

VII STRATEGIES TO OVER COME THE GAPS IN IPM/INN

Chapter VII Table -1
Proposed Strategies for Integrated Nutrient Management

District : Chatra

Crop: Paddy

Sl. No.	Particulars	AES-I					AES-II					AES-III					AES-IV						
		E.P	R.P.	G.A.	R.G.	P.S.	E.P	R.P.	G.A.	R.G.	P.S.	E.P	R.P.	G.A.	R.G.	P.S.	E.P	R.P.	G.A.	R.G.	P.S.		
1.	Soil Testing/ Soil Health	-		F	1,4	1,2	-		F	1,4	1,2	-		F	1,4	1,2	-		F	1,4	1,2		
2.	Use of Manures(mt./ha.)																						
	FYM	2 tone	10+/ha	P	2,3,4	1-5	2 tone	10+/ha	P	2,3,4	1-5	2 tone	10+/ha	P	2,3,4	1-5	2 tone	10+/ha	P	2,3,4	1-5		
	Compost	Nil		F	1,2,3,4	1-5	Nil		F	1,2,3,4	1-5	Nil			F	1,2,3,4	1-5		Nil		F	1,2,3,4	1-5
	Vermicompost	Nil		F	1,2,3,4	1-5	Nil		F	1,2,3,4	1-5	Nil			F	1,2,3,4	1-5		Nil		F	1,2,3,4	1-5
3.	Use of major Fert.																						
	Basal dose Kg./ha.																						
	N kg/ha	20	20-50 kg/ha	P	1,2,4	1-5	20	20-50 kg/ha	P	1,2,4	1-5	40	20-50 kg/ha	P	1,2,4	1-5	20	20-50 kg/ha	P	1,2,4	1-5		
	P kg/ha	30	20-40 kg/ha	P	1,2,4	1-5	30	20-40 kg/ha	P	1,2,4	1-5	30	20-40 kg/ha	P	1,2,4	1-5	30	20-40 kg/ha	P	1,2,4	1-5		
	K kg/ha	00	20-40 kg/ha	F	1,2,3,4	1-5	00	20-40 kg/ha	F	1,2,3,4	1-5	10	20-40 kg/ha	P	1,2,3,4	1-5	00	20-40 kg/ha	F	1,2,3,4	1-5		
4.	Top dress (Kg./ha.)																						
	N	20	20-50 kg/ha	P	1,3,4	1-5	20	20-50 kg/ha	P	1,3,4	1-5	30	20-50 kg/ha	P	1,3,4	1-5	20	20-50 kg/ha	P	1,3,4	1-5		
5.	Cultivation of Legumes																						
	As rotational crop	Not done	Pulse crop	F	1,2,4	1-4	Not done	Pulse crop	F	1,2,4	1-4	Not done	Pulse crop	F	1,2,4	1-4	Not done	Pulse crop	F	1,2,4	1-4		
	As inter crop	-	-	F	1,2,4	1-4	-	-	F	1,2,4	1-4	-	-	F	1,2,4	1-4	-	-	F	1,2,4	1-4		
	As Green manure	Not done	Greengram/Cowpea, Sunhemp/Sesbania etc	F	1,2,4	1-4	Not done	Greengram/Cowpea, Sunhemp/Sesbania etc	F	1,2,4	1-4	Not done	Greengram/Cowpea, Sunhemp/Sesbania etc	F	1,2,4	1-4	Not done	Greengram/Cowpea, Sunhemp/Sesbania etc	F	1,2,4	1-4		
	Use of bio-fertil.(Kg./ha.)	-	Blue Green algae 2 kg/ha	F	1,2,4	1-4	-	Blue Green algae 2 kg/ha	F	1,2,4	1-4	-	Blue Green algae 2 kg/ha	F	1,2,4	1-4	-	Blue Green algae 2 kg/ha	F	1,2,4	1-4		
		-	Azolla	F	1,2,4	1-4	-	Azolla	F	1,2,4	1-4	-	Azolla	F	1,2,4	1-4	-	Azolla	F	1,2,4	1-4		
		-	Phosphate	F	1,2,4	1-4	-	Phosphate	F	1,2,4	1-4	-	Phosphate	F	1,2,4	1-4	-	Phosphate	F	1,2,4	1-4		
		-	Solubilizers	F	1,2,4	1-4	-	Solubilizers	F	1,2,4	1-4	-	Solubilizers	F	1,2,4	1-4	-	Solubilizers	F	1,2,4	1-4		
6.	Any other																						

Reasons for gap 1. Lack of knowledge 2. Lack resources 3. Non availability of inputs 4. Unaware of Management practices	Gap in Adoption N = Nil P = Partial F = Full	Proposed Strategy 1. Training & awareness campaign 2. Demonstration 3. Exposer visit 4. On farm trail/ORF 5. Soil testing based fertilizer use needed to be strengthened
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Chapter VII Table -1
Proposed Strategies for Integrated Nutrient Management

District : Chatra

Crop: Maize

Sl. No.	Particulars	AES-I					AES-II					AES-III					AES-IV				
		E.P	R.P.	G.A.	R.G.	P.S.	E.P	R.P.	G.A.	R.G.	P.S.	E.P	R.P.	G.A.	R.G.	P.S.	E.P	R.P.	G.A.	R.G.	P.S.
1	Soil Testing/ Soil Health			F	1,4	1,2			F	1,4	1,2			F	1,4	1,2			F	1,4	1,2
2	Use of Manures(mt./ha.)																				
	FYM	2 tone	10-15/ha	P	2,3,4	1-5	2 tone	10-15/ha	P	2,3,4	1-5	3 tone	10-15/ha	P	2,3,4	1-5	2 tone	10-15/ha	P	2,3,4	1-5
	Compost	-		F	1,2,3,4	1-5	-		F	1,2,3,4	1-5	-		F	1,2,3,4	1-5	-		F	1,2,3,4	1-5
	Vermicompost	-		F	1,2,3,4	1-5	-		F	1,2,3,4	1-5	-		F	1,2,3,4	1-5	-		F	1,2,3,4	1-5
3.	Use of major Fert.																				
	Basal dose Kg./ha.																				
	N	10	30 kg/ha	P	1,2,4	1-5	10	30 kg/ha	P	1,2,4	1-5	25	30 kg/ha	P	1,2,4	1-5	10	30 kg/ha	P	1,2,4	1-5
	P	10	60 kg/ha	P	1,2,4	1-5	10	60 kg/ha	P	1,2,4	1-5	20	60 kg/ha	P	1,2,4	1-5	10	60 kg/ha	P	1,2,4	1-5
	K	00	40 kg/ha	F	1,2,3,4	1-5	00	40 kg/ha	F	1,2,3,4	1-5	10	40 kg/ha	P	1,2,3,4	1-5	00	40 kg/ha	F	1,2,3,4	1-5
4.	Top dress (Kg./ha.)																				
	N	30	30-40 kg/ha	P	1,3,4	1-5	30	30-40 kg/ha	P	1,3,4	1-5	30	30-40 kg/ha	P	1,3,4	1-5	30	30-40 kg/ha	P	1,3,4	1-5
5.	Cultivation of Legumes																				
	As rotational crop	-	Pigeonpea, Cowpea	F	1,2,4	1-4	-	Pigeonpea, Cowpea	F	1,2,4	1-4	-	Pigeonpea, Cowpea	F	1,2,4	1-4	-	Pigeonpea, Cowpea	F	1,2,4	1-4
	As inter crop	Ground nut	Soybean, Groundnut Cowpea	p	1,2,4	1-4	Ground nut	Soybean, Groundnut Cowpea	p	1,2,4	1-4	Ground nut	Soybean, Groundnut Cowpea	p	1,2,4	1-4	Ground nut	Soybean, Groundnut Cowpea	p	1,2,4	1-4
	As Green manure	-	-	F	1,2,4	1-4	-	-	F	1,2,4	1-4	-	-	F	1,2,4	1-4	-	-	F	1,2,4	1-4
	Use of bio-fertl.(Kg./ha.)	-	Azotobacter	F	1,2,4	1-4	-	Azotobacter	F	1,2,4	1-4	-	Azotobacter	F	1,2,4	1-4	-	Azotobacter	F	1,2,4	1-4
		-	Phosphate Solubilizers	F	1,2,4	1-4	-	Phosphate Solubilizers	F	1,2,4	1-4	-	Phosphate Solubilizers	F	1,2,4	1-4	-	Phosphate Solubilizers	F	1,2,4	1-4
6.	Any other																				

Reasons for gap
1. Lack of knowledge
2. Lack resources
3. Non availability of inputs
4. Unaware of Management practices

Gap in Adoption
N = Nil
P = Partial
F = Full

Proposed Strategy
1. Training & awareness campaign
2. Demonstration
3. Exposer visit
4. On farm trail/ORF
5. Soil testing based fertilizer use needed to be strengthened

**Chapter VII Table -1
Proposed Strategies for Integrated Nutrient Management**

District : Chatra

Crop: Wheat

Sl. No.	Particulars	AES-I					AES-II					AES-III					AES-IV							
		E.P	R.P.	G.A.	R.G.	P.S.	E.P	R.P.	G.A.	R.G.	P.S.	E.P	R.P.	G.A.	R.G.	P.S.	E.P	R.P.	G.A.	R.G.	P.S.			
1.	Soil Testing/ Soil Health	-		F	1,4	1,2	-		F	1,4	1,2	-		F	1,4	1,2	-		F	1,4	1,2			
2.	Use of Manures(mt./ha.)																							
	FYM	2 tone	5-10/ha	P	2,3,4	1-5	2 tone	5-10/ha	P	2,3,4	1-5	2 tone	5-10/ha	P	2,3,4	1-5	2 tone	5-10/ha	P	2,3,4	1-5			
	Compost	-		-	-	-	-		-	-	-	-		-	-	-	-		-	-	-	-	-	-
	Vermicompost	-		-	-	-	-		-	-	-	-		-	-	-	-		-	-	-	-	-	-
3.	Use of major Fert.																							
	Basal dose Kg./ha.																							
	N	30	50 kg/ha	P	1,2,4	1-5	30	50 kg/ha	P	1,2,4	1-5	20	50 kg/ha	P	1,2,4	1-5	30	50 kg/ha	P	1,2,4	1-5			
	P	20	50 kg/ha	P	1,2,4	1-5	20	50 kg/ha	P	1,2,4	1-5	40	50 kg/ha	P	1,2,4	1-5	20	50 kg/ha	P	1,2,4	1-5			
	K	00	25 kg/ha	F	1,2,3,4	1-5	00	25 kg/ha	F	1,2,3,4	1-5	10	25 kg/ha	P	1,2,3,4	1-5	00	25 kg/ha	F	1,2,3,4	1-5			
4.	Top dress (Kg./ha.)																							
	N	10	50 kg/ha	P	1,3,4	1-5	10	50 kg/ha	P	1,3,4	1-5	20	50 kg/ha	P	1,3,4	1-5	10	50 kg/ha	P	1,3,4	1-5			
5.	Cultivation of Legumes																							
	As rotational crop	-	Moong/Urad/Soyabean	F	1,2,4	1-4	-	Moong/Urad/Soyabean	F	1,2,4	1-4	-	Moong/Urad/Soyabean	F	1,2,4	1-4	-	Moong/Urad/Soyabean	F	1,2,4	1-4			
	As inter crop	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	As Green manure	-	Sunhemp, Greengram, Cowpea etc.	F	1,2,4	1-4	-	Sunhemp, Greengram, Cowpea etc.	F	1,2,4	1-4	-	Sunhemp, Greengram, Cowpea etc.	F	1,2,4	1-4	-	Sunhemp, Greengram, Cowpea etc.	F	1,2,4	1-4			
	Use of bio-fertl.(Kg./ha.)	-	Azotobacter Azospirillum	F	1,2,4	1-4	-	Azotobacter Azospirillum	F	1,2,4	1-4	-	Azotobacter Azospirillum	F	1,2,4	1-4	-	Azotobacter Azospirillum	F	1,2,4	1-4			
			Phosphate Solubilizers	F	1,2,4	1-4		Phosphate Solubilizers	F	1,2,4	1-4		Phosphate Solubilizers	F	1,2,4	1-4		Phosphate Solubilizers	F	1,2,4	1-4			
6.	Any other																							

Reasons for gap
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5. Soil testing based fertilizer use needed to be strengthened

Chapter VII Table -1
Proposed Strategies for Integrated Nutrient Management

District : Chatra

Crop: Arhar

Sl. No.	Particulars	AES-I					AES-II					AES-III					AES-IV					
		E.P	R.P.	G.A.	R.G.	P.S.	E.P	R.P.	G.A.	R.G.	P.S.	E.P	R.P.	G.A.	R.G.	P.S.	E.P	R.P.	G.A.	R.G.	P.S.	
1.	Soil Testing/ Soil Health	-					-					-					-					
2.	Use of Manures(mt./ha.)																					
	FYM	1 tone	5 tone	P	2,3,4	1-5	1 tone	5 tone	P	2,3,4	1-5	1 tone	5 tone	P	2,3,4	1-5	1 tone	5 tone	P	2,3,4	1-5	
	Compost	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Vermicompost	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.	Use of major Fert.																					
	Basal dose Kg./ha.																					
	N	50	20 kg/ha	P	1,2,4	1-5	50	20 kg/ha	P	1,2,4	1-5	50	20 kg/ha	P	1,2,4	1-5	50	20 kg/ha	P	1,2,4	1-5	
	P	1	40 kg/ha	P	1,2,4	1-5	1	40 kg/ha	P	1,2,4	1-5	5	40 kg/ha	P	1,2,4	1-5	1	40 kg/ha	P	1,2,4	1-5	
	K	0	20 kg/ha	F	1,2,3,4	1-5	0	20 kg/ha	F	1,2,3,4	1-5	0	20 kg/ha	F	1,2,3,4	1-5	0	20 kg/ha	F	1,2,3,4	1-5	
4.	Top dress (Kg./ha.)																					
	N	5	10	P	1,3,4	1-5	5	10	P	1,3,4	1-5	7	10	P	1,3,4	1-5	5	10	P	1,3,4	1-5	
5.	Cultivation of Legumes																					
	As rotational crop	-	Greengram, Blackgram	F	1,2,4	1-4	-	Greengram, Blackgram	F	1,2,4	1-4	-	Greengram, Blackgram	F	1,2,4	1-4	-	Greengram, Blackgram	F	1,2,4	1-4	
	As inter crop	Upland rice	Upland rice	N	-	-	Upland rice	Upland rice	N	-	-	Upland rice	Upland rice	N	-	-	Upland rice	Upland rice	N	-	-	
	As Green manure	-	Niger, Maize	F	1,2,4	1-4	-	Niger, Maize	F	1,2,4	1-4	-	Niger, Maize	F	1,2,4	1-4	-	Niger, Maize	F	1,2,4	1-4	
	Use of bio-fertl.(Kg./ha.)	-	Rhizobium	F	1,2,4	1-4	-	Rhizobium	F	1,2,4	1-4	-	Rhizobium	F	1,2,4	1-4	-	Rhizobium	F	1,2,4	1-4	
		-	Phosphate Solubilizers	F	1,2,4	1-4	-	Phosphate Solubilizers	F	1,2,4	1-4	-	Phosphate Solubilizers	F	1,2,4	1-4	-	Phosphate Solubilizers	F	1,2,4	1-4	
6.	Any other																					

Reasons for gap
1. Lack of knowledge
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3. Non availability of inputs
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Proposed Strategy
1. Training & awareness campaign
2. Demonstration
3. Exposer visit
4. On farm trail/ORF
5. Soil testing based fertilizer use needed to be strengthened

Chapter VII Table -1
Proposed Strategies for Integrated Nutrient Management

District : Chatra

Crop: Nizer

Sl. No.	Particulars	AES-I					AES-II					AES-III					AES-IV					
		E.P	R.P.	G.A.	R.G.	P.S.	E.P	R.P.	G.A.	R.G.	P.S.	E.P	R.P.	G.A.	R.G.	P.S.	E.P	R.P.	G.A.	R.G.	P.S.	
1.	Soil Testing/ Soil Health	-		-	-	-	-		-	-	-	-		-	-	-	-		-	-	-	
2.	Use of Manures(mt./ha.)																					
	FYM	-	5 tone	F	2,3,4	1-5	-	5 tone	F	2,3,4	1-5	-	5 tone	F	2,3,4	1-5	-	5 tone	F	2,3,4	1-5	
	Compost	-		-	-	-	-		-	-	-	-	-		-	-	-	-		-	-	-
	Vermicompost	-		-	-	-	-		-	-	-	-	-		-	-	-	-		-	-	-
3.	Use of major Fert.																					
	Basal dose Kg./ha.																					
	N	5	20 kg/ha	P	1,2,4	1-5	5	20 kg/ha	P	1,2,4	1-5	5	20 kg/ha	P	1,2,4	1-5	5	20 kg/ha	P	1,2,4	1-5	
	P	-	20 kg/ha	F	1,2,4	1-5	-	20 kg/ha	F	1,2,4	1-5	-	20 kg/ha	F	1,2,4	1-5	-	20 kg/ha	F	1,2,4	1-5	
	K	-	15 kg/ha	F	1,2,3,4	1-5	-	15 kg/ha	F	1,2,3,4	1-5	-	15 kg/ha	F	1,2,3,4	1-5	-	15 kg/ha	F	1,2,3,4	1-5	
4.	Top dress (Kg./ha.)																					
	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
5.	Cultivation of Legumes																					
	As rotational crop	-	Moong/Gram	F	1,2,4	1-4	-	Moong/Gram	F	1,2,4	1-4	-	Moong/Gram	F	1,2,4	1-4	-	Moong/Gram	F	1,2,4	1-4	
	As inter crop	-	Arhar	F	1,2,4	1-4	-	Arhar	F	1,2,4	1-4	-	Arhar	F	1,2,4	1-4	-	Arhar	F	1,2,4	1-4	
	As Green manure	-	Cowpea, Dhaincha	F	1,2,4	1-4	-	Cowpea, Dhaincha	F	1,2,4	1-4	-	Cowpea, Dhaincha	F	1,2,4	1-4	-	Cowpea, Dhaincha	F	1,2,4	1-4	
	Use of bio-fertl.(Kg./ha.)	-	Phosphate Solubilizers	F	1,2,4	1-4	-	Phosphate Solubilizers	F	1,2,4	1-4	-	Phosphate Solubilizers	F	1,2,4	1-4	-	Phosphate Solubilizers	F	1,2,4	1-4	
6.	Any other																					

Reasons for gap
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Proposed Strategy
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2. Demonstration
3. Exposer visit
4. On farm trail/ORF
5. Soil testing based fertilizer use needed to be strengthened

Chapter VII Table -1
Proposed Strategies for Integrated Nutrient Management

District : Chatra

Crop: Potato

Sl. No.	Particulars	AES-I					AES-II					AES-III					AES-IV				
		E.P	R.P.	G.A.	R.G.	P.S.	E.P	R.P.	G.A.	R.G.	P.S.	E.P	R.P.	G.A.	R.G.	P.S.	E.P	R.P.	G.A.	R.G.	P.S.
1.	Soil Testing/ Soil Health	-	To be done	-	-	-	-	To be done	-	-	-	-	To be done	-	-	-	-	To be done	-	-	-
2.	Use of Manures(mt./ha.)																				
	FYM	15	20-25 kg/ha	P	2,3,4	1-5	15	20-25 kg/ha	P	2,3,4	1-5	20	20-25 kg/ha	P	2,3,4	1-5	15	20-25 kg/ha	P	2,3,4	1-5
	Compost	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Vermicompost	-	4-5 kg/ha	F	2,3,4	1-5	-	4-5 kg/ha	F	2,3,4	1-5	-	4-5 kg/ha	F	2,3,4	1-5	-	4-5 kg/ha	F	2,3,4	1-5
3.	Use of major Fert.																				
	Basal dose Kg./ha.																				
	N kg/ha	20	50 kg/ha	P	1,2,4	1-5	20	50 kg/ha	P	1,2,4	1-5	30	50 kg/ha	P	1,2,4	1-5	20	50 kg/ha	P	1,2,4	1-5
	P kg/ha	50	90 kg/ha	P	1,2,4	1-5	50	90 kg/ha	P	1,2,4	1-5	60	90 kg/ha	P	1,2,4	1-5	50	90 kg/ha	P	1,2,4	1-5
	K kg/ha	20	100 kg/ha	P	1,2,3,4	1-5	20	100 kg/ha	P	1,2,3,4	1-5	25	100 kg/ha	P	1,2,3,4	1-5	20	100 kg/ha	P	1,2,3,4	1-5
4.	Top dress (Kg./ha.)																				
	N	40	50 kg/ha	P	1,2,3,4	1-5	40	50 kg/ha	P	1,2,3,4	1-5	40	50 kg/ha	P	1,2,3,4	1-5	40	50 kg/ha	P	1,2,3,4	1-5
5.	Cultivation of Legumes																				
	As rotational crