02	13			13

Title of the Course	Duration in days	Number of Participants			
		Male	Female	SC/ST	Total
Others					
CBTMCP	03	11	14		25
CBTMCP	03	16	10		26

2002-2003

OFF-CAMPUS: FOR PRACTICING FARMERS/FARM WOMEN

Title of the Course	Duration in days	Number of Participants			
		Male	Female	SC/ST	Total
Home Science					
Candle and Soap powder preparation	01	03	32		35
Conflict management in SHGs	01		30	10	30
Book Keeping in SHGs	01	01	30	05	31
Conflict management in SHGs	01		30	05	30
Conflict management in SHGs	01		31	05	31

Title of the Course	Duration in days	Number of Participants			
		Male	Female	SC/ST	Total
Horticulture					
Propogation of Fruit tree and nursery management	01	30		10	30

Title of the Course	Duration in days	Number of Participants			
		Male	Female	SC/ST	Total
Animal Science					
Dairy farming to SHGs	01	05	25		30
Scientific dairy farming	01	30	10		40
Scientific dairy farming	01	15	05		20
Dairy Production, Fodder and Grass varieties	01	10	20		30
Day today management of dairy animals to SGHs	01	05	24		29
Diseases of Cattle & Buffaloes and their control Measures	01	20		05	20
Animal Husbandary activities to women (WYTEP programme)	01		30	05	30
Animal Husbandary activities to women (WYTEP programme)	01		30	10	30
Animal Husbandary activities to women (WYTEP programme)	01		31	05	31
Parasitic deseases of cattle and Buffaloes and their control measures	01	20	10	10	30
Management of Dairy animals and SJGSRY implimentation	01	02	22	05	22

Title of the Course	Duration in days	Number of Participants			
		Male	Female	SC/ST	Total
Agril. Engineering					
People's participation in watershed programme	01	35			35
People's participation in watershed programme	01	40	02		42
People's participation in Jala samrakashane	01	50		15	50
Use of Drumseeder in paddy	01	20			20

Title of the Course	Duration in days	Number of Participants			
		Male	Female	SC/ST	Total
Agril. Extension					
Enterpreunership development	01	05	27		32
SHG and income generating activities	01	25	08		33
EDP in Agriculture and related aspects	01	08	40		48
People's participation in Jala samrakashane	01	18			18

Title of the Course	Duration in days	Number of Participants			
		Male	Female	SC/ST	Total
Crop Production					
Onion varities and cultivation aspects	01	20	02		22
New varieties in Bengalgram, cultivation aspects and diseases management	01	14			14
Development of pulse crops	01	35	10		45
Agronomic practices in paddy	01	5	25		30
Cultivation practices of minor millets	01	35		05	35
Cultivation practices of minor millets	01	40		05	40
Cultivation practices of Sorghum & Redgram	01	40		10	40
Cultivation practices & inter cropping systems in sorghum & Minor millets	01	30		03	30
Cultivation practices of Navane, Redgram and Ragi	01	20		04	20

Title of the Course	Duration in days	Number of Participants			
		Male	Female	SC/ST	Total
Plant Protection					
Pests and diseases management in paddy	01	25			25
Pests and diseases management in cotton	01		25		25
Management of diseases in chrysanthimum	01	20			20
Pests and diseases management in paddy	01	05	25		30

TRAINING ACHIEVEMENTS : 2003-2004
On Campus and Off Campus

Discipline	No.of courses	No.of Participants			No.SC/ST out of total			No.of courses	No.of Participants			No.SC/ST out of total			Grand Total
		Male	Female	Total	Male	Female	Total		Male	Female	Total	Male	Female	Total	
(A) Practicing Farmers															
Crop Production	2	22	0	22	3	1	4	12	335	68	403	64	46	110	114
Horticulture	3	47	38	85	9	2	11	2	52	13	65	7	6	13	24
Livestock Production and Management	4	12	78	90	2	24	26	6	22	145	167	19	19	38	64
Home Science	7	18	127	145	12	23	35	8	70	143	213	21	51	72	107
Agril. Engineering	0	0	0	0	0	0	0	2	70	0	70	3	2	5	5
Plant Protection	7	96	73	169	31	8	39	14	357	84	441	41	26	67	106
Ag. Extension	2	28	8	36	4	2	6	5	109	31	140	17	19	36	42
Soil Fertility & Management	1	19	0	19	19	0	19	0	0	0	0	0	0	0	19
TOTAL	26	242	324	566	80	60	140	49	1015	484	1499	172	169	341	481
(B) Rural Youths															
Horticulture	4	67	32	99	8	2	10	1	20	18	38	5	11	16	26
Livestock Production and Management	3	41	81	122	13	26	39	5	73	76	149	10	10	20	59
Home Science	5	21	108	129	5	45	50	8	2	226	228	22	63	85	135
Plant Protection	4	14	58	72	1	18	19	3	30	65	95	2	3	5	24
TOTAL	16	143	279	422	27	91	118	17	125	385	510	39	87	126	244
Grand Total (A+B)	42	385	603	988	107	151	258	66	1140	869	2009	211	256	467	725

SPONSORED TRAINING PROGRAMMES 2002-2003

Discipline	Sponsoring agency	Dur. (days)	No. of courses	Total No. of Participants			No. of SC/ST out of total		
				M	F	Total	M	F	Total
Horticulture	KSDA	05	01	00	30	30	00	03	03
Livestock	KSDA	05	01	00	30	30	00	01	01
Production & Management	Swashakti Project Bellary	05	10	00	299	299	00	183	183
Ag. Extension	CBTCP	02	02	27	24	51	09	05	14
Total		17	14	27	383	410	9	192	201

2003-2004

**DETAILS OF TRAININGS PROGRAMMES (ON AND OFF CAMPUS):
ON-CAMPUS: FOR PRACTICING FARMERS/FARM WOMEN**

Title of the Course	Dur. in days	Number of Participants								
		M	F	Total	SC		ST		SC/ST Total	
					M	F	M	F		
Home Sciences										
Preparation of candles & Soap powder	02	03	15	18	2	5	00	05	12	
EDP & Preparation of Soap Powder for Rural Youth	02	04	13	17	01	01	00	00	02	
preparation of Agarbatti	02	01	26	27	01	26	00	00	27	
Preparation of Agarbatti	02	10	01	11	10	00	00	00	10	
Integrated child development & self help group maintainances for Anganwadi Supervisors	03	00	30	30	00	01	00	03	04	
Preparation of Candle	01	00	25	25	00	04	00	00	04	
Preparation of Agarbatti	03	10	17	27	03	01	00	01	05	
Preparation of Agarbatti	00	00	13	13	00	01	00	01	02	
Preparation of Masala Powder	02	00	24	24	00	00	00	00	00	
Preparation of Candle	02	01	32	33	00	13	00	00	13	
Preparation of Candle	02	03	20	23	00	03	00	01	04	
Preparation of Masala Powder	02	05	20	25	00	03	00	00	03	
Preparation of Agarbatti	02	02	29	31	00	03	00	00	03	
Total (13)			39	265	304	17	61	0	11	89

Title of the Course	Dur. in days	Number of Participants							
		M	F	Total	SC		ST		SC/ST Total
					M	F	M	F	
Animal Science									
Scientific dairy management	02	02	12	14	00	00	00	00	00
Day to Day Management of Dairy Farm	03	09	05	14	02	00	00	00	02
Scientific Dairy farming	02	09	19	28	00	03	00	11	14
Scientific dairy management	02	00	29	29	00	05	00	06	11
Scientific dairy management	01	32	33	65	13	00	00	00	13
Scientific dairy management	02	00	29	29	00	06	00	06	12
Scientific dairy management	01	01	32	33	00	13	00	00	13
Total (7)		53	159	212	15	27	0	23	65

Title of the Course	Dur. in days	Number of Participants							
		M	F	Total	SC		ST		SC/ST Total
					M	F	M	F	
Horticulture									
Mushroom cultivation	02	09	17	26	01	01	00	00	02
cultivation practices of Mushroom	02	12	14	26	00	00	02	00	02
Mushroom cultivation	02	26	07	33	04	00	02	01	07
Mushroom cultivation	02	26	07	33	04	00	02	01	07
Oyster Mushroom Production, Processing and utilization technologies	02	08	09	17	00	00	00	00	00
Mushroom cultivation	02	20	16	36	01	01	01	00	03
Mushroom cultivation	02	13	00	13	00	00	00	00	00
Total(7)		114	70	184	10	2	7	2	21

Title of the Course	Duration in days	Number of Participants							
		M	F	Total	SC		ST		SC/ST Total
					M	F	M	F	
Agril. Extension									
Entrepreneurship development in agriculture	03	12	08	20	00	00	03	02	05
Entrepreneurship development in agriculture	04	16	00	16	01	00	00	00	01
Total (2)		28	8	36	1	0	3	2	6

Title of the Course	Dur. in days	Number of Participants							
		M	F	Total	SC		ST		SC/ST Total
					M	F	M	F	
Plant protection									
Vermicompost production and its uses	01	01	13	14	00	00	00	01	01
Vermicompost production and its uses	01	01	18	19	00	02	00	11	13
Bee keeping (Apiculture)	02	12	00	12	01	00	00	01	02
Vermicompost production and its uses	01	00	27	27	00	03	00	00	03
Peat Disease and nutrient management in crops	01	10	00	10	00	00	00	00	00
Vermicompost production and its uses	02	00	21	21	00	00	00	00	00
Vermicompost production and its uses	02	07	24	31	02	00	01	03	06
Vermicompost production and its uses	01	30	00	30	06	00	06	00	12
Vermicompost and its uses	01	20	13	33	05	00	00	05	10
Trichoderma Production and its uses	01	15	15	30	05	00	03	00	08
Use of Bio Pesticides	01	14	00	14	03	00	00	00	03
Total (11)		110	131	241	22	5	10	21	58

Title of the Course	Dur. in days	Number of Participants							
		M	F	Total	SC		ST		SC/ST Total
					M	F	M	F	
Crop Production									
Integrated nutrient management in major Kharif crops	01	09	00	09	00	00	00	00	00
Cotton Production Technology	03	30	00	30	00	00	00	00	00
Production Technology for minor millets	02	13	00	13	03	01	00	00	04
Total (3)		52	00	52	03	01	00	00	04

2003-2004
OFF-CAMPUS: FOR PRACTICING FARMERS/FARM WOMEN

Title of the Course	Dur. in days	Number of Participants							
		M	F	Total	SC		ST		SC/ST Total
					M	F	M	F	
Home Sciences									
Value Addition to Minor Millets	01	40	00	40	02	03	02	03	10
Preparation of Candels	01	20	05	25	05	05	05	05	20
Preparation of Agarbathi	01	02	23	25	02	01	01	01	05
Preparation of Agarbathi	01	00	30	30	06	04	03	02	15
Hand Embroidery	01	00	30	30	05	05	02	03	15
Preparation weaning food for childrens	01	00	28	28	02	03	01	01	07
Book keeping and Maintenance of SHG's Members	01	05	30	35	00	07	00	03	10
Value addition of Ragi	01	04	37	41	02	10	03	02	17
Preparation of Agarbathi	01	00	17	17	00	03	01	01	05
Preparation of Agarbathi	01	00	16	16	00	02	01	01	04
Preparation of Chalk pies	01	01	13	14	00	03	00	00	03
Value Addition to Little Millet	01	00	25	25	00	02	00	01	03
Preparation of Agarbathi	01	00	23	23	00	03	00	02	05
Preparation of Candle	01	00	22	22	00	05	00	03	08
Batic Printing	01	00	40	40	00	10	00	05	15
Preparation of Soap powder	01	00	30	30	00	10	00	05	15
Total (16)		72	369	441	24	76	19	38	157

Title of the Course	Dur. in days	Number of Participants							
		M	F	Total	SC		ST		SC/ST Total
					M	F	M	F	
Horticulture									
Banana Cultivation practices and Production technology	01	30	10	40	03	02	00	00	05
Propagation of Techniques in Fruit crops	01	20	18	38	00	03	05	08	16
Cultivation practices of Vegetables	01	22	03	25	03	02	01	02	08
Total		72	31	103	6	7	6	10	29

Title of the Course	Dur. in days	Number of Participants							
		M	F	Total	SC		ST		SC/ST Total
					M	F	M	F	
Animal Science									
Scientific dairy management	01	10	30	40	02	03	02	03	10
Scientific dairy management	01	05	20	25	01	01	01	01	04
Scientific dairy management	01	06	23	29	03	01	01	01	06
Scientific dairy management	01	00	30	30	02	01	01	01	05
Scientific dairy management	01	00	30	30	02	01	01	01	05
Management of Buffalo during Scarcity	01	10	20	30	01	02	01	01	05
Management of Dairy Animals during Scarcity Season	01	12	14	26	02	03	02	03	10
Scientific dairy management	01	00	25	25	03	02	03	02	10
Artificial Insemination and its application .	01	22	03	25	00	0	0	0	0
Dairy production and management.	01	00	26	26	0	01	01	01	03
Artificial Insemination and its application .	01	30	0	30	0	0	0	0	0
Total (11)		95	221	316	16	15	13	14	58

Title of the Course	Dur. in days	Number of Participants							
		M	F	Total	SC		ST		SC/ST Total
					M	F	M	F	
Agril. Engineering									
Soil and water conservation and methods of under ground water recharge to increate water table.	01	30	0	30	02	01	01	01	05
Formation of water association and its activities.	01	40	0	40	0	0	0	0	0
Total (2)		70	0	70	2	1	1	1	5

Title of the Course	Dur. in days	Number of Participants							
		M	F	Total	SC		ST		SC/ST Total
					M	F	M	F	
Agril. Extension									
Orientation Training of TTC members	01	32	10	42	03	04	0	0	07
Leader ship development training to TTC Members	01	17	02	19	03	02	01	01	07
Communication techniques to TTC members.	01	15	02	17	01	01	01	01	04
How to motivate rural people –training to TTC- members.	01	25	05	30	02	03	03	02	10
Meet and Match programme of TTC	01	20	12	32	0	0	03	05	08
Data collection techniques to volunteers of NGO's (SPS, IDS)	01	15	0	15	0	0	0	0	0
Interview techniques in field Survey	01	15	0	15	0	0	0	0	0
Total (7)		139	31	170	9	10	8	9	36

Title of the Course	Dur. in days	Number of Participants							
		M	F	Total	SC		ST		SC/ST Total
					M	F	M	F	
Crop Production									
Production technology in Maize	01	30	05	35	03	03	02	02	10
Production technology in Groundnut	01	30	10	40	02	01	01	01	05
Production technology in Sunflower	01	30	00	30	01	01	02	03	07
Organic farming	01	30	05	35	02	01	01	02	06
Cultivation practices in Bengalgram.	01	30	0	30	02	03	03	02	10
Cultivation practices in Greengram	01	25	15	40	10	05	05	05	25
Improved Agronomic practices in paddy Cultivation	01	30	05	35	02	03	03	02	10
Cultivation practices of minor millets	01	25	10	35	02	02	02	01	07
Cultivation practices of Redgram.	01	30	05	35	01	03	02	03	09
Cultivation practices of Sorghum .	01	30	03	33	05	00	04	00	09
Cultivation practices & inter cropping systems in sorghum .	01	25	05	30	02	01	05	0	08
Cultivation practices and intercropping systems in Minor millets.	01	20	05	25	01	01	01	01	04
Total (12)		335	68	403	33	24	31	22	110

Title of the Course	Dur. in days	Number of Participants							
		M	F	Total	SC		ST		SC/ST Total
					M	F	M	F	
Plant Protection									
Management and Control Measures paddy Blast disease	01	30	00	30	02	03	03	02	10
Pest and disease management in Maize	01	25	10	35	02	01	02	00	05
Management of diseases of Groundnut crop.	01	20	20	40	03	02	04	01	10
Management of Cotton pest and diseases	01	20	05	25	03	02	02	03	10
Management of diseases of Soybean crop	01	20	20	40	02	02	04	02	10
Vermicompost Production and its uses.	01	30	00	30	00	0	0	0	0
Vermicompost Production and its uses..	01	0	30	30	01	02	01	01	05
Vermicompost Production and its uses.	01	00	35	35	0	0	0	0	00
Role of Biopesticides in Organic farming	01	30	00	30	0	0	0	0	0
Management of coconut mite	01	25	10	35	0	0	0	0	0
Management of coconut mite	01	20	08	28	0	0	0	0	0
Management of coconut mite	01	38	00	38	0	0	0	0	0
Management of coconut mite	01	30	00	30	00	0	0	0	0
Pest and Diseases management in cotton	01	30	00	30	02	01	00	0	03
Management of pest and diseases in Greengram	01	15	01	16	01	01	0	0	02
Vermicompost Production and its uses.	01	24	10	34	01	01	10	05	17
Integrated pest management in Cotton	01	30	00	30	0	0	0	0	0
Total (17)		387	149	536	17	15	26	14	72

Title of the Course	Duration in days	Number of Participants							
		M	F	Total	SC		ST		SC/ST Total
					M	F	M	F	
Soil Science									
Importance of Soil testing	01	19	00	19	15	00	04	00	19
Total (1)	01	19	00	19	15	00	04	00	19

TRAININGS PROGRAMMES FOR THE EXTENSION FUNTIONARIES

Title of the Course	Duration in days	Number of Participants							
		M	F	Total	SC		ST		SC/ST Total
					M	F	M	F	
Crop Production	02	58	02	60	18	02	10	00	30
Horticulture	02	22	00	0	22	00	00	00	22
Animal Science	01	24	00	24	01	00	00	00	01
Home Science	01	00	26	26	00	23	00	03	26
Agrilcural Extension	02	30	00	30	00	00	00	00	00
TOTAL	8	134	28	140	41	25	10	3	79

VOCATIONAL TRAININGS PROGRAMMES (3 months)

A) HOME SCIENCE: Basic Tailoring

4. FRONT LINE DEMONSTRATIONS :

These demonstrations are conducted with the following objectives.

- ❖ To create awareness and interest among the farmers about the new production technologies of field crops.
- ❖ To demonstrate the pre released and newly released crop production technologies at the farmers fields to exploit their maximum potential.
- ❖ To prepare technical relationship in the village.
- ❖ To organise need based training programme in latest production technology of field crops to subject matter specialists, Extension workers and farmers.
- ❖ To provide feed back to research and extension systems.

Keeping the above objectives in view demonstrations on various oil seeds and pulses are being conducted under different agroclimatic zones.

RESULTS FRONT LINE DEMONSTRATIONS :

**Front Line Demonstrations (With Icar Funds)
During Kharif (1999-2000)**

Sl. No	Crop	Variety	Area (Ha)	No.of Beneficiaries	Yield Q/ha		Avg. Yield Q/ha	Check Yield Q/ha	% Increase
					Max	Min			
1	Groundnut	JL-24	1.60	04	15.00	15.00	15.00	10.75	39.53
		K-134	3.20	08	13.75	8.13	12.20	10.75	13.48
		VRI-2	5.20	13	18.75	15.00	16.82	10.75	56.50
2	Soyabean	JS-335	4.00	11	12.50	8.75	11.54	8.75	31.88
3	Castor	GCH-4	2.00	05	3.70	3.00	3.29	2.75	19.63
4	Sesamum	DS-1	1.00	02	3.25	2.75	3.00	2.40	25.00
5	Redgram	S-1	10.00	25	17.00	10.00	14.80	12.40	19.50
6	Greengram	CM	5.00	12	7.90	5.30	6.58	4.95	32.90
7	Blackgram	T-9	2.00	05	6.25	5.50	5.95	3.75	58.66
		TAU-1	8.00	20	6.25	5.00	5.48	3.50	56.57
Total			42.00	105					

**Front Line Demonstrations (With ICAR Funds)
During Rabi/Summer (1999-2000)**

Sl. No	Crop	Variety	Area (Ha)	No.of Beneficiaries	Yield Q/ha		Avg.	Check Yield Q/ha	% Increase
					Max	Min			
1	G-Nut	VRI-2	10	25	25.00	21.50	23.70	17.50	35.60
2	Safflower	A-1	04	10	7.50	4.80	6.30	4.80	31.25
3	Bangalgram	A-1	10	25	8.50	6.50	7.60	6.25	21.60

Demonstration Of Sorghum In Collaboration With Other Schemes (Hyderabad)

During Rabi/Summer (1999-2000)

Sl. No	Crop	Variety	Area (Ha)	No.of Beneficiaries	Yield Q/ha		Avg.	Check Yield Q/ha	% Increase
					Max	Min			
1	Sorghum	CSH-13	0.40	01	17.50	17.50	17.50	11.00	59.00
2	Sorghum	CSV-15	0.40	01	11.50	11.50	11.50	11.00	4.50

- Note:** 1. Yield of Hybrid Sorghum CSH-13 is more compare to variety CSV-15
2. Yield Variety CSV-15 is more compare to the local variety.

**Demonstration Of Sorghum In Collaboration With Sorghum Scheme Of
University Of Agricultural Sciences, Dharwad
During Kharif (1999-2000)**

Sl. No	Crop	Variety	Area (Ha)	No.of Beneficiaries	Yield Q/ha		Avg.	Check Yield Q/ha	% Increase
					Max	Min			
1	Sorghum (Variety)	CSV-15	0.40	01	11.90	11.90	11.90	11.25	5.77
2	Sorghum Hybrid	CSH-13	0.40	01	18.50	18.50	18.50	11.25	64.00
3	Sorghum (Hybrid) (Dharwad)	CSH-16	0.40	01	16.13	16.13	16.13	11.25	43.32
4	Sorghum (Variety)	CSV-15	0.40	01	12.90	12.90	12.90	11.25	14.66
5	Sorghum (Hybrid)	CSH-13	0.40	01	17.30	17.30	17.30	11.25	53.77
6	Sorghum (Hybrid) (Hyderabad)	CSH-16	0.40	01	15.30	15.30	15.30	11.25	36.00

- Note:** 1. Yield of Hybrid Sorghum CSH-13 is more compare to variety CSV-15
2. Yield of Hybrid sorghum (CSH-16) is also more compare to the variety CSV-15

**Demonstration Of Maize In Collaboration With Maize Scheme Arabhavi
University Of Agricultural Sciences, Dharwad
During Kharif (1999-2000)**

Sl. No	Crop	Variety	Area (Ha)	No.of Beneficiaries	Yield Q/ha		Avg. Q/ha	Check Yield Q/ha	% Increase
					Max	Min			
1	Maize	DMH-2	0.80	02	40.00	32.50	36.25	26.42	39.42

**Demonstration of miner millets in collaboration with millets schemes of A.R.S
Hanumanamatti, university of agricultural sciences, Dharwad,
During Kharif (1999-2000)**

Sl. No	Crop	Variety	Area (Ha)	No.of Beneficiaries	Yield Q/ha		Avg. Q/ha	Check Yield Q/ha	% Increase
					Max	Min			
1	Save	TNAU-63	10.00	25	15.00	5.0	10.82	6.89	57.00
2	Navane	SIA-2642	0.80	02	8.25	7.50	7.90	5.60	41.00
3	Ragi	GPU-28	0.80	02	9.50	8.13	8.80	6.25	40.00

**Demonstration Of Cotton In Collaboration With Cotton Scheme University Of
Agricultural Sciences, Dharwad
During Kharif (1999-2000)**

Sl. No	Crop	Variety	Area (Ha)	No.of Beneficiaries	Yield Q/ha		Avg. Q/ha	Check Yield Q/ha	% Increase
					Max	Min			
1	Cotton	DHH-11	2.00	05	17.50	12.50	14.75	11.00	34.00

**Demonstration Of Castor In Collaboration With Oil Seeds Scheme University Of
Agricultural Sciences, Dharwad
During Kharif (1999-2000)**

Sl. No	Crop	Variety	Area (Ha)	No.of Beneficiaries	Yield Q/ha		Avg. Yd. Q/ha	Check Yield Q/ha	% Increase
					Max	Min			
1	Castor	GCH-4	02	05	3.50	3.00	3.30	2.75	20.00

**Front Line Demonstrations (With ICAR Funds)
During Kharif (2000-2001)**

Sl. No	Crop	Variety	Area (Ha)	No.of Beneficiaries	Yield Q/ha		Avg. Yield Q/ha	Check Yield Q/ha	% Increase
					Max	Min			
1	G-Nut	VRI-2	10	25	13.75	11.50	12.70	10.75	18.73
2	Soyabean	JS-335	05	12	13.75	11.50	12.10	9.50	27.36
3	Castor	GCH-4	05	12	04.40	03.25	03.83	2.80	36.78
4	Redgram	S-1	10	25	9.75	8.25	9.00	7.50	20.00
5	Greengram	CM	05	12	8.75	6.25	7.20	5.50	30.90
Total			35	86					

**FRONT LINE DEMONSTRATIONS (WITH ICAR FUNDS)
During Rabi/Summer (2000-2001)**

Sl. No	Crop	Variety	Area (Ha)	No. of Beneficiaries	Yd Q/ha		Avg. Yield Q/ha.	Check Yield Q/ha	% Increase
					Max	Min			
1	G-Nut	R-8808	10	25	20.00	17.00	18.90	15.00	26.00
2	Safflower	A-1	05	12	6.50	4.00	5.80	4.50	28.80
3	Bangalgram	ICCV-2	05	12	8.50	7.00	7.80	6.25	24.80
Total			20	49					

**FRONT LINE DEMONSTRATIONS
During Kharif (2001-02)**

Sl. No.	Crop	Variety/ Technology	Area (ha.)	No. of Beneficiaries	Demonstration	Check	Percent Increase Over Check
1.	Ground nut	R-8808	08	20	10.30	8.50	21
		VRI-2	02	05	11.00	8.50	29
2.	Soyabean	JS-335	05	13	10.00	7.80	28
3.	Sunflower	KBSH-1	05	13	7.90	7.25	09
4.	Caster	48-1	05	12	7.80	5.60	39
5.	Redgram	Shiggaon-1	05	12	8.50	7.50	13
6.	Greengram	China Mung	05	12	8.50	7.15	18
7.	Blackgram	TAU-1	08	20	8.80	5.90	49
Total			43	107			

**FRONT LINE DEMONSTRATION ON COTTON
During Kharif (2001-02)**

Sl. No.	Crop	Variety/ Technology	Area (ha.)	No. of Beneficiaries	Demonstration	Check	Percent Increase Over Check
1.	Cotton	DHH-11	15	16	15.40	8.50	81
2.	Cotton	IPM	05	06	10.92	7.25	51
Total			20	22			

**FRONT LINE DEMONSTRATION
During Rabi/Summer (2001-02)**

Sl. No.	Crop	Variety/ Technology	Area (ha.)	No. of Beneficiaries	Demonstration	Check	Percent Increase Over Check
1.	Groundnut	VRI-2	10	25	18.90	15.00	26
2.	Safflower	A-1	10	25	5.80	4.50	28
3.	Bengalgram	ICCV-2	10	25	7.80	6.25	25
Total			30	75			

PERFORMANCE OF FLD ON OILSEEDS –KHARIF (2002-03)

Crop	Variety	No. of farmers	Area (ha)	Yield (q/ha)				Increase in yield (%)	Cost of additional cash Rs./ha	
				Demonstration			Local check		Demo.	Local check
				Highest	Lowest	Average				
Groundnut	GPBD-4	15	06	13.50	8.50	10.80	8.50	27.00	7487	5500
	VRI-2	10	04	19.50	10.50	14.70	8.50	73.00	7305	5500
Castor	48-1	12	05	3.25	2.00	2.80	2.50	12.00	1025	800
Sunflower	KBSH-1	12	05	7.75	4.00	5.25	4.75	16.00	1742	1200
Total		49	20							

PERFORMANCE OF FLD ON OILSEEDS - RABI /SUMMER (2002-03)

Crop	Variety	No. of farmers	Area (ha)	Yield (q/ha)				Increase in yield (%)	Cost of additional cash Rs./ha	
				Demonstration			Local check		Demo.	Local check
				Highest	Lowest	Average				
Groundnut	TAG-24	03	1.20	20.00	17.00	18.00	10.00	85.00	8150	6000
	DH-86	01	0.60	22.00	22.00	22.00	10.00	120.00	8300	6000
	VRI-2	09	3.20	17.50	12.00	14.95	10.00	49.00	8245	6000
Total		13	05							

PERFORMANCE OF FLD ON PULSES - KHARIF (2002-03)

Crop	Variety	No. of farmers	Area (ha)	Yield (q/ha)			Local check	Increase in yield (%)	Cost of additional cash Rs./ha	
				Demonstration					Demo.	Local check
				Highest	Lowest	Average				
Redgram	Maruthi	15	06	6.00	4.00	5.25	4.50	16.00	2222	1800
	Asha	10	04	6.25	4.00	5.25	4.75	21.00	2550	1800
Greengram	CM	12	05	4.00	3.10	3.50	3.00 (Karihesaru)	16.00	1290	900
Blackgram	TAU-1	13	05	4.75	2.75	3.50	3.00	16.00	1270	850
Total		50	20							

PERFORMANCE OF FLD ON PULSES –RABI /SUMMER (2002-03)

Crop	Variety	No. of farmers	Area (ha)	Yield (q/ha)			Local check	Increase in yield (%)	Cost of additional cash Rs./ha	
				Demonstration					Demo.	Local check
				Highest	Lowest	Average				
Bengalgram	ICCV-2	12	05	5.00	3.75	4.25	3.00	41.00	2773	3200
Total		12	05							

