

Action Plan

April 2015 – March 2016

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QUARTERWISE SUMMERY OF ACTION PLAN**1. TRAINING PROGRAMME**

<i>S. No.</i>	<i>Subject</i>	<i>On Campus</i>																<i>Total</i>								<i>Grand Total</i>
		<i>P.F.</i>				<i>F.W.</i>				<i>R.Y.</i>				<i>E.F.</i>				<i>On campus</i>				<i>Off Campus</i>				
		<i>I</i>	<i>II</i>	<i>III</i>	<i>IV</i>	<i>I</i>	<i>II</i>	<i>III</i>	<i>IV</i>	<i>I</i>	<i>II</i>	<i>III</i>	<i>IV</i>	<i>I</i>	<i>II</i>	<i>III</i>	<i>IV</i>	<i>I</i>	<i>II</i>	<i>III</i>	<i>IV</i>	<i>I</i>	<i>II</i>	<i>III</i>	<i>IV</i>	
1	Crop Production	1	2	1	0	0	0	0	0	1	0	0	0	0	0	0	0	2	2	2	0	3	3	3	4	18
2	Horticulture	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	2	2	2	9
3	Extension	0	0	1	1	1	0	0	1	1	0	1	0	0	0	1	1	2	0	2	3	1	2	2	3	15
4	Plant Protection	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	3	0	0	0	1	1	1	1	7
5	LPM	1	1	1	1	1	1	0	0	0	0	0	1	0	1	0	0	2	3	1	1	2	2	2	2	15
6	Home Science	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	1	1	1	0	1	1	1	1	7
	Total	2	3	4	3	4	2	1	1	3	0	1	1	1	1	1	1	10	6	7	5	9	11	11	13	71

2. DEMONSTRATION

S. No.	Type of Demonstration	Season	Crop	Farming situation	No. of Demonstration	Area (ha)	
A.	Front Line Demonstration	Kharif					
		• Oilseeds	♦ Sesame	Rainfed	20	10	
			♦ Castor	Rainfed	10	10	
		• Pulses	♦ Green gram	Rainfed	20	10	
		Rabi					
		• Oilseed	♦ Mustard	Irrigated	30	20	
• Pulses	♦ Gram	Irrigated	20	10			
B.	Demonstration other than FLD	Kharif	♦ Maize	Rainfed	20	10	
			♦ Sorghum	Rainfed	20	10	
			♦ Cluster bean	Rainfed	20	10	
			♦ Napier grass	Irrigated	30	15	
		Rabi	♦ Wheat	Irrigated	30	15	
			♦ Barley	Irrigated	30	15	
			♦ Cumin	Irrigated	30	15	
			♦ Oat	Irrigated	40	20	
			♦ Vegetable	Irrigated	20	2.0	
C.	Others						
	• Compost/ vermi compost				05	-	
	• MNFB				05	-	
	• Improved Agril. Equipment				05	-	
	• Kitchen Garden				05	-	

1. TRAINING PROGRAMMES

1.1 On Campus training (For practicing farmers/ farm women & rural youth)

<i>Quarter</i>	<i>Discipline</i>	<i>Title of Training</i>	<i>Date</i>	<i>Duration (days)</i>	<i>No. of Participants</i>	<i>Type of Participants</i>
1 st	Crops	1. Organic farming for sustainable agriculture	1-2 April	2	20	PF
	Horticulture	1. Agro-techniques for arid fruit plants	9-10 April	2	20	PF
		2. Improvement of desi ber plants and rejuvenation of old orchards	6-7 May	2	20	PF
	Extension	1. Mass media for information on improved agrotechniques	2-3 May	2	20	PF/R Y
2 nd	Crops	1. Cultivation practices for kharif pulses	4-5 June	2	20	PF
	Horticulture	1. Techniques for propagation of arid fruits plants	25-26 June	2	20	PF
	Animal Science	1. Management and feeding practices of dairy animals	23-24 June	2	15	PF
		2. Prophylactic and control measures of contagious diseases	1-2 July	2	20	PF
	Home Science	1. Bandhej	7-8 August	2	20	FW
3 rd	Crops	1. Efficient management of irrigation water	3-4 Sept.	2	20	PF
	Home science	1. Basic of food and nutritional balanced diet	18-19 Sept.	2	20	FW
		2. Nutrition for mother and children	7-8 Oct.	2	20	FW
	Animal Science	1. Role of minerals and vitamins in animal feed	11-12 Nov.	2	20	PF
	Extension	1. Sources and procedures for purchase of quality agri-inputs	19-20 Dec.	2	20	PF/FW

