

### Agro-Ecological Situation

The planning commission, Govt. of India, has divide the whole Country into 15 agro climatic Zones and 127 Sub Zones. Jharkhand state falls under VIIth Agro Climatic zone. This state is also divided into three agro climatic Sub-Zones IVth, Vth and VIth. Among the three Ranchi district comes under the eastern plateau zone (Agro-climatic Zone V) Agro climatic region. Based on the variation in topography, Soil types and its problem, source of irrigation, cropping pattern, forest area (district had been divided into three agro-ecological situation (AESs) for the purpose of SREP preparation. One representative village of each AES was selected for participatory data collection through multidisciplinary AES teams. These AES are named as under:

#### Criteria for AES Selection.

1. Soil Type.
2. Vegetation .
3. Source of Irrigation.
4. Farming pattern.

- AES -I Well/Tank – Irrigated Intensive Vegetable Growing Area. Soil Type - Red laterite sandy/Sandy loam Soil. Blocks - Chanho, Mandar, Bero, Ratu, Kanke, Ormajhi, Burmu Angara, Namkum and Tamar.
- AES -II Rainfed, undulated Partial Fortial Forest Area. Soil Type - Red late rite sandy/Sandy loam Soil. Blocks - Angara, Namkum, Silli, Ormanjhi, Bundu and Sanahatu.
- AES -III Rainfed, Undulated Dense Forest Eroded Soil Area. Soil Type - Red late rite sandy/Sandy loam Soil. Blocks - Karra, Rania, Torapa, Murhu, Khunti, Lapung, Arki Burmu & Tamar.

**Table – 5.01 : AES and village selected for participatory data collection**

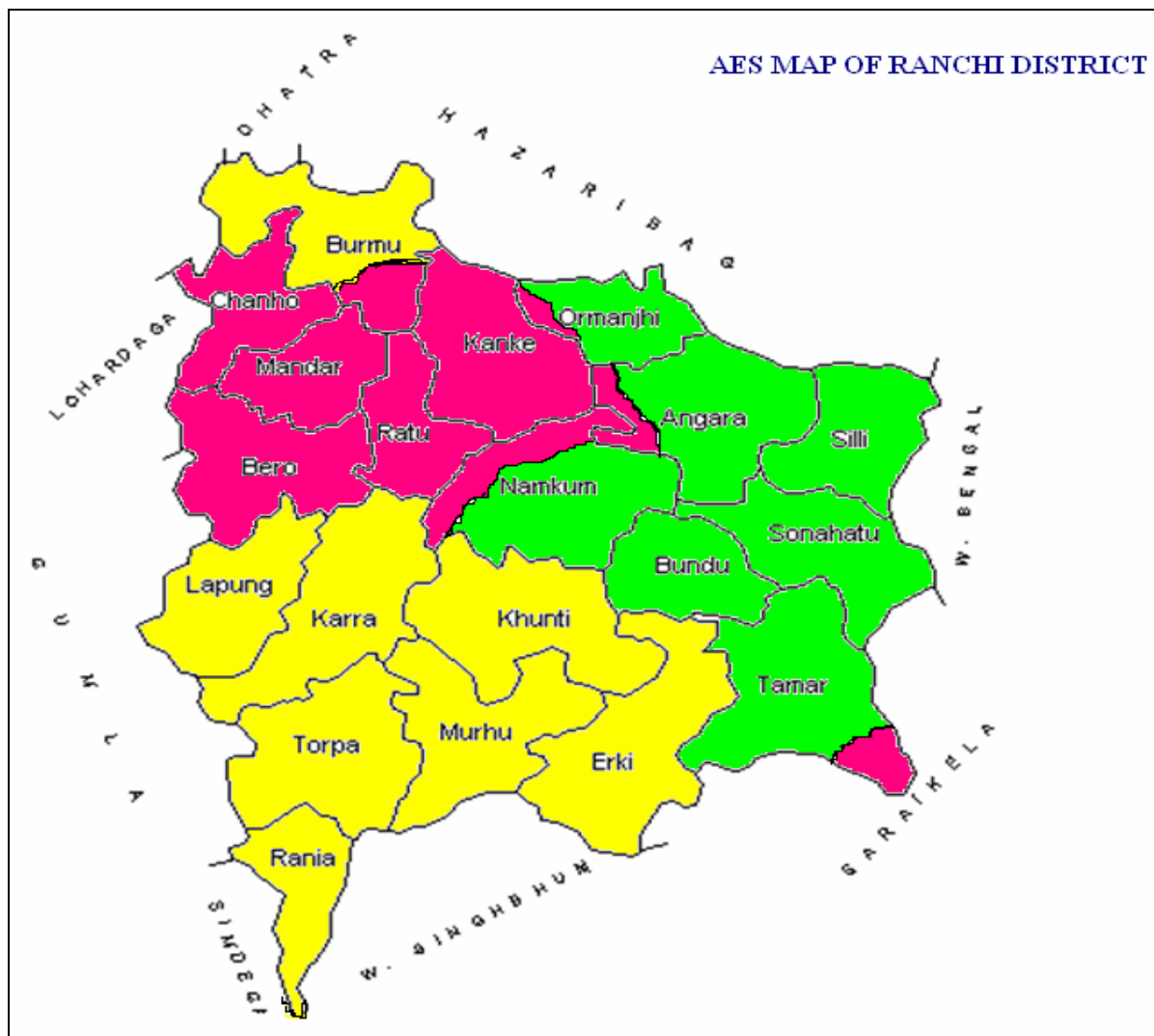
AES number	Name of AES	Name of Block	Name of representative village
AES – I	Well/Tank– Irrigated Vegatable Growing Area	MANDAR	Karkara
AES – II	Rainfed, undulated Partial Partial Forest	ANGARA	Nawagarh
AES – III	Rainfed, Undulated Dense Forest Eroded Soil Area	KARRA	Chapi

**Table 5.2: DISTRIBUTION OF AES IN DISTRICT**

SI. No.	Name of Block	% Distribution of AES		
		AES I	AES II	AES III
1	Kanke	100%	-	-
2	Ratu	100%	-	-
3	Mander	100%	-	-
4	Chanho	100%	-	-
5	Bero	100%	-	-
6	Burmu	30%	-	70%
7	Lapung	-	-	100%
8	Ormanjhi	40%	60%	-
9	Angara	20%	80%	-
10	Namkum	20%	80%	-
11	Silli	-	100%	-
12	Bundu	-	100%	-
13	Tamar	10%	-	90%
14	Sonahatu	-	100%	-
15	Khunti	-	-	100%
16	Murhu	-	-	100%
17	Arki	-	-	100%
18	Rania	-	-	100%
19	Torpa	-	-	100%
20	Karra	-	-	100%

**Table – 5.03 : Detail about the number of families under each kind of resource situation in different AES**

Sl.No	Categories	AES -I		AES -II		AES -III	
			%		%		%
1.	Resource Rich	31	9.68	18	4.73	25	10.20
2.	Resource Poor	289	90.32	362	95.27	220	89.80



- AES [I] Well/Tank- Irrigated Intensive Vegetable Growing Area. Soil Type - Red laterite sandy/Sandy loam Soil. Blocks - Chanho, Mandar, Bero, Ratu, Kanke, Ormanjhi, Burmu, Namkum, Angara & Tamar.
- AES [II] Rainfed, Undulated Partial Forest Area. Soil Type - Red late rite sandy/Sandy loam Soil. Blocks -( Angars, Namkum, Silli, Ormanjhi, Tamar, Bundu & Sanahatu.
- AES [III] Rainfed, Undulated Dense Forest Eroded Soil Area. Soil Type - Red late rite sandy/Sandy loam Soil. Blocks -( Karra, Rania, Torpa, Murhu, Khunti, Lapung, Erki & Budamu.

**Table No. 5.4****DETAILS ABOUT PREDOMINANT EXISTING FARMING SYSTEMS (EFS) IN THE REPRESENTATIVE VILLAGE OF AN AES**

District :- Ranchi.

Agro-ecological situation : I  
Resource Situation : Rich.

Sl. No.	Existing farming system	No. & % of families associated	
		Number	Percentage
1	Agri. + Hort. +A.H.	25	80.64
2	Agri. + A.H.	6	19.36

District :- Ranchi

Agro-ecological situation : I  
Resource Situation : Poor.

Sl. No.	Existing farming system	No. & % of families associated	
		Number	Percentage
1	Agri. + Hort. + A.H.	172	59.51
2	Agri. + Hort.	100	34.60
3	Agri. + A.H.	17	5.89

District :- Rinchi.

Agro-ecological situation : II  
Resource Situation : Rich.

Sl. No.	Existing farming system	No. & % of families associated	
		Number	Percentage
1	Agri. + Hort. +A.H.	16	88.89
2	Agri. + Hort.	2	11.11

District :- Ranchi

Agro-ecological situation : II  
Resource Situation : Poor.

Sl. No.	Existing farming system	No. & % of families associated	
		Number	Percentage
1	Agri. + Hort. + A.H.	314	86.74
2	Agri. + Hort.	48	13.26

District :- Ranchi

Agro-ecological situation : III  
Resource Situation : Rich.

Sl. No.	Existing farming system	No. & % of families associated	
		Number	Percentage
1	Agri. + Hort. +A.H.	22	88.00
2	Agri. + A.H.	3	12.00

District :- Ranchi

Agro-ecological situation : III  
Resource Situation : Poor.

Sl. No.	Existing farming system	No. & % of families associated	
		Number	Percentage
1	Agri. + Hort. + A.H.	126	57.28
2	Agri. +A.H.	94	42.72

**Table – 5.05: Major enterprises associated with each Existing Farming System**

**Resource Rich**

TYPE OF ENTERPRISES/ COMMODITIES	% of families associated with dominant enterprises												
	AES-I				AES-II				AES-III				
	EFS-1		EFS-2		EFS-1		EFS-2		EFS-1		EFS-2		
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	
1	2	3	4	5	6	7	8	9	10	11	12	13	
<b>- Agricultural crops</b>													
<b>Irrigated</b>													
Wheat	20	80	4	66	6	37.5	2	100	10	45	3	100	
Major Vegetables	25	100	-	-	10	62.5	2	100	15	68	2	67	
Potato	15	60	3	50	-	-	-	-	8	36	2	67	
Pea	15	60	3	50	4	25	-	-	4	18	-	-	
<b>Rainfed</b>													
Paddy	local	-	-	-	-	-	-	-	-	-	-	-	
	H.Y.V	8	32	4	66	12	75	2	100	15	68	3	100
	Hybrid	17	68	6	100	4	25	-	-	8	36	3	100
Maize	15	60	6	100	2	12.5	2	100	6	27	3	100	
Pigeon pea	5	20	-	-	6	37.5	2	100	10	45	3	100	
Black gram	5	20	-	-	6	37.5	1	50	8	36	3	100	
Ragi	8	32	-	-	8	50	2	100	10	45	3	100	
Ginger	12	48	-	-	-	-	-	-	-	-	-	-	
Ground Nut	4	16	6	100	-	-	-	-	-	-	-	-	
<b>- Horticulture</b>													
Orchard	-	-	-	-	-	-	-	-	-	-	-	-	
Vegetables	25	100	6	100	12	75	1	50	19	86	2	67	
<b>-Animal Husbandry</b>													
Cow	4	16	4	66	6	37.5	-	-	4	18	3	100	
Buffaloes	10	40	6	100	12	75	2	100	18	82	3	100	
Goat	10	40	3	50	16	100	2	100	18	82	3	100	
Duckry	-	-	-	-	-	-	-	-	3	13	-	-	
Poultry	15	60	3	50	12	75	2	100	15	68	-	-	

Note :- Major Vegetable – Couli flower, Cabage, Tomato, Brinjal, Chilli, Capsicum, Cucurbits, Pea etc.

**Table – 5.06: Major enterprises associated with each Existing Farming System**

**Resource Poor**

TYPE OF ENTERPRISES/ COMMODITIES	% of families associated with dominant enterprises														
	AES-I						AES-II				AES-III				
	EFS-1		EFS-2		EFS-3		EFS-1		EFS-2		EFS-1		EFS-2		
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
<b>- Agricultural crops</b>															
<b>Irrigated</b>															
Wheat	40	23	14	14	-	-	30	9.5	-	-	10	8	-	-	
Major Vegetables	36	21	18	18	-	-	26	8	-	-	12	9	-	-	
Pea	46	26	22	22	-	-	18	6	-	-	6	5	-	-	
<b>Rainfed</b>															
Paddy	Local	9	5	12	12	7	41	155	49	41	85	65	51	45	48
	H.Y.V.	41	24	30	30	10	59	103	33	12	25	45	36	30	32
	Hybrid	122	71	58	58	-	-	48	16	-	-	16	13	19	20
Maize	50	29	40	40	-	-	16	5	8	16	10	8	18	19	
Pigeon pea	30	17	25	25	-	-	22	7	-	-	7	6	9	9.5	
Black gram	15	8	33	33	-	-	29	9	5	10	12	9	17	18	
Ragi	30	17	33	33	-	-	22	7	20	41	30	24	23	24	
Ginger	30	17	12	12	-	-	-	-	-	-	-	-	-	-	
Ground Nut	13	7	28	28	-	-	-	-	-	-	-	-	-	-	
<b>- Horticulture</b>															
Orchard	4	2	-	-	-	-	-	-	-	-	-	-	-	-	
Vegetables	172	100	90	90	-	-	17	5.5	12	25	15	12	-	-	
<b>-Animal Husbandry</b>															
Cow	17	9	-	-	-	-	80	25	-	-	40	32	-	-	
Buffaloes	42	24	-	-	-	-	-	-	-	-	-	-	-	-	
Goat	172	100	-	-	17	100	300	95	-	-	90	71	-	-	
Poultry	172	100	-	-	-	-	286	91	-	-	120	95	80	85	
Fish	-	-	-	-	-	-	8	2.5	-	-	-	-	-	-	

**TABLE- 5.07 Contribution of different enterprises toward annual income under each farming system**

**Resource Rich**

TYPE OF ENTERPRISES/ COMMODITIES	Units	Contribution of different enterprises in terms of P/S/T/Q and net income in Rs.											
		AES-I				AES-II				AES-III			
		EFS-1		EFS-2		EFS-1		EFS-2		EFS-1		EFS-2	
<b>- Agricultural crops</b>													
<b>Irrigated</b>													
Wheat	hect.	3000		5500		2500		2500		3000		3200	
<b>Rainfed</b>													
Paddy	Local	hect.	-			2000		2000		2000		2000	
	H.Y.V.	hect.	6000		7500		5000		4500		5500		6000
	Hybrid	hect.	30000	SECONDARY	32000	PRIMARY	26000	PRIMARY	26000	PRIMARY	30000	PRIMARY	30000
Maize	hect.	15000		15000		10000		10000		8000		8000	
Pigeon pea	hect.	3400		-		2600		2500		2000		2000	
Black gram	hect.	2500		-		2500		2000		2000		2000	
Ragi	hect.	3000		-		2500		2500		2500		3000	
Ground Nut	hect.	10000		10000		-		-		-		-	
<b>Total</b>		<b>72900</b>		<b>70000</b>		<b>53100</b>		<b>52000</b>		<b>55000</b>		<b>56200</b>	
<b>- Horticulture</b>													
Major Vegetables	hect.	35000		-		20000		18000		15000		-	
Potato	hect.	15000	PRIMARY	18000	SECONDARY	-	SECONDARY	-	SECONDARY	15000	SECONDARY	13000	SECONDARY
Pea (green pea)	hect.	15000		17000		12000		-		10000		-	
Ginger	hect.	60000		-		-		-		-		-	
Orchard	hect.	15000		-		-		-		-		-	
Vegetables	hect.	30000		-		20000		12000		10000		-	
<b>Total</b>		<b>170000</b>		<b>35000</b>		<b>52000</b>		<b>30000</b>		<b>50000</b>		<b>13000</b>	
<b>-Animal Husbandry-Rs./Animal/annum</b>													
Cow/ month	Animal	1700		2200		1000		-		1300		1200	
Buffaloes /month	Animal	1100	TRITIREY	1600	TRITIREY	900	TRITIREY	-		900	TRITIREY	900	TRITIREY
Goat /Year	Animal	1200		1700		1000		-		1000		1000	
Duckery	Animal	-		-		-		-		-		4000	
Poultry	Ten Bird	1200		1400		1200		-		1000		1000	
Fish	hect.	-		-		-		-		-		-	
<b>Total :-</b>		<b>5200</b>		<b>6900</b>		<b>4100</b>		<b>-</b>		<b>4200</b>		<b>8100</b>	
<b>Grand Total :-</b>		<b>248100</b>	B : C 1.77 : 1	<b>111900</b>	B : C 1.75 : 1	<b>109200</b>	B : C 1.61 : 1	<b>82000</b>	B : C 1.51 : 1	<b>109200</b>	B : C 1.48 : 1	<b>77300</b>	B : C 1.50 : 1

**TABLE- 5.08 Contribution of different enterprises toward annual income under each farming system**

**Resource Poor**

TYPE OF ENTERPRISES/ COMMODITIES		Contribution of different enterprises in terms of P/S/T/Q and net income in Rs.																			
		AES-I			AES-II			AES-III													
		EFS-1	EFS-2	EFS-3	EFS-1	EFS-2	EFS-1	EFS-2													
<b>- Agricultural crops</b>																					
<b>Irrigated</b>																					
Wheat	2000	SECONDARY	2000	SECONDARY	-	PRIMARY	2000	PRIMARY	-	PRIMARY	2000	PRIMARY	2000	PRIMARY							
<b>Rainfed</b>																					
Paddy	-		2000		2000		2000		2000		2000		2000		2000	2000	2000	2000	2000	2000	2000
Local	-		2000		2000		2000		2000		2000		2000		2000	2000	2000	2000	2000	2000	2000
H.Y.V.	4500		4500		4000		4500		4000		4500		4000		4500	4000	4500	4000	4500	4000	4500
Hybrid	16000		15000		-		15000		-		15000		-		15000	-	15000	-	15000	-	15000
Ragi	2500		2200		-		2500		2000		2500		2000		2500	2000	2500	2000	2500	2000	2500
Maize	10000		10000		-		10000		-		10000		-		10000	-	10000	-	10000	-	10000
Pigeon pea	2500		2200		-		2500		-		2500		-		2500	-	2500	-	2500	-	2500
Black gram	2000		2000		-		2000		-		2000		-		2000	-	2000	-	2000	-	2000
Ground Nut	8000	7500	-	-	-	-	-	-	-	-	-	-	-	-							
<b>Total</b>	<b>47500</b>	<b>47400</b>	<b>6000</b>	<b>40500</b>	<b>8000</b>	<b>37000</b>	<b>26200</b>														
<b>- Horticulture</b>																					
Major Vegetables	20000	PRIMARY	18000	PRIMARY	-	-	15000	SECONDARY	-	-	10000	SECONDARY	-	-							
Pea	10000		10000		-		8000		-		8000		-								
Ginger	20000		18000		-		-		-		-		-								
Orchard	15000		-		-		-		-		-		-								
Vegetables	15000		15000		-		-		-		10000		-								
<b>Total</b>	<b>80000</b>		<b>61000</b>		<b>-</b>		<b>23000</b>		<b>-</b>		<b>28000</b>		<b>-</b>								
<b>-Animal Husbandry</b>																					
Cow	1500	TRITIREY	-	SECONDARY	-	-	1500	TRITIREY	-	SECONDARY	1200	TRITIREY	1200	SECONDARY							
Buffaloes	1000		-		1000		-		1000		-										
Goat	1000		-		800		-		800		-										
Poultry	1200		-		1000		-		1000		-										
Fish	-		-		-		-		-		-										
Labour	-		-		-		-		-		-										
Agro Forestry	-		-		-		3000		-		-										
<b>Total :-</b>	<b>4700</b>		<b>-</b>		<b>1800</b>		<b>4300</b>		<b>3000</b>		<b>4000</b>		<b>4000</b>								
<b>Grand Total :-</b>	<b>132200</b>	<b>B : C 1.52:1</b>	<b>108400</b>	<b>B : C 1.44:1</b>	<b>7800</b>	<b>B : C 1.29:1</b>	<b>67800</b>	<b>B : C 1.47:1</b>	<b>8000</b>	<b>B : C 1.25:1</b>	<b>69000</b>	<b>B : C 1.36:1</b>	<b>30200</b>	<b>B : C 1.37:1</b>							

Note :-1. Major Vegetable – Couli flower, Cabbage, Tomato, Brinjal, Chili, Capsicum, etc. 2. Vegetable – Only Cucurbits in rainy season. 3. Maize grown for green cob & Sold in local market.



AES-I : Within an existing farming system, agriculture is the common enterprise in which Rice, Maize, Pulses like Arahar (Rad gram), Urd (Black gram) are grown in rainfed situation whereas wheat is grown in irrigated condition. Vegetables and Hybrid paddy is grown extensively In AES-I. In Horticulture enterprises, mango and jackfruit are grown under rainfed condition. In Agriculture animal husbandry system farmers are feeding their animal on agriculture by-product. Farmers own local cow, buffaloes, goat and poultry under animal husbandry enterprises. Cow and buffalo are used as draft animal. 60 % area in rice is covered by hybrid Rice Variety. Hence the rice productivity is higher compared to AES-II & III.

AES-II : Agriculture-Horticulture-Animal husbandry and Agriculture-Animal husbandry farming systems are observed here. In Agriculture-Animal husbandry farming system, the crops like Rice, Arahar, Maize, Rice + Arahar, Urd were predominantly grown in rainfed condition. Vegetables and hybrid Rice is less popular in the AES-II. The by-product of these crops are fed to their animals such as cow, buffalo, goat. In another farming system. A Sizeable population is also depended on labour.

AES-III : Two farming systems were observed i.e. Agriculture-Animal husbandry and Agriculture-Horticulture-Animal husbandry. Both farming system are found in rainfed condition. Rice, Maize, Arhar, Ragi, Black gram are grown under rainfed condition. 50% area in rice is covered by local Rice Variety. Hence the rice productivity is less compared to AES-I.

**Table No. 5.09**  
**TREND ABOUT GROWTH OF EXISTING**  
**ENTERPRISES/COMMODITIES/LIVESTOCK IN THE REPRESENTATIVE**  
**VILLAGE.**

**AES- I**

Sl. No.	Name of enterprises/commodities/Livestock	Unit	Trend about no. of units in the village (%)					Remarks
			2007	2002	1997	1992	1987	
<b>1.</b>	<b>Agriculture - Irrigated + Rainfed Crops</b>							
➤	<b>Paddy</b>	Local	10	25	50	75	90	
		H.Y.V.	30	60	40	25	10	
		Hybrid	60	30	10	Nil	Nil	
➤	Maize		15	12	10	8	6	
➤	Ragi		20	45	60	75	100	
➤	Pigeon pea & Other Pulses		20	30	60	80	90	
➤	Ginger		30	60	50	20	10	
➤	Vegetable		90	80	70	40	20	
<b>2.</b>	<b>Animal Husbandry</b>							
➤	Local breed		-	-	-	-	-	
➤	Cross breed		-	-	-	-	-	
➤	Goat		-	-	-	-	-	
➤	<b>Poultry</b>	Commercial	-	-	-	-	-	
		Back Yard	-	-	-	-	-	
<b>3.</b>	<b>Non Farm Sector</b>							
➤	Regular Service		-	-	-	-	-	
➤	Transport	Tractor/Other Vehicle	-	-	-	-	-	
		Bullock cart	-	-	-	-	-	

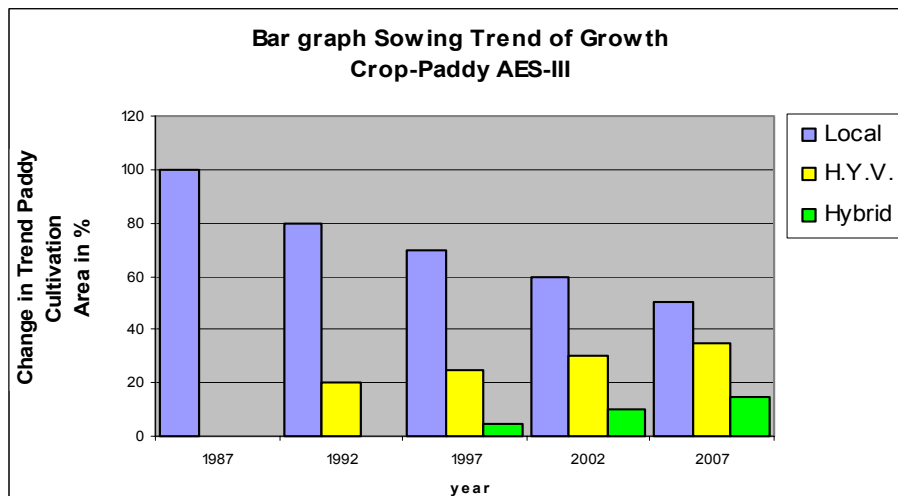
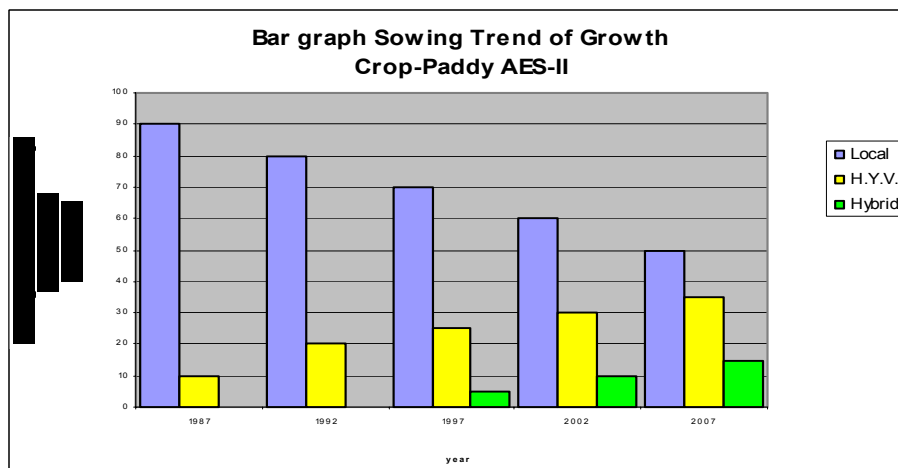
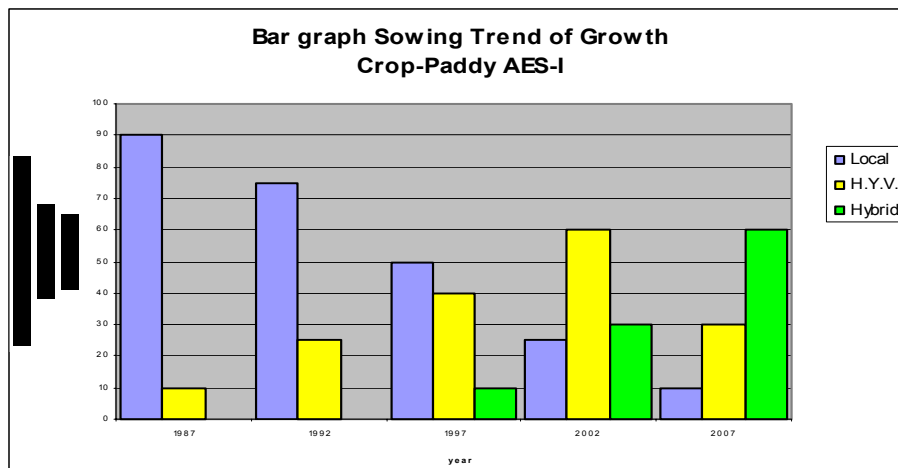
## AES- II

Sl. No.	Name of enterprises/commodities/Livestock	Unit	Trend about no. of units in the village (%)					Remarks	
			2007	2002	1997	1992	1987		
<b>1.</b>	<b>Agriculture - Irrigated + Rainfed Crops</b>								
➤	<b>Paddy</b>	Local	In Percent (%)	50	60	70	80	90	
		H.Y.V.		35	30	25	20	10	
		Hybrid		15	10	05	Nil	Nil	
➤	Maize			12	10	08	06	04	
➤	Ragi			20	45	60	75	100	
➤	Pigeon pea & Other Pulses			20	30	60	80	90	
➤	Ginger			-	-	-	-	-	
➤	Vegetable		30	25	20	15	10		
<b>2.</b>	<b>Animal Husbandry</b>								
➤	Local breed		-	-	-	-	-		
➤	Cross breed		-	-	-	-	-		
➤	Goat		-	-	-	-	-		
➤	<b>Poultry</b>	Commercial	-	-	-	-	-		
		Back Yard	-	-	-	-	-		
<b>3.</b>	<b>Non Farm Sector</b>								
➤	Regular Service		-	-	-	-	-		
➤	Transport	Tractor/Other Vehicle	-	-	-	-	-		
		Bullock cart	-	-	-	-	-		

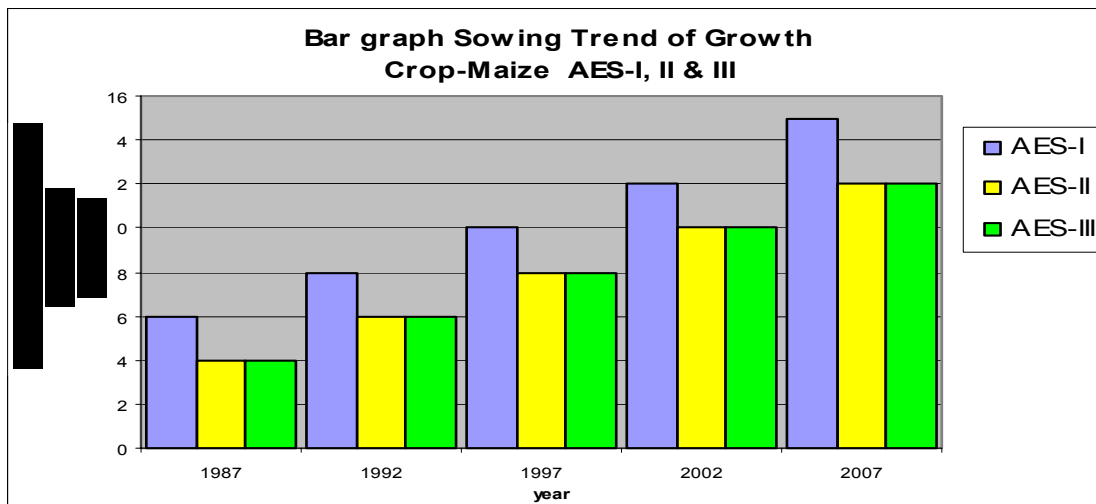
## AES- III

Sl. No.	Name of enterprises/commodities/Livestock	Unit	Trend about no. of units in the village					Remarks	
			2007	2002	1997	1992	1987		
<b>1.</b>	<b>Agriculture - Irrigated + Rainfed Crops</b>								
➤	<b>Paddy</b>	Local	In Percent (%)	50	60	70	80	100	
		H.Y.V.		35	30	25	20	00	
		Hybrid		15	10	05	Nil	Nil	
➤	Maize			12	10	08	06	04	
➤	Ragi			20	45	60	75	100	
➤	Pigeon pea & Other Pulses			20	30	60	80	90	
➤	Ginger			-	-	-	-	-	
➤	Vegetable		35	25	20	15	10		
<b>2.</b>	<b>Animal Husbandry</b>								
➤	Local breed		-	-	-	-	-		
➤	Cross breed		-	-	-	-	-		
➤	Goat		-	-	-	-	-		
➤	<b>Poultry</b>	Commercial	-	-	-	-	-		
		Back Yard	-	-	-	-	-		
<b>3.</b>	<b>Non Farm Sector</b>								
➤	Regular Service		-	-	-	-	-		
➤	Transport	Tractor/Other Vehicle	-	-	-	-	-		
		Bullock cart	-	-	-	-	-		

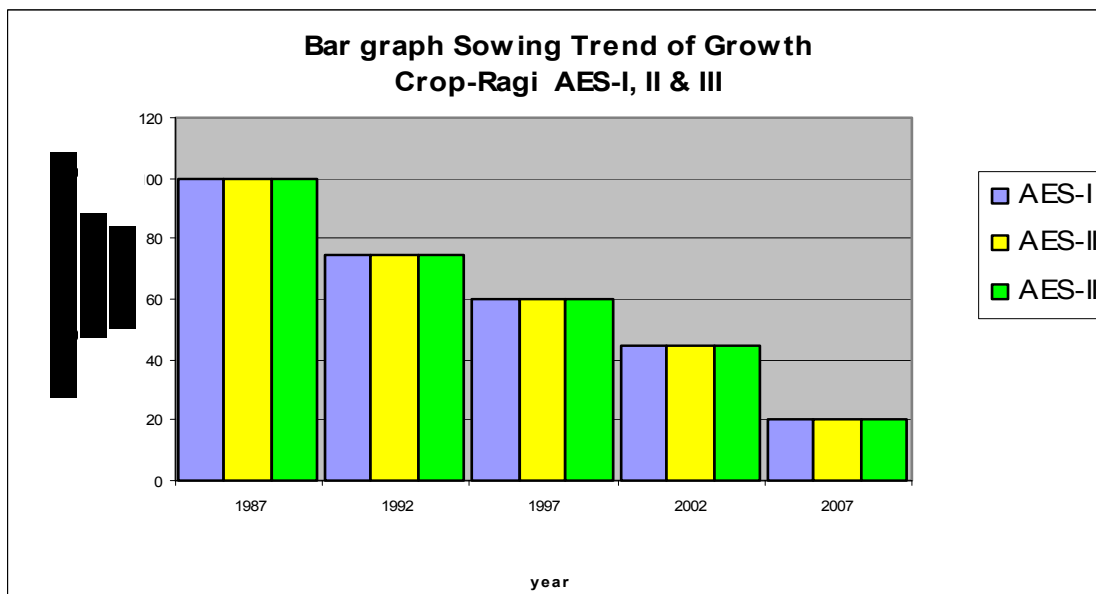
Change in Trend Paddy Cultivation Area in %									
Year	AES - I			AES - II			AES - II		
	Local	H.Y.V.	Hybrid	Local	H.Y.V.	Hybrid	Local	H.Y.V.	Hybrid
1987	90	10	Nil	90	10	Nil	100	Nil	Nil
1992	75	25	Nil	80	20	Nil	80	20	Nil
1997	50	40	10	70	25	5	70	25	5
2002	25	60	30	60	30	10	60	30	10
2007	10	30	60	50	35	15	50	35	15



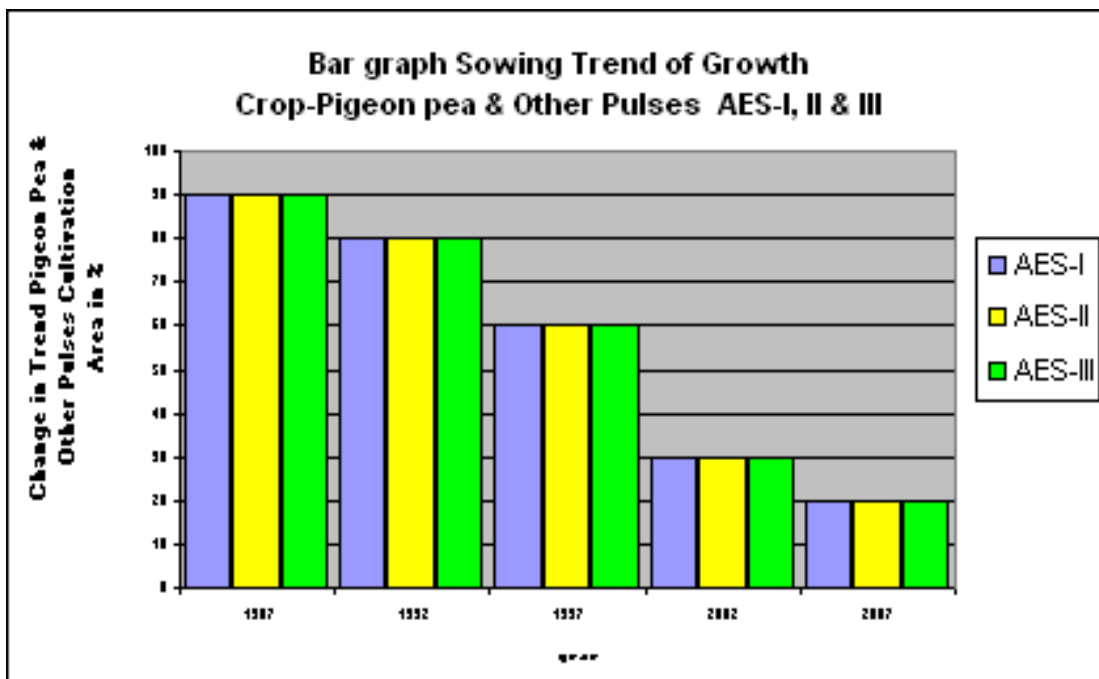
Change in Trend Maize Cultivation Area in %			
Year	AES-I	AES-II	AES-III
1987	6	4	4
1992	8	6	6
1997	10	8	8
2002	12	10	10
2007	15	12	12



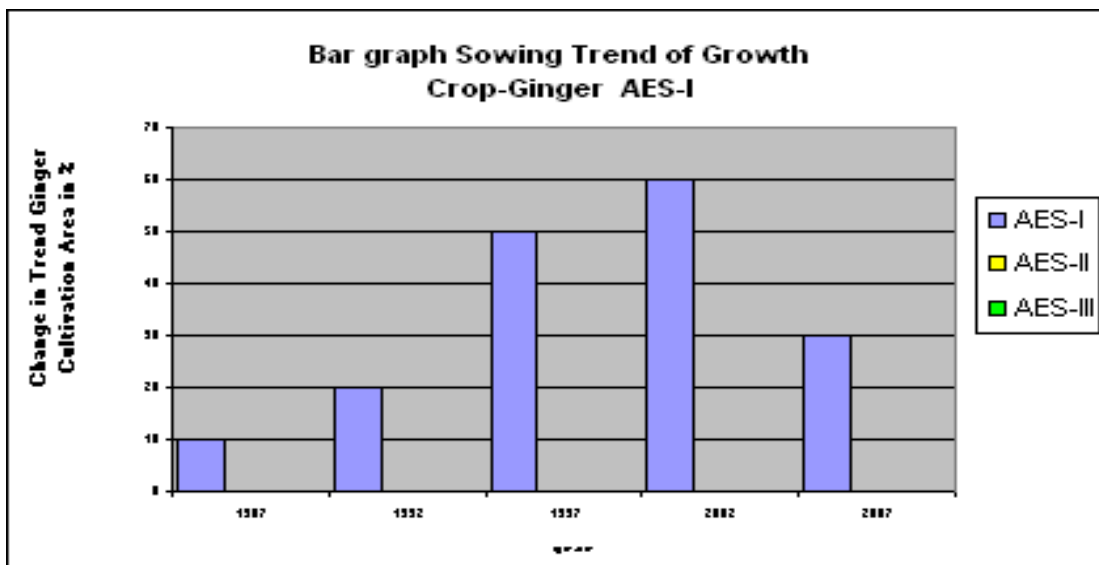
Change in Trend Ragi Cultivation Area in %			
Year	AES-I	AES-II	AES-III
1987	100	100	100
1992	75	75	75
1997	60	60	60
2002	45	45	45
2007	20	20	20



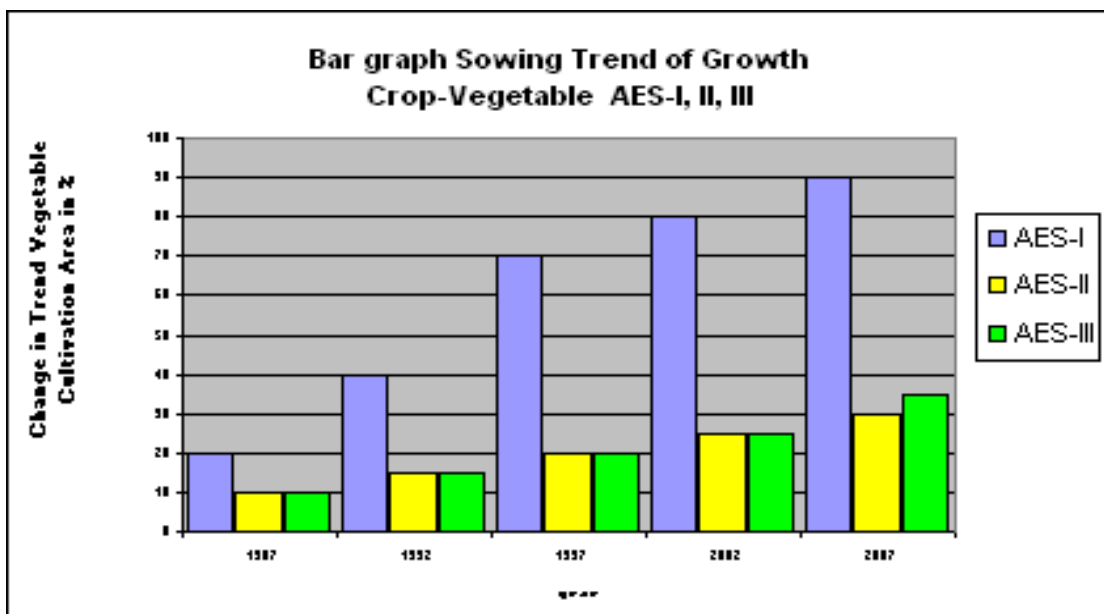
Change in Trend Pigeon Pea & Other Pulses Cultivation Area in %			
Year	AES-I	AES-II	AES-III
1987	90	90	90
1992	80	80	80
1997	60	60	60
2002	30	30	30
2007	20	20	20



Change in Trend Ginger Cultivation Area in %			
Year	AES-I	AES-II	AES-III
1987	10	Nil	Nil
1992	20	Nil	Nil
1997	50	Nil	Nil
2002	60	Nil	Nil
2007	30	Nil	Nil

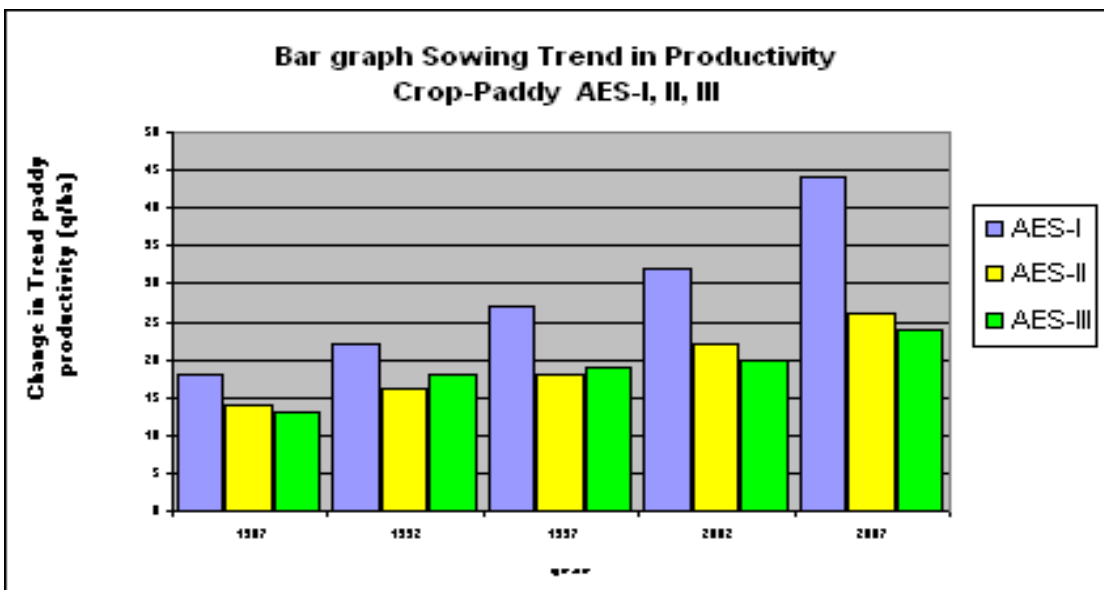


Change in Trend Vegetable Cultivation Area in %			
Year	AES-I	AES-II	AES-III
1987	20	10	10
1992	40	15	15
1997	70	20	20
2002	80	25	25
2007	90	30	35

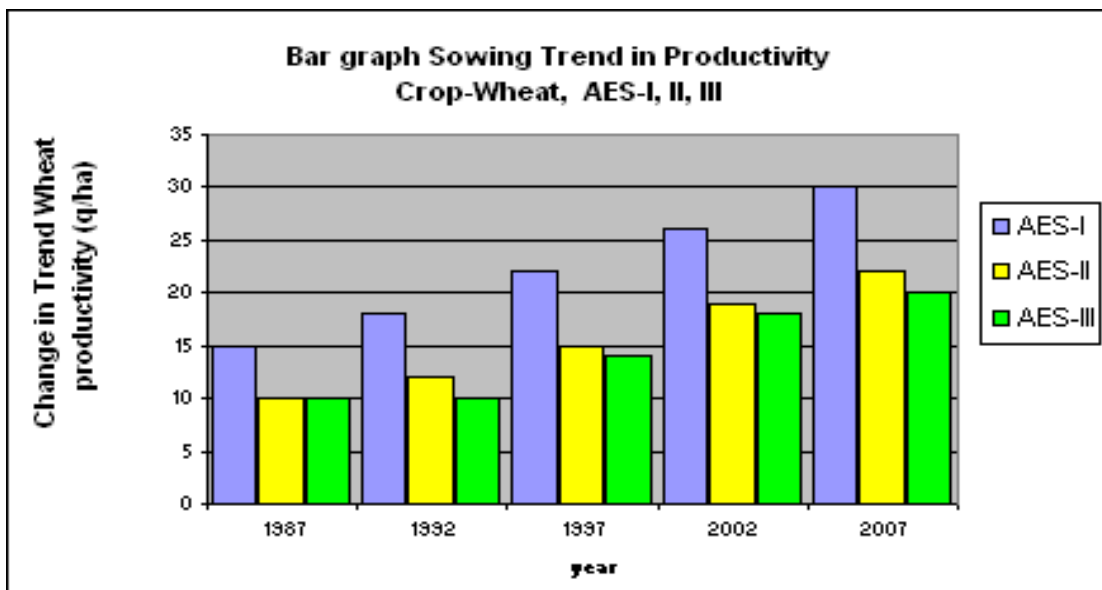


### Trend in Productivity in Different AES

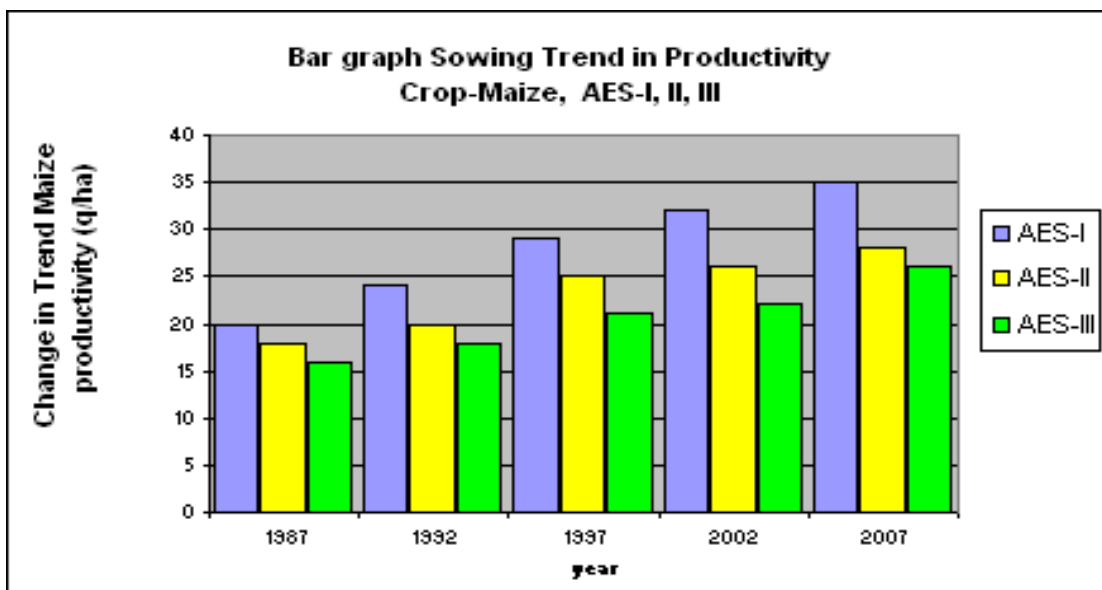
Change in Trend Paddy productivity (q/ha) in representative village			
Year	AES-I	AES-II	AES-III
1987	18	14	13
1992	22	16	18
1997	27	18	19
2002	32	22	20
2007	44	26	24



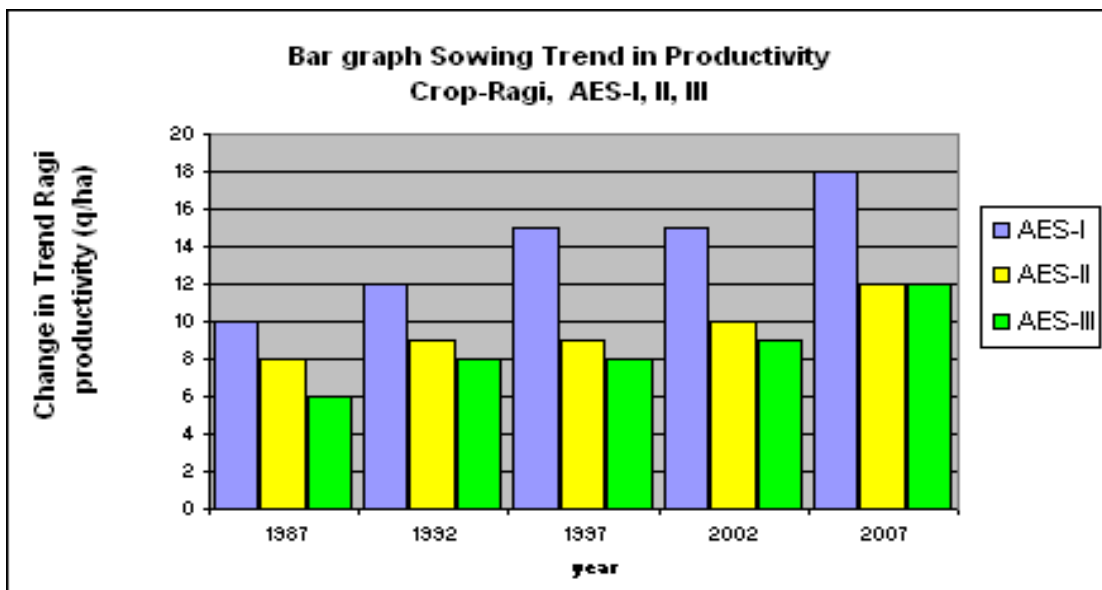
Change in Trend Wheat productivity (q/ha)in representative village			
Year	AES-I	AES-II	AES-III
1987	15	10	10
1992	18	12	10
1997	22	15	14
2002	26	19	18
2007	30	22	20



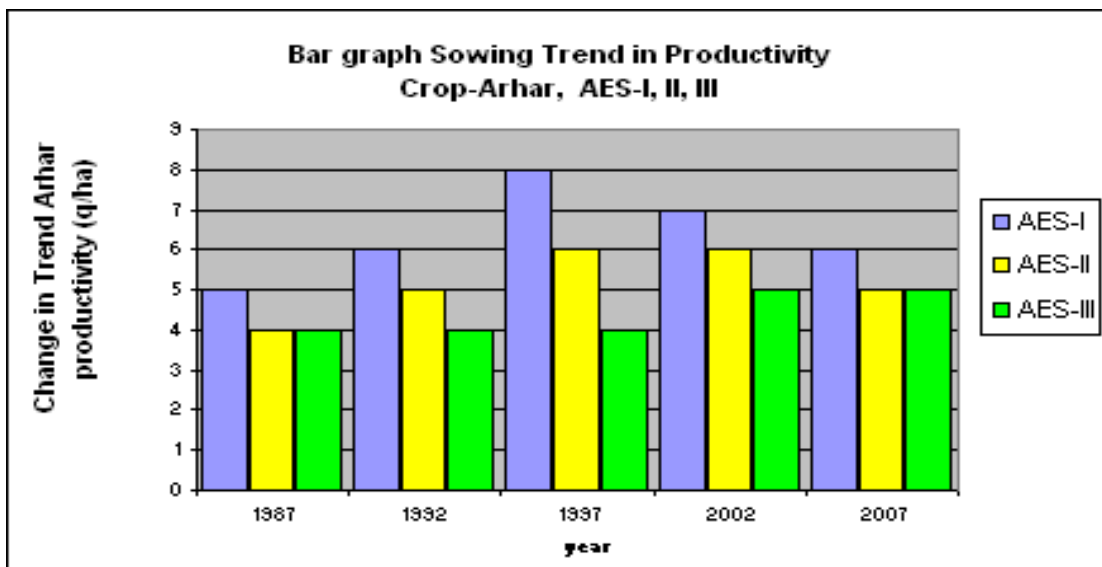
Change in Trend Maize productivity (q/ha)in representative village			
Year	AES-I	AES-II	AES-III
1987	20	18	16
1992	24	20	18
1997	29	25	21
2002	32	26	22
2007	35	28	26



Change in Trend Ragi productivity (q/ha)in representative village			
Year	AES-I	AES-II	AES-III
1987	10	8	6
1992	12	9	8
1997	15	9	8
2002	15	10	9
2007	18	12	12



Change in Trend Arhar productivity (q/ha)in representative village			
Year	AES-I	AES-II	AES-III
1987	5	4	4
1992	6	5	4
1997	8	6	4
2002	7	6	5
2007	6	5	5





**TABLE-5.10: Analysis of Specific Problems associated with each Existing Farming System and its Solutions and Strategies as Perceived by the Farmers**

Agro-ecological situation-I						Resource Rich farmers								
TYPE OF ENTERPRISES COMMODITIES	EFS-I					EFS-II								
	Specific problem*	No of Families affected (%)	Solution as proposed by farmer **	Reasons for non adoption #	Proposed Strategies # #	Specific problem*	No of Families affected (%)	Solution as proposed by farmer **	Reasons for non adoption #	Proposed Strategies # #				
<b>Agricultural crops</b>														
<b>Rainfed</b>														
Wheat	2,5,7,9	80	2,3,6,7,8,12	1,2,3,4,	1,2,3,4	2,5,7,9	66	2,3,6,7,8,12	1,2,3,4,	1,2,3,4,5,7,10,12,13,14,15				
Major Vegetables	1,2,3,4,5,6,7,8,9,16	100	1,2,3,6,7,8	1,2,3,4,	1,2,3,4	-	-	-	-	-				
Potato	1,2,3,4,5,6,7,8,9,16	60	1,2,3,6,7,8	1,2,3,4,	1,2,3,4	1,2,3,4,5,6,7,8,9,16	50	1,2,3,6,7,8	1,2,3,4,	1,2,3,4,5,7,9,10,12,13,14,17				
Pea	1,2,3,4,5,6,7,8,9,16	60	1,2,3,6,7,8	1,2,3,4,	1,2,3,4	1,2,3,4,5,6,7,8,9,16	50	1,2,3,6,7,8	1,2,3,4,	1,2,3,4,5,7,9,10,12,13,14,17				
Paddy	Local	-	-	-	-	-	-	-	-	-				
	H.Y.V.	1,4,5,6,7,8	32	1,2,3,6,7,8	1,2,3,4,	1,2,3,4	1,4,5,6,7,8	66	1,2,3,6,7,8	1,2,3,4,	1,2,3,4,5,7,8,10,12,13,14,16,17			
	Hybrid	1,4,5,6,7,8	68	1,2,3,6,7,8	1,2,3,4,	1,2,3,4	1,4,5,6,7,8	100	1,2,3,6,7,8	1,2,3,4,	1,2,3,4,5,7,8,10,12,13,14,16,17			
Maize	1,4,5,6,7,8	60	1,2,3,6,7,8	1,2,3,4,	1,2,3,4,6	1,4,5,6,7,8	100	1,2,3,6,7,8	1,2,3,4,	1,2,3,4,5,6,7,9,10,12,13,14,17				
Pigeon pea	1,2,3,4,5,7,8	20	1,2,3,6,7,8	1,2,3,4,	1,2,3,4,6	-	-	-	-	-				
Black gram	1,2,3,4,5,7,8	20	1,2,3,6,7,8	1,2,3,4,	1,2,3,4,6	-	-	-	-	-				
Ragi	1,2,3,4,5,7	32	1,2,3,6,7,8	1,2,3,4,	1,2,3,4,6	-	-	-	-	-				
Ginger	1,2,3,4,5,7	48	1,2,3,6,7,8	1,2,3,4,	1,2,3,4,	-	-	-	-	-				
Ground Hut	1,2,3,4,5,7	16	1,2,3,6,7,8	1,2,3,4,	1,2,3,4,	1,2,3,4,5,7	100	1,2,3,6,7,8	1,2,3,4,	1,2,3,4,5,6,7,9,10,12,13,14,17				
<b>Horticulture</b>														
Vegetables	1,2,3,4,5,6,7	100	1,2,3,6,7,8	1,2,3,4,	1,2,3,4,	1,2,3,4,5,6,7	100	1,2,3,6,7,8	1,2,3,4,	1,2,3,4,5,7,9,10,12,13,14,17				
<b>-Animal Husbandry-Rs./Animal/annum</b>														
Cows	12,13,14,15,16	16	9,13,15,16	1,2,3,4,	1,2,3,4,	12,13,14,15,16	66	9,13,15,16	1,2,3,4,	1,2,3,4,5,11,12,13,14,18				
Buffaloes	12,13,14,15,16	40	9,13,15,16	1,2,3,4,	1,2,3,4,	12,13,14,15,16	100	9,13,15,16	1,2,3,4,	1,2,3,4,5,11,12,13,14,18				
Goat	12,13,14,15,16	40	9,13,15,16	1,2,3,4,	1,2,3,4,	12,13,14,15,16	50	9,13,15,16	1,2,3,4,	1,2,3,4,5,11,12,13,14,18				
Poultry	12,13,14,15,16	60	9,13,15,16	1,2,3,4,	1,2,3,4,	12,13,14,15,16	50	9,13,15,16	1,2,3,4,	1,2,3,4,5,11,12,13,14,18				
<b>Specific Problem*</b>		<b>Proposed solution **</b>				<b>Reasons for non adoption #</b>		<b>Proposed Strategies # #</b>						
<ol style="list-style-type: none"> <li>Erratic distribution of rainfall</li> <li>Non adoption of recommended varieties.</li> <li>Use of traditional low yielding varieties.</li> <li>Indigenous method of sowing/Transplanting.</li> <li>Low input use.</li> <li>use of Unbalance fertilizer.</li> <li>Reluctance about seed treatment.</li> <li>Low use of organics.</li> <li>Low availability of water in winter &amp; Summer.</li> <li>Lack of improved breeds.</li> <li>Marketing control by middle man .</li> <li>Lack of improved breeds.</li> <li>Lack of awareness.</li> <li>Non availability of perennial water sources.</li> </ol>		<ol style="list-style-type: none"> <li>Inadequate availability of fodder.</li> <li>Lack of finance.</li> <li>Small land holding.</li> <li>Non adoption of crop rotation.</li> <li>non adoption of inter crop being in uplands.</li> <li>Lack of knowledge on secondary and micronutrient use.</li> <li>No lining in acid soils.</li> <li>More care of Vegetable crops compared to rice because of cast income.</li> <li>Poor management of animal.</li> <li>Increase in current fallow in upland.</li> <li>Lack of awareness.</li> </ol>				<ol style="list-style-type: none"> <li>Application of lime in acid soils.</li> <li>Managing rain water for use in agricultural crops.</li> <li>Improved crop production technologies.</li> <li>Line sowing/transplanting of crops.</li> <li>Use of high yielding varieties.</li> <li>Promotion of INM in vegetables/pulses/oilseeds.</li> <li>Balanced use of plant nutrients.</li> <li>Formation of farmers marketing society &amp; establishment of collection center in local market.</li> <li>Use of improved breeds of animals.</li> <li>Crop rotation.</li> <li>Control of diseases and pests in crops.</li> </ol>		<ol style="list-style-type: none"> <li>Developing improved post harvest techniques.</li> <li>Controlling animal diseases.</li> <li>Better nutrition of animals.</li> <li>Training and exposure visits.</li> <li>Dissemination of knowledge through mass media.</li> <li>Use of phosphate, calcium and lime with bio fertilizers for crops.</li> <li>Preventive vaccination.</li> <li>Using low water requiring crops such as coarse cereals.</li> <li>Inter cropping with Kharif pulses/ Vegetables.</li> </ol>		<ol style="list-style-type: none"> <li>Lack of capitals.</li> <li>Lack of awareness.</li> <li>Poor transfer of technology to farmers.</li> <li>Non-availability of inputs.</li> <li>Inability to take risks under rainfed conditions.</li> <li>Lack of knowledge/motivation .</li> <li>Poor market information's.</li> <li>Insecure profit.</li> <li>Poor transport.</li> <li>Poor excess to improved technologies.</li> <li>Reluctance /Negligence by financial institution due to increasing NPA.</li> <li>Availability of adequate Irrigation falsity.</li> </ol>		<ol style="list-style-type: none"> <li>Training and exposures visit.</li> <li>Demonstrations.</li> <li>providing financial assistance crop / Animal insurance.</li> <li>providing market opportunities.</li> <li>Gearing quality input supply in rural areas.</li> <li>Inter cropping in uplands.</li> <li>Follow up IPM &amp; INM.</li> <li>Promotion to green manuring to increase organic matter in soil.</li> <li>using of lime in acidic soil.</li> <li>More emphasis on judicious use of soil and water.</li> <li>using improved breeds of cattle.</li> <li>Farmer scientist interaction.</li> <li>Linkage to financial institution.</li> <li>Promoted zero tillage/lest tillage.</li> <li>paarcropping of oil seeds/pulses in low land.</li> <li>crop rotation.</li> <li>Improvement of indigenous breeds.</li> </ol>		

**TABLE-5.11: Analysis of Specific Problems associated with each Existing Farming System and its Solutions and Strategies as Perceived by the Farmers  
Agro-ecological situation-I**

TYPE OF ENTERPRISES COMMODITIES	EFS-I					EFS-II					EFS-III												
	Specific problem*	No of Families affected (%)	Solution as proposed by farmer **	Reasons for non adoption #	Proposed Strategies # #	Specific problem*	No of Families affected (%)	Solution as proposed by farmer **	Reasons for non adoption #	Proposed Strategies # #	Specific problem*	No of Families affected (%)	Solution as proposed by farmer **	Reasons for non adoption #	Proposed Strategies # #								
<b>Agricultural crops</b>																							
<b>Irrigated</b>																							
Wheat	2,4,5,7,9	23	2,3,6,7,8	1,2,3,4	1,2,3,4	2,4,5,7,9	14	2,3,6,7,8	1,2,3,4	1,2,3,4	-	-	-	-	-								
Major Vegetable	1,2,3,4,5,6,7,8,9	21	1,2,3,6,7,8	1,2,3,4	1,2,3,4	1,2,3,4,5,6,7,8,9	18	1,2,3,6,7,8	1,2,3,4	1,2,3,4	-	-	-	-	-								
Pea	1,2,3,4,5,6,7,8,9	26	1,2,3,6,7,8,11	1,2,3,4	1,2,3,4	1,2,3,4,5,6,7,8,9	22	1,2,3,6,7,8,11	1,2,3,4	1,2,3,4	-	-	-	-	-								
<b>Rainfed</b>																							
Paddy	Local	1,2,3,4,5,6,7,8,17,22	5	1,2,3,4,5,6,7,8	1,2,3,4	1,2,3,4	1,2,3,4,5,6,7,8,17,22	12	1,2,3,4,5,6,7,8	1,2,3,4	1,2,3,4	1,2,3,4,5,6,7,8,17,22	41	1,2,3,4,5,6,7,8	1,2,3,4,6,7,8,10,11,12	1,2,3,4,5,7,8,10,12,13,14,16,17							
	H.Y.V.	1,4,5,6,7,8	24	2,3,4,6,7,8,11	1,2,3,4	1,2,3,4	1,4,5,6,7,8	30	2,3,4,6,7,8,11	1,2,3,4	1,2,3,4	1,4,5,6,7,8,22	59	2,3,4,6,7,8,11,12,15,16,17,18	1,2,3,4,6,7,8,10,11,12	1,2,3,4,5,7,8,10,12,13,14,16,17							
	Hybrid	1,4,5,6,7,8	71	2,3,4,6,7,8,11	1,2,3,4	1,2,3,4	1,4,5,6,7,8	58	2,3,4,6,7,8,11	1,2,3,4	1,2,3,4	-	-	-	-	-							
Maize	1,4,5,6,7,8	29	1,2,3,4,5,6,7,8,10	1,2,3,4	1,2,3,4	1,4,5,6,7,8	40	1,2,3,4,5,6,7,8,10	1,2,3,4	1,2,3,4	-	-	-	-	-								
Pigeon Pea	1,2,3,4,5,7,8	17	1,2,3,4,5,6,7,8,10	1,2,3,4	1,2,3,4	1,2,3,4,5,7,8	25	1,2,3,4,5,6,7,8,10	1,2,3,4	1,2,3,4	-	-	-	-	-								
Black gram	1,2,3,4,5,7,8	8	1,2,3,4,5,6,7,8,10	1,2,3,4	1,2,3,4	1,2,3,4,5,7,8	33	1,2,3,4,5,6,7,8,10	1,2,3,4	1,2,3,4	-	-	-	-	-								
Ragi	1,2,3,4,5,7	17	1,2,3,4,5,6,7,8,10	1,2,3,4	1,2,3,4	1,2,3,4,5,7	33	1,2,3,4,5,6,7,8,10	1,2,3,4	1,2,3,4	-	-	-	-	-								
Ginger	1,2,3,4,5,7	17	1,2,3,5,6,7,8,11	1,2,3,4	1,2,3,4	1,2,3,4,5,7	12	1,2,3,5,6,7,8,11	1,2,3,4	1,2,3,4	-	-	-	-	-								
Ground Nut	1,2,3,4,5,7	7	1,2,3,5,6,7,8,11	1,2,3,4	1,2,3,4	1,2,3,4,5,7	28	1,2,3,5,6,7,8,11	1,2,3,4	1,2,3,4	-	-	-	-	-								
<b>-Horticulture</b>																							
Orchard	2,3,11,16,17,24,25	2	2,3,5,6,8,10,12,17	1,2,3,4	1,2,3,4	-	-	-	-	-	-	-	-	-	-								
Vegetables	1,2,3,4,5,6,7	100	1,2,3,6,7,8,12	1,2,3,4	1,2,3,4	1,2,3,4,5,6,7	90	1,2,3,6,7,8,12	1,2,3,4	1,2,3,4	-	-	-	-	-								
<b>-Animal Husbandry-Rs./Animal/annum</b>																							
Cows	12,13,14,15,16	9	8,9,13,14,15,16	1,2,3,4	1,2,3,4	-	-	-	-	-	-	-	-	-	-								
Buffaloes	12,13,14,15,16	24	8,9,13,14,15,16	1,2,3,4	1,2,3,4	-	-	-	-	-	-	-	-	-	-								
Goat	12,13,14,15,16	100	8,9,13,14,15,16	1,2,3,4	1,2,3,4	-	-	-	-	-	12,13,14,15,16	100	8,9,13,14,15,16	1,2,3,4	1,2,3,4								
<b>Specific Problem*</b>		<b>Proposed solution **</b>				<b>Reasons for non adoption #</b>				<b>Proposed Strategies # #</b>													
<ol style="list-style-type: none"> <li>Erratic distribution of rainfall</li> <li>Non adoption of recommended varieties.</li> <li>Use of traditional low yielding varieties.</li> <li>Indigenous method of sowing/Transplanting.</li> <li>Low input use.</li> <li>use of Unbalance fertilizer.</li> <li>Reluctance about seed treatment.</li> <li>Low use of organics.</li> <li>Low availability of water in winter &amp; Summer.</li> <li>Lack of improved breeds.</li> <li>Marketing control by middle man .</li> <li>Lack of improved breeds.</li> <li>Lack of awareness.</li> <li>Non availability of perennial water sources.</li> </ol>		<ol style="list-style-type: none"> <li>Inadequate availability of fodder.</li> <li>Lack of finance.</li> <li>Small land holding.</li> <li>Non adoption of crop rotation.</li> <li>non adoption of inter crop ping in uplands.</li> <li>Lack of knowledge on secondary and micronutrient use.</li> <li>No lining in acid soils.</li> <li>More care of Vegetable crops compared to rice because of cast income.</li> <li>Poor management of animal</li> <li>Increase in current fallow in upland.</li> <li>Lack of awareness.</li> </ol>				<ol style="list-style-type: none"> <li>Application of lime in acid soils.</li> <li>Managing rain water for use in agricultural crops.</li> <li>Improved crop production technologies.</li> <li>Line sowing/transplanting of crops.</li> <li>Use of high yielding varieties.</li> <li>Promotion of INM in vegetables/ pulses/oilseeds.</li> <li>Balanced use of plant nutrients.</li> <li>Formation of farmers marketing society &amp; establishment of collection center in local market.</li> <li>Use of improved breeds of animals.</li> <li>Crop rotation.</li> <li>Control of diseases and pests in crops.</li> </ol>				<ol style="list-style-type: none"> <li>Developing improved post harvest techniques.</li> <li>Controlling animal diseases.</li> <li>Better nutrition of animals.</li> <li>Training and exposure visits.</li> <li>Demonstration.</li> <li>Dissemination of knowledge through mass media.</li> <li>Use of phosphate, calcium and lime with bio fertilizers for crops.</li> <li>Preventive vaccination.</li> <li>Using low water requiring crops such as coarse cereals.</li> <li>Inter cropping with Kharif pulses/ Vegetables.</li> </ol>				<ol style="list-style-type: none"> <li>lack of capitals.</li> <li>Lack of awareness.</li> <li>Poor transfer of technology to farmers.</li> <li>Non-availability of inputs.</li> <li>Inability to take risks under rainfed conditions.</li> <li>Lack of knowledge/motivation .</li> <li>Poor market information's.</li> <li>Insecure profit.</li> <li>Poor transport.</li> <li>Poor excess to improved technologies.</li> <li>Reluctance /Negligence by financial institution due to increasing NPA.</li> <li>Availability of adequate Irrigation falsity.</li> </ol>				<ol style="list-style-type: none"> <li>Training and exposures visit.</li> <li>Demonstrations.</li> <li>providing financial assistance crop / Animal insurance.</li> <li>providing market opportunities.</li> <li>Gearing quality input supply in rural areas.</li> <li>Inter cropping in uplands.</li> <li>Follow up IPM &amp; INM.</li> <li>Promotion to green manuring to increase organic matter in soil.</li> <li>using of lime in acidic soil.</li> <li>More emphasis on judicious use of soil and water.</li> <li>using improved breeds of cattle.</li> <li>Farmer scientist interaction.</li> <li>Farmer scientist interaction.</li> <li>Linkage to financial institution.</li> <li>Promoted zero tillage/lest tillage.</li> <li>paarcropping of oil seeds/pulses in low land.</li> <li>crop rotation.</li> <li>Improvement of indigenous breeds.</li> </ol>					

**TABLE-5.12: Analysis of Specific Problems associated with each Existing Farming System and its Solutions and Strategies as Perceived by the Farmers Agro-ecological situation-II Resource Rich farmers**

TYPE OF ENTERPRISES COMMODITIES		EFS-I					EFS-II				
		Specific problem*	No of Families affected (%)	Solution as proposed by farmer **	Reasons for non adoption #	Proposed Strategies # #	Specific problem*	No of Families affected (%)	Solution as proposed by farmer **	Reasons for non adoption #	Proposed Strategies # #
<b>Agricultural crops</b>											
<b>Irrigated</b>											
Wheat	2,4,5,7,9	37.5	2,3,6,7,8	1,2,3,4	1,2,3,4	2,4,5,7,9	100	2,3,6,7,8	1,2,3,4	1,2,3,4	
Major Vegetable	1,2,3,4,5,6,7,8,9,16	62.5	1,2,3,6,7,8	1,2,3,4	1,2,3,4	1,2,3,4,5,6,7,8,9,16	100	1,2,3,6,7,8	1,2,3,4	1,2,3,4	
Potato	-	-	-	-	-	-	-	-	-	-	
Pea	1,2,3,4,5,6,7,8,9,16	25	1,2,3,6,7,8,11	1,2,3,4	1,2,3,4,5	-	-	-	-	-	
<b>Rainfed</b>											
Paddy	Local	1,2,3,4,5,6,7,8,17,22	-	2,3,4,6,7,8,11	1,2,3,4	1,2,3,4	-	-	-	-	
	H.Y.V.	1,4,5,6,7,8,22	75	2,3,4,6,7,8,11	1,2,3,4	1,2,3,4	1,4,5,6,7,8,22	100	2,3,4,6,7,8,11	1,2,3,4	
	Hybrid	1,4,5,6,7,8,22	25	2,3,4,6,7,8,11	1,2,3,4	1,2,3,4	-	-	-	-	
Maize	1,4,5,6,7,8	12.5	1,2,3,4,5,6,7,8,10	1,2,3,4	1,2,3,4	1,4,5,6,7,8	100	1,2,3,4,5,6,7,8,10	1,2,3,4	1,2,3,4	
Pigeon Pea	1,2,3,4,5,7,8	35.5	1,2,3,4,5,6,7,8,10	1,2,3,4	1,2,3,4	1,2,3,4,5,7,8	100	1,2,3,4,5,6,7,8,10	1,2,3,4	1,2,3,4	
Black gram	1,2,3,4,5,7,8	37.5	1,2,3,4,5,6,7,8,10	1,2,3,4	1,2,3,4	1,2,3,4,5,7,8	50	1,2,3,4,5,6,7,8,10	1,2,3,4	1,2,3,4	
Ragi	1,2,3,4,5,7,8	50	1,2,3,4,5,6,7,8,10	1,2,3,4	1,2,3,4	1,2,3,4,5,7,8	100	1,2,3,4,5,6,7,8,10	1,2,3,4	1,2,3,4	
<b>-Horticulture</b>											
Orchard	-	-	-	-	-	-	-	-	-	-	
Vegetables	1,2,3,4,5,6,7,8	75	1,2,3,6,7	1,2,3,4	1,2,3,4	1,2,3,4,5,6,7,8	50	1,2,3,6,7	1,2,3,4	1,2,3,4	
<b>-Animal Husbandry-Rs./Animal/annum</b>											
Cow	12,13,14,15,16	37.5	8,9,13,14,15,16	1,2,3	1,2,3,4	-	-	-	-	-	
Buffaloes	12,13,14,15,16	75	8,9,13,14,15,16	1,2,3	1,2,3,4	12,13,14,15,16	100	8,9,13,14,15,16	1,2,3	1,2,3,4	
Goat	12,13,14,15,16	100	8,9,13,14,15,16	1,2,3	1,2,3,4	12,13,14,15,16	100	8,9,13,14,15,16	1,2,3	1,2,3,4	
Poultry	12,13,14,15,16	75	8,9,13,14,15,16	1,2,3	1,2,3,4	12,13,14,15,16	100	8,9,13,14,15,16	1,2,3	1,2,3,4	

Specific Problem*	Proposed solution **	Reasons for non adoption #	Proposed Strategies # #		
<ol style="list-style-type: none"> <li>Erratic distribution of rainfall</li> <li>Non adoption of recommended varieties.</li> <li>Use of traditional low yielding varieties.</li> <li>Indigenous method of sowing/Transplanting.</li> <li>Low input use.</li> <li>use of Unbalance fertilizer.</li> <li>Reluctance about seed treatment.</li> <li>Low use of organics.</li> <li>Low availability of water in winter &amp; Summer.</li> <li>Lack of improved breeds.</li> <li>Marketing control by middle man .</li> <li>Lack of improved breeds.</li> <li>Lack of awareness.</li> <li>Non availability of perennial water sources.</li> </ol>	<ol style="list-style-type: none"> <li>Inadequate availability of fodder.</li> <li>Lack of finance.</li> <li>Small land holding.</li> <li>Non adoption of crop rotation.</li> <li>non adoption of inter crop ping in uplands.</li> <li>Lack of knowledge on secondary and micronutrient use.</li> <li>No lining in acid soils.</li> <li>More care of Vegetable crops compared to rice because of cast income.</li> <li>Poor management of animal.</li> <li>Increase in current fallow in upland.</li> <li>Lack of awareness.</li> </ol>	<ol style="list-style-type: none"> <li>Application of lime in acid soils.</li> <li>Managing rain water for use in agricultural crops.</li> <li>Improved crop production technologies.</li> <li>Line sowing/transplanting of crops.</li> <li>Use of high yielding varieties.</li> <li>Promotion of INM in vegetables/ pulses/oilseeds.</li> <li>Balanced use of plant nutrients.</li> <li>Formation of farmers marketing society &amp; establishment of collection center in local market.</li> <li>Use of improved breeds of animals.</li> <li>Crop rotation.</li> <li>Control of diseases and pests in crops.</li> </ol>	<ol style="list-style-type: none"> <li>Developing improved post harvest techniques.</li> <li>Controlling animal diseases.</li> <li>Better nutrition of animals.</li> <li>Training and exposure visits.</li> <li>Demonstration.</li> <li>Dissemination of knowledge through mass media.</li> <li>Use of phosphate, calcium and lime with bio fertilizers for crops.</li> <li>Preventive vaccination.</li> <li>Using low water requiring crops such as coarse cereals.</li> <li>Inter cropping with Kharif pulses/ Vegetables.</li> </ol>	<ol style="list-style-type: none"> <li>Lack of capitals.</li> <li>Lack of awareness.</li> <li>Poor transfer of technology to farmers.</li> <li>Non-availability of inputs.</li> <li>Inability to take risks under rainfed conditions.</li> <li>Lack of knowledge/motivation .</li> <li>Poor market information's.</li> <li>Insecure profit.</li> <li>Poor transport.</li> <li>Poor excess to improved technologies.</li> <li>Reluctance /Negligence by financial institution due to increasing NPA.</li> <li>Availability of adequate Irrigation falsity.</li> </ol>	<ol style="list-style-type: none"> <li>Training and exposures visit.</li> <li>Demonstrations.</li> <li>providing financial assistance crop / Animal insurance.</li> <li>providing market opportunities.</li> <li>Gearing quality input supply in rural areas.</li> <li>Inter cropping in uplands.</li> <li>Follow up IPM &amp; INM.</li> <li>Promotion to green manuring to increase organic matter in soil.</li> <li>using lime in acidic soil.</li> <li>More emphasis on judicious use of soil and water.</li> <li>using improved breeds of cattle.</li> <li>Farmer scientist interaction.</li> <li>Farmer scientist interaction.</li> <li>Linkage to financial institution.</li> <li>Promoted zero tillage/leest tillage.</li> <li>paarcropping of oil seeds/pulses in low land.</li> <li>crop rotation.</li> <li>Improvement of indigenous breeds.</li> </ol>

**TABLE-5.13: Analysis of Specific Problems associated with each Existing Farming System and its Solutions and Strategies as Perceived by the Farmers Agro-ecological situation-II Resource Poor farmers**

TYPE OF ENTERPRISES COMMODITIES	EFS-I					EFS-II								
	Specific problem*	No of Families affected (%)	Solution as proposed by farmer **	Reasons for non adoption #	Proposed Strategies # #	Specific problem*	No of Families affected (%)	Solution as proposed by farmer **	Reasons for non adoption #	Proposed Strategies # #				
<b>Agricultural crops</b>														
<b>Irrigated</b>														
Wheat	2,4,5,7,9	9.5	2,3,6,7,8	1,2,3,4	1,2,3,4	-	-	-	-	-				
Major Vegetable	1,2,3,4,5,6,7,8,9,16	8	1,2,3,6,7,8	1,2,3,4	1,2,3,4	-	-	-	-	-				
Pea	1,2,3,4,5,6,7,8,9,16	6	1,2,3,6,7,8	1,2,3,4	1,2,3,4	-	-	-	-	-				
Paddy	Local	1,2,3,4,5,6,7,8,16	49	1,2,3,4,5,6,7,8	1,2,3,4	1,2,3,4	1,2,3,4,5,6,7,8,16	85	1,2,3,4,5,6,7,8	1,2,3,4	1,2,3,4			
	H.Y.V.	1,4,5,6,7,8	33	2,3,4,6,7,8,11	1,2,3,4	1,2,3,4	1,4,5,6,7,8	25	2,3,4,6,7,8,11	1,2,3,4	1,2,3,4			
	Hybrid	1,4,5,6,7,8	16	2,3,4,6,7,8,11	1,2,3,4	1,2,3,4	-	-	-	-	-			
Maize	1,4,5,6,7,8	5	1,2,3,4,5,6,7,8,10	1,2,3,4	1,2,3,4	1,4,5,6,7,8	16	1,2,3,4,5,6,7,8,10	1,2,3,4	1,2,3,4				
Pigeon Pea	1,2,3,4,5,7,8	7	1,2,3,4,5,6,7,8,10	1,2,3,4	1,2,3,4	-	-	-	-	-				
Black gram	1,2,3,4,5,7,8	9	1,2,3,4,5,6,7,8,10	1,2,3,4	1,2,3,4	1,2,3,4,5,7,8	10	1,2,3,4,5,6,7,8,10	1,2,3,4	1,2,3,4				
Ragi	1,2,3,4,5,7,8	7	1,2,3,4,5,6,7,8,10	1,2,3,4	1,2,3,4	1,2,3,4,5,7,8	41	1,2,3,4,5,6,7,8,10	1,2,3,4	1,2,3,4				
<b>-Horticulture</b>														
Orchard	-	-	-	-	-	-	-	-	-	-				
Vegetables	1,2,3,4,5,6,7,8	5.5	1,2,3,6,7	1,2,3,4	1,2,3,4	1,2,3,4,5,6,7,8	25	1,2,3,6,7	1,2,3,4	1,2,3,4				
<b>-Animal Husbandry-Rs./Animal/annum</b>														
Cows	12,13,14,15,16	25	8,9,13,14,15,16	1,2,3,4	1,2,3,4	-	-	-	-	-				
Buffaloes	-	-	-	-	-	-	-	-	-	-				
Goat	12,13,14,15,16	95	8,9,13,14,15,16	1,2,3	1,2,3,4	-	-	-	-	-				
Poultry	12,13,14,15,16	91	8,9,13,14,15,16	1,2,3	1,2,3,4	-	-	-	-	-				
Fisheries	12,13,14,15,16,3	2.5	8,9,13,14,15,16	1,2,3	1,2,3,4	-	-	-	-	-				
<b>Specific Problem*</b>		<b>Proposed solution **</b>			<b>Reasons for non adoption #</b>		<b>Proposed Strategies # #</b>							
<ol style="list-style-type: none"> <li>Erratic distribution of rainfall</li> <li>Non adoption of recommended varieties.</li> <li>Use of traditional low yielding varieties.</li> <li>Indigenous method of sowing/Transplanting.</li> <li>Low input use.</li> <li>use of Unbalance fertilizer.</li> <li>Reluctance about seed treatment.</li> <li>Low use of organics.</li> <li>Low availability of water in winter &amp; Summer.</li> <li>Lack of improved breeds.</li> <li>Marketing control by middle man .</li> <li>Lack of improved breeds.</li> <li>Lack of awareness.</li> <li>Non availability of perennial water sources.</li> </ol>		<ol style="list-style-type: none"> <li>Inadequate availability of fodder.</li> <li>Lack of finance.</li> <li>Small land holding.</li> <li>Non adoption of crop rotation.</li> <li>non adoption of inter crop ping in uplands.</li> <li>Lack of knowledge on secondary and micronutrient use.</li> <li>No lining in acid soils.</li> <li>More care of Vegetable crops compared to rice because of cast income.</li> <li>Poor management of animal.</li> <li>Increase in current fallow in upland.</li> <li>Lack of awareness.</li> </ol>			<ol style="list-style-type: none"> <li>Application of lime in acid soils.</li> <li>Managing rain water for use in agricultural crops.</li> <li>Improved crop production technologies.</li> <li>Line sowing/transplanting of crops.</li> <li>Use of high yielding varieties.</li> <li>Promotion of INM in vegetables/pulses/oilseeds.</li> <li>Balanced use of plant nutrients.</li> <li>Formation of farmers marketing society &amp; establishment of collection center in local market.</li> <li>Use of improved breeds of animals.</li> <li>Crop rotation.</li> <li>Control of diseases and pests in crops.</li> </ol>		<ol style="list-style-type: none"> <li>Developing improved post harvest techniques.</li> <li>Controlling animal diseases.</li> <li>Better nutrition of animals.</li> <li>Training and exposure visits.</li> <li>Demonstration.</li> <li>Dissemination of knowledge through mass media.</li> <li>Use of phosphate, calcium and lime with bio fertilizers for crops.</li> <li>Preventive vaccination.</li> <li>Using low water requiring crops such as coarse cereals.</li> <li>Inter cropping with Kharif pulses/ Vegetables.</li> </ol>		<ol style="list-style-type: none"> <li>lack of capitals.</li> <li>Lack of awareness.</li> <li>Poor transfer of technology to farmers.</li> <li>Non-availability of inputs.</li> <li>Inability to take risks under rainfed conditions.</li> <li>Lack of knowledge/motivation .</li> <li>Poor market information's.</li> <li>Insecure profit.</li> <li>Poor transport.</li> <li>Poor excess to improved technologies.</li> <li>Reluctance /Negligence by financial institution due to increasing NPA.</li> <li>Availability of adequate Irrigation falsity.</li> </ol>		<ol style="list-style-type: none"> <li>Training and exposures visit.</li> <li>Demonstrations.</li> <li>providing financial assistance crop / Animal insurance.</li> <li>providing market opportunities.</li> <li>Gearing quality input supply in rural areas.</li> <li>Inter cropping in uplands.</li> <li>Follow up IPM &amp; INM.</li> <li>Promotion to green manuring to increase organic matter in soil.</li> <li>using of lime in acidic soil.</li> <li>More emphasis on judicious use of soil and water.</li> <li>using improved breeds of cattle.</li> <li>Farmer scientist interaction.</li> <li>Linkage to financial institution.</li> <li>Promoted zero tillage/leest tillage.</li> <li>paarcropping of oil seeds/pulses in low land.</li> <li>crop rotation.</li> <li>Improvement of indigenous breeds.</li> </ol>			

**TABLE-5.14: Analysis of Specific Problems associated with each Existing Farming System and its Solutions and Strategies as Perceived by the Farmers Agro-ecological situation-III Resource Rich farmers**

TYPE OF ENTERPRISES COMMODITIES	EFS-I					EFS-II						
	Specific problem*	No of Families affected (%)	Solution as proposed by farmer **	Reasons for non adoption #	Proposed Strategies # #	Specific problem*	No of Families affected (%)	Solution as proposed by farmer **	Reasons for non adoption #	Proposed Strategies # #		
<b>Agricultural crops</b>												
<b>Irrigated</b>												
Wheat	2,4,5,7,9	45	2,3,6,7,8	1,2,3,4	1,2,3,4	2,4,5,7,9	100	2,3,6,7,8	1,2,3,4	1,2,3,4		
Major Vegetable	1,2,3,4,5,6,7,8,9,16	68	2,3,6,7,8	1,2,3,4	1,2,3,4	1,2,3,4,5,6,7,8,9,16	67	2,3,6,7,8	1,2,3,4	1,2,3,4		
Potato	1,2,3,4,5,6,7,8,9,16	36	2,3,6,7,8	1,2,3,4	1,2,3,4	1,2,3,4,5,6,7,8,9,16	67	2,3,6,7,8	1,2,3,4	1,2,3,4		
Pea	1,2,3,4,5,6,7,8,9,16	18	2,3,6,7,8	1,2,3,4	1,2,3,4	-	-	-	-	-		
<b>Rainfed</b>												
Paddy	Local	1,2,3,4,5,6,7,8,17	-	2,3,6,7,8	1,2,3,4	1,2,3,4	-	-	-	-		
	H.Y.V.	1,4,5,6,7,8	68	2,3,6,7,8	1,2,3,4	1,2,3,4	1,4,5,6,7,8	100	2,3,6,7,8	1,2,3,4		
	Hybrid	1,4,5,6,7,8	36	2,3,6,7,8	1,2,3,4	1,2,3,4	1,4,5,6,7,8	100	2,3,6,7,8	1,2,3,4		
Maize	1,4,5,6,7,8	27	2,3,6,7,8	1,2,3,4	1,2,3,4	1,4,5,6,7,8	100	2,3,6,7,8	1,2,3,4	1,2,3,4		
Pigeon Pea	1,4,5,6,7,8	45	2,3,6,7,8	1,2,3,4	1,2,3,4	1,4,5,6,7,8	100	2,3,6,7,8	1,2,3,4	1,2,3,4		
Black gram	1,4,5,6,7,8	36	2,3,6,7,8	1,2,3,4	1,2,3,4	1,4,5,6,7,8	100	2,3,6,7,8	1,2,3,4	1,2,3,4		
Ragi	1,4,5,6,7,8	45	2,3,6,7,8	1,2,3,4	1,2,3,4	1,4,5,6,7,8	100	2,3,6,7,8	1,2,3,4	1,2,3,4		
<b>Horticulture</b>												
Vegetable	1,4,5,6,7,8	86	2,3,6,7,8	1,2,3,4	1,2,3,4	1,4,5,6,7,8	67	2,3,6,7,8	1,2,3,4	1,2,3,4		
<b>Animal Husbandry</b>												
Cow	12,13,14,15,16	18	8,9,13,14,15,16	1,2,3,4	1,2,3,4	12,13,14,15,16	100	8,9,13,14,15,16	1,2,3,4	1,2,3,4		
Buffaloes	12,13,14,15,16	82	8,9,13,14,15,16	1,2,3,4	1,2,3,4	12,13,14,15,16	100	8,9,13,14,15,16	1,2,3,4	1,2,3,4		
Goat	12,13,14,15,16	82	8,9,13,14,15,16	1,2,3,4	1,2,3,4	12,13,14,15,16	100	8,9,13,14,15,16	1,2,3,4	1,2,3,4		
Duckery	12,13,14,15,16	13	8,9,13,14,15,16	1,2,3,4	1,2,3,4	-	-	-	-	-		
Poultry	12,13,14,15,16	68	8,9,13,14,15,16	1,2,3,4	1,2,3,4	-	-	-	-	-		
<b>Specific Problem*</b>		<b>Proposed solution **</b>		<b>Reasons for non adoption #</b>		<b>Proposed Strategies # #</b>						
<ol style="list-style-type: none"> <li>Erratic distribution of rainfall</li> <li>Non adoption of recommended varieties.</li> <li>Use of traditional low yielding varieties.</li> <li>Indigenous method of sowing/Transplanting.</li> <li>Low input use.</li> <li>use of Unbalance fertilizer.</li> <li>Reluctance about seed treatment.</li> <li>Low use of organics.</li> <li>Low availability of water in winter &amp; Summer.</li> <li>Lack of improved breeds.</li> <li>Marketing control by middle man .</li> <li>Lack of improved breeds.</li> <li>Lack of awareness.</li> <li>Non availability of perennial water sources.</li> </ol>		<ol style="list-style-type: none"> <li>Inadequate availability of fodder.</li> <li>Lack of finance.</li> <li>Small land holding.</li> <li>Non adoption of crop rotation.</li> <li>non adoption of inter crop ping in uplands.</li> <li>Lack of knowledge on secondary and micronutrient use.</li> <li>No lining in acid soils.</li> <li>More care of Vegetable crops compared to rice because of cast income.</li> <li>Poor management of animal.</li> <li>Increase in current fallow in upland.</li> <li>Lack of awareness.</li> </ol>		<ol style="list-style-type: none"> <li>Application of lime in acid soils.</li> <li>Managing rain water for use in agricultural crops.</li> <li>Improved crop production technologies.</li> <li>Line sowing/transplanting of crops.</li> <li>Use of high yielding varieties.</li> <li>Promotion of INM in vegetables/pulses/oilseeds.</li> <li>Balanced use of plant nutrients.</li> <li>Formation of farmers marketing society &amp; establishment of collection center in local market.</li> <li>Use of improved breeds of animals.</li> <li>Crop rotation.</li> <li>Control of diseases and pests in crops.</li> </ol>		<ol style="list-style-type: none"> <li>Developing improved post harvest techniques.</li> <li>Controlling animal diseases.</li> <li>Better nutrition of animals.</li> <li>Training and exposure visits.</li> <li>Demonstration.</li> <li>Dissemination of knowledge through mass media.</li> <li>Use of phosphate, calcium and lime with bio fertilizers for crops.</li> <li>Preventive vaccination.</li> <li>Using low water requiring crops such as coarse cereals.</li> <li>Inter cropping with Kharif pulses/ Vegetables.</li> </ol>		<ol style="list-style-type: none"> <li>lack of capitals.</li> <li>Lack of awareness.</li> <li>Poor transfer of technology to farmers.</li> <li>Non-availability of inputs.</li> <li>Inability to take risks under rainfed conditions.</li> <li>Lack of knowledge/motivation .</li> <li>Poor market information's.</li> <li>Insecure profit.</li> <li>Poor transport.</li> <li>Poor excess to improved technologies.</li> <li>Reluctance /Negligence by financial institution due to increasing NPA.</li> <li>Availability of adequate Irrigation falsity.</li> </ol>		<ol style="list-style-type: none"> <li>Training and exposures visit.</li> <li>Demonstrations.</li> <li>providing financial assistance crop / Animal insurance.</li> <li>providing market opportunities.</li> <li>Gearing quality input supply in rural areas.</li> <li>Inter cropping in uplands.</li> <li>Follow up IPM &amp; INM.</li> <li>Promotion to green manuring to increase organic matter in soil.</li> <li>using of lime in acidic soil.</li> <li>More emphasis on judicious use of soil and water.</li> <li>using improved breeds of cattle.</li> <li>Farmer scientist interaction.</li> <li>Farmer scientist interaction.</li> <li>Linkage to financial institution.</li> <li>Promoted zero tillage/lest tillage.</li> <li>paarcropping of oil seeds/pulses in low land.</li> <li>crop rotation.</li> <li>Improvement of indigenou breeds.</li> </ol>		

**TABLE-5.15: Analysis of Specific Problems associated with each Existing Farming System and its Solutions and Strategies as Perceived by the Farmers**  
**Agro-ecological situation-III** **Resource Poor farmers**

TYPE OF ENTERPRISES COMMODITIES	EFS-I					EFS-II				
	Specific problem*	No of Families affected (%)	Solution as proposed by farmer **	Reasons for non adoption #	Proposed Strategies # #	Specific problem*	No of Families affected (%)	Solution as proposed by farmer **	Reasons for non adoption #	Proposed Strategies # #
<b>Agricultural crops</b>										
<b>Irrigated</b>										
Wheat	2,4,5,7,9	8	2,3,6,7,8	1,2,3,4	1,2,3,4	-	-	-	-	-
Major Vegetable	1,2,3,4,5,6,7,8,9,16	9	2,3,6,7,8	1,2,3,4	1,2,3,4	-	-	-	-	-
Pea	1,2,3,4,5,6,7,8,9,16	5	2,3,6,7,8	1,2,3,4	1,2,3,4	-	-	-	-	-
Paddy	Local	51	1,2,3,4,5,6,7,8	1,2,3,4	1,2,3,4	1,2,3,4,5,6,7,8,17	48	1,2,3,4,5,6,7,8	1,2,3,4	1,2,3,4
	H.Y.V.	36	2,3,4,6,7,8,11	1,2,3,4	1,2,3,4	1,4,5,6,7,8	32	2,3,4,6,7,8,11	1,2,3,4	1,2,3,4
	Hybrid	13	2,3,4,6,7,8,11	1,2,3,4	1,2,3,4	1,4,5,6,7,8	20	2,3,4,6,7,8,11	1,2,3,4	1,2,3,4
Maize	1,4,5,6,7,8	8	1,2,3,4,5,6,7,8,10	1,2,3,4	1,2,3,4	1,4,5,6,7,8	19	1,2,3,4,5,6,7,8,10	1,2,3,4	1,2,3,4
Pigeon Pea	1,4,5,6,7,8	6	1,2,3,4,5,6,7,8,10	1,2,3,4	1,2,3,4	1,4,5,6,7,8	9.5	1,2,3,4,5,6,7,8,10	1,2,3,4	1,2,3,4
Black gram	1,4,5,6,7,8	9	1,2,3,4,5,6,7,8,10	1,2,3,4	1,2,3,4	1,4,5,6,7,8	18	1,2,3,4,5,6,7,8,10	1,2,3,4	1,2,3,4
Ragi	1,4,5,6,7,8	24	1,2,3,4,5,6,7,8,10	1,2,3,4	1,2,3,4	1,4,5,6,7,8	24	1,2,3,4,5,6,7,8,10	1,2,3,4	1,2,3,4
<b>-Horticulture</b>										
Vegetables	1,2,3,4,5,6,7	12	1,2,3,6,7,8,10	1,2,3,4	1,2,3,4	-	-	-	-	-
<b>-Animal Husbandry-Rs./Animal/annum</b>										
Cows	12,13,14,15,16	32	8,9,13,14,15,16	1,2,3,4	1,2,3,4	-	-	-	-	-
Goat	12,13,14,15,16	71	8,9,13,14,15,16	1,2,3,4	1,2,3,4	-	-	-	-	-
Poultry	12,13,14,15,16	95	8,9,13,14,15,16	1,2,3,4	1,2,3,4	12,13,14,15,16	85	8,9,13,14,15,16	1,2,3,4	1,2,3,4

Specific Problem*	Proposed solution **	Reasons for non adoption #	Proposed Strategies # #		
<ol style="list-style-type: none"> <li>Erratic distribution of rainfall</li> <li>Non adoption of recommended varieties.</li> <li>Use of traditional low yielding varieties.</li> <li>Indigenous method of sowing/Transplanting.</li> <li>Low input use.</li> <li>use of Unbalance fertilizer.</li> <li>Reluctance about seed treatment.</li> <li>Low use of organics.</li> <li>Low availability of water in winter &amp; Summer.</li> <li>Lack of improved breeds.</li> <li>Marketing control by middle man .</li> <li>Lack of improved breeds.</li> <li>Lack of awareness.</li> <li>Non availability of perennial water sources.</li> </ol>	<ol style="list-style-type: none"> <li>Inadequate availability of fodder.</li> <li>Lack of finance.</li> <li>Small land holding.</li> <li>Non adoption of crop rotation.</li> <li>Non adoption of inter crop ping in uplands.</li> <li>Lack of knowledge on secondary and micronutrient use.</li> <li>No lining in acid soils.</li> <li>More care of Vegetable crops compared to rice because of cast income.</li> <li>Poor management of animal.</li> <li>Increase in current fallow in upland.</li> <li>Lack of awareness.</li> </ol>	<ol style="list-style-type: none"> <li>Application of lime in acid soils.</li> <li>Managing rain water for use in agricultural crops.</li> <li>Improved crop production technologies.</li> <li>Line sowing/transplanting of crops.</li> <li>Use of high yielding varieties.</li> <li>Promotion of INM in vegetables/ pulses/oilseeds.</li> <li>Balanced use of plant nutrients.</li> <li>Formation of farmers marketing society &amp; establishment of collection center in local market.</li> <li>Use of improved breeds of animals.</li> <li>Crop rotation.</li> <li>Control of diseases and pests in crops.</li> </ol>	<ol style="list-style-type: none"> <li>Developing improved post harvest techniques.</li> <li>Controlling animal diseases.</li> <li>Better nutrition of animals.</li> <li>Training and exposure visits.</li> <li>Demonstration.</li> <li>Dissemination of knowledge through mass media.</li> <li>Use of phosphate, calcium and lime with bio fertilizers for crops.</li> <li>Preventive vaccination.</li> <li>Using low water requiring crops such as coarse cereals.</li> <li>Inter cropping with Kharif pulses/ Vegetables.</li> </ol>	<ol style="list-style-type: none"> <li>lack of capitals.</li> <li>Lack of awareness.</li> <li>Poor transfer of technology to farmers.</li> <li>Non-availability of inputs.</li> <li>Inability to take risks under rainfed conditions.</li> <li>Lack of knowledge/motivation .</li> <li>Poor market information's.</li> <li>Insecure profit.</li> <li>Poor transport.</li> <li>Poor excess to improved technologies.</li> <li>Reluctance /Negligence by financial institution due to increasing NPA.</li> <li>Availability of adequate Irrigation falsity.</li> </ol>	<ol style="list-style-type: none"> <li>Training and exposures visit.</li> <li>Demonstrations.</li> <li>providing financial assistance crop / Animal insurance.</li> <li>providing market opportunities.</li> <li>Gearing quality input supply in rural areas.</li> <li>Inter cropping in uplands.</li> <li>Follow up IPM &amp; INM.</li> <li>Promotion to green manuring to increase organic matter in soil.</li> <li>using of lime in acidic soil.</li> <li>More emphasis on judicious use of soil and water.</li> <li>using improved breeds of cattle.</li> <li>Farmer scientist interaction.</li> <li>Farmer scientist interaction.</li> <li>Linkage to financial institution.</li> <li>Promoted zero tillage/leest tillage.</li> <li>paarcropping of oil seeds/pulses in low land.</li> <li>crop rotation.</li> <li>Improvement of indigenous breeds.</li> </ol>

**TABLE-5.16: Proposed farming systems and mutually Agreed upon Farming System In terms of Net income (in rupees) and the Interventions\*\* (Diversification & Intensification)**

**Agro-ecological situation-I**

**Resource Rich Farmers**

TYPE OF ENTERPRISES COMMODITIES	EFS-I					EFS-II					
	EFS-1 Op-i	Op-ii	Op-iii	Mut. Ag. Upon	Interventions*	EFS-1 Op-i	Op-ii	Op-iii	Mut. Ag. Upon	Interventions *	
<b>Agricultural crops</b>											
<b>Irrigated</b>											
Wheat	3000	Nil	10000	10000	A-1,2,3,7	5500	Nil	14500	14500	A-1,2,3,7	
Major Vegetables	35000	Nil	50000	50000	A-2, 3,7	-	-	-	-	-	
Potato	15000	Nil	30000	30000	A-2, 3,7	-	-	-	-	-	
Pea	15000	Nil	25000	25000	A – 2, 3,7	-	-	-	-	-	
<b>Rainfed</b>											
Paddy	Local	-	-	-	-	-	-	-	-	-	
	H.Y.V.	6000	Nil	10000	10000	A- 1, 2, 3,7 B-1	7500	Nil	12000	12000	A- 1, 2, 3,7 B-1
	Hybrid	30000	Nil	40000	40000	A- 1, 2, 3,7 B-1	32000	Nil	40000	40000	A- 1, 2, 3,7 B-1
Maize	15000	Nil	20000	20000	A-1, 4, 8	15000	Nil	20000	20000	A-1, 4, 8	
Pigeon pea	3400	Nil	4500	4500	A-1, 4, 8,10	1000	Nil	4500	4500	A-1, 4, 8,10	
Black gram	2500	Nil	3500	3500	A- 1, 2 , 9	-	-	-	-	-	
Ragi	3000	Nil	5000	5000	A- 1, 2 , 9	-	-	-	-	-	
Ginger	60000	Nil	85000	85000	A- 1, 2 , 3	-	-	-	-	-	
Ground Nut	10000	Nil	15000	15000	A-1,2,3,4,7, B-5	10000	Nil	15000	15000	A-1,2,3,4,7, B-5	
<b>Horticulture</b>											
Orchard	15000	Nil	25000	25000	A-1,3	-	-	-	-	-	
Vegetable	30000	Nil	40000	40000	A-2,3,4	-	-	-	-	-	
<b>Animal Husbandry</b>											
Cows	1700	Nil	2000	2000	A-8,9	2200	Nil	2500	2500	A-8,9	
Buffaloes	1100	Nil	1500	1500	A-8,9	1600	Nil	2000	2000	A-8,9	
Goat	1200	Nil	2000	2000	A-8,9,10	1700	Nil	2000	2000	A-8,9,10	
Duckery	-	Nil	-	-	-	-	-	-	-	-	
Poultry	1200	Nil	1800	1800	A-8,9,10	1400	Nil	1800	1800	A-8,9,10	
Fish	-	Nil	-	-	-	-	-	-	-	-	
<b>Total :-</b>	<b>248100</b>	<b>Nil</b>	<b>370300</b>	<b>370300</b>		<b>77900</b>	<b>Nil</b>	<b>114300</b>	<b>114300</b>		

**Note :-** Option - i is Existing Farming Situation Followed by Farmer.

Option - ii is Recommendation of Research Institution/SAU of high cost technology and high yield which is not adaptable by farmer under present Economic condition.

Therefore option –ii is sowing Nil.

Option – iii is adapted by progressive/Innovative farmer of the village. Therefore it has been recommended as Mutually Agreed Upon.

**Applied for Table No – 5.16 to 5.21**

**Intervention :A Intensification**

1. Improved management practices. 2. Change of variety form local to improve one. 3. Judicious use of Inputs like seed, fertilizers, water etc. 4. Adoption of Short duration varieties fertilizer responsive crop varieties. 5. Inter cropping with Pigeon pea, Black gram/Green gram. 6. Inter cropping/mixed cropping with Ginger turmeric/ Black gram/Green gram/Lobia. 7. Access to better market. 8. Change of breed form local to improved breed/up-gradation of local breed. 9. Adoption of breeds with high lactation period in case of milch animals. 10. Adoption of high weight breeds having tolerance, in goatry/Piggery etc.

**B. Diversification**

1. Adoption of inter/mixed cropping system in case of mono cropping. 2. Para cropping (Paddy with pea/gram/lentil). 3. Adoption of multi-tier cropping system in case of horticulture crops. 4. Paddy-cum-fish culture. 5. Cultivation of oil seeds/pulses to utilize residual moisture.

**TABLE-5.17: Proposed farming systems and mutually Agreed upon Farming System In terms of Net income (in rupees) and the Interventions\*\* (Diversification & Intensification)**

Agro-ecological situation-I												Resource Poor Farmers				
TYPE OF ENTERPRISES COMMODITIES		EFS-I					EFS-II					EFS-III				
		EFS-1 Op-i	Op-ii	Op-iii	Mut. Ag. Upon	Intervent ions*	EFS-1 Op-i	Op-ii	Op-iii	Mut. Ag. Upon	Intervent ions*	EFS-1 Op-i	Op-ii	Op-iii	Mut. Ag. Upon	Intervent ions*
<b>Agricultural crops</b>																
<b>Irrigated</b>																
Wheat		2000	Nil	10000	10000	A-1,2,3,7, B-2,4	2000	Nil	7500	7500	A-1,2,3,7, B- 2,4,6	-	-	-	-	-
Major Vegetables		20000	Nil	35000	35000	A-2, 3,7	18000	Nil	35000	35000	A-2, 3,7	-	-	-	-	-
Pea		10000	Nil	25000	25000	A - 2, 3, 7	10000	Nil	22000	22000	A - 2, 3, 7	-	-	-	-	-
<b>Rainfed</b>																
Paddy	Local	-	-	-	-	-	2000	Nil	7500	7500	A- 1, 2, 3, 7 B-1	2000	Nil	6000	6000	A- 1, 2, 3, 7 B-1
	H.Y.V.	4500	Nil	8000	8000	A- 1, 2, 3, 7 B-1	4500	Nil	8000	8000	A- 1, 2, 3, 7 B-1	4000	Nil	7500	7500	A- 1, 2, 3, 7 B-1
	Hybrid	16000	Nil	25000	25000	A- 1, 2, 3, 7 B-1	15000	Nil	25000	25000	A- 1, 2, 3, 7 B-1	-	-	-	-	-
Ragi		2500	Nil	4500	4500	A-1, 4, 8, B- 5	2200	Nil	4500	4500	A-1, 4, 8	-	-	-	-	-
Maize		10000	Nil	15000	15000	A-1, 4, 8, 10 B-5	10000	Nil	15000	15000	A-1, 4, 8,10,B-5	-	-	-	-	-
Pigeon pea		2500	Nil	4000	4000	A- 1, 2, 9	2200	Nil	4000	4000	A- 1, 2, 9	-	-	-	-	-
Black gram		2000	Nil	3000	3000	A- 1, 2, 9 B- 5	2000	Nil	3000	3000	A- 1, 2, 9 B- 5	-	-	-	-	-
Ground Nut		8000	Nil	15000	15000	A-1,2,3,4,7, B-5	7500	Nil	12000	12000	A-1,2,3,4,7, B-5	-	-	-	-	-
Ginger		20000	Nil	45000	45000	A-1,2,3	18000	Nil	45000	45000	A-1,2,3	-	-	-	-	-
<b>Horticulture</b>																
Orchard		15000	Nil	20000	20000	A-1,3	-	-	-	-	-	-	-	-	-	-
Vegetable		15000	Nil	25000	25000	A-2,3,4	15000	Nil	25000	25000	A-2,3,4	-	-	-	-	-
<b>Animal Husbandry</b>																
Cows		1500	Nil	2000	2000	A-8,9	-	-	-	-	-	-	-	-	-	-
Buffaloes		1000	Nil	1500	1500	A-8,9	-	-	-	-	-	-	-	-	-	-
Goat		1000	Nil	1800	1800	A-8,9,10	-	-	-	-	-	800	Nil	1200	1200	A-8,9,10
Poultry		1200	Nil	2000	2000	A-7,8,9,10	-	-	-	-	-	1000	Nil	1500	1500	A-,8,9,10
<b>Total :-</b>		<b>132200</b>	<b>Nil</b>	<b>241800</b>	<b>241800</b>		<b>108400</b>	<b>Nil</b>	<b>213500</b>	<b>213500</b>		<b>7800</b>	<b>Nil</b>	<b>16200</b>	<b>16200</b>	

**Intervention :A Intensification**

1. Improved management practices. 2. Change of variety form local to improve one. 3. Judicious use of Inputs like seed, fertilizers, water etc. 4. Adoption of Short duration varieties fertilizer responsive crop varieties. 5. Inter cropping with Pigeon pea, Black gram/Green gram. 6. Inter cropping/mixed cropping with Ginger turmeric/ Black gram/Green gram/Lobia. 7. Access to better market. 8. Change of breed form local to improved breed/up-gradation of local breed. 9. Adoption of breeds with high lactation period in case of milch animals. 10. Adoption of high weight breeds having tolerance, in goatry/Piggery etc.

**B. Diversification**

1. Adoption of inter/mixed cropping system in case of mono cropping. 2. Para cropping (Paddy with pea/gram/lentil). 3. Adoption of multi-tier cropping system in case of horticulture crops. 4. Paddy-cum-fish culture. 5. Cultivation of oil seeds/pulses to utilize residual moisture.6.Cultivation of rainfed wheat after short duration paddy.



**TABLE-5.18: Proposed farming systems and mutually Agreed upon Farming System In terms of Net income (in rupees) and the Interventions\*\* (Diversification & Intensification)**

Agro-ecological situation-II						Resource Rich Farmers					
TYPE OF ENTERPRISES COMMODITIES	EFS-I					EFS-II					
	EFS-1 Op-i	Op-ii	Op-iii	Mut. Ag. Upon	Interventions*	EFS-1 Op-i	Op-ii	Op-iii	Mut. Ag. Upon	Interventions *	
<b>Agricultural crops</b>											
<b>Irrigated</b>											
Wheat	2500	Nil	10000	10000	A-1,2,3,7	2500	Nil	7500	7500	A-1,2,3,7	
Major Vegetables	20000	Nil	35000	35000	A-2, 3, 7	18000	Nil	30000	30000	A-2, 3, 7	
Potato	-	Nil	-	-	A-2, 3, 7	-	-	-	-	-	
Pea	12000	Nil	20000	20000	A-2, 3, 7	-	-	-	-	-	
<b>Rainfed</b>											
Paddy	Local	2000	Nil	7500	7500	A- 1, 2, 3, 7 B-1	2000	Nil	7500	7500	A- 1, 2, 3, 7 B-1
	H.Y.V.	5000	Nil	10000	10000	A- 1, 2, 3, 7 B-1	4500	Nil	9000	9000	A- 1, 2, 3, 7 B-1
	Hybrid	26000	Nil	36000	36000	A- 1, 2, 3, 7 B-1	26000	Nil	35000	35000	A- 1, 2, 3, 7 B-1
Maize	10000	Nil	15000	15000	A-1, 4, 8	10000	Nil	15000	15000	A-1, 4, 8	
Pigeon pea	2600	Nil	4500	4500	A-1, 4, 8, 10	2500	Nil	4500	4500	A-1, 4, 8, 10	
Black gram	2500	Nil	3500	3500	A- 1, 2, 9	2000	Nil	3500	3500	A- 1, 2, 9	
Ragi	2500	Nil	5000	5000	A- 1, 2, 9	2500	Nil	4500	4500	A- 1, 2, 9	
Ginger	-	-	-	-	-	-	-	-	-	-	
Ground Nut	-	-	-	-	-	-	-	-	-	-	
<b>Horticulture</b>											
Orchard	-	-	-	-	-	-	-	-	-	-	
Vegetable	20000	Nil	30000	30000	A-2,3,4	12000	Nil	22000	22000	A-2,3,4	
<b>Animal Husbandry</b>											
Cows	1000	Nil	2000	2000	A-8,9	-	-	-	-	-	
Buffaloes	900	Nil	1500	1500	A-8,9	-	-	-	-	-	
Goat	1000	Nil	2000	2000	A-8,9,10	-	-	-	-	-	
Duckery	-	-	-	-	-	-	-	-	-	-	
Poultry	1200	Nil	1800	1800	A-8,9,10	-	-	-	-	-	
Fish	-	-	-	-	-	-	-	-	-	-	
<b>Total :-</b>	<b>109200</b>		<b>183800</b>	<b>183800</b>		<b>82000</b>	Nil	<b>138500</b>	<b>138500</b>		

**Intervention :A Intensification**

1. Improved management practices. 2. Change of variety from local to improve one. 3. Judicious use of Inputs like seed, fertilizers, water etc. 4. Adoption of Short duration varieties fertilizer responsive crop varieties. 5. Inter cropping with Pigeon pea, Black gram/Green gram. 6. Inter cropping/mixed cropping with Ginger turmeric/ Black gram/Green gram/Lobia. 7. Access to better market. 8. Change of breed from local to improved breed/up-gradation of local breed. 9. Adoption of breeds with high lactation period in case of milch animals. 10. Adoption of high weight breeds having tolerance, in goatry/Pigqervy etc.

**B. Diversification**

1. Adoption of inter/mixed cropping system in case of mono cropping. 2. Para cropping (Paddy with pea/gram/lentil). 3. Adoption of multi-tier cropping system in case of horticulture crops. 4. Paddy-cum-fish culture. 5. Cultivation of oil seeds/pulses to utilize residual moisture. 6. Cultivation of rainfed wheat after short duration paddy.

**TABLE-5.19: Proposed farming systems and mutually Agreed upon Farming System In terms of Net income (in rupees) and the Interventions\*\* (Diversification & Intensification)**

Agro-ecological situation-II							Resource Poor Farmers				
TYPE OF ENTERPRISES COMMODITIES		EFS-I					EFS-II				
		EFS-1 Op-i	Op-ii	Op-iii	Mut. Ag. Upon	Interventions*	EFS-1 Op-i	Op-ii	Op-iii	Mut. Ag. Upon	Interventions*
<b>Agricultural crops</b>											
<b>Irrigated</b>											
Wheat		2000	Nil	7500	7500	A-,2,3,7, B-2,4	-	-	-	-	-
Major Vegetables		15000	Nil	30000	30000	A-2, 3,7	-	-	-	-	-
Pea		8000	Nil	15000	15000	A-2, 3,7	-	-	-	-	-
<b>Rainfed</b>											
Paddy	Local	2000	Nil	7500	7500	A- 1, 2, 3,7 B-1	2000	Nil	7500	7500	A- 1, 2, 3,7 B-1
	H.Y.V.	4500	Nil	8000	8000	A- 1, 2, 3,7 B-1	4000	Nil	8000	8000	A- 1, 2, 3,7 B-1
	Hybrid	15000	Nil	25000	25000	A- 1, 2, 3,7 B-1	-	-	-	-	-
Ragi		2500	Nil	4500	4500	A-1, 4, 8	2000	Nil	3500	3500	A-1,4,8
Maize		10000	Nil	15000	15000	A-1, 4, 8,10	-	-	-	-	-
Pigeon pea		2500	Nil	4000	4000	A- 1, 2, 9	-	-	-	-	-
Black gram		2000	Nil	3000	3000	A- 1, 2, 9	-	-	-	-	-
Ground Nut		-	-	-	-	-	-	-	-	-	-
Ginger		-	-	-	-	-	-	-	-	-	-
<b>Horticulture</b>											
Orchard		-	-	-	-	-	-	-	-	-	-
Vegetable		-	-	-	-	-	-	-	-	-	-
<b>Animal Husbandry</b>											
Cows		1500	Nil	2000	2000	A-8,9	-	-	-	-	-
Buffaloes		1000	Nil	1500	1500	A-8,9	-	-	-	-	-
Goat		800	Nil	1500	1500	A-8,9,10	-	-	-	-	-
Poultry		1000	Nil	1500	1500	A-7,8,9,10	-	-	-	-	-
Fish		-	-	-	-	-	-	-	-	-	-
Agro. Forestry		-	-	-	-	-	3000	-	-	-	-
<b>Total :-</b>		<b>67800</b>	<b>Nil</b>	<b>126000</b>	<b>126000</b>		<b>8000</b>	<b>Nil</b>	<b>19000</b>	<b>19000</b>	<b>-</b>

**Intervention :A Intensification**

1. Improved management practices. 2. Change of variety form local to improve one. 3. Judicious use of Inputs like seed, fertilizers, water etc. 4. Adoption of Short duration varieties fertilizer responsive crop varieties. 5. Inter cropping with Pigeon pea, Black gram/Green gram. 6. Inter cropping/mixed cropping with Ginger turmeric/ Black gram/Green gram/Lobia. 7. Access to better market. 8. Change of breed form local to improved breed/up-gradation of local breed. 9. Adoption of breeds with high lactation period in case of milch animals. 10. Adoption of high weight breeds having tolerance. in goatrv/Piqavry etc.

**B. Diversification**

1. Adoption of inter/mixed cropping system in case of mono cropping. 2. Para cropping (Paddy with pea/gram/lentil). 3. Adoption of multi-tier cropping system in case of horticulture crops. 4. Paddy-cum-fish culture. 5. Cultivation of oil seeds/pulses to utilize residual moisture. 6.Cultivation of rainfed wheat after short duration paddy.

**TABLE-5.20: Proposed farming systems and mutually Agreed upon Farming System In terms of Net income (in rupees) and the Interventions\*\* (Diversification & Intensification)**

Agro-ecological situation-III						Resource Rich Farmers					
TYPE OF ENTERPRISES COMMODITIES	EFS-I					EFS-II					
	EFS-1 Op-i	Op-ii	Op-iii	Mut. Ag. Upon	Interventions*	EFS-1 Op-i	Op-ii	Op-iii	Mut. Ag. Upon	Interventions*	
<b>Agricultural crops</b>											
<b>Irrigated</b>											
Wheat	3000	Nil	10000	10000	A-1,2,3,7	3200	Nil	10000	10000	A-1,2,3,7	
Major Vegetables	15000	Nil	30000	30000	A-2, 3, 7	-	-	-	-	-	
Potato	15000	Nil	25000	25000	A-2, 3, 7	13000	Nil	25000	25000	-	
Pea	10000	Nil	15000	15000	A - 2, 3, 7	-	-	-	-	-	
<b>Rainfed</b>											
Paddy	Local	2000	Nil	8000	8000	A- 1, 2, 3, 7 B-1	2000	Nil	7500	7500	A- 1, 2, 3, 7 B-1
	H.Y.V.	5500	Nil	12000	12000	A- 1, 2, 3, 7 B-1	6000	Nil	12000	12000	A- 1, 2, 3, 7 B-1
	Hybrid	30000	Nil	40000	40000	A- 1, 2, 3, 7 B-1	30000	Nil	40000	40000	A- 1, 2, 3, 7 B-1
Maize	8000	Nil	15000	15000	A-1, 4, 8	8000	Nil	15000	15000	A-1, 4, 8	
Pigeon pea	2000	Nil	4000	4000	A-1, 4, 8, 10	2000	Nil	4000	4000	A-1, 4, 8, 10	
Black gram	2000	Nil	3500	3500	A- 1, 2, 9	2000	Nil	3500	3500	A- 1, 2, 9	
Ragi	2500	Nil	4500	4500	A- 1, 2, 9	3000	Nil	4500	4500	A- 1, 2, 9	
Ginger	-	-	-	-	-	-	-	-	-	-	
Ground Nut	-	-	-	-	-	-	-	-	-	-	
<b>Horticulture</b>											
Orchard	-	-	-	-	-	-	-	-	-	-	
Vegetable	10000	Nil	20000	20000	A-2,3,4	-	-	-	-	A-2,3,4	
<b>Animal Husbandry</b>											
Cows	1300	Nil	1800	1800	A-8,9	1200	Nil	1500	1500	A-8,9	
Buffaloes	900	Nil	1500	1500	A-8,9	900	Nil	1500	1500	A-8,9	
Goat	1000	Nil	1800	1800	A-8,9,10	1000	Nil	1800	1800	A-8,9,10	
Duckery	-	-	-	-	-	4000	Nil	6000	6000	A-8,9,10	
Poultry	1000	Nil	1500	1500	A-8,9,10	1000	Nil	1500	1500	A-8,9,10	
Fish	-	-	-	-	-	-	-	-	-	-	
<b>Total :-</b>	<b>109200</b>	<b>Nil</b>	<b>193600</b>	<b>193600</b>		<b>77300</b>	<b>Nil</b>	<b>133800</b>	<b>133800</b>		

**Intervention :A Intensification**

1. Improved management practices. 2. Change of variety form local to improve one. 3. Judicious use of Inputs like seed, fertilizers, water etc. 4. Adoption of Short duration varieties fertilizer responsive crop varieties. 5. Inter cropping with Pigeon pea, Black gram/Green gram. 6. Inter cropping/mixed cropping with Ginger turmeric/ Black gram/Green gram/Lobia. 7. Access to better market. 8. Change of breed form local to improved breed/up-gradation of local breed. 9. Adoption of breeds with high lactation period in case of milch animals. 10. Adoption of high weight breeds having tolerance, in goatry/Piggery etc.

**B. Diversification**

1. Adoption of inter/mixed cropping system in case of mono cropping. 2. Para cropping (Paddy with pea/gram/lentil). 3. Adoption of multi-tier cropping system in case of horticulture crops. 4. Paddy-cum-fish culture. 5. Cultivation of oil seeds/pulses to utilize residual moisture. 6. Cultivation of rainfed wheat after short duration paddy.

**TABLE-5.21: Proposed farming systems and mutually Agreed upon Farming System In terms of Net income (in rupees) and the Interventions\*\* (Diversification & Intensification)**

**Agro-ecological situation-III**

**Resource Poor Farmers**

TYPE OF ENTERPRISES COMMODITIES		EFS-I					EFS-II				
		EFS-I Op-i	Op-ii	Op-iii	Mut. Ag. Upon	Interventions*	EFS-I Op-i	Op-ii	Op-iii	Mut. Ag. Upon	Interventions*
<b>Agricultural crops</b>											
<b>Irrigated</b>											
Wheat		2000	Nil	7500	7500	A-1,2,3,7, B-2,4	2000	Nil	7500	7500	A-1,2,3,7, B-2,4
Major Vegetable		10000	Nil	20000	20000	A-2, 3,7	-	-	-	-	-
Pea		8000	Nil	15000	15000	A - 2, 3,7	-	-	-	-	-
<b>Rainfed</b>											
Paddy	Local	2000	Nil	7500	7500	A- 1, 2, 3,7 B-1	2000	Nil	7500	7500	A- 1, 2, 3,7 B-1
	H.Y.V.	4000	Nil	10000	10000	A- 1, 2, 3,7 B-1	4000	Nil	10000	10000	A- 1, 2, 3,7 B-1
	Hybrid	14000	Nil	25000	25000	A- 1, 2, 3,7 B-1	12000	Nil	20000	20000	A- 1, 2, 3,7 B-1
Ragi		2500	Nil	4500	4500	A-1, 4, 8	2200	Nil	4500	4500	A-1, 4, 8
Maize		8000	Nil	15000	15000	A-1, 4, 8,10	-	-	-	-	-
Pigeon pea		2500	Nil	4500	4500	A- 1, 2, 9	2000	Nil	4000	4000	A- 1, 2, 9
Black gram		2000	Nil	3000	3000	A- 1, 2, 9	2000	Nil	3000	3000	A- 1, 2, 9
<b>- Horticulture</b>											
Orchard		-	-	-	-	-	-	-	-	-	-
Vegetable		10000	Nil	20000	20000	A-2,3,4	-	-	-	-	-
<b>Animal Husbandry</b>											
Cows		1200	Nil	1700	1700	A-8,9	1200	Nil	1700	1700	A-8,9
Buffaloes		1000	Nil	1500	1500	A-8,9	1000	Nil	1500	1500	A-8,9
Goat		800	Nil	1200	1200	A-8,9,10	800	Nil	1200	1200	A-8,9,10
Poultry		1000	Nil	1500	1500	A-7,8,9,10	1000	Nil	1300	1300	A-7,8,9,10
<b>Total :-</b>		<b>55000</b>	<b>Nil</b>	<b>112000</b>	<b>112000</b>		<b>26200</b>	<b>Nil</b>	<b>56500</b>	<b>56500</b>	

**Intervention :A Intensification**

1. Improved management practices. 2. Change of variety form local to improve one. 3. Judicious use of Inputs like seed, fertilizers, water etc. 4. Adoption of Short duration varieties fertilizer responsive crop varieties. 5. Inter cropping with Pigeon pea, Black gram/Green gram. 6. Inter cropping/mixed cropping with Ginger turmeric/ Black gram/Green gram/Lobia. 7. Access to better market. 8. Change of breed form local to improved breed/up-gradation of local breed. 9. Adoption of breeds with high lactation period in case of milch animals. 10. Adoption of high weight breeds having tolerance, in goatry/Piggery etc.

**B. Diversification**

1. Adoption of inter/mixed cropping system in case of mono cropping. 2. Para cropping (Paddy with pea/gram/lentil). 3. Adoption of multi-tier cropping system in case of horticulture crops. 4. Paddy-cum-fish culture. 5. Cultivation of oil seeds/pulses to utilize residual moisture. 6. Cultivation of rainfed wheat after short duration paddy.

**TABLE-5.22 : Gap in adoption and proposed strategies for promoting the Modified Farming System**

Agro-ecological situation-I		Resource Rich											
Type of enterprises/commodities	EFS-I						EFS-II						
	Contribution in terms of net income		Interventions to be carried out	Gaps in adoption F/P/N	Reasons for gap	Proposed Strategies	Contribution in terms of net income		Interventions to be carried out	Gaps in adoption F/P/N	Reasons for gap	Pro. Strategies	
	Op-i	MAU					Op-i	MAU					
<b>Agricultural crops</b>													
<b>Irrigated</b>													
Wheat	3000	10000	A-1,2,3,7	P	1,2,3,10,11,12	1,2,3,4,10	5500	15000	A-1,2,3,7	P	1,2,3,10,11,12	1,2,3,4,10	
Major Vegetables	35000	50000	A-2,3,7	P	1,2,3,7,10,11,12	1,2,3,4,7,10	-	-	-	-	-	-	
Potato	15000	30000	A-2,3,7	P	1,2,3,7,10,11,12	1,2,3,4,7,10	-	-	-	-	-	-	
Pea	15000	25000	A-2,3,7	P	1,2,3,7,10,11,12	1,2,3,4,7,10	-	-	-	-	-	-	
<b>Rainfed</b>													
Paddy	Local	-	-	A-1,2,3,7,B-1	F	1,2,3,4,5,6,7	1,2,3,4,8,10	-	-	A-1,2,3,7,B-1	F	1,2,3,4,5,6,7	1,2,3,4,8,10
	H.Y.V.	6000	10000	A-1,2,3,7,B-1	P	1,2,3,4,5,6,7	1,2,3,4,8,10	7500	12000	A-1,2,3,7,B-1	P	1,2,3,4,5,6,7	1,2,3,4,8,10
	Hybrid	30000	40000	A-1,2,3,7,B-1	P	1,2,3,4,5,6,7	1,2,3,4,8,10	32000	40000	A-1,2,3,7,B-1	P	1,2,3,4,5,6,7	1,2,3,4,8,10
Maize	15000	20000	A-1,4,8	P	1,2,3,4,5,6,7	1,2,3,4,9,10	15000	20000	A-1,4,8	P	1,2,3,4,5,6,7	1,2,3,4,9,10	
Pigeon pea	3400	4500	A-1,4,8,10	F	1,2,3,4,5,6,7	1,2,3,4,9,10	1000	4500	A-1,4,8,10	F	1,2,3,4,5,6,7	1,2,3,4,9,10	
Black gram	2500	3500	A-1,2,9	F	1,2,3,4,5,6,7	1,2,3,4,9,10	-	-	A-1,2,9	F	1,2,3,4,5,6,7	1,2,3,4,9,10	
Ragi	3000	5000	A1,2,9	P	1,2,3,4,5,6,7	1,2,3,4,9	-	-	A1,2,9	P	1,2,3,4,5,6,7	1,2,3,4,9	
Ginger	60000	85000	A-1,2,3	F	1,2,3,4,5,6,7,8,9,10,11	1,2,3,4,9,10	-	-	A-1,2,3	F	1,2,3,4,5,6,7,8,9,10,11	1,2,3,4,9,10	
Ground Nut	10000	15000	A1,2,3,4,7,B-5	P	1,2,3,4,5,6,7,8,9,10	1,2,3,4,9,10	10000	15000	A1,2,3,4,7,B-5	P	1,2,3,4,5,6,7,8,9,10	1,2,3,4,9,10	
<b>Horticulture</b>													
Orchard	15000	25000	A-1,3	P	1,2,3,4,6,7,9,10,11	1,2,3,4,9,10	-	-	A-1,3	P	1,2,3,4,6,7,9,10,11	1,2,3,4,9,10	
Vegetable	30000	40000	A-2,3,4	P	1,2,3,4,6,7,9,10,11	1,2,3,4,9	-	-	A-2,3,4	P	1,2,3,4,6,7,9,10,11	1,2,3,4,9	
<b>Animal Husbandry</b>													
Cows	1700	2000	A-8,9	F	1,2,5,6,7,8,11	1,2,3,4,11,12	2200	2500	A-8,9	F	1,2,5,6,7,8,11	1,2,3,4,11,12	
Buffaloes	1100	1500	A-8,9	F	1,2,5,6,7,8,11	1,2,3,4,11,12	1600	2000	A-8,9	F	1,2,5,6,7,8,11	1,2,3,4,11,12	
Goat	1200	2000	A-8,9,10	F	1,2,5,6,7,8,11	1,2,3,4,11,12	1700	2000	A-8,9,10	F	1,2,5,6,7,8,11	1,2,3,4,11,12	
Duckery	-	-	-	-	-	-	-	-	-	-	-	-	
Poultry	1200	1800	A8,9,10	P	1,2,5,6,7,8,11	1,2,3,4,11,12	1400	1800	A8,9,10	P	1,2,5,6,7,8,11	1,2,3,4,11,12	
Fish	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Total :-</b>	<b>248100</b>	<b>370300</b>					<b>77900</b>	<b>114300</b>					

**Intervention :A Intensification :-** 1. Improved management practices. 2. Change of variety form local to improve one. 3. Judicious use of Inputs like seed, fertilizers, water etc. 4. Adoption of Short duration varieties fertilizer responsive crop varieties. 5. Inter cropping with Pigeon pea, Black gram/Green gram. 6. Inter cropping/mixed cropping with Ginger turmeric/ Black gram/Green gram/Lobia. 7. Access to better market. 8. Change of breed form local to improved breed/upgradation of local breed. 9. Adoption of breeds with high lactation period in case of milch animals. 10. Adoption of high weight breeds having tolerance, in goatry/Piggery etc.

**B. Diversification :-** 1. Adoption of inter/mixed cropping system in case of mono cropping. 2. Para cropping (Paddy with pea/gram/lentil). 3. Adoption of multi-tier cropping system in case of horticulture crops. 4. Paddy-cum-fish culture. 5. Cultivation of oil seeds/pulses to utilize residual moisture. 6. Cultivation of rainfed wheat after short duration paddy.

**Reasons for gap-** 1. lack of capitals. 2. Lack of awareness. 3. Poor transfer of technology to farmers. 4. Non-availability of inputs. 5. Inability to take risks under rainfed conditions. 6. Lack of knowledge/motivation. 7. Poor market information's. 8. Uncertainty to get profit. 9. Poor transport. 10. Poor excess to improved technologies. 11. Reluctance/Negligence by financial institute. 12. lack of irrigation Facility.

**Prop. Strategies :-** 1. Training and exposures visit. 2. Demonstrations. 3. providing financial assistance/crop insurance/ Linkage to financial institution.. 4. providing market opportunities. 5. Gearing quality input supply in rural areas. 6. Inter cropping in uplands. 7. Follow up IPM & INM. 8. Promotion to green manuring to increase organic matter in soil. 9. Use of lime in acidic soil. 10 More emphasis on judicious use of soil and water. 11. Use improved breeds of cattle. 12. Farmer scientist interaction.

**TABLE- 5.23 : Gap in adoption and proposed strategies for promoting the Modified Farming System**

**Agro-ecological situation-I**

**Resource Poor**

Type of enterprises/ commodities	EFS-I						EFS-II						EFS-III						
	Contribution in terms of net income		Intervention s to be carried out	Gaps in adoption F/P/N	Rea-ns for gap	Pro. Strategies	Contribution in terms of net income		Interventions to be carried out	Gaps in adoption F/P/N	Reasons for gap	Pro. Strategies	Contribution in terms of net income		Interventi ons to be carried out	Gaps in adoption F/P/N	Reasons for gap	Pro. Strategie s	
	Op-i	MAU					Op-i	MAU					Op-i	MAU					
<b>Agricultural Crops</b>																			
<b>Irrigated</b>																			
Wheat	2000	10000	A-1,2,3,7, B-2,4	P	1,2,3,10,11,12	1,2,3,4,10	2200	7500	A-1,2,3,7, B-2,4	P	1,2,3,10,11,12	1,2,3,4,10	-	-	-	-	1,2,3,10,11,12	1,2,3,4,10	
Major Vegetables	20000	35000	A-2, 3, 7	P	1,2,3,7,10,11,12	1,2,3,4,7,10	18000	35000	A-2, 3, 7	P	1,2,3,7,10,11,12	1,2,3,4,7,10	-	-	-	-	-	-	
Pea	10000	25000	A-2, 3, 7	P	1,2,3,7,10,11,12	1,2,3,4,7,10	10000	22000	A-2, 3, 7	P	1,2,3,7,10,11,12	1,2,3,4,7,10	-	-	-	-	-	-	
<b>Rainfed</b>																			
Paddy	Local	-	-	A-1,2,3,7 B-1	F	1,2,3,4,5,6,7	1,2,3,4,8,10	2000	7500	A-1,2,3,7 B-1	F	1,2,3,4,5,6,7	1,2,3,4,8,10	2000	6000	A-2,3,7 B-1	F	1,2,3,4,5,6,7	1,2,3,4,8,10
	H.Y.V.	4500	8000	A-1,2,3,7 B-1	P	1,2,3,4,5,6,7	1,2,3,4,8,10	4500	8000	A-1,2,3,7 B-1	P	1,2,3,4,5,6,7	1,2,3,4,8,10	4000	7500	A-2,3,7 B-1	P	1,2,3,4,5,6,7	1,2,3,4,8,10
	Hybrid	16000	25000	A-1,2,3,7 B-1	P	1,2,3,4,5,6,7	1,2,3,4,8,10	15000	25000	A-1,2,3,7 B-1	P	1,2,3,4,5,6,7	1,2,3,4,8,10	-	-	-	-	-	-
Ragi	2500	4500	A-1,4,8 B-5	P	1,2,3,4,5,6,7	1,2,3,4,9	2200	4500	A-1,4,8 B-5	P	1,2,3,4,5,6,7	1,2,3,4,9	-	-	-	-	-	-	
Maize	10000	15000	A-1,4,8,10 B-5	P	1,2,3,4,5,6,7	1,2,3,4,9,10	10000	15000	A-1,4,8,10 B-5	P	1,2,3,4,5,6,7	1,2,3,4,9,10	-	-	-	-	-	-	
Pigeon pea	2500	4000	A-1,2,9	F	1,2,3,4,5,6,7	1,2,3,4,9,10	2200	4000	A-1,2,9	F	1,2,3,4,5,6,7	1,2,3,4,9,10	-	-	-	-	-	-	
Black gram	2000	3000	A1,2,9 B-5	F	1,2,3,4,5,6,7	1,2,3,4,9,10	2000	3000	A1,2,9 B-5	F	1,2,3,4,5,6,7	1,2,3,4,9,10	-	-	-	-	-	-	
Ground Nut	8000	15000	A-1,2,3,4,7 B-5	P	1,2,3,4,5,6,7,8,9,10	1,2,3,4,9,10	7500	12000	A-1,2,3,4,7 B-5	P	1,2,3,4,5,6,7,8,9,10	1,2,3,4,9,10	-	-	-	-	-	-	
Ginger	20000	45000	A-1,2,3	F	1,2,3,4,5,6,7,8,9,10,11	1,2,3,4,9,10	18000	45000	A-1,2,3	F	1,2,3,4,5,6,7,8,9,10,11	1,2,3,4,9,10	-	-	-	-	-	-	
<b>-Horticulture</b>																			
Orchard	15000	20000	A-1,3	P	1,2,3,4,6,7,9,10,11	1,2,3,4,9,10	-	-	-	-	-	-	-	-	-	-	-	-	
Vegetable	15000	25000	A-2,3,4	P	1,2,3,4,6,7,9,10,11	1,2,3,4,9	15000	25000	A-2,3,4	P	1,2,3,4,6,7,9,10,11	1,2,3,4,9	-	-	-	-	-	-	
<b>Animal Husbandry</b>																			
Cows	1500	2000	A-8,9	F	1,2,5,6,7,8,11	1,2,3,4,11,12	-	-	-	-	-	-	-	-	-	-	-	-	
Buffaloes	1000	1500	A-8,9	F	1,2,5,6,7,8,11	1,2,3,4,11,12	-	-	-	-	-	-	-	-	-	-	-	-	
Goat	1000	1800	A-8,9,10	F	1,2,5,6,7,8,11	1,2,3,4,11,12	-	-	-	-	-	-	800	1200	A-8,9,10	F	1,2,5,6,7,8,11	1,2,3,4,11,12	
Poultry	1200	2000	A-7,8,9,10	F	1,2,5,6,7,8,11	1,2,3,4,11,12	-	-	-	-	-	-	1000	1500	A-7,8,9,10	F	1,2,5,6,7,8,11	1,2,3,4,11,12	
<b>Total :-</b>	<b>132200</b>	<b>241800</b>					<b>108400</b>	<b>213500</b>					<b>7800</b>	<b>16200</b>					

**Intervention :A Intensification :-**1. Improved management practices. 2. Change of variety form local to improve one. 3. Judicious use of Inputs like seed, fertilizers, water etc. 4. Adoption of Short duration varieties fertilizer responsive crop varieties. 5. Inter cropping with Pigeon pea, Black gram/Green gram. 6. Inter cropping/mixed cropping with Ginger turmeric/ Black gram/Green gram/Lobia. 7. Access to better market. 8. Change of breed form local to improved breed/upgradation of local breed. 9. Adoption of breeds with high lactation period in case of milch animals. 10. Adoption of high weight breeds having tolerance, in goatry/Piggery etc.

**B. Diversification :-**1. Adoption of inter/mixed cropping system in case of mono cropping. 2. Para cropping (Paddy with pea/gram/lentil). 3. Adoption of multi-tier cropping system in case of horticulture crops. 4. Paddy-cum-fish culture. 5. Cultivation of oil seeds/pulses to utilize residual moisture. 6.Cultivation of rainfed wheat after short duration paddy.

**Reasons for gap-1.** lack of capitals. 2. Lack of awareness. 3.Poor transfer of technology to farmers. 4. Non-availability of inputs. 5. Inability to take risks under rainfed conditions. 6. Lack of knowledge/motivation .7. Poor market information's. 8. Uncertainty to get profit. 9. Poor transport.10. Poor excess to improved technologies.11. Reluctance/Negligence by financial institute.12. lack of irrigation Facility.

**Prop. Strategies :-** 1. Training and exposures visit. 2. Demonstrations. 3. providing financial assistance/crop insurance/ Linkage to financial institution. 4. providing market opportunities. 5. Gearing quality input supply in rural areas. 6. Inter cropping in uplands. 7. Follow up IPM & INM. 8. Promotion to green manuring to increase organic matter in soil. 9. Use of lime in acidic soil. 10 More emphasis on judicious use of soil and water. 11. Use improved breeds of cattle. 12. Farmer scientist interaction.

**TABLE- 5.24 : Gap in adoption and proposed strategies for promoting the Modified Farming System**

**Agro-ecological situation-II**

**Resource Rich**

Type of enterprises/commodities	EFS-I						EFS-II						
	Contribution in terms of net income		Interventions to be carried out	Gaps in adoption F/P/N	Reasons for gap	Pro. Strategies	Contribution in terms of net income		Interventions to be carried out	Gaps in adoption F/P/N	Reasons for gap	Pro. Strategies	
	Op-i	MAU					Op-i	MAU					
<b>Agricultural crops</b>													
<b>Irrigated</b>													
Wheat	2500	10000	A-1, 2,3, 7	P	1,2,3,10,11,12	1,2,3,4,10	2500	7500	A-1,2,3,7	P	1,2,3,10,11,12	1,2,3,4,10	
Major Vegetables	20000	35000	A-2, 3,7	P	1,2,3,7,10,11,12	1,2,3,4,7,10	18000	30000	A-2,3,7	P	1,2,3,7,10,11,12	1,2,3,4,7,10	
Potato	-	-	-	-	-	-	-	-	-	-	-	-	
Pea	12000	20000	A - 2,3,7	P	1,2,3,7,10,11,12	1,2,3,4,7,10	-	-	-	-	-	-	
<b>Rainfed</b>													
Paddy	Local	2000	7500	A-1,2,3,7, B-1	F	1,2,3,4,5,6,7	1,2,3,4,8,10	2000	7500	A-1,2,3,7,B-1	F	1,2,3,4,5,6,7	1,2,3,4,8,10
	H.Y.V.	5000	10000	A-1,2,3,7, B-1	P	1,2,3,4,5,6,7	1,2,3,4,8,10	4500	9000	A-1,2,3,7,B-1	P	1,2,3,4,5,6,7	1,2,3,4,8,10
	Hybrid	26000	36000	A-1,2,3,7, B-1	P	1,2,3,4,5,6,7	1,2,3,4,8,10	26000	35000	A-1,2,3,7,B-1	P	1,2,3,4,5,6,7	1,2,3,4,8,10
Maize	10000	15000	A- 1,4,8	P	1,2,3,4,5,6,7	1,2,3,4,9,10	10000	15000	A- 1,4,8	P	1,2,3,4,5,6,7	1,2,3,4,9,10	
Pigeon pea	2600	4500	A -1,4,8,10	F	1,2,3,4,5,6,7	1,2,3,4,9,10	2500	4500	A-1,4,8,10	F	1,2,3,4,5,6,7	1,2,3,4,9,10	
Black gram	2500	3500	A - 1,2,9	F	1,2,3,4,5,6,7	1,2,3,4,9,10	2000	3500	A- 1,2,9	F	1,2,3,4,5,6,7	1,2,3,4,9,10	
Ragi	2500	5000	A - 1,2,9	P	1,2,3,4,5,6,7	1,2,3,4,9	2500	4500	A- 1,2,9	P	1,2,3,4,5,6,7	1,2,3,4,9	
<b>Horticulture</b>													
Orchard	-	-	-	-	-	-	-	-	-	-	-	-	
Vegetable	20000	30000	A - 1,2,3	P	1,2,3,4,6,7,9,10,11	1,2,3,4,9	12000	22000	A- 2,3,4	P	1,2,3,4,6,7,9,10,11	1,2,3,4,9	
<b>Animal Husbandry</b>													
Cows	1000	2200	A - 8, 9	F	1,2,5,6,7,8,11	1,2,3,4,11,12	-	-	-	-	-	-	
Buffaloes	900	1500	A - 8, 9	F	1,2,5,6,7,8,11	1,2,3,4,11,12	-	-	-	-	-	-	
Goat	1000	2000	A -8,9,10	F	1,2,5,6,7,8,11	1,2,3,4,11,12	-	-	-	-	-	-	
Duckery	-	-	-	-	-	-	-	-	-	-	-	-	
Poultry	1200	1800	A -8,9,10	P	1,2,5,6,7,8,11	1,2,3,4,11,12	-	-	-	-	-	-	
Fish	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Total :-</b>	<b>109200</b>	<b>183800</b>					<b>82000</b>	<b>138500</b>					

**Intervention :A Intensification** :-1. Improved management practices. 2. Change of variety form local to improve one. 3. Judicious use of Inputs like seed, fertilizers, water etc. 4. Adoption of Short duration varieties fertilizer responsive crop varieties. 5. Inter cropping with Pigeon pea, Black gram/Green gram. 6. Inter cropping/mixed cropping with Ginger turmeric/ Black gram/Green gram/Lobia. 7. Access to better market. 8. Change of breed form local to improved breed/upgradation of local breed. 9. Adoption of breeds with high lactation period in case of milch animals. 10. Adoption of high weight breeds having tolerance, in goatry/Piggery etc.

**B. Diversification** :-1. Adoption of inter/mixed cropping system in case of mono cropping. 2. Para cropping (Paddy with pea/gram/lentil). 3. Adoption of multi-tier cropping system in case of horticulture crops. 4. Paddy-cum-fish culture. 5. Cultivation of oil seeds/pulses to utilize residual moisture. 6.Cultivation of rainfed wheat after short duration paddy.

**Reasons for gap**-1. lack of capitals. 2. Lack of awareness. 3.Poor transfer of technology to farmers. 4. Non-availability of inputs. 5. Inability to take risks under rainfed conditions. 6. Lack of knowledge/motivation .7. Poor market information's. 8. Uncertainty to get profit. 9. Poor transport.10. Poor excess to improved technologies.11. Reluctance/Negligence by financial institute.12. lack of irrigation Facility.

**Prop. Strategies** :- 1. Training and exposures visit. 2. Demonstrations. 3. providing financial assistance/crop insurance/ Linkage to financial institution.. 4. providing market opportunities. 5. Gearing quality input supply in rural areas. 6. Inter cropping in uplands. 7. Follow up IPM & INM. 8. Promotion to green manuring to increase organic matter in soil. 9. Use of lime in acidic soil. 10 More emphasis on judicious use of soil and water. 11. Use improved breeds of cattle. 12. Farmer scientist interaction.

**TABLE- 5.25 : Gap in adoption and proposed strategies for promoting the Modified Farming System**

**Agro-ecological situation-II**

**Resource Poor**

Type of enterprises/com modities	EFS-I						EFS-II						
	Contribution in terms of net income		Interventions to be carried out	Gaps in adoption F/P/N	Rea-ns for gap	Pro. Strategies	Contribution in terms of net income		Interventions to be carried out	Gaps in adoption F/P/N	Reasons for gap	Pro. Strategies	
	Op-i	MAU					Op-i	MAU					
<b>Agricultural Crops</b>													
<b>Irrigated</b>													
Wheat	2000	7500	A-1,2,3,7, B-2,4	P	1,2,3,10,11,12	1,2,3,4,10	-	-	-	-	-	-	
Major Vegetables	15000	30000	A-2, 3,7	P	1,2,3,7,10,11,12	1,2,3,4,7,10	-	-	-	-	-	-	
Pea	8000	15000	A-2, 3,7	P	1,2,3,7,10,11,12	1,2,3,4,7,10	-	-	-	-	-	-	
<b>Rainfed</b>													
Paddy	Local	2000	7500	A-2,3,7, B-1	F	1,2,3,4,5,6,7	1,2,3,4,8,10	2000	7500	A-1,2,3,7, B-1	F	1,2,3,4,5,6,7	1,2,3,4,8,10
	H.Y.V.	4500	8000	A-1,2,3,7, B-1	P	1,2,3,4,5,6,7	1,2,3,4,8,10	4000	8000	A-1,2,3,7, B-1	P	1,2,3,4,5,6,7	1,2,3,4,8,10
	Hybrid	15000	25000	A-1,2,3,7, B-1	P	1,2,3,4,5,6,7	1,2,3,4,8,10	-	-	-	-	-	-
Ragi	2500	4500	A-1,4,8	P	1,2,3,4,5,6,7	1,2,3,4,9	2000	3500	A-1,4,8	P	1,2,3,4,5,6,7	1,2,3,4,9	
Maize	10000	15000	A-1,4,8,10	P	1,2,3,4,5,6,7	1,2,3,4,9,10	-	-	-	-	-	-	
Pigeon pea	2500	4000	A-1, 2, 9	F	1,2,3,4,5,6,7	1,2,3,4,9,10	-	-	-	-	-	-	
Black gram	2000	3000	A-1, 2, 9	F	1,2,3,4,5,6,7	1,2,3,4,9,10	-	-	-	-	-	-	
<b>-Horticulture</b>													
Orchard	-	-	-	-	-	-	-	-	-	-	-	-	
Vegetable	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Animal Husbandry</b>													
Cows	1500	2000	A-8,9	F	1,2,5,6,7,8,11	1,2,3,4,11,12	-	-	-	-	-	-	
Buffaloes	1000	1500	A-8,9	F	1,2,5,6,7,8,11	1,2,3,4,11,12	-	-	-	-	-	-	
Goat	800	1500	A-8,9,10	F	1,2,5,6,7,8,11	1,2,3,4,11,12	-	-	-	-	-	-	
Poultry	1000	1500	A-7,8,9,10	F	1,2,5,6,7,8,11	1,2,3,4,11,12	-	-	-	-	-	-	
<b>Total :-</b>	<b>67800</b>	<b>126000</b>	-	-	-	-	<b>8000</b>	<b>19000</b>	-	-	-	-	

**Intervention :A Intensification :-**1. Improved management practices. 2. Change of variety form local to improve one. 3. Judicious use of Inputs like seed, fertilizers, water etc. 4. Adoption of Short duration varieties fertilizer responsive crop varieties. 5. Inter cropping with Pigeon pea, Black gram/Green gram. 6. Inter cropping/mixed cropping with Ginger turmeric/ Black gram/Green gram/Lobia. 7. Access to better market. 8. Change of breed form local to improved breed/upgradation of local breed. 9. Adoption of breeds with high lactation period in case of milch animals. 10. Adoption of high weight breeds having tolerance, in goatry/Piggery etc.

**B. Diversification :-**1. Adoption of inter/mixed cropping system in case of mono cropping. 2. Para cropping (Paddy with pea/gram/lentil). 3. Adoption of multi-tier cropping system in case of horticulture crops. 4. Paddy-cum-fish culture. 5. Cultivation of oil seeds/pulses to utilize residual moisture. 6.Cultivation of rainfed wheat after short duration paddy.

**Reasons for gap-**1. lack of capitals. 2. Lack of awareness. 3.Poor transfer of technology to farmers. 4. Non-availability of inputs. 5. Inability to take risks under rainfed conditions. 6. Lack of knowledge/motivation .7. Poor market information's. 8. Uncertainty to get profit. 9. Poor transport.10. Poor excess to improved technologies.11. Reluctance/Negligence by financial institute.12. lack of irrigation Facility.

**Prop. Strategies :-** 1. Training and exposures visit. 2. Demonstrations. 3. providing financial assistance/crop insurance/ Linkage to financial institution.. 4. providing market opportunities. 5. Gearing quality input supply in rural areas. 6. Inter cropping in uplands. 7. Follow up IPM & INM. 8. Promotion to green manuring to increase organic matter in soil. 9. Use of lime in acidic soil. 10 More emphasis on judicious use of soil and water. 11. Use improved breeds of cattle. 12. Farmer scientist interaction.



**TABLE- 5.26 : Gap in adoption and proposed strategies for promoting the Modified Farming System**

**Agro-ecological situation-III**

**Resource Rich**

Type of enterprises/commodities	EFS-I						EFS-II						
	Contribution in terms of net income		Interventions to be carried out	Gaps in adoption F/P/N	Reasons for gap	Proposed Strategies	Contribution in terms of net income		Interventions to be carried out	Gaps in adoption F/P/N	Reasons for gap	Pro. Strategies	
	Op-i	MAU					Op-i	MAU					
<b>Agricultural crops</b>													
<b>Irrigated</b>													
Wheat	3000	10000	A – 1,2,3,7	P	1,2,3,10,11,12	1,2,3,4,10	3200	10000	A – 1,2,3,7	P	1,2,3,10,11,12	1,2,3,4,10	
Major Vegetables	15000	30000	A -2,3,7	P	1,2,3,7,10,11,12	1,2,3,4,7,10	-	-	-	-	-	-	
Potato	15000	25000	A – 2,3,7	P	1,2,3,7,10,11,12	1,2,3,4,7,10	13000	25000	A – 2,3,7	P	1,2,3,7,10,11,12	1,2,3,4,7,10	
Pea	10000	15000	A -2,3,7	P	1,2,3,7,10,11,12	1,2,3,4,7,10	-	-	-	-	-	-	
<b>Rainfed</b>													
Paddy	Local	2000	8000	A-1,2,3,7,B-1	F	1,2,3,4,5,6,7	1,2,3,4,8,10	2000	7500	A-1,2,3,7,B-1	F	1,2,3,4,5,6,7	1,2,3,4,8,10
	H.Y.V.	5500	12000	A-1,2,3,7,B-1	P	1,2,3,4,5,6,7	1,2,3,4,8,10	6000	12000	A-1,2,3,7,B-1	P	1,2,3,4,5,6,7	1,2,3,4,8,10
	Hybrid	30000	40000	A-1,2,3,7,B-1	P	1,2,3,4,5,6,7	1,2,3,4,8,10	30000	40000	A-1,2,3,7,B-1	P	1,2,3,4,5,6,7	1,2,3,4,8,10
Maize	8000	15000	A – 1,4,8	P	1,2,3,4,5,6,7	1,2,3,4,9,10	8000	15000	A- 1,4,8	P	1,2,3,4,5,6,7	1,2,3,4,9,10	
Pigeon pea	2000	4000	A -1,4,8,10	F	1,2,3,4,5,6,7	1,2,3,4,9,10	2000	4000	A-1,4,8,10	F	1,2,3,4,5,6,7	1,2,3,4,9,10	
Black gram	2000	3500	A -1,2,9	F	1,2,3,4,5,6,7	1,2,3,4,9,10	2000	3500	A -1,2,9	F	1,2,3,4,5,6,7	1,2,3,4,9,10	
Ragi	2500	4500	A – 1,2,9	P	1,2,3,4,5,6,7	1,2,3,4,9	3000	4500	A – 1,2,9	P	1,2,3,4,5,6,7	1,2,3,4,9	
Ginger	-	-	-	-	-	-	-	-	-	-	-	-	
Ground Nut	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Horticulture</b>													
Orchard	-	-	-	-	-	-	-	-	-	-	-	-	
Vegetable	10000	20000	A -2,3,4	P	1,2,,3,4,6,7,9,10,11	1,2,3,4,9	-	-	-	-	-	-	
<b>Animal Husbandry</b>													
Cows	1300	1800	A -8,9	F	1,2,5,6,7,8,11	1,2,3,4,11,12	1200	1500	A – 8,9	F	1,2,5,6,7,8,11	1,2,3,4,11,12	
Buffaloes	900	1500	A -8,9	F	1,2,5,6,7,8,11	1,2,3,4,11,12	900	1500	A -8,9	F	1,2,5,6,7,8,11	1,2,3,4,11,12	
Goat	1000	1800	A – 8,9,10	F	1,2,5,6,7,8,11	1,2,3,4,11,12	1000	1800	A -8,9,10	F	1,2,5,6,7,8,11	1,2,3,4,11,12	
Duckery	-	-	-	-	-	-	4000	6000	A -8,9,10	-	-	-	
Poultry	1000	1500	A – 8,9,10	P	1,2,5,6,7,8,11	1,2,3,4,11,12	1000	1500	A -8,9,10	P	1,2,5,6,7,8,11	1,2,3,4,11,12	
Fish	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Total :-</b>	<b>109200</b>	<b>193600</b>	-	-	-	-	<b>77300</b>	<b>135400</b>	-	-	-	-	

**Intervention :A Intensification :-**1. Improved management practices. 2. Change of variety form local to improve one. 3. Judicious use of Inputs like seed, fertilizers, water etc. 4. Adoption of Short duration varieties fertilizer responsive crop varieties. 5. Inter cropping with Pigeon pea, Black gram/Green gram. 6. Inter cropping/mixed cropping with Ginger turmeric/ Black gram/Green gram/Lobia. 7. Access to better market. 8. Change of breed form local to improved breed/upgradation of local breed.

9. Adoption of breeds with high lactation period in case of milch animals. 10. Adoption of high weight breeds having tolerance, in goatry/Piggery etc.

**B. Diversification :-**1. Adoption of inter/mixed cropping system in case of mono cropping. 2. Para cropping (Paddy with pea/gram/lentil). 3. Adoption of multi-tier cropping system in case of horticulture crops. 4. Paddy-cum-fish culture. 5. Cultivation of oil seeds/pulses to utilize residual moisture. 6.Cultivation of rainfed wheat after short duration paddy.

**Reasons for gap-**1. lack of capitals. 2. Lack of awareness. 3.Poor transfer of technology to farmers. 4. Non-availability of inputs. 5. Inability to take risks under rainfed conditions. 6. Lack of knowledge/motivation .7. Poor market information's. 8. Uncertainty to get profit. 9. Poor transport.10. Poor excess to improved technologies.11. Reluctance/Negligence by financial institute.12. lack of irrigation Facility.

**Prop. Strategies :-** 1. Training and exposures visit. 2. Demonstrations. 3. providing financial assistance/crop insurance/ Linkage to financial institution.. 4. providing market opportunities. 5. Gearing quality input supply in rural areas. 6. Inter cropping in uplands. 7. Follow up IPM & INM. 8. Promotion to green manuring to increase organic matter in soil. 9. Use of lime in acidic soil. 10 More emphasis on judicious use of soil and water. 11. Use improved breeds of cattle. 12. Farmer scientist interaction.

**TABLE- 5.27 : Gap in adoption and proposed strategies for promoting the Modified Farming System**

**Agro-ecological situation-III**

**Resource Poor**

Type of enterprises/commodities	EFS-I						EFS-II						
	Contribution in terms of net income		Interventions to be carried out	Gaps in adoption F/P/N	Reasons for gap	Pro. Strategies	Contribution in terms of net income		Interventions to be carried out	Gaps in adoption F/P/N	Reasons for gap	Pro. Strategies	
	Op-i	MAU					Op-i	MAU					
<b>Agricultural crops</b>													
<b>Irrigated</b>													
Wheat	2000	7500	A-1,2,3,7,B-2,4	P	1,2,3,10,11,12	1,2,3,4,10	2000	7500	A-1,2,3,7,B-2,4	P	1,2,3,10,11,12	1,2,3,4,10	
Major Vegetables	10000	20000	A- 2,3,7	P	1,2,3,7,10,11,12	1,2,3,4,7,10	-	-	-	-	-	-	
Pea	8000	15000	A-2,3,7	P	1,2,3,7,10,11,12	1,2,3,4,7,10	-	-	-	-	-	-	
<b>Rainfed</b>													
Paddy	Local	2000	7500	A-1,2,3,7,B-1	F	1,2,3,4,5,6,7	1,2,3,4,8,10	2000	7500	A-1,2,3,7,B -1	F	1,2,3,4,5,6,7	1,2,3,4,8,10
	H.Y.V.	4000	10000	A-1,2,3,7,B-1	P	1,2,3,4,5,6,7	1,2,3,4,8,10	4000	10000	A-1,2,3,7,B -1	P	1,2,3,4,5,6,7	1,2,3,4,8,10
	Hybrid	14000	25000	A-1,2,3,7,B-1	P	1,2,3,4,5,6,7	1,2,3,4,8,10	12000	20000	A-1,2,3,7,B -1	P	1,2,3,4,5,6,7	1,2,3,4,8,10
Ragi	2500	4500	A -1,4,8	P	1,2,3,4,5,6,7	1,2,3,4,9	2200	4500	A -1,4,8	P	1,2,3,4,5,6,7	1,2,3,4,9	
Maize	8000	15000	A-1,4,8,10	P	1,2,3,4,5,6,7	1,2,3,4,9,10	-	-	-	-	-	-	
Pigeon pea	2500	4500	A- 1,2,9	F	1,2,3,4,5,6,7	1,2,3,4,9,10	2000	4000	A - 1,2,9	F	1,2,3,4,5,6,7	1,2,3,4,9,10	
Black gram	2000	3000	A -1,2,9	F	1,2,3,4,5,6,7	1,2,3,4,9,10	2000	3000	A - 1,2,9	F	1,2,3,4,5,6,7	1,2,3,4,9,10	
<b>Horticulture</b>													
Orchard	-	-	-	-	-	-	-	-	-	-	-	-	
Vegetable	1000	20000	A -2,3,4	P	1,2,3,4,6,7,9,10,11	1,2,3,4,9	-	-	-	-	-	-	
<b>Animal Husbandry</b>													
Cows	1200	1700	A -8,9	F	1,2,5,6,7,8,11	1,2,3,4,11,12	1200	1700	A -8, 9	F	1,2,5,6,7,8,11	1,2,3,4,11,12	
Buffaloes	1000	1500	A -8,9	F	1,2,5,6,7,8,11	1,2,3,4,11,12	1000	1500	A -8, 9	F	1,2,5,6,7,8,11	1,2,3,4,11,12	
Goat	800	1200	A -8,9,10	F	1,2,5,6,7,8,11	1,2,3,4,11,12	800	1200	A-8,9,10	F	1,2,5,6,7,8,11	1,2,3,4,11,12	
Poultry	1000	1500	A-7,8,9,10	F	1,2,5,6,7,8,11	1,2,3,4,11,12	1000	1300	A-7,8,9,10	F	1,2,5,6,7,8,11	1,2,3,4,11,12	
Fish	-	-	-	-	-	-	-	-	-	-	-	-	
Agro Forestry	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Total :-</b>	<b>55000</b>	<b>112000</b>	-	-	-	-	<b>26200</b>	<b>56500</b>	-	-	-	-	

**Intervention :A Intensification :-**1. Improved management practices. 2. Change of variety form local to improve one. 3. Judicious use of Inputs like seed, fertilizers, water etc. 4. Adoption of Short duration varieties fertilizer responsive crop varieties. 5. Inter cropping with Pigeon pea, Black gram/Green gram. 6. Inter cropping/mixed cropping with Ginger turmeric/ Black gram/Green gram/Lobia. 7. Access to better market. 8. Change of breed form local to improved breed/upgradation of local breed. 9. Adoption of breeds with high lactation period in case of milch animals. 10. Adoption of high weight breeds having tolerance, in goaty/Piggery etc.

**B. Diversification :-**1. Adoption of inter/mixed cropping system in case of mono cropping. 2. Para cropping (Paddy with pea/gram/lentil). 3. Adoption of multi-tier cropping system in case of horticulture crops. 4. Paddy-cum-fish culture. 5. Cultivation of oil seeds/pulses to utilize residual moisture. 6.Cultivation of rainfed wheat after short duration paddy.

**Reasons for gap-**1. lack of capitals. 2. Lack of awareness. 3.Poor transfer of technology to farmers. 4. Non-availability of inputs. 5. Inability to take risks under rainfed conditions. 6. Lack of knowledge/motivation .7. Poor market information's. 8. Uncertainty to get profit. 9. Poor transport.10. Poor excess to improved technologies.11. Reluctance/Negligence by financial institute.12. lack of irrigation Facility.

**Prop. Strategies :-** 1. Training and exposures visit. 2. Demonstrations. 3. providing financial assistance/crop insurance/ Linkage to financial institution.. 4. providing market opportunities. 5. Gearing quality input supply in rural areas. 6. Inter cropping in uplands. 7. Follow up IPM & INM. 8. Promotion to green manuring to increase organic matter in soil. 9. Use of lime in acidic soil. 10 More emphasis on judicious use of soil and water. 11. Use improved breeds of cattle. 12. Farmer scientist interaction.