PERFORMANCE OF FLDS OTHER THAN OILSEED AND PULSE CROPS- KHARIF (2002-03)

Crop	Variety	No. of farmers	Area (ha)	Yield (q/ha)			Local check	Increase in yield (%)	Cost of Additional cash (Rs./ha)	
				Demonstration					Demo.	Local check
				Highest	Lowest	Average				
Little Millet	Sukshema	02	0.80	23.75	23.75	23.75	10.00 (Kari saave)	137.50	3,000	2,000
Hybrid Chilli	9646	02	0.80	20.00	20.00	20.00	15 (Byadgi kaddi)	33.00	9,500	7,000
Total		04	1.60							

PERFORMANCE OF FLD ON OILSEEDS –KHARIF (2003-04)

Crop	Variety	No. of farmers	Area (ha)	Yield (q/ha)			Local check	Increase in yield (%)	Cost of additional cash Rs./ha	
				Demonstration					Demo.	Local check
				Highest	Lowest	Average				
Groundnut	GPBD-4	25	10	9.00	7.00	8.25	7.50	10.00	6200	9500
Soybean	JS-335	13	05	7.00	3.50	5.25	3.75	40.00	2550	2600
Caster	48-1	08	05	4.00	3.00	3.50	3.00	16.00	1275	1500
Sunflower	KBSH-1	13	05	6.00	4.00	5.00	4.50	11.00	1750	2100
Total		59	25							

PERFORMANCE OF FLD ON OILSEEDS -RABI /SUMMER (2003-04)

Crop	Variety	No. of farmers	Area (ha)	Yield (q/ha)				Increase in yield (%)	Cost of additional cash Rs./ha	
				Demonstration			Local check		Demo	Local check
				Highest	Lowest	Average				
Groundnut	GPBD-4	06	2.50	21.00	17.00	19.15	13.75	39.00	7285	7000
	DH-86	06	2.50	19.50	16.50	17.60	13.75	28.00	7310	7000
Sunflower	KBSH-1	12	05	12.25	7.50	9.60	8.00	20.00	3050	3700
Safflower	A-1	13	05	8.25	7.50	7.80	6.50	20.00	1800	2300
Total		37	15							

PERFORMANCE OF FLD ON PULSES - KHARIF (2003-04)

Crop	Variety	No. of farmers	Area (ha)	Yield (q/ha)				Increase in yield (%)	Cost of additional cash Rs./ha	
				Demonstration			Local check		Demo.	Local check
				Highest	Lowest	Average				
Redgram	Maruti	10	4.00	5.25	2.50	3.88	3.50	10.00	2900	5248
	Asha	15	6.00	5.25	3.00	4.20	3.50	20.00	2500	6320
Greengram	PB	15	6.00	3.00	2.00	2.50	2.00	25.00	1250	2687
	S-4	10	4.00	3.00	1.50	2.25	2.00	12.50	1150	3225
Blackgram	TAU-1	25	10.00	3.25	2.00	2.60	2.00	30.00	1050	1150
Total		75	30							

PERFORMANCE OF FLD ON PULSES –RABI /SUMMER (2003-04)

Crop	Variety	No. of farmers	Area (ha)	Yield (q/ha)				Increase in yield (%)	Cost of additional cash Rs./ha	
				Demonstration			Local check		Demo.	Local check
				Highest	Lowest	Average				
Bengalgram	ICCV-2	18	10	10.00	7.50	8.62	7.00	18.79	2700	3200
Greengram	S-4	13	05	6.50	4.25	5.37	4.25	26.72	1950	2100
Total		31	15							

PERFORMANCE OF FLDS OTHER THAN OILSEED AND PULSE CROPS- KHARIF (2003-2004)

Crop	Variety	No. of farmers	Area (ha)	Yield (q/ha)			Local check	Increase in yield (%)	Additional Cost of cash (Rs./ha)	
				Demonstration					Demo.	Local check
				Highest	Lowest	Average				
1.	Little Millet (Sukshema)	20	08	15.00	2.00	8.50	5.00	70	1690	1500
2.	Foxtail Millet (HMT-100-1)	15	06	14.00	2.00	8.00	5.50	45	1300	1250
3.	Finger Millet (GPU-28)	20	08	22.50	3.75	13.00	8.50	52	1260	1050
4.	Sorghum (CSH-17) Inter cropping system	02	01	8.00	6.00	7.00	6.00	16	1200	1600
5.	Sorghum (CSH-18) Inter cropping system (2:1)	02	01	7.50	7.50	7.50	6.50	15	1200	1600
6.	Sorghum (CSV-15) Sole crop	02	01	7.00	7.00	7.00	5.75	21	1200	1600
7.	Sorghum (CSH-16) Sole crop	02	01	7.25	7.25	7.25	6.00	20	1200	1600
8.	Sorghum (DSV-2) Sole crop	02	01	7.00	7.00	7.00	6.00	16	1200	1600
9.	Sorghum + Soybean (2:1) (CSH-17 + JS-335) Sole crop	02	02	9.50	3.25	6.35	5.35	18	1200	1600
10.	Sorghum + Redgram (CSH-17 + Maruti) Sole crop	03	03	8.00	4.00	6.00	4.00	28	2500	3400
				8.50	6.50	7.50	6.25	20	1200	1600
Total		70	32	5.50	2.00	4.25	3.50	21	2200	2300

5. EXTENSION ACTIVITIES

In order to support and strength various transfer of Technologies, Krishi Vigyan Kendra has organised various formal and non-formal extension activities like Field Day, Farm science club, Exhibitions, Field visits and other activities as mentioned below.

EXTENSION ACTIVITIES : (1999 – 2000)

Sl. No.	Activities	No.	No.of Participants			Total
			Male	Female	SC/ST	
1	Exhibition	2	900	200	100	1100
2	Field Days	1	220	40	20	260
3	Video Shows	25	750	150	50	900
4	Field Visits	45	80	10	5	90
5	Animal Health Camps	0	0	0	0	0
6	Method Demonstration	3	70	140	15	210
7	Preparing of Teaching Aids	0	0	0	0	0
8	Radio Talk	4	0	0	0	0
9	Research Articles	4	0	0	0	0
10	Popular Articles	12	0	0	0	0
11	Tips of Farmers-Over AIR	26	0	0	0	0
12	Tips of Farmers-Over Press	22	0	0	0	0
13	Consultancy	58	308	29	44	337
14	Kissan Mela	1	1200	300	318	1500
15	Farmers Visit to KVK	103	640	60	34	700
16	Farmers Meetings	29	504	51	86	555
17	News Paper Coverage	25	0	0	0	0

EXTENSION ACTIVITIES : (2000 –2001)

Sl. No.	Activities	No.	No.of Participants			Total
			Male	Female	SC/ST	
1	Exhibition	1	0	0	0	0
2	Field Days	2	405	80	25	485
3	Video Shows	21	500	130	30	630
4	Field Visits	85	105	65	35	170
5	Animal Health Camps	7	0	0	0	300 Animals
6	Method Demonstration	7	63	215	0	278
7	Preparing of Teaching Aids	0	0	0	0	0
8	Radio Talk	10	0	0	0	0
9	Research Articles	7	0	0	0	0
10	Popular Articles	25	0	0	0	0
11	Tips of Farmers	30	0	0	0	0
12	Consultancy	78	115	10	25	125
13	Kissan Mela	2	300	125	25	425
14	Scientific Visit to Farmers Field	120	225	40	35	265
15	Farmers Visit to KVK	275	0	240	35	240
16	Farmers Meetings	2	63	0	0	63
17	News Paper Coverage	27	0	0	0	0
18	TV Coverage	3	0	0	0	0

OTHER EXTENSION ACTIVITIES:

1. “ Women in Agriculture Day” was celebrated on 04.12.2000 (250 farm women were participated).
2. “ Vana Mahotsava “ was celebrated by planting seedlings in the campus during first week of July 2000 to 2001 (30 Participants were attended).
3. “ World Food Day “ organised on 16.10.2000 (around 50 participants were attended)
4. Organisation of “ World AIDS Day “ on 1.12.2000 (Around 25 participants were attended)
5. All KVK Staff were participated “ International Women’s Day” at Ranebennur Organised by Rotary Club, Ranebennur on 8.3.2001.

EXTENSION ACTIVITIES : (2001- 2002)

Sl. No.	Activities	No.	No.of Participants			Total
			Male	Female	SC/ST	
1	Farmers Visit to KVK	0	563	63	15	626
2	Seminars	12	847	130	170	977
3	Workshop	7	805	105	0	910
4	Exhibitions	3	135	0	0	135
5	Field Days	5	385	30	20	415
6	Animal Health Camps	6	292 cows	105 Buffaloe	71 Others	468 Animal
7	Method Demonstration	13	78	105	21	183
8	Radio Talk	9	0	0	0	9
9	Popular Articles	15	0	0	0	15
10	Research Articles	7	0	0	0	7
11	Scientific Visit to Farmers Field	75	570	45	28	615
12	Tips of Farmers	25	0	0	0	25
13	Consultancy Mail/Phone	35	0	0	0	35
14	News Paper Coverage	15	0	0	0	15
15	TV/Video Shows Coverage	20	0	0	0	20
16	Farmers Meetings	19	324	35	10	359
17	Leaflets	3	0	0	0	3
18	As resource person	5	85	135	0	220

EXTENSION ACTIVITIES:(2002- 2003)

Sl. No.	Activities	No.	Date(s)	No.of beneficiaries (farmers/Rural Youths)			No.of Extension functionaries		
				Male	Female	Total	Male	Female	Total
1.	Field days	02	26.5.03	100		100	06		06
			20.9.03	175	25	200	05		05
2	Radio and TV talks	01							
3	Exhibition	01	4-7 Oct,03	15000	10000	25000			
4	News coverage	10							
5	Popular article	19							
6	Method Demon	09		200	38	238			
7	Res.Articles	04							
8	Tech.Seminar	06					230	10	240
9	Workshops	03							
10	Consultancy :								
	a) Field Visits	40							
	b) By phone	50							
	c) By mail	61							
11	Animal Health Camps.	11				2581 Animals			
12	Seminars	08		450	60	510			

EXTENSION ACTIVITIES: (2003-2004)

Sl. No.	Activities	No. of prg.	Date (s)	No. of beneficiaries (farmers/Rural Youths)			No. of Extension functionaries		
				M	F	Total	M	F	Total
1	Kissan melas	01	17/08/04	250	50	300	02	00	02
2	Field days	03	20/09/03	180	20	200	05	00	05
			17/08/04	250	50	300	02	00	02
			05/09/04	75	10	85	02	00	02
4	Radio & TV talks	14	-	00	00	00	00	00	00
5	Film show	15	-	70	230	300	00	00	00
6	Exhibition	02	10-12, Feb-04	1500	1000	2500	00	00	00
			27-29 Feb-04	2000	800	2800	00	03	03
7	News coverage	40	-	00	00	00	00	00	00
8	Popular article	17	-	00	00	00	00	00	0
9	Advisory services	30	-	60	10	70	00	00	00
10	Method Demon.	13	-	275	200	475	10	03	13
11	Tech. Seminar	06	-	00	00	00	30	10	40
12	Workshops	07	-	00	000	00	00	00	00
13	Field Visits	90	-	200	70	270	20	05	25
14	Farmers Seminars	07	-	612	142	754	05	00	05

15	Animal Health Camps.	10	683 Cows	210 Bufflowes	600 Calves	111 Other Animals	1604 Animals
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6. ON FARM TESTING :

Details of ON FARM TESTING Conducted during Kharif (1999-2000) “Leaf Curl Management in chilli”

Sl. No	Farmers Name And Address	Area (Ha)	Previous Crop	Variety	Treatments
1	Nagaraj. V. Suranagi, Kakol Village Ranebennur (Tq.)	1.60	G-nut	Byadagi Kaddi	T1= Monocrotophos+ Dicofol(RPP) (2.0+2.5 ml/ltr of water)
					T2= Monocrotophos+ Wettable sulphur (2.0ml+4 gm/ltr of water)
					T3= Dimethioate + Dicofol (1.5ml+2.5 ml/ltr of water)
					T4= Dimethioate + Wettable sulphur (1.5ml+4 gm/ltr of water)
					T5= Farmer practice
2	H.M.Kalappanaver Nelogal Village Haveri	1.6	Cotton	Byadagi Kaddi	--do--

Result of “ On-Farm Testing” ‘ Leaf Curl Management in Chilli’

Treatments	Yield of Dry Chilli (Q/ha)				Remarks
	Location I	Location II	Mean	% Increase	
T1= Monocrotophos+ Dicofol	6.75	6.38	6.56	28.00	T1&T3 treatments recorded more yield of dry chilli compared to other treatments
T2= Monocrotophos+ Wettable sulphur	5.75	6.25	6.00	17.00	
T3= Dimethioate (Rogor)+ Dicofol	6.50	6.00	6.25	22.00	
T4= Dimethioate(Rogor) + Wettable sulphur	6.00	6.12	6.06	18.00	
T5= Farmer practice	5.00	5.25	5.12	00	

1999-2000
Details of ON FARM TESTING Conducted during Rabi-Summer

Title“ Management of Groundnut Leaf minor”

Sl. No	Farmers Name And Address	Area (Ac)	Previous Crop	Variety	Treatments
1	N.B. Shivanna Hiremorab	1.00	Paddy	K-134	T1= Carboryl (4 gm/ltr of water)
		1.00			T2= Nimbiciden (5 ml /ltr of water)
		1.00			T3= Farmers practice
2.	H.B. Mudigouda Hiremorab	1.00	Paddy	K-134	T1= Carboryl (4 gm/ltr of water)
		1.00			T2= Nimbiciden (5 ml /ltr of water)
		1.00			T3= Farmers practice
3.	B.H. Mudigouda Hiremorab	1.00	Maize	K-134	T1= Carboryl (4 gm/ltr of water)
		1.00			T2= Nimbiciden (5 ml /ltr of water)
		1.00			T3= Farmers practice
4.	R.B Belludi Hiremorab	1.00	Maize	K-134	T1= Carboryl (4 gm/ltr of water)
		1.00			T2= Nimbiciden (5 ml /ltr of water)
		1.00			T3= Farmers practice
5.	Mahadevappa Jambur Hiremorab	1.00	Paddy	K-134	T1= Carboryl (4 gm/ltr of water)
		1.00			T2= Nimbiciden (5 ml /ltr of water)
		1.00			T3= Farmers practice

Treatments imposed on 30th and 60th days after sowing.

ON –FARM TESTING : (2000-2001)

1. Mortality of African Giant Snail (*Achatina fulica*) by using different poison bait material in Betelvine garden.

Treatment Details:

T1	:	Metaldehyde 2.5 %
T2	:	Monocrotaphos Bait 36 SL
T3	:	Carbofuran Bait 3 G
T4	:	Thiodan Bait 35 EC
T5	:	Chloropyrifos bait 20 The EC
T6	:	Lime Powder
T7	:	Rice bran + Jaggary

Field Screening of Position bait against giant African Snail *Achatina fulica*

Poison bait	Dos age (Kg/ Ac)	Method of Application	Mean mortality Number					
			Location I			Location II		
			Mean Initial Population	1 DAT	3 DAT	Mean Initial Population	1 DAT	3 DAT
Metaldehyde 2.5 %	10	Spot Application	19.0	162	39	14	64	36
Monocrotaphos 36 SL	60	Broadcasted	21.0	45	36	14	29	13
Carbofuran 3 G	60	Broadcasted	20.0	17	22	11	17	12
Thiodan 35 EC	60	Broadcasted	11.0	03	01	12	02	03
Chloropyrifos bait 20 EC	60	Broadcasted	17.0	03	01	14	03	02
Lime Powder	60	Broadcasted	16.0	02	02	13	03	02
Rice bran + Jaggary	60	Broadcasted	18.0	00	00	13	00	00
CD 5%				44.0	12.8	00	18.4	15.3
CV %				94.0	50.0	00	62.0	70.0

**Laboratory screening of effective poison bait against giant African snail
*Achatina fulica***

Poison bait	No.of Snails Released	Mean Mortality Number			Mean Percent Mortality
		1st DAR	3 rd DAR	Mean	
Metaldehyde 2.5 %	15 x 4	8.0	9.0	8.5	65.0
Monocrotophos 36 SL	15 x 4	5.0	4.0	5.5	61.0
Carbofuran 3 G	15 x 4	3.0	3.0	3.0	38.0
Thiodan 35 EC	15 x 4	3.0	2.0	2.5	30.0
Chloropyrifos bait 20 EC	15 x 4	2.0	1.0	1.5	18.0
Lime Powder	15 x 4	4.0	2.0	3.0	40.0
Rice bran + Jaggary	15 x 4				
CD 5%		2.5	1.4	0	0
CV %		38.66	42.97	0	0

ON FARM TESTING : (2001-2002)

" Liquid Rhizobium Inoculant on Nodulation, growth and yield of chick pea"

Season : Rabi/Summer 2001-02

Sl. No.	Farmers name and address	Area (ha)	Crop/Variety	Previous crop	Treatments	Remarks
1.	Sri.K.Siddappa Kakol Ranebennur	0.2	Chickpea ICCV-2	Maize	T1- Control T2- LRI-1 T3-LRI-2 T4-CRI	LRI-1 found considerably superior in enhancing yield over other treatments
2.	Sri.C.V.Kanchurmatah, Kamadhod Ranebennur	do	do	Sunflower	do	
3	Sri. M.V.Pujar Bannihatti Byadagi	do	do	Maize	do	
4.	Sri. Channabasavanagouda Kenchanagouda. Asundi Ranebennur	do	do	do	do	
5.	Sri. Rudrappa E. Kambliar Kakol Ranebennur	do	do	Hybrid Sorghum	do	

National Level On Farm Trial (OFT) On Liquid Rhizobium Biofertiliser on Chickpea Rabi-Summer 2001-2002.

Treatments	Germination (%)	No. of Nodules/ Plant		Crop stand	Yield (Kg/plot)
		30 DAS	45 DAS		
T ₁ (Control)	70	2.78 B	4.98B	Moderate	14.70 B
T ₂ (LRI-1)	100	5.60 A	8.00 A	Very Good	17.80 A
T ₃ (LRI-2)	100	4.06 AB	6.18 B	Good	17.10 A
T ₄ (CRI)	100	3.44 B	5.72 B	Good	15.70 AB

No. of nodules from 10 plant/ treatment Alphabets followed by the same does not differ statistically.

LRI-1 - Liquid Rhizobium-1

LRI-2 - Liquid Rhizobium-2

CRI - Carrier based Rhizobium (Black powder)

INTRODUCED FOR THE FIRST TIME IN THE HAVERI DISTRICT POLYTHENE MULCHING AND BBF IN GROUNDNUT DURING SUMMER 2002-03 AT HIREMAGDUR VILLAGE OF SAVANUR TALUKA.

FLD ON POLYTHENE MULCH DURING SUMMER 2002-2003.

Name of the farmer	Sowing Method	Pod Yield Qt./Ha					% Increase	
		DH-86	TAG-24	TMV-2	VRI-2	Mean	PM+BBF V/s others	BBF V/s Flat
C.K.Kanavalli Hiremagadur, Savanur (Tq)	P.M+B.B.F	56.0	52.0	48.0	48.0	51.0	-	-
	B.B.F Only	44.0	0.0	40.0	40.0	41.3	23.5	-
	Flat Bed	35.5	35.5	25.0	28.0	30.7	66.00	34.5
Mean		45.0	43.5	37.6	38.6	-	-	-
%Inc .of DH-86 over		-	3.4	19.6	16.6		-	-

7. SEEDS AND SEEDLINGS PRODUCED

SEED PROCURED (OCT.1999-OCT.2004)

Crop	Variety	Total quantits Seed Produced (Kgs)				Total
		2000-01	2001-02	2002-03	2003-04	
I. Oil Seeds						
Ground nut	VRI-2	145	905	2765	2770	6585
Groundnut	DH-86				635	635
Groundnut	TAG-24				275	275
Groundnut	GPBD-4			500	4530	5030
Caster	48-1	125	60			185
II PULSES						
Greengram	CM	125	383	85		593
Greengram	S-4		36	70		106
Blackgram	TAU-1		90	235	100	425
Bengalgram	ICCU-2		1020	905		1925
Redgram	S-1	215		70		285
Redgram	ASHA			210		210
Redgram	MARUTI		185	260		445
Cowpea	C-152			105	150	255
Cowpea	DCS-5				75	75
III CEREALS						
Sorghum	Pule Yesoda				400	400
Sorghum	9-13 R				250	250
Sorghum	M-35-1		35		400	435
Sunhemp		515	180	150	120	965
IV MINOR MILLETS						
Little millets	SUKESHMA	579	1038	2296	3230	7143
Foxtail Millets	HMT-100-1				500	500
Finger millets	GPU-28		250	350	270	870
Total		1704	4182	8001	13705	27592

SEEDLINGS PRODUCED (OCT.1999-OCT.2004)

Particulars	Variety	Total No. of Seedlings Produced			
		1999-00	2000-01	2001-02	2002-03
Mango	Alphanso	300	300	50	50
Sapota	DSH-1/DSH-2	200	300	100	200
Guava	L-49	250	150	400	10
Curryleaf	Sahasani	500	600	550	500
Total		1250	1350	1100	760

PRODUCTION OF TRICHODERMA (OCT.1999-OCT.2004)

Particulars	Total quantities Produced (Kgs)				Total
	1999-00	2000-01	2002-03	2003-2004	
Trichoderma Powder	108	50	50	75	283
Total	108	50	50	75	283

8. IMPACT STUDIES

IMPACT OF TRAINING PROGRAMMES : (1999 –2000)

Sl. No.	Name of the specific Technology/Skill transferred	No.of Beneficiaries	% Adop tions	Change in income	
				Before Training	After Training
1.	Improved varieties of grass and fodder cultivation	50	20	00	10% reduction in the Input use
2	Feeding of cholers tarom to new born calves	100	10	00	30% reduction in the Mortality of new born calves
3	Vermicomposting	90	04	00	Self use and reduction in the usage of chemical fertilizers.
4	Drainage management in Aeronaut plot	30	40	00	Due to proper drainage management the growth of Arecanut plants is improved about 20 %
5	Drip irrigation in Banana	10	50	00	After installation of Drip irrigation's in Banana, minimize the water use and increase yield of Banana

IMPACT OF TRAINING PROGRAMMES: (2000-2001)

Sl. No.	Name of the Specific Technology Skill Transferred	No.of Trainees	% Of Adoption	Change in income	
				Before Training Rs./unit /ha	After Training Rs./unit /ha.
1	Improved varieties of grass and fodder cultivated	20	50	500	1500
2	Improved varieties of minor millets cultivation (Save,Navane, Udalu, Baragu and Ragi)	35	60	2500	11050
3	Soil and water conservation Technology like Contour bundling, Contour Border strips, Graded bund and gully plug with improved Agronomic Practices like new varieties, contour line sowing and inter cropping system	45	60	1800	9500
4	Dryland Horticulture in Watershed area planting of Mango and Sapota seedlings	8	20	0	0
5	Cultivation of Horticulture crops like Banana instead of Paddy in same area of Hanagal and Hirekerur talukas	20	40	4500	35000
6	Balanced Nutrient Feed in Cows	28	40	500	1200/pm/Animal
7	Rearing of cross bred cows	35	65	600	1400/pm/Animal
8	Tailoring and Embroidering	10	35	00	300/Month
9	Demonstration on preparation of various weaning foods using locally available materials like oilseeds, pulses,cereals and millets	60	60	00	00
10	Demonstration of Lambani Craft	23	40	400	800/month

IMPACT OF TRAINING PROGRAMME: (2001-2002)

Sl. No.	Name of the specific technology/skill transferred	No.of Trainees	% Adoption	Before Trg. Rs./Unit/ha.	After Trg. Rs./Unit/ha.
1.	Soil and water conservation technology like contour bunding, CBS, GBS, with improved Agronomic practices like new varieties, contour line sowing and intercropping system.	38	80	5000	16500
2	Popularisation of new varieties of minor millets cultivation (Little millet and Finger millet)	340	80	4500	18000
3	Introduction of intercropping system in minor millets				
	a) Little Millet + Redgram (4:2) Against 6:1 (Farmers practice)	120	80	8050	19250
	b) Finger millet + Redgram (4:2) against 6:1 (Farmers practice)	80	60	6300	16300
4	Vermi compost bed preparation	260	30	1000	2500
5	Use of Trichoderma biocontrol agent as a seed treatment to pulses to tackle wilt.	235	40	2500	4000
6	Management of spodoptera incidence in groundnut using chloropyriphos poison bait	35	40	3500	6000
7	Clean milking methods	80	65	1200	1800
8	Identification of Animals in heat (Activities during Animal health camp crossbred cows and calves rally)	70	50	1500	2000
9	Feeding of milk and colostrum for newly born calves.	81	70	1800	3500
10	Demonstration of feeding in to purchased crossbred cows.	82	80	2000	3500
11	Multi-storied cropping system				
	Arecanut + Banana + Coconut	145	20	75000	180000
	Mango+ Drumstick+Curryleaf		40	65000	120000
	Banana+cabbage+Sapota+Fodde-r crop		25	175000	375000
12	Preparation of concentrate feed with locally available materials	180	70	400	800

IMPACT OF TRAINING PROGRAMMES : (2002- 2003)

Sl. No.	Name of the specific Technology /skill transferred	No. of Trainees	% adoption	Before Trg.Rs./ Unit/ha	After Trg.Rs/nit/ ha
1.	Soil and water conservation technology like contour bunding, CBS, BGS,with improved agronomic practices like new varieties,contour line sowing and intercropping system	38	80	5000	16500
2.	Popularisation of new varieties of minor millets cultivation (Little millet and Finger millet)	340	80	4500	18000
3.	Introduction of intercropping system in minor millets a) Little millet+Redgram (4:2) 6:1 (Farmers practice) b) b)Finger millet+Redgram (4:) against 6:1(Farmers practice)	120 80	80 60	8050 6300	19250 16300
4.	Vermicompost bed preparation	260	30	-	2500
5.	Use of Trichoderma bio control agent as a seed treatment to pulses to tackle wilt	235	40	2500	4000
6.	Management of spodoptera incidence in ground nut using chloropyriphos poison bait	35	40	3500	6000
7.	Clean milking methods	80	65	1200	1800
8.	Identification of Animals in heat Activities during Animal Health camp crossbred cows and calves rally)	70	50	1500	2000
9.	Feeding of milk and colostrum for newly born calves	81	70	1800	3500
10.	Demonstration of feeding to newly purchased crossbred cows.	82	80	2000	3500
11.	Multi-storied cropping system Arecanut+ Banana+Coconut Mango+Drumstic+Curryleaf Banana+Cabbage+ Sapota+Fodder crop	145	20 40 25	75,000 65,000 1,75000	1,80,000 120,000 3,75,000
12.	Preparation of concentrate feed with locally available materials	180	70	400	800
13.	Deworming schedule in sheep	100	30	40% mortality of lambs	10% mortality of lambs
14.	Feeding of balanced Ration of dairy animals	100	30	-	20% increase in Milk production
15.	Tailoring	18(6)	33	-	Rs.500 /month
16.	Dry land Sapota Cultivation	118	10	Rs. 2500/ha	Rs. 5000/ha
17.	IPM Technology of Cotton and Redgram	150	30	Rs.500/ha	4000/ha
18.	Preparation of Agarbatti	12(7)	58	-	Rs.800/month
19.	Preparation of Candle	01	100	-	Rs.2500/month
20.	Early childhood Education centres (Baby sitting)	23(4)	17	-	Rs.500-750/month

NB:Should be based on actual study questionnaire/ group discussion etc. with ex trainees.

**PARTICIPATORY IMPACT MONITORING OF SMALL MILLETS IN HAVERI
DISTRICT OF KARNATAKA (2003-04)**

INTRODUCTION :

The transformation of agriculture to more productive systems has often been accompanied by increased production in a fewer crop species, concurrently, the area and production of a great diversity of traditional crops have declined. Yet in many parts of world, these traditional crops play an important role in maintaining stable and sustainable forms of agriculture.

One of such traditional group of cereal crops is the small millets. This group includes Finger millet(Ragi, *Eleusine coracana*), Foxtail millet (Italian millet, Navane, *Etaria italica*), Little millet (Savi / Samai/ Kutki *Panicum miliare*), Barnyard millet (Oodahe/Banti, *Echinochloa frumentacea*), Proso millet (Baragu / Cheena French millet, *Panicum miliacium*) and Khodomillet (Haraka, Varagu, *Paspalum scrobiculatum*). Presently, small millets are cultivated in areas where they produce a more dependable harvest compared to any other crop. This has been largely responsible for their continued presence and cultivation in many parts of the world. These crops provide good nutrition and compare very well with rice or wheat. Further, small millets are superior in protective nutrients such as vitamins, minerals, dietary fibre, essential amino acids and phytochemicals. In recognition of this, these grains are now considered as **nutritious grains** .

These are grown in diverse soils, varying rainfall regimes and in area widely differing in thermo and photoperiods .The resilience exhibited by these crops is helpful in adopting themselves to different ecological niches. All these have made quite indispensable to rainfed, tribal and hill agriculture, where crop substitution is difficult. Therefore it is important to enhance production and productivity of these crops to ensure food and nutritional security not only to people living in harsh and difficult terrains, but also in other areas.

The major ragi growing states are Karnataka, Tamilnadu, Andhra Pradesh, Orissa, Jharkhand, Maharashtra and Uttaranchal. The cultivation of little millet and Foxtail millet is more seen in Madhya Pradesh, Tamilnadu, Karnataka and Orissa. Utilization of these crops is mainly as food for human consumption. The straw is often a precious fodder for bovines. The grain is consumed in traditional way and almost the entire produce is sold in the assured markets and transported to Maharashtra for further processing and utilization.

Inspite of superior nutritive value of grains, their use is limited, largely confined to rural markets and very little finds its way to urban market. The problems of pests and diseases in small millets is negligible . Being ecofriendly crops, they are suitable for fragile and vulnerable eco -systems and regarded as preferred crops for sustainable and green agriculture. Hence the promotion of these crops, can lead to efficient management of natural resources and holistic approach in sustaining precious agro- biodiversity.

Nutrient Composition of Cereals and millets(g/100g)

Cereals / Millets	Protein	Carbohydrates	Fat	Crude Fibre	Mineral Matter	Calcium (mg)	Phosporus (mg)
Rice	6.8	78.2	0.5	0.2	0.6	10	160
Wheat	11.8	71.2	1.5	1.2	1.5	41	306
Sorghum	10.4	72.6	1.9	1.6	1.6	25	222
Finger millet	7.3	72.0	1.3	3.6	2.7	344	283
Little Millet	8.7	75.5	5.3	8.6	3.3	17	220
Foxtail millet	12.3	60.9	4.3	8.0	1.7	31	290

Essential Aminoacid contents of Cereals and Millets (g/100g protein)

Crops	Isoleucine	Leucine	Lysine	Methionine	Cystine	Phenyl alanine	Tyrosine	Threonine	Tryptophan	Valine	Histidine
Rice	3.8	8.2	3.8	2.3	1.4	5.2	3.9	4.1	1.4	5.5	2.4
Wheat	3.3	6.7	2.8	1.5	2.2	4.5	3.0	2.8	1.5	4.4	2.3
Sorghum	3.9	13.3	2.0	1.4	1.4	4.9	2.7	3.1	1.1	5.0	2.1
Finger Millet	4.4	9.5	2.9	3.1	2.2	5.2	3.6	3.8	1.5	6.6	2.2
Foxtail Millet	7.6	16.7	2.2	2.8	1.6	6.7	2.2	2.7	1.0	6.9	2.1
Little Millet	2.3	4.8	0.7	1.1	0.6	2.1	-	3.2	0.4	2.2	0.8

MATERIAL AND METHODS:

The small millets research programme at Hanumanamatti was initiated during 1992 and continued till date. A repertoire of local land races of small millets were collected and evaluated in the station for various characters. Many promising varieties were identified and were released after multi location trial. These varieties along with agronomic practices were popularised among the farming community of the district through Front line Demonstrations and sale of quality seeds both by KVK and ARS, Hanumanamatti. An attempt is made to study the impact of these transfer of technologies through participatory monitoring. Initially study was started keeping little millet in mind. Later as per the suggestion of the Director of Extension, all the three small millets (Little, Finger and Foxtail millets) were considered for the study.

Yearwise Area, Production And Productivity Of Small Millets In Haveri District

Taluk	2000-01			2001-02			2002-03			2003-04		
	Area/ha	Production/t	Productivity (kgs/ha)	Area/ha	Production/t	Productivity (kgs/ha)	Area/ha	Production/t	Productivity (kgs/ha)	Area/ha	Production/t	Productivity (kgs/ha)
Haveri	2412	1206	500	1725	862.5	500	1612	1128	700	1077	107.7	100
Byadagi	1224	1224	1000	1319	791.4	600	649	162	250	727	363.5	500
Hanagal	117	117	1000	218	43.6	200	46	12	250	0	0	-
Hirekerur	2542	1525.2	600	961	374.79	390	893	536	600	943	377.2	400
Ranebennur	3004	1201.6	400	3507	701.4	200	3762	1505	400	1900	380	200
Savanur	2413	1689.1	700	2135	320.25	150	3551	710	200	3015	301.5	100
Shiggaon	1393	1393	1000	913	438.24	480	2192	1754	800	1990	1094.5	550
District Total	13105	8355.9	742.8	10778	3532.18	360	12705	5807	457	9652	2624.4	264.2

Locale of the study:

The study was conducted in Haveri district of Karnataka, which comes under zone -8 viz., Northern transitional zone. All the seven taluks of the district were consider for the study.

Sample for the study:

The sample for the study was 93 randomly selected respondents which comprised of 36 Little millet respondents (10%), 11 foxtail millet beneficiaries (20%) and 16 finger millet beneficiaries (23%). The list of all the beneficiaries was organised year wise and village wise then the required sample was randomly selected for the study. An impact to be monitored indicates to be used and interview schedule was developed with participation of the client at each and every level. This interview schedule was presented and suitable modifications were incorporated with respect to characteristics of respondents, impacts to be monitored and indicators to be used.

Table 2. Transfer of Small Millets Technology in Haveri District

Crop	Mode of Transfer of Technology	KVK		ARS		Total		Farmer to Farmers	
		No.	Area	No.	Area	No.	Area	No.	Area
Little Millet	FLD	99	112	99	99	349	640.6	278	532
	Sale of Seeds	141	400	9	30.00				
Foxtail Millet	FLD	23	25	28	29	53	64	19	31
	Sale of Seeds	02	10	00	00				
Finger Millet	FLD	22	22	10	20	66	82.5	00	00
	Sale of Seeds	29	40	06	10.50				
Total		316	609	152	188.50	468	787.1	297	563

Table 3. Size of the sample for the study

Crops	Population	Sample Size	Per centage
Little Millet	349	36	10
Foxtail Millet	53	11	20
Finger Millet	66	16	23
Total	468	93	

Objectives of Transfer of Technology Project :

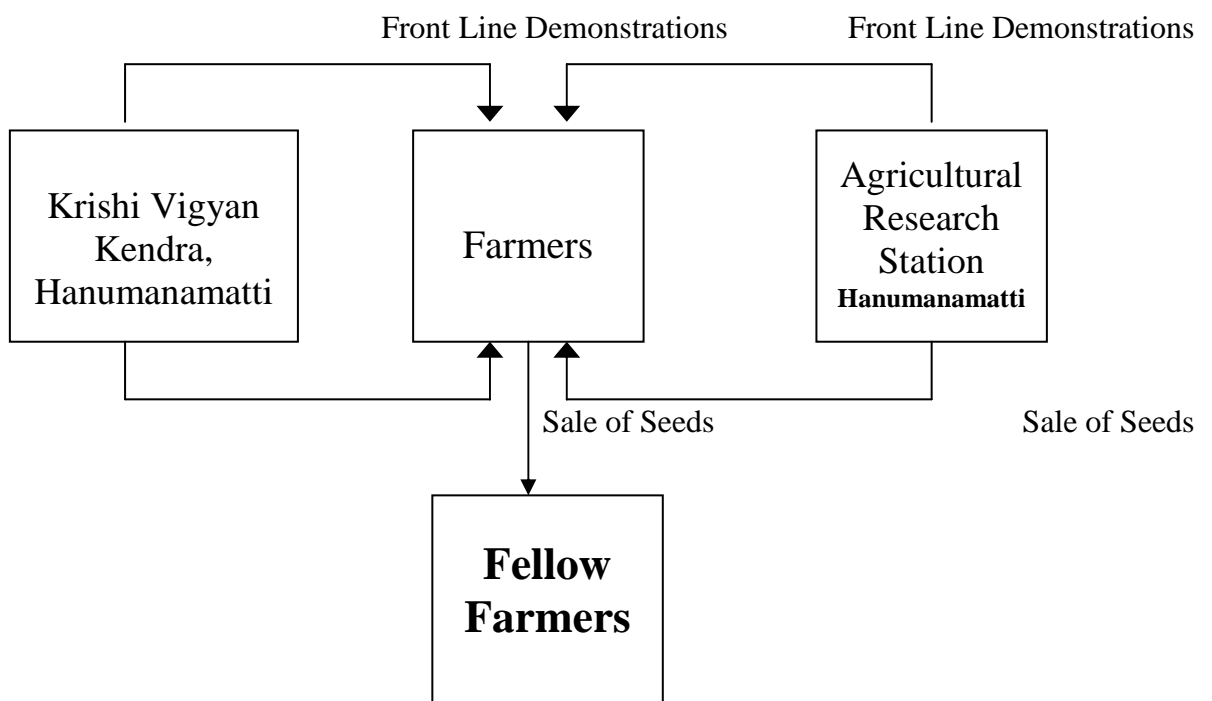
1. To demonstrate production potentialities and profitability of the improved small millet varieties under real farming situations of Haveri district.

2. Timely supply of improved quality small millet seeds to the farmers.

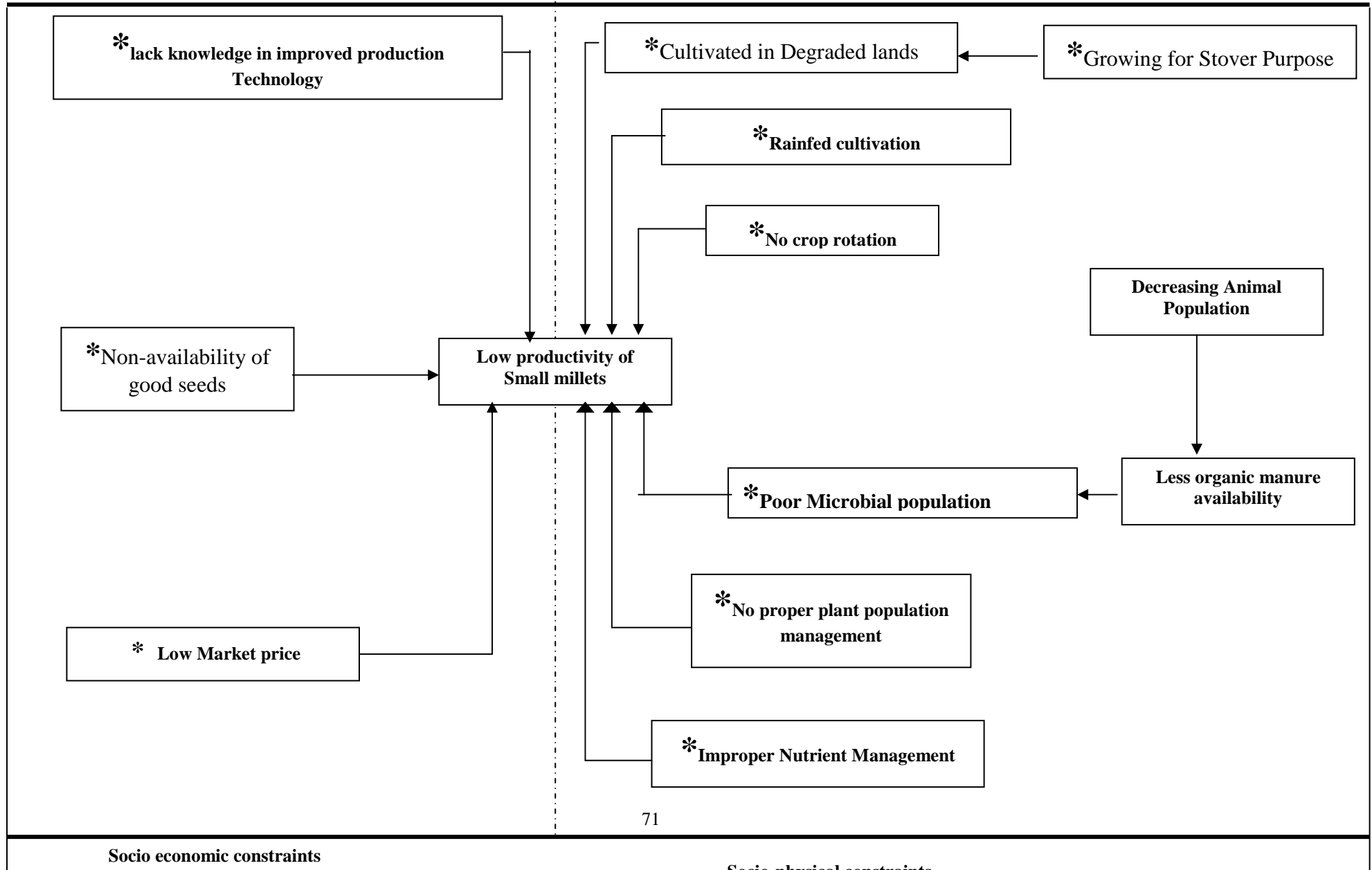
Impacts to be monitored:

1. Increased knowledge and awareness of improved technology of small millets.
2. Increased small millet grain production and productivity.
3. Increased availability of small millet fodder.

Transfer of Improved Small millets technology in Haveri District



PROBLEM CAUSE TREE FOR LOW PRODUCTIVITY OF SMALL MILLETS



1 Impact : Increased Knowledge and awareness of improved technology of small millets.

Definition:

Awareness: It is the primary level of understanding of a fact or situation. It is the comprehension of why a certain action or behavior is necessary.

Knowledge: It is the information, a person has acquired through experience or training. It is the understanding of how information obtained may be used for one's own benefit.

Indicators :

The percentage of farmers who have achieved a level of clarity in improved small millet production technology has increased.

Survey unit : Beneficiaries of Transfer of Technology Project of KVK

Respondents : Beneficiaries of Transfer of Technology Project of KVK

Method/ Time : Semi- Structured interview of individuals and groups (30 minutes)

Sampling : Randomly selected Transfer of Technology beneficiaries .

Rationale and limitations of the indicators.

Since farmers are the actual cultivators, it is necessary to upgrade their knowledge and to create potential awareness in the farming community on the improved production technologies of small millets especially the variety. The farmers of Haveri district lack knowledge and awareness on improved production technologies of small millets like variety, seed rate, fertilizer management etc. The potential of farmers is guaranteed only when they become aware of the capabilities of improved production technologies. In Krishi Vigyan Kendra, Hanumanamatti, this is done through conducting field demonstration in villages and supply of quality seeds to farmers. The degree of knowledge and awareness of farmers can be assessed by investing the level to which they have achieved clarity about all these issues.

Instruction for data collection :

- Interviewing the respondents both individually and in groups.
- Introducing the different subjects which were looked into and described in different classifications of knowledge and awareness (basic, understanding and clarity) in order to make the procedure as transparent as possible. Made sure that the interviewee did not perceive the interview as an examination. A relaxed atmosphere was created.
- Started the interview by asking the respondent some general questions regarding agricultural situation in the village. Then slowly proceeding to specific question and recording the answers.

2. Impact: Increased Small millet production and productivity

Definition:

Production: Production is the total grain and stover production of small millet cultivated by the individual farmer in a season.

Productivity: Productivity is the average seasonal production of small millet cultivated per acre by a farmer.

Indicators:

1. The yield of small millet cultivated by farmer per unit area (grain field in q/Ac and stover yield in t/Ac) and per cropping seasons has increased.
2. The stover of small millets is put to alternative uses.

Survey unit: Beneficiaries of Transfer of Technology project of Krishi Vigyan Kendra, Hanumanamatti.

Respondents: Beneficiaries of Transfer of Technology project of Krishi Vigyan Kendra, Hanumanamatti.

Sampling : Randomly selected beneficiaries of Transfer of Technology project of Krishi Vigyan Kendra, Hanumanamatti.

Rationale and limitations of the indicators : Little millet, Foxtail millet and Finger millet are the small millet considered for the study as they are small millets grown by farmers of Haveri district . The indicator takes into consideration the grain and stover production of these crops in the district during one cropping season. Productivity emphasises the capacity of soil to produce a grain and stover yield and should be expressed in the terms of yield per acre (grain) and tonnes per acre (stover). Productivity of the crop does not only depend on improved technologies adopted by farmer, but is also affected by climatic factors. Rain fall is the main source of water for growing small millets in the district. Its variability plays a dominate role in influencing crop growth and the yield.

The indicators have the following limitations :

- Statements of individual framers based on their assessment of the quantity of yield may not be vary precise.
- Post harvest losses are faced by the farmers which are not include in the calculation of the yield (the actual yield on the standing crop is more).

RESULTS AND DISCUSSION

Table 4. Characteristics of Little Millet Transfer of Technology beneficiaries

Characteristics	Categories	Frequency	Per centage
1. Age	Young < 35 years	04	13.79
	Middle aged 35-60 years	19	65.52
	Old > 60 years	06	20.69
2. Education	Illiterate	09	31.03
	Neoliterate	01	3.45
	Primary	08	27.59
	Secondary	11	37.93
	Degree	-	-
	Others	-	-
3. Caste	SC	03	10.34
	Others	26	89.66
4. Land Holdings	Small < 10 Ac	12	33.33
	Medium 10-50 Ac	18	50.00
	Large > 50 Ac	06	16.66
5. Annual Income	Low < 50,000	17	58.62
	Medium 50,000-1,00,000	08	27.59
	High >1,00,000	04	13.79
6. Family	Nuclear	07	24.14
	Joint	22	75.86
7. Livestock	< 3	08	27.89
	3-6	13	44.83
	>6	08	27.59
8. Cropping Pattern	Sole	13	36.11
	Intercrop	23	63.89
9. Distance from Market	<7.20 Km	02	6.90
	7.20-17.10	21	72.41
	>17.10 Km	06	20.69

Characteristics of Little millets Transfer of Technology beneficiaries

Table-4 reveals the characteristics of little millet Transfer of Technology beneficiaries. It is clear from the table that highest per centage of beneficiaries belong to middle age group (65.52 per cent), Majority of them are educated upto secondary school (37.93 per cent), chunk of them belong to other caste category (89.66 %), half of the respondents had medium land holding, maximum respondents had low annual income and three fourth of them had joint family setup.

Regarding other characteristics nearly half of them (44.83%) had 3-6 cattles, majority of them cultivating minor millets as inter crop (63.89 per cent) and chunk of them (72.41 per cent) stay 15 kms away from the market.

Table 5. Adoption Pattern of Little Millet Technologies

Technologies	Categories	Frequency	Percentage
1. FYM	< 1.12 tonnes	08	27.59
	1.12 – 3.36 tonnes	14	48.28
	>3.36	07	24.14
2. Fertilizer			
i. Nitrogen	< Recommended	10	34.48
	Recommended	14	48.28
	>Recommended	05	17.24
ii. Phosphorus	< Recommended	03	10.34
	Recommended	12	41.38
	>Recommended	14	48.28
iii. Potassium	< Recommended	00	00
	Recommended	15	51.72
	>Recommended	14	48.28
3. Grain Yield (q/Ac)	< 2.81	06	16.67
	2.81 – 8.46	26	72.22
	>8.46	04	11.11
4. Fodder Yield (t/Ac)	< 1.10	13	36.11
	1.10 – 2.66	17	47.22
	>2.66	06	16.67
5. Cost of Cultivation(Rs)	< 1248	06	20.69
	1248 – 1787	17	58.62
	>1787	06	20.69

Adoption pattern of Little Millet technologies:

Table-5 indicates the adoption pattern of the little millet technology by the beneficiaries. It is evident from the table that nearly half (48.28 per cent) of the beneficiaries have applied 1 to 3 tonnes of FYM per acre of land. Regarding adoption of chemical fertilizer, recommended dose of Nitrogen was adopted by nearly 50 per cent of the respondents (48.28 per cent) . As far as Phosphorus and potassium are concerned more than recommended was adopted by nearly 59 per cent of the beneficiaries.

Three fourth of the respondents (72.22 per cent) had obtained grain yields between 2.81 to 8.50 quintals, where as nearly half of the respondents had obtained 1 to 2.66 tonnes of stover yield . Most of the respondents (58.62 per cent) spent rupees 1248 to 1787 for cultivation of an acre of little millet.

Table 6. Characteristics of Foxtail Millet TOT Beneficiaries

Characteristics	Categories	Frequency	Percentage
1. Age	Young < 33 years	01	10
	Middle aged 33-60 years	08	80
	Old> 60 years	01	10
2. Education	Illiterate	02	20
	Neoliterate	00	00
	Primary	03	30
	Secondary	05	50
	Degree	-	-
	Others	-	-
	3. Caste	SC	01
	Others	09	90
4. Land Holdings	Small< 4.50 Ac	01	10
	Medium 4.50-20.50 Ac	07	70
	Large > 20.50 Ac	02	20
5. Annual Income (Rs.)	Low< 6180	01	10
	Medium 6180-56020	07	70
	High >56020	02	20
6. Family	Nuclear	03	30
	Joint	07	70
7. Livestock	< 3	01	10
	3-6	04	40
	>6	05	50
8. Cropping Pattern	Sole	08	80
	Intercrop	02	20
9. Distance from Market (km)	<8 km	02	20
	8 –13 km	08	80
	>13 Km	00	00

Characteristics of Foxtail millet Transfer of Technology beneficiaries

Table-6 indicates the characteristics of foxtail millet beneficiaries . The data shows that majority of the beneficiaries were middle aged, educated upto secondary school and belonged to other than SC/ST caste category. They had land holdings of 4.50-20.50 acres with annual income of Rs. 6180 to 56020, having joint family, with more than six cattle, cultivating sole crop and had to travel 8-13 kms to market their produce.

Table 7. Adoption Pattern of Foxtail Millet Technologies by Beneficiaries

Technologies	Categories	Frequency	Percentage
1. FYM	< 1.25 tonnes	01	10
	1.25 – 3.95 tonnes	05	50
	>3.95 tonnes	04	40
2. Fertilizer Application			
i. Nitrogen	< Recommended	04	40
	Recommended	02	20
	>Recommended	04	40
ii. Phosphorus	< Recommended	02	20
	Recommended	04	40
	>Recommended	04	40
iii. Potassium	< Recommended	03	30
	Recommended	02	20
	>Recommended	05	50
3. Grain Yield (q/Ac)	< 3.05	01	10
	3.05–9.45	08	80
	>9.45	01	10
4. Stover Yield (t/Ac)	< 1.44	01	10
	1.44–3.46	07	70
	>3.46	02	20
5. Cost of Cultivation (Rs.)	< 1173	01	10
	1173 –2276	07	70
	>2276	02	20

Adoption Pattern of Foxtail millet technology by beneficiaries :

Table-7 indicates the adoption pattern of production technologies of foxtail millet by the beneficiaries. The data reveals that 1.25 to 3.95 tonnes of FYM was applied by 50 per cent of the beneficiaries. Regarding chemical fertilizer application meagre (20 per cent) per centage of respondents have adopted recommended dose of nitrogen and potassium fertilizers. Regarding phosphorus fertilizer, forty per cent each of the respondents have applied either recommended and more than recommended dose .

Eighty per cent of respondents got 3 to 9.45 quintals of grain yield where as seventy per cent got 1.44 to 3.46 tonnes yield of stover per acre. The cost of cultivation of majority (70 per cent) of the respondents ranged between Rs. 1173 to 2276.

Table 8. Characteristics of Finger Millet Transfer of Technology Beneficiaries

Characteristics	Categories	Frequency	Percentage
1. Age	Young < 31 years	04	26.67
	Middle aged 31-58 years	09	60
	Old > 58 years	02	13.33
2. Education	Illiterate	03	20
	Neoliterate	00	00
	Primary	05	33.33
	Secondary	05	33.33
	Degree	02	13.33
	Others	-	-
3. Caste	SC	00	00
	Others	10	100
4. Land Holdings	Small < 2 Ac	02	13.33
	Medium 2 –30 Ac	10	66.67
	Large > 30 Ac	03	20
5. Annual Income (Rs.)	Low < 6945	01	6.67
	Medium 6945-51055	12	80
	High >51,055	02	13.33
6. Family	Nuclear	07	46.67
	Joint	08	53.33
7. Livestock	< 3	05	33.33
	3-6	08	53.33
	>6	02	13.33
8. Cropping Pattern	Sole	10	66.67
	Intercrop	05	33.33
9. Distance from Market (km)	<8 km	01	6.67
	8–13 km	11	73.37
	>13 km	03	20

Characteristics of Finger millet Transfer of Technology beneficiaries

The data regarding various characteristics of beneficiaries of finger millet Transfer of Technology are presented in Table-8 .

It is clear from the table that majority of the beneficiaries were middle aged , educated at least up to primary level, having medium land holding, with medium annual income, owners of 3-6 cattles, cultivating finger millet as sole crop, have to travel 8-13 kms for marketing of their produce. Regarding caste, cent per cent of them belonged to other caste category and distributed evenly in nuclear and joint family holdings.

Table 9. Adoption Pattern of Finger Millet Technologies by Beneficiaries

Technologies	Categories	Frequency	Percentage
1. FYM	< 0.56 tonnes	02	13.33
	0.56 – 4.24 tonnes	11	73.33
	>4.24	02	13.33
2. Fertilizer application			
i. Nitrogen	< Recommended	04	26.66
	Recommended	04	26.66
	>Recommended	07	46.67
ii. Phosphorus	< Recommended	01	6.67
	Recommended	12	50
	>Recommended	02	13.33
iii. Potassium	< Recommended	01	6.67
	Recommended	13	86.67
	>Recommended	01	6.67
3. Grain Yield (q/Ac)	< 2.19	04	26.67
	2.19–8.55	09	60
	>8.55	02	13.33
4. Fodder Yield (t/Ac)	< 1.12	04	26.67
	1.12–3.28	08	53.33
	>3.28	03	20
5. Cost of Cultivation (Rs.)	< 1713	01	6.67
	1713 –2772	12	80
	>2772	02	13.33

Adoption pattern of Finger millet technologies by beneficiaries:

Table-9 explains the adoption pattern of finger millet by the beneficiaries . It is evident from the table that half to four tonnes of FYM was applied by three fourth of the respondents. As for as chemical fertilizer application is concerned only 26 per cent have applied recommended dose of nitrogen where as 50 per cent and 86 per cent respondents have applied phosphorus and potassium fertilizers at the recommend dose respectively.

Sixty per cent of beneficiaries obtained 2.19 to 8.55 quintals of grain yield and 53 per cent have harvested 1.12 to 3.28 tonnes of stover yield per acre. Eighty per cent have spent Rs.1713 – 2772 per acre of finger millet.

Table 10. Impact. 1. Increase in Knowledge and awareness of Improved Technology of Little Millet by the beneficiaries

Improved Technology Components	Basic	Understanding	Clarity
Awareness about the improved variety	-	36.11	63.89
Difference between improved and local Variety	13.89	61.11	25.00
Adaptability of improved Variety	30.55	27.78	41.67

Increase in knowledge and awareness of improved technology of little millet

The data regarding impact of Transfer of Technology project on increase in knowledge and awareness of improved technology of little millet by the beneficiaries is presented in Table-10. It is evident from the data that 63.89 per cent of the beneficiaries had clarity regarding awareness about the improved variety i.e., TNAU-63. Only 25 per cent of respondents have clarity regarding differences between improved and local varieties, where as 41.67 per cent have clarity with respect to adaptability of improved variety.

Table 11. Impact. 1. Increase in Knowledge and awareness of Improved Technology of Foxtail Millet by the beneficiaries

Improved Technology components	Basic	Understanding	Clarity
Awareness about the improved variety	-	-	100
Difference between improved and local Variety	40	40	20
Adaptability of improved Variety	10	50	40

Increase in knowledge and awareness of improved technology of Foxtail millet

Table-11 reveals increase in knowledge and awareness of improved technology of foxtail millets by the beneficiaries. It is interesting to note that all the respondents have awareness about the improved variety. Regarding difference between improved and local variety only 20 per cent have the clarity where as 40 per cent have clarity about adaptability of improved variety.

Table 12. Impact. 1. Increase in Knowledge and awareness of Improved Technology of Finger Millet by the beneficiaries

Improved Technology components	Basic	Understanding	Clarity
Awareness about the improved variety	53.33	-	46.67
Difference between improved and local Variety	6.67	26.67	66.67
Adaptability of improved Variety	13.33	60	26.67

Increase in knowledge and awareness of improved technology of Finger millet

The data presented in Table-12 reveals the increase in knowledge and awareness of improved technology of finger millet by the beneficiaries. It shows that 46.67 per cent of the respondents has clarity about awareness about improved variety. chunk of the respondents have clarity regarding difference in improved and local variety where as only 26.67 per cent of the respondents have clarity about adaptability of improved variety.

Table 13. Impact. 2. Increased Production and productivity of Little Millet

	Improved	Local	Per centage Increase in Yield
Grain Yield (q/Ac)	5.63	4.18	34.69
Stover Yield (t/Ac)	1.88	1.41	33.33

Table 14. Alternate Uses of Fodder (Little Millet)

Uses	Frequency	Percentage
Animal Feed	30	83.33
Sale for cash	10	27.78
Thatching	04	11.11
Payment in kind	02	5.56

Impact –2 :Increased grain and stover production and productivity:

The information regarding increased grain and stover production and productivity of little millet is presented in Table-13. The data reveals that the grain and stover yields of improved variety has increased by 35 per cent and 33 per cent respectively.

The data presented in Table-14 reveals the alternatives uses of little millet because of increased yield. Most of the stover (83.33 per cent) is utilised for animal feed followed by sale for cash.

Table 15. Impact. 2. Increased Production and productivity of Foxtail Millet

	Improved	Local	Percentage Increase in Yield
Grain Yield (q/Ac)	6.25	4.75	31.58
Stover Yield (t/Ac)	2.45	1.65	48.48

Table 16. Alternate Uses of Fodder (Foxtail Millet)

Uses	Frequency	Percentage
Animal Feed	09	90
Sale for cash	02	20
Thatching	05	50
Payment in kind	03	30

The data regarding increased production and productivity of grain and stover yield of foxtail millet is presented in Table-15. It is clear from the table that the increase in grain and stover yielded is 31.58 per cent and 48.48 per cent respectively.

The data regarding alternative uses of stover of foxtail millet is presented in Table –16. Almost all the stover is used for animal feed. The data on increased production and productivity of grain and stover yield of finger millet is provided in Table-17. It is evident from the Table that there an increase of 32.27 per cent and 29.41 per cent in grain and stover yield respectively.

Table 17. Impact. 2. Increased Production and productivity of Finger Millet

	Improved	Local	Per centage Increase in Yield
Grain Yield (q/Ac)	5.37	4.07	32.27
Stover Yield (t/Ac)	2.20	1.70	29.41

Table 18. Alternate Uses of Fodder (Finger Millet)

Uses	Frequency	Per centage
Animal Feed	14	93.33
Sale for cash	04	26.67
Thatching	01	6.67
Payment in kind	00	00

The data presented in Table –18 is concerned to alternative uses of finger millet stover. Here also almost all the stover is utilized for animal feed only.

Table 19. Unintended impact-cultivation of little millet under irrigated condition

Particulars	Grain Yield (q/Ac.)	Stover yield (t/Ac.)
TNAU-63	12	05
Local	07	2.5
% Increase over check	71.43	100

Unintended impact-cultivation of little millet under irrigated condition in rabi summer

The data regarding cultivation of little millet in rabi/ summer in paddy fallows is presented in Table-19. Twenty five per cent of the respondents cultivated little in rabi/summer under irrigated condition in paddy fallows . It is clear from the table that the farmers got 12 q grain and 5 tonnes of stover yield per acre which is 71.43 and 100 per cent more than the local yields.

Table 20. Farmer to Farmer Spread of Small Millets Technology in Haveri District

Subject	Little Millet	Foxtail Millet	Finger Millet
Average Quantity of Seeds (kgs)	12.60	7.50	19.73
Total Quantity (kgs)	4397	398	1302
Maximum Quantity (kgs)	200	25	100
Average No. Farmers	01	01	03
Maximum No.	12	03	06
Total No.	349	53	198

Farmer to farmer spread of small millet technology

Table-20 reveals the farmer to farmer spread of minor millet technology in Haveri district. The average quantity of seeds spread by each farmer is highest in the finger millet (19.73 kgs), while it is lowest in foxtail millet (7.50 kgs). The total quantity of seeds spread was 4397 kgs, 398 kgs, and 1302 kgs in little millet, foxtail millet and finger millet respectively. The maximum spread by a single farmer is 12 while largest quantity given out by a farmer is 200 kgs of little millet. The total number of spread by the beneficiaries was 349, 53 and 198 in little, foxtail and finger millet respectively.

Production scenario of small millets of Haveri district.

Area and production of small millets in Haveri district has been presented in the Table-21. The production levels of little, foxtail and finger millet were 6320.6, 2201.9 and 3103 tonnes respectively.

Potential yield deduced from the average yields of beneficiaries and research station respectively, have been presented in the table. The result indicates major change in the production scenario, with research station yield levels of 16054, 8355 and 13080 tonnes of little, foxtail and finger millet respectively.

The data in Table-22 indicates the after effects of adoption of small millet technology on the economics of small millet in Haveri district. Figures presented show a substantial increase in gross and net returns. In case of little millet, the net returns increase from 24 lakhs to 1.4 crores and 2.7 crores based on farmer field and research station yield levels respectively. Similarly the increase in case of foxtail and finger millets is from 19 lakhs to 5.6 and 7.8 crores and from 64 lakhs to 3.7 and 4.7 crores respectively. The potential increase in returns of the district is around 7.8 crores and 12.2 crores based on farmer field and research station yield levels respectively.

Table –21. Production Scenario of Small Millets of Haveri District (2000-01)

Crop	Area (Acres)	Production (tonnes)	Potential yield in farmers Field (tonnes)	Research Station yield levels (tonnes)
Little Millet	22934	6320.6	12912	16054
Foxtail Millet	9829	2201.9	6143	8355
Finger Millet	8175	3103	10975	13080

Table –22. Ramifications of improved variety on the economics of Small millets in Haveri district

Crop	Present Gross Returns (Rs.)	Present Net Returns (Rs.)		Potential Returns		Potential Increase (Rs.)
				Gross Returns (Rs.)	Net Returns (Rs.)	
Little millet	13211400	2399500	In Farmer field	36858000	13651731	11252231
			In Research Station	50130000	26923731	23206269
Foxtail Millet	44244200	19016800	In Farmer field	90384000	55570188	36553388
			In Research Station	112378000	77564188	58547388
Finger Millet	15515000	6422500	In Farmer field	54875000	36538475	30115975
			In Research Station	65400000	47063475	40640975
Total	72970600	27838800	In Farmer field	182117000	105760394	77921594
			In Research Station	227908000	151551394	122394632

Marketing of Small millets

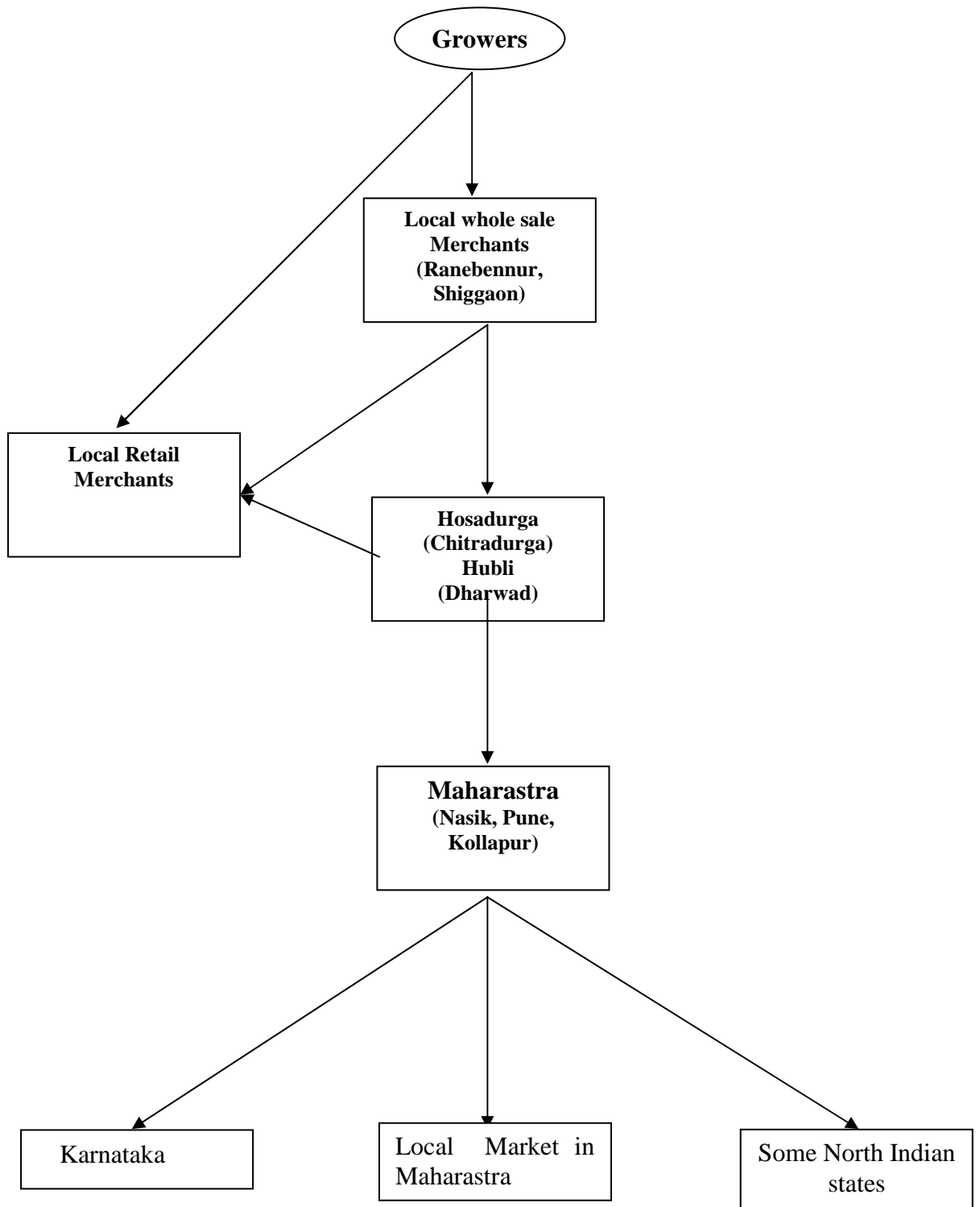


Table 23 Utilization of Small millets by the producers

Particulars	Finger Millets	Little Millets	Foxtail Millets	Average
As a Food	58 *	3**	2**	21
For Feed (Animals)	18	-	9-	9
As seed	2	1	2	1.7
Wastage	2	7	6	5
For sale	20	89	81	63

- Mostly conversion to flour and use as mudde, unleavened pancakes (roti) thin porridge (amble).

** Cooked as rice after dehulling used to prepare leavened pancake (dosa) and idli, paddu.

Regular consumption of small millet as staple food was found to be very rare in rural communities. However, its consumption was more common among millet products during festivals (Tambittu, Hurakki Holige, Save payasam and Anekallu huggi) was strictly followed by all rural communities. Thus, rural communities have preserved the traditional significance of these millet use in their regular diet in this district. " Hal Navane " a foxtail millet cultivator specially used for preparation of food products is of soft texture and easily digestible nature. Milk and milk products (curds, butter milk, Ghee) were commonly used with millet porridge and rice by the house hold in the survey.

The results shows that 80 per cent of little millet and foxtail millet produced are sold in local market to whole sale merchants. About 21 per cent used for consumption purpose and another 1 to 2 per cent used for seed harvest handling, threshing transportation and cleaning (Table-33). Major portion of finger millet produced are used for consumption purpose. Finger millet and foxtail millet were also used as a feed for live stockes. From the traders it was found that Ranebennur in Haveri and Hosadurga of Chitadurga have the major little millet markets of Karnatak followed by Shiggaon and Hubli. Little millet purchased from these places are transported to Maharashtra for value addition . Nasik in Maharashtra having maximum number of small millet dehusking unit followed by pune, Kollapur and Goti. Decorticated little millet and foxtail millet rice were sold in local markets of Maharashtra, Karnataka and in some places of North Indian States. The market price of little millet in Ranebennur rages from Rs. 700/- to Rs. 1200/- per quintal whereas finger millet and foxtail millet price ranges from Rs. 450 to 550/-.

Summary

The transformation of agriculture to more productive systems has often been accompanied by increased production in a fewer crop species, concurrently, the area and production of a great diversity of traditional crops have declined. Yet in many parts of world, these traditional crops play an important role in maintaining stable and sustainable forms of agriculture.

The major ragi growing states are Karnataka, Tamilnadu, Andhra Pradesh, Orissa, Jharkhand, Maharashtra and Uttaranchal. The cultivation of little millet and Foxtail millet is more seen in Madhya Pradesh, Tamilnadu, Karnataka and Orissa. Utilization of these crops is mainly as food for human consumption. The straw is often a precious fodder for bovines. The grain is consumed in traditional way and almost the entire produce is sold in the assured markets and transported to Maharashtra for further processing and utilization.

In spite of superior nutritive value of grains, their use is limited, largely confined to rural markets and very little finds its way to urban market.

Small millets are important cereals grown in Haveri, Dharwad, Belgaum districts. They are cultivated for both grain and fodder. During 2000-2001 the area under small millets in Haveri district was 13,105 ha., which includes finger millet, little millet and foxtail millet. Small millets growing area is concentrated in shallow soils under rainfed situation. Small millets are grown either as sole crop or as mixed crop with Redgram and sesamum. Farmers are cultivating local land races which are highly adapted to this situation, but they are poor yielders.

The study was conducted in Haveri district of Karnataka, which comes under zone -8 i.e., Northern transitional zone. All the seven taluks of the district were considered for the study. The sample for the study was 93 which comprised of 36 Little millet respondents (10%), foxtail millet beneficiaries (20%) and 16 finger millet beneficiaries (23%). The list of all the beneficiaries was organised year wise and village wise then the required sample was randomly selected for the study. An interview schedule was developed with participation of the client at each and every level. This interview schedule was presented and suitable

modifications were incorporated with respect to characteristics of respondents, impacts to be monitored and indicators to be used.

The study reveals that majority of the beneficiaries of the small millet Transfer of Technology projects of the Krishi Vigyan Kendra, Hanumanamatti belong to middle age group. educated at least up to primary school and belong to general caste category. They have good land holdings, higher annual income and holding joint family.

Regarding adoption of demonstrated technology most of the beneficiaries have clarity regarding the improved variety, but they lack understanding with respect to chemical fertilizer application and to some extent with respect to seed rate.

Although the transfer of technology is being attempted since 5 years, still there is a lot of scope for increasing the area under improved technologies of small millets. If at least fifty per cent of total area under small millets is brought under improved production technologies, it can transform the economic scenario of the district.

9. SUCCESS STORIES

SUCCESS STORIES/ CASE STUDIES : (2002-2003)

Smt. USHA SIDDESHWAR DANAPPANAVAR, HANUMANAMATTI

* Smt. Usha .S. Danappanavar, resident of Hanumanamatti, near Kajjari cross is a women entrepreneur, holding 4 ha of land and her major source of income is through poultry keeping on a commercial scale (27,500 layers). She has invested more than 1.5 crore Rupees earning a net profit of more than 5 lakhs per annum. The poultry farm was started during 1996-97 with 5000 layers. Now it is expanded to 27,500 birds with 4 sheds along with 1 chick growers shed and one feed processing unit. Sound Management, regular vaccination, Sanitation and balanced feeding rather than medication and treatments has improved the health of the birds. Latest managerial techniques are being adopted in order to obtain optimal egg production and minimum mortality. Own feed mixing unit was established to reduce the feed cost, without compromising feed quality . Her bank repayment is regular. Eggs are being sold through our own retail shop in order to reduce on going expenditure. The on going business is being made to sustain by generating sufficient income to repay back the loan on regular interval . At present they are planning to further expand by converting layer farm into Broiler farm with a capacity of 40,000. Hard work, dedication, self and sound management, Intensive care and cent percent involvement were the major contributing factors to her success.

Feed:

Feed is the largest single item of expenditure in poultry production. Hence she aimed at minimising the expenditure on feed. She started own feed mixing unit in the farm with Canara Bank Assistance. She started preparing own feed, which will cost about, Rs.6 per Kg i.e. 20 to 25% cheaper than factory feed. Hence in her layer farm, where the average feed in take per hen is 63 Kg. i.e.Rs.130/- per hen can be saved. She is preparing low cost feed, by using locally available cheaper feed ingredients without affecting nutrient composition and Hen day production.

The birds were fed with known quantity of feed per bird per day, based on their age, growth rate and egg production instead of ad libitum feeding. This has reduced the feed cost without affecting the production.

Health care and Medication:

She has carried out routine vaccination programme based on diseases prevailing in our area. All the medicines will be given through automatic waterer or feeder. So that the cost of medicine as well as labour is reduced.

18. Contribution made in the area of Ancillary farm activities to be highlighted.

*** Management:**

She has constructed the poultry shed (1+2+2) as per the recommendations, with locally available cheaper materials. To reduce labour and Electricity charges, as well as increasing stocking density of birds. She has utilised multi-tier cage system with mechanical ventilation. She has reduced the Housing plus equipment cost per bird leading to lesser interest and depreciation on capital.

*** Equipment's:**

She is using Compact Fluorescent Lights (C.F.L) in the place of ordinary bulbs, to reduce electricity cost considerably. For cages, Nipple drinkers are installed which reduced the labour cost and feed spoilage. She has installed automatic feeders, which will reduce the expenditure by minimising the feed wastage and labour cost.

Marketing of produce:

She has established facilities for grading, packing and transportation of eggs produced and also started direct marketing through our Retail shops at Ranebennur.

Others:

- She has reduced lighting hours in layer farm by 3 hrs without affecting the production in turn reducing the electricity cost .
- Skipping the 1 to 2 feed in varied intervals in a week resulted in continued production and reduced feed cost.

Smt. KARIYAMMA DILLEPPA BEERAL, HIREBIDARI

- Mrs.Kariyamma Dilleppa Beeral, 53 Years old, is having 3.2 ha of land. Her major source of income is through dairy farming on commercial scale, at Hirebidari Village of Ranebennur Taluk, Dist.Haveri, State Karnataka.
- She is belongs to shepherd community, she had only 18-20 sheep and one acre dryland in the beginning. Sheep and goat rearing and wool weaving were the major activities carried out in those days. She was very much influenced by principals and activities of Mrs. Shyamala Hiremath, The Director, India Development Service, a Non-Governmental Organisation. Gradually she started involving in community work and started wool weavers society with guidance of Mrs. Shymala. During 1981-82 she has undergone Training in dyeing and yarning of wool at Sindholli of Belgaum district and Kundaragi of Bagalkot district.

During 1984-85 Karnataka Dairy Development Board (KDDC) was launched in entire northern Karnataka. They were interested to start milk producers cooperative societies solely managed by women members to encourage women's participation. Under the guidance of Mrs. Shymala Hiremath, she started motivating fellow women to get organised into society. She faced opposition from family members as well as men folk of the village. With great difficulties, Women Milk producers Co-operative Society was opened on 29th July 1988. It was of first of its kind in old Dharwad district with 150 members. She enrolled as founder member and consequently elected as president, and presently continuing as active member. She has undergone training in "Artificial insemination and First Aid' at KMF training centre. Dairy Campus, Dharwad-580 002 from 13.12.1989 to 17.01.1990. She was further guided and monitored by Mr. Subhash Madiwalar of Aremallpur under the supervision of Mrs. Shymala. She started doing Artificial Insemination in 1990. She feels proud to mention here that surrounding villages such as Makanur, Irani, Mustur, Aremallapur, Konanatambigi, Yellapur including their village, are now full of crossbred cows and more than 150 families are earning their livelihood by dairy farming.

In 1984-85, she has organised a rally and fought against Tungabhadra river polluted by surrounding Industry, along with some NGO's. During 1989 flood she arranged, free distribution of rice and dal for sufferers with the help of their society members and IDS.

During 1993-94 she became member to Hirebidari Gram Panchayat and served for 5 years successfully and struggled to get help for society members and fellow farm women through

several Government Schemes. She is also member to Sakshra Sourabha Samiti, Public Food Distribution System S, Kamadhenu Self Help Group and Primary and High School Development and Management Committee. During her period as president the society has been awarded Union's "The Best Women Milk Production Co-operative Society" on 30.08.2001 on the eve of Silver Jubilee Celebration of Karnataka Co-operative Dairy Farming Society organised by KMF, Bangalore.

She has received "Women of the Year" award by Rotary Club, Ranebennur during 2001-02, she was honoured by Krishi Vigyan Kendra, Hanumanamatti on the eve of "Women in Agriculture day" celebration on 4.12.2002.

Presently she is maintaining nine crossbred cows. She has purchased 8 Acres of irrigated land, 3 acres of dry land and cultivating paddy and Sunflower. She has constructed own house, educated children and purchased tractor.

During 2001-02, Kariyamma along with her SHG members, succeed to get Group loan for "Dairy farming" under Swarna Jayanthi Gram Swa rojagar yojana. All the 14 members of her Kamadhenu Self Help Group were benefited by the same, thus empowered women through Self Help Groups, she and her fellow SHG members undergone training programme in "Scientific Dairy Farming" at Krishi Vigyan Kendra, Hanumanamatti.

She has motivated the fellow farm women in clean milk production, cultivation of fodder crops such as maize, sorghum, horsegram and supplied seeds of new fodder and grasses such as Napier, Guini and Paragrass. She has helped in enrichment of dry fodder. She is motivating the fellow farmers to adopt IPM in paddy.

From 1989-90 up to today she has done more than 1,500 artificial insemination to cows and buffaloes yielding more than 1,000 calves, She has given First Aid treatment to more than 3,000 cows and buffaloes.

she is helping the women members of our village in getting various types of financial assistance from banks and other developmental organisations. She is actively involved in conducting animal health camps, vaccination camps, deworming camps, health camps and SHG meetings jointly organised by developmental departments, KMF and KVK, Hanumanamatti.

Hirebidri society is unique of its kind through out Haveri and Dharwad Districts.

Mrs. GEETHA KUPPELUR

* Mrs. Geetha Kuppelur of Haranagiri Village aged 23, had studied upto S S L C . she wanted to utilize her spare time to earn money for her livelihood. she underwent training on " Agrabathi preparation " at KVK, Hanumanamatti along with her few friends. The training gave her through knowledge and skill in Agarabathi preparation, dipping in perfume, packing and marketing. She realised the scope for wider market. Now she earns an income of Rs. 500 per month through sale of varieties of Agarbathies in her own as well as surrounding villages. She would like to teach the skill to her family members and plan to extend her business to earn more profit in the near future.

Mrs. JAYASHREE HIREMATH

* Mrs. Jayashree Hiremath of Kajjari Village aged 32 is a house wife studied upto 7th std. She under went 8 months vocational training on "Basic Tailoring craft" at KVK, Hanumanamatti along with her 16 friends.

She was interested to utilise her spare time in more economic way The trining gave her through knowledge and skill in basic tailouring i e., measurement, drafting, cutting stitching and finishing the fabric especially ladies garments. She has also learned hand embrorideries like, Kutch work Karnataka Kasooti Lambani craft and also repair and maintainance of sewing machine in the training programme. Along with her house hold and agriculture work she is earning Rs. 500 per month. Savitri Mahadevakka, Prema, Gouramma, Laxmi Vanita of Kajjari and Geeta of Abalur who under went training along with Jayashree are also earnin Rs.100 to 300 per month and saving Rs.120 to 200 per month by stitching family clothing by themselves.

SUCCESS STORIES/ CASE STUDIES :(2003-2004)

Shri SHANKARAPPA MALAKAPPA MALAGI,
RANEBENNUR (MUSHROOM PRODUCTION)

Shri Shankarappa M. Malagi, aged 38 years, resident of Ranebennur, had education up to Diploma. His major source of income is through welding shop. He is living in a joint family setup constituting a total of 13 members including his two daughters. In order meet his large family requirements he needed a subsidiary occupation with sizeable income. in this regard he underwent training on " Mushroom Production " at Krishi Vigyan Kendra, Hanumanamatti on 21-22 November, 2003 along with his wife. This training impacted in them through knowledge and skill in mushroom production, marketing and its medicinal values. He realised, the scope and profitability of this venture, as were no producers in this product. He began the production of mushroom from 5th January,2004 with minimum of 10 kilo spawn. It was a failure. He persisted with his efforts in this line and successfully started production from March,2004 with five kilo spawn material purchased from Lalbagh, Government of Karnataka, Bangalore.

The knowledge acquired in the training programme and through is trial and error methods, he is now sustains production level of two to five kilo per day. This accrues to 60-150 kg per month. He sells fresh mushroom, to the selected consumers on demand at the price of Rs. 60 per kg. The gross returns range from Rs. 3600 to Rs.,9000 per month and the net returns being Rs. 2500 to Rs.7500 per month.

Without affecting his regular welding business, daily he spends a minimum of two hours in early morning hours and the rest of the work load is attended by his wife. He sustains is family through this subsidiary income of Rs. 2500 to 7500 per month by self marketing system. By putting least efforts in the subsidiary occupation he earns sizeable income, as a reward for his enterprenarship. He is aspiring to expand this business in large scale in future.

10 FARMERS' REACTIONS ON SPECIFIC TECHNOLOGIES

1. DH-86,VRI-2,TAG-24 and GPBD-4 varieties of Groundnut were accepted by farmers.
2. Plant population and Gypsum application in groundnut was accepted by farmers.
3. Application of Organic farming and vermicompost were accepted by farmers
4. Inter cropping systems in Minor millets were accepted by farmers
5. Seed Treatment with trichoderma in pulses were accepted by farmers
6. Feeding of milk and Colostrum for newly born calves.
7. Preparation concentrate feed with locally available nutrients.
8. Deworming schedule in Sheep
9. Nipping in Bengalgram.
10. Wider spacing in sunflower(90 x 60).
11. Urea spray(2%) at 50 % flowering in soybean

INDICATE THE SPECIFIC TRAINING NEED TOOLS/ METHODOLOGY FOLLOWED FOR

- **Identification of courses for farmers/ farm women**
- **Rural Youth**
- **In service personnel**

For Farmers/ Farm women Rural Youth

- a) Participatory Rural appraisal method .
- b) Field visits
- c) Linkage with developmental departments and NGO's.
- d) Survey method.

For Service personals:

- a) Bimonthly workshops
- b) NARP workshops
- c) Extension workshops workshops

FIELD ACTIVITIES

- i. Number of villages adopted
- ii. No. of farm families selected
- iii. No. of survey/ PRA conducted

INDICATE ANY INNOVATIVE TECHNOLOGY OR ANY INNOVATIVE METHODOLOGY OF TRANSFER OF TECHNOLOGY DEVELOPED DURING THE YEAR.

- a) Face to face interaction of the trainees with the Successful entrepreneurs during the training programme .
- b) Introduction of Experimental learning module in training programme.
- c) Conducting visits to successful entrepreneur's units
- d) Arranging Lectures by the Bank, Insurance, Marketing and other developmental department officers during training programme.
- e) Arranging for out sourcing of the products.
- f) Equipment's required for establishing homescale industries were purchased and given to the needy clients.
- h) Small group discussions and role play during training.

11. WORTHY CONTRIBUTION DURING THE LAST 5 YEARS (YEAR WISE)

1999-2000

- 1. Introduction Caster hybrid GCH-4 and 48-1 in farmers fields trough demonstration**
- 2. Copper Ore Tailings demonstration were conducted at various places in Haveri District, 1000 kgs COT per acre was applied to different crops.**
- 3. Introduced new Groundnut varieties like VRI-2 and K-134.**
- 4. Introduced new Sesamum variety (DS-1) in Haveri District.**
- 5. First time introduced new Blackgram varieties (T-9 and TAU-1) in Haveri District.**
- 6. In Maize new hybrid DMH-1 and DMH-2 introduced.**

2000-2001

- 1. By conducting Front Line Demonstrations in Small millets (Save, Navane and Ragi), popularised varieties through seeds distribution by KVK, about 5000 ha area covered under small millets.**
- 2. In order to promote organic farming recycle Agricultural waste, vermicomposting has been populairsed among the farmers through method demonstration and training.**
- 3. By make use Lambani Women belongs to Hunsikati and Gangajal Tanda, training conducted in collaboration with Banashankari Mahilla Mandal for preparation Lambani Kasooti bags, Divana covers, etc., to incerase the income of the farming community.**
- 4. During the year soil and water conservation activities were carried out at Sunnakalbidari Village of Hediyaala Watershed, about 100 ha area covered by Contour Bunding,CBS.,GBS., Diversion Channel and Gully plugs.**

5. Introduced new varieties and inter cropping system in small millets, Oilseeds and pulses were adopted after treatment of the Watershed. These resulted in good yield (15 to 20% of yield increased compared to outside the watershed).
6. Advocated farmers about growing up Castor on the bunds in watershed area

2001-2002

1. Blind Self Help Group have farmed in Ranebennur and Hulihalli villages, the Agarbatti preparation training was conducted and introduced the Bank facilities to their help for financial assistance.
2. Five months vocational training programme was organised for Rural Women belongs to Kajjari, Kakol, Hanumanamatti and Abalur villages, 25 Women participated in this training and benefited in Tailoring, Embroidering, Kasuti etc., Among the five women started their own Tailoring and earning monthly Rs. 400 to Rs. 500/- income.

2002-2003

1. By Making use of On-campus training on " Preparation of Masala Powder " Member of " Navachetana" and " Chandhana" Mahila Mandals preparing various masala powder under the brand name " Ruchi" and earning a profit of Rs.800/- per month.
2. In collaboration with AICRP (CD) UAS, Dharwad two On-campus training programmes on " Scientific management of Early Childhood Education (ECE) Centres " were conducted. As a result two early Childhood Education center and one day-care center were started at Ranebennur.
3. To popularised consumption of Little Millet, Foxtail Millet and Finger Millet training programme were conducted on processing of Small

Millets for better utilisation of Small Millets through demonstration at Billahalli, Joisarahalli, Shiggaon villages.

- 4. During the year about 50 quintal of Groundnut, Blackgram, Bengalgarm and Small Millets were purchased from farmers under Revolving Fund and distributed for further spread.**
- 5. During the year about 75 quintals of Groundnut varieties (GPBD-4, TAG-24,DH-86, VRI-2) and 25 Quintals of Small Millets were purchased and supplied to all TOT centres, Extension Education Units, NGO's and farmers.**
- 6. The following varieties are introduced and populrised among farming comminute**
Groundnut : DH-86, TAG-24, GPBD-4 and VRI-2
Redgram : Asha
Castor : GCH-4 and 48-1
- 7. Polythene Mulch and BBF Technology in Groundnut has been introduced for the first the district through KVK with increased yield of 54 q/ha.**
- 8. Introduction of Front Line Demonstrations and timely supply of seeds in small millets. The area of Small Millets is increased about 20000 ha. Under improved varieties.**
- 9. First time Little Millet was introduced in summer both for fodder and grain purpose at Madli and Shydambi villages. The farmers have accepted the variety.**