		2. Entrepreneurship development in agriculture	9-10 Dec.	2	20	RY
4 th	Crops	1. Improved cultivation practice for quality fodder production	3-4 Mar	2	20	RY
		2. Management of saline/ sodic soils	26-27 Mar	2	20	PF
	Horticulture	1. Nursery raising techniques for arid fruit plants	4-5 Feb.	2	20	PF
	Home science	1. Value addition to the arid fruit through various preparations	10-11 Mar	2	20	RY
	Animal Science	1. Scientific sheep and goat rearing	20-21 Feb	2	20	PF
	Extension	1. Govt. programmes for benefit of rural community	25-26 Feb	2	20	PF/RY
		2. Information on improved agricultural technology using print media	27-28 Mar	2	20	PF/RY

1.2 Off Campus Training (For practicing farmers/ farm women & rural youth)

<i>Quarter</i>	<i>Discipline</i>	<i>Title of Training</i>	<i>Date</i>	<i>Duration (days)</i>	<i>No. of Participants</i>	<i>Type of Participants</i>
1 st	Crops	1. Improved package of practices for grasses	4.4.2015	1	20	WF
		2. Seed production of kharif crops	19.4.2015	1	20	PF
		3. Cultivation practices for sesame	15.5.2015	1	20	PF
	Horticulture	1. Package & practice of fruit plants	22.5.2015	1	20	PF
		2. Techniques for training & pruning of ber plants	16.4.2015	1	20	PF
	Animal	1. Role of probiotic ruminant.	28.5.2015	1	20	PF

	Science	2. Anoestrus in buffalo and its solution	31.5.2015	1	20	PF
	Home Science	1. Importance of breast feeding for infants	17.6.2015	1	20	FW
	Extension	1. Mass media for information on improved agrotechniques	4.6.2015	1	20	PF/R Y
		2. Importance of modern information technology for farmers	21.6.2015	1	20	
	Plant protection	1. Seed treatment for improved production	30.6.2015	1	20	PF
2 nd	Crops	1. Moisture conservation for rainfed farming	8.7.2015	1	20	PF
		2. Weed management in sesame	12.7.2015	1	20	PF
		3. Vermi-composting	12.8.2015	1	20	WF
	Horticulture	1. Techniques for In-situ budding of ber plants	10.9.2015	1	20	R Y
		2. Techniques for In-situ budding of aonla plants	19.9.2015	1	20	PF
	Animal Science	1. Vaccination in animals and its economical importance	1.7.2015	1	20	PF
		2. Management of heat stroke	21.8.2015	1	20	PF
	Extension	1. Sources and procedures for purchase of quality agri-inputs	30.8.2015	1	20	PF/FW
	Home science	1. Reason and precautions from different diseases during childhood	1.8.2015	1	20	FW
	Plant protection	1. Plant protection measure in kharif pulses	14.8.2015	1	20	PF
2. Plant protection measure in kharif crops		24.9.2015	1	20	PF	
3 rd	Crops	1. Agronomical practices for rabi cereals	7.10.2015	1	20	PF
		2. Improved package of practice for mustard	20.10.2015	1	20	PF
		3. Water management for rabi crops	15.11.2015	1	20	PF
		4. Fertility management through composting	18.11.2015	1	20	R Y

	Horticulture	1. Techniques & tips of vegetable production	31.10.2015	1	20	PF
		2. Grading & packing of fruits and vegetables	4.11.2015	1	20	RY
		3. Improved package of practices of cumin production	1.12.2015	1	20	PF
	Animal Science	1. First aid in animal	3.10.2015	1	20	PF
		2. Artificial insemination in animals	6.12.2015	1	20	PF
	Home science	1. Preparation of nutritious food poshak for children	23.12.2015	1	20	FW
		2. Importance and techniques of kitchen gardening	3.12.2015	1	20	FW
		3. Safe drinking water technology	18.12.2015	1	20	RY
	Extension	1. Print media for information on improved agri-techniques	29.11.2015	1	20	PF
	Plant protection	1. Seed treatment for rabi cereals	16.10.2015	1	20	PF
4 th	Crops	1. Soil fertility management through composting	1.1.2016	1	20	PF
		2. Rain water harvesting technology for rainfed farming	13.1.2016	1	20	PF
	Horticulture	1. Techniques & tips of lady's finger production	22.1.2016	1	20	PF
		2. Techniques & tips of cucurbits production	5.2.2016	1	20	PF
	Animal Science	1. Quality improvement of roughages by urea treatment	24.1.2016	1	20	PF
		2. Clean milk production	17.2.2016	1	20	FW
	Extension	1. Govt. programmes for benefit of rural community	24.2.2016	1	20	PF/RY
		2. Mass Media for information for improved Agro techniques	10.2.2016	1	20	PF/FW
	Plant protection	1. Plant protection in rabi oilseeds	7.3.2016	1	20	PF
		2. Plant protection measure in rabi crops	13.3.2016	1	20	PF
	Home Science	1. Training on health and hygiene	2.1.2016	1	20	FW
		2. Use of serrated sickles for drudgery reduction	28.3.2016	1	20	RY/FW

2. DEMONSTRATION

2.1 FRONT LINE DEMONSTRATION

<i>Title of Demons.</i>	<i>Objectives</i>	<i>Farming situation</i>	<i>No. of Farmer</i>	<i>Area (ha)</i>	<i>Existing technology</i>	<i>Specific techno. Intervention</i>	<i>Critical Input</i>	<i>Remarks</i>
Oilseed								
Sesame	To popular new variety, use of fertilizer & PP chemicals	Rainfed	20	10	Use of local tili or available old variety, no line sowing, no use of fertilizer/ pp chemicals	Use of latest variety, line sowing, balance fertilizer & pp chemicals	Seed, bio fertilizer, ssp/dap, pp chemicals	kharif
Castor	To popular new variety, use of fertilizer & PP chemicals	Rainfed	10	10	Use of local variety or available old variety, no line sowing, no use of fertilizer/ pp chemicals	Use of latest variety, line sowing, balance fertilizer & pp chemicals	Seed, bio fertilizer, ssp/dap, pp chemicals	kharif
Mustard	To demonstrate latest technology of mustard	Irrigated	30	20	Using available old variety, imbalance fertilizer use, lower doses of pp measures	Use of latest variety, balance fertilizer, bio fertilizer & proper pp measures	Seed, bio fertilizer/ ssp/dap/urea & pp chemicals	rabi
Pulses								
Green gram	To demonstrate latest production technology of green gram	Rainfed	20	10	Using old variety, no bio fertilizer/ fertilizer & pp measures	Use of latest variety, bio fertilizer, fertilizer, timely pp measures & weed control	Seed, bio fertilizer, SSP, urea & pp chemicals	kharif
Gram	To demonstrate latest production technology of gram	Rainfed	20	10	Using old variety, no bio fertilizer/ fertilizer & pp measures	Use of latest variety, bio fertilizer, fertilizer, timely pp measures & weed control	Seed, bio fertilizer, SSP, urea & pp chemicals	kharif

2.2 Demonstration other than FLD

S. No.	Title of Demons.	Objectives	Farming situation	No. of farmers	Area (ha)	Existing technology	Specific techno. Intervention	Critical Input
1.	Maize	To demonstrate high yielding short duration varieties	Rainfed	20	10	Use of local seed, no seed treatment, fertilizer / pp application	Use of high yielding variety, seed treatment, bio fertilizer	Seed, bio fertilizer / pp chemicals
2.	Sorghum	To popularize high yielding short duration varieties	Rainfed	20	10	Use of locally available jowar, no seed treatment/fertilizer / bio fertilizer application & no PP measures	Improved seeds of latest variety & bio fertilizer	Seed & bio fertilizer
3.	Cluster bean	To demonstrate performance of high yielding short duration variety	Rainfed	20	10	Use of local seed, no seed treatment, fertilizer / pp application	Use of high yielding variety, seed treatment, bio fertilizer	Seed, bio fertilizer / pp chemicals
4.	Wheat	To demonstrate performance of high yielding variety	Irrigated	30	15	Use of local seed, no seed treatment, imbalance use of fertilizer, no weeding practice is followed	Improved variety seed, seed treatment, bioferti. / balance fertilizer & chemical weed control	Seed, bio ferti. Seed treatment chemicals & weedicide
5.	Barley	To popularize high yielding variety under saline soils	Irrigated	30	15	Use of local seed, no seed treatment no fertilizer use,	Improved variety seed, seed treatment, bio ferti./ balance fertilizer	Seed, bio ferti. Seed treatment chemicals
6.	Cumin	To demonstrate performance of high yielding	Irrigated	30	15	Use of local seed, no seed treatment	Improved seed, pp measures	Seeds

		variety						
7.	Napier grass	To popularize Napier grass for fodder use	Irrigated	20	10	Use of local fodder crop	Use of high yielding variety of Napier grass	Offshoot of Napier grass
8.	Vegetable	To improve the quality and quantity of vegetables	Irrigated	50	5	Not growing vegetable with improved technology	Grow the vegetable with improved technology	Improved seed, insecticide, pesticides & fertilizer
9.	Oat	To popularize oat for fodder use	Irrigated	40	20	Use of local fodder crop	Use of high yielding variety of Oat	Seed
10.	Ber	To improve the quality & quantity of ber fruits	Rainfed	15	150 Nos.	No adopted any improved technology	Budded technology	Buds, insecticides & pesticides
Others than crops								
1.	Compost/vermi compost	To popularize compost technology for improvement of soil fertility	-	05	-	Kept at open place near the house	Improved compost/vermi compost technology	Super phosphate, PSB culture & worms
2.	Multi nutrient feed block	Supplementary feeding to malnourished animals	-	05	-	Demonstrate MNFB	Multi nutrient feed block/ mixture	MNFB/mixture
3.	Improved agricultural implements	To popularize use of improved agricultural implements	-	05	-	Use of local agricultural implements	Use of improved agricultural implements	
4.	Kitchen Garden	To popularize kitchen garden	-	05	-	Not growing vegetables in kitchen garden	Grow vegetables in kitchen garden	

3. Extension Activities

S. No.	Type of Activity	Quarter				Total
		I	II	III	IV	
1.	Field day	0	03	02	02	07
2.	Farmers day/ Vichar goshti	02	02	02	02	08
3.	Agril. Exhibition	0	0	02	02	04
4.	Scientist farmers interaction	01	01	01	01	04
5.	Farm science club	0	01	01	01	03
6.	Ex trainees meeting	03	03	03	03	12
7.	World food day	0	01	0	0	01
8.	Women in agril day	0	0	01	0	01
9.	World Environment Day	0	01	0	0	01
10.	CAZRI foundation day	0	0	0	01	01
11.	Diagnostic service					
	◆ Farmers visit to KVK	04	06	05	06	21
	◆ Scientist visit to farmers field	10	10	10	10	40
12.	Lectures on other programme	10	10	10	10	40
13.	Campaigns					
	◆ Grain storage	0	01	0	01	02
	◆ Composting	02	02	02	02	08
14.	Publication					
	◆ Research paper to be published	-	-	-	-	-
	◆ Popular articles to be published	02	02	02	02	08

	◆ Extension bulletin	0	01	01	01	03
	◆ Pamphlets/ folder	02	0	02	0	04
15.	Poster/ Charts	01	01	01	01	04
16.	Communication media					
	◆ Radio talk	02	02	02	02	08
	◆ TV/ film show	03	03	03	03	12
	◆ News paper coverage	05	05	05	05	20

4. PROPOSED PLAN OF WORK FOR INSTRUCTIONAL FARM

<i>S. No.</i>	<i>Name of Unit</i>	<i>Season</i>	<i>Crop</i>	<i>Area (ha)</i>
1.	Crop production	Kharif	◆ Crop museum of grasses	0.50
			◆ Crop museum of kharif crops	0.50
		Rabi	◆ Crop museum of rabi crops	0.50
2.	Seed Multiplication Programme	Kharif	✓ Sesame	1.00
			✓ Okra	0.50
			✓ Napier grass	0.25
		Rabi	✓ Oat	0.50
3.	Horticulture	Kharif	◆ Ber	1000 Nos. seedlings

5. INFRA STRUCTURAL DEVELOPMENT

<i>S. No.</i>	<i>Infrastructural development/ particulars</i>	<i>Existing</i>	<i>Proposed during the year (2015-16) with cost (Rs lakh)</i>	<i>Justification</i>
1.	Building (office and farmers Hostel) - White wash & colour	01	3.0	Need maintenance
2.	Vehicle (Mini bus)	Nil	10.5	Required for trainings purposes
3.	Tractor	01	6.50	Need replacement
4.	Soil testing lab	Nil	5.5	Needed for providing service to farming community

6. SAC MEETING PROPOSED: 24/07/2015**7. ON FARM TRIALS****1. AGRONOMY****TITLE : LOW PRODUCTIVITY OF MAIZE****Location : Inderwada**

The village Inderwada is situated about 60 km from district headquarter. Maize is the staple food crop of this area occupying nearly 35 per cent of kharif cropped area. The crop is grown under irrigated condition and sown with the onset of monsoon particularly from the end of June to mid of July. Hardly 10-15 per cent area is occupied by improved i.e. hybrid/ compost variety. Rare use of basal dose of phosphatic fertilizer, nitrogen is applied when crop is well established but at sub optimal level. Farmers are maintaining relatively higher plant population in early stage of crop growth which invites competition between the plants. Beside these, crop suffers heavily with acute weed problem at initial stage which ultimate affect the grain production. Plant protection measures are not followed properly.

Reason for low productivity

1. Poor adoption of improved variety.
2. Improper and sub optimum fertilizer use.
3. Severe weed infestation.
4. Delayed sowing
5. Improper crop geometry and higher plant population.

Intervening points :

1. Severe weed infestation
2. Rare use of fertilizer at sowing
3. Rare use of manure

Technological intervention : Herbicidal weed control in maize crop**Treatments :**

- T₁** Farmers practice _hand weeding at 15 / 20 days
T₂ Pre-emergence spray of Atrazine 0.5kg/ha.
T₃ Pre-emergence spray of Atrazine 0.5kg/ha.+ one hand weeding at 30 days.

Plot size : 0.25ha**No. of farmers : 12****Critical input to be supplied:**

1. Improved seed
2. Atrazine
3. Basal dose of fertilizer
4. Top dressing of fertilizer

Duration : Three years**Budget required :** The budget required for purchase of critical input is approximate Rs. 7775/ per year.

TITLE: *RESPONSE OF GYPSUM LEVEL AND ORGANIC MATERIALS IN SODIC SOIL UNDER DIFFERENT CROPPING SEQUENCE*

Location: Rampura

The high sodicity and pH adversely affect the soil physical properties. The effects are more prominent after rainfall and or irrigation. The stagnation of water results in serious aeration problem at the field level. Such type of soil remains almost dry, hard below a few centimeter of the surface, due to poor infiltration of water. This affects the growth of roots. High level of pH also leads to reduced availability of plant nutrients like nitrogen and Zinc. The application of gypsum and organic materials reduces sodicity, increase percolation, there by increase in production of crop. The object of the OFT is to create awareness among the farmers about waste organic materials (burn by the farmers at fields) with gypsum levels for increasing crop production.

Object: To evaluate the effect of gypsum and organic matter on crop production.

The cropping sequence will be as follow:

- Pearl millet – Wheat
- Cluster bean – Wheat/ Mustard
- Green gram – Wheat/ Mustard

Reason for increasing sodicity in soil

1. Poor management practices
2. Low rainfall and high evaporation
3. Irrigation with available well water which is problematic
4. Imbalance use of chemical fertilizer
5. Rare use of available FYM

Possible solution

- Application of gypsum in affected soil
- Organic material e.g. FYM/ mustard straw
- Deep ploughing

Treatment

- T₁ No gypsum
- T₂ Gypsum – 100 per cent required dose
- T₃ Gypsum – 50 per cent + 10 tonnes/ ha mustard straw.
- T₄ Gypsum – 50 per cent + 20 tonnes/ ha mustard straw.

Plot size: 0.25 ha

No. of farmers: 6

List of critical input: Gypsum, FYM, improved seed

Duration: Three years

Budget: The budget required for purchase of critical input is approximate Rs. 9000/ per year.

2. HORTICULTURE

TITLE: *LOW QUALITY AND QUANTITY OF BER FRUITS*

Reason of low quality and quantity of fruits

1. Lack of nutrients
2. Lack of proper time and method of spraying of insecticides and fungicides
3. Improper time of watering
4. Poor knowledge of package and practices

Technology of intervention

1. Spraying of zinc sulphate and application of organic manure+ fertilizers
2. Timely plant protection measures

Treatments

- T₁ Farmers practices
- T₂ Recommended Fertilizer Dose (N:P:K 1.1:1.4:0.2 per tree)
- T₃ Recommended Fertilizer Dose+ Spraying of zinc sulphate (0.5% in September)

No of farmers 2

Plot sizes 0.25ha

Cost of critical inputs 15,000/-

Period Three years

TITLE: *LOW PRODUCTIVITY OF CUMIN*

Reason of low productivity

1. Use of local seed due to non availability of quality seeds.
2. No seed treatment
3. Imbalance use of fertilizer
4. Late sowing
5. Poor knowledge of improved package and practices

Technology intervention

1. Timely Sowing
2. Available of quality seeds
3. Treatment of seeds

Treatments

- T₁ Farmer practices
- T₂ Recommended Practice
- T₃ T₂ + Timely sowing + incorporation of mustard straw in soil (2 ton./ha.)

No of farmers: 4

Plots sizes: 0.5 ha

Cost of critical inputs: Rs 10,000

Times: Three years

TITLE: APPLICATION OF MULCH IN VEGETABLE CROPS

Reason of application of mulch

1. Earlier crops
2. To conserve moisture
3. To improve the fertility and health of the soil
4. To reduce weed growth
5. Poor knowledge about mulch application

Technology intervention

1. Applying mulches including organic as well as inorganic.

Treatments

- T₁: Farmer practices
T₂: Black polythene
T₃: Transparent polythene /FYM/Straw (Crop residue)

No of farmers: 2

Plots sizes: 0.5 ha

Cost of critical inputs: Rs 20,000

Times: Three years

3. HOME SCIENCE

TITLE: PROBLEM OF ANAEMIA IN ADOLESCENT GIRLS OF PALI DISTRICT.

Problem Diagnose:

Anaemia is a major global problem affecting between 20-70% of the population in various countries. In India it is important public health problem affecting people from all walks of life. In this series Rajasthan is also affected with anaemia and rural areas is severely suffered with it. This problem is severe in Pali district too especially in rural area.

What is anaemia:

Anaemia is defined as reduction in hemoglobin (Hb) level in circulation and it adolescent girls hemoglobin is required 10-13 mg/dl. Hemoglobin present in red cells contains iron which is needed to carry oxygen to all part of the body. For the formation and normal growth of red cells iron and vitamin like folic acid and B12 are essential. The measure problem of hemoglobin reduction is due to these factors.

1. Lower absorption rate of iron of foods such as legume, cereals due to inhibiting factors such as phytates tanines present in plant.
2. Lower consumption of vitamin C, calcium and protein rich food. That increases the bio-availability of iron in body.
3. Iron loses during menstruation (15-30mg every cycle) increase the iron requirement of adult women.
4. Demand of iron is substantially increased during pregnancy and growth.

So to emphasis on this problem health expert scientist's, village leaders team make a survey in villages of Pali district and found that there is a number of health problem in adolescent girls such as malnutrition anaemia, vitamin A deficiency, vitamin D deficiency,

iodine deficiency etc. But on the basis of ranking of these problems we found that anaemia is the major problem of Pali region in adolescent girls. These signs were seen in the target group-

- Pale eyes
- White nails (flat & thin)
- Tired ness
- Irritable behavior
- Prone to infection

Details of technologies selected for assessment/refinement:

- Selection of 60 girls from Pali district on the basis of signs of anemia.
- Taking their hemoglobin (< 10 mg/dl is selected for trial) and dietary assessment.
- Treatment selected.
T1 –Control – (15 girls) no iron supplementation
T2 –Experimental – (15 girls) Iron tablets supplementation as per doctor consult for 100 days.
T3 –Experimental – (15 girls) iron enriched aonla candy supplementation as per dietary requirement of target group for 100 days.
- **Preparation of aonla candy-** Aonla rich in vitamin C & vitamin C increase the bio-availability of iron in body, so to increase the absorption of dietary iron, aonla candy is prepared and it is enriched by lotus stem powder that contain a good amount of iron.

Source of Technology: College of food and dairy technology MPUAT, Udaipur

Production system and thematic area: Nutrition management.

Performance of technology with performance indicator:

- **Clinical signs-** Pale eyes, thin and flat nails, irritable behavior etc.
- **Dietary survey-** 24 hours recall method for one day.
- **Hemoglobin test-** Clinical method.

Final recommendation for micro level situation: After conducting the OFT.

Constraints identified and feed back for research: After conducting the OFT.

Process of farmers participation and their reaction: After conducting the OFT.

4. VETERINARY SCIENCE

TITLE : *LOW MILK YIELD IN BOVINE*

Reason of low productivity

1. Low nutrition status
2. Poor economic condition for supplement feeding
3. Lack of knowledge of supplementary feeding

Technology intervention

1. Multi nutrient feed blocks
2. Oral calcium

Treatments

- T1** Farmers practices
T2 MNFB + Galog bolus
T3 MNFB + Galog bolus + Oral calcium

No of farmers: 4

Cost of critical inputs: 8,000/-

Period: Three years

5. AGRICULTURE EXTENSION**TITLE: ASSESSING EFFECT OF GROUP FORMATION ON SOCIAL CAPITAL AND RURAL LIVELIHOODS.**

For sustainable livelihood a high level of social capital is a must in rural areas. It implies the idea that social bonds and norms are important for sustainable livelihoods. In most villages, farm families often resort to individual efforts which pay only average dividends. The success of self help groups and farm interest groups in improving rural incomes all over the world has proven this fact. The observation that in various micro location of the KVK, Pali, farm income are abysmally low coupled with poor avenue for farm women and rural youth. Village survey revealed that spirit of group activities lacking among the rural population. The OFT will be conducted in five different location in the district with following treatments.

Treatments

- T₁** Self Help Groups with 20 farmers focusing on group farming (Vegetable)
T₂ Self Help Groups with 20 farm women focusing on saving and income generation (Processing and value addition of arid fruits)
T₃ Control Group with 20 farmers

Cost of inputs: Rs. 5000/-

Source of technology: KVK, Pali

Period : One year

6. PLANT PATHOLOGY**TITLE: LOW YIELD OF TOMATO DUE TO FRUIT BORER.****Reasons**

1. Severe infestation of Tomato fruit borer.
2. Lack of knowledge of IPM.
3. Lack of money for inputs.

Treatments

- T₁** Farmer's practice – no use of pesticide
T₂ Dimethoate 1ml /lit at flowering time and Acetron 1 gram/lit at fruiting time
T₃ Dimethoate 1/2ml /lit at flowering time and Acetron 0.5 gram/lit at fruiting time +Ha NPV 250 LE @ 0.4 ml/lit of water at flowering time & fruiting

Source of technology : IIVR, Varanasi

Period : Two year

TITLE: REDUCTION IN CUMIN AREA IN THE DISTRICT DUE TO WILT**Reasons of low productions.**

1. Low plant population due to poor germination
2. Plant mortality due to severe wilt infestation
3. Use of depth irrigation water
4. Moisture stress towards maturity.

Intervention :

1. Seed treatment with fungicides
2. Integrated disease management
3. Use of trichoderma.

Treatments:

- T1 Farmers practice (no seed treatment)
 T2 Seed treatment with trichoderma @ 4 gm/kg seed
 T3 Seed treatment with trichoderma @ 4 gm/ kg seed + use of 60 kg FYM enriched with trichoderma @ 1.5 kg/ha for soil treatment.

Cost of inputs: Budget requirement for per hectare

Seed	-	3350
Bavistin	-	100
Fertilizer	-	50
Trichoderma	-	350
Total Rs	-	7000

Source of technology : CAZRI, Jodhpur

Period : Two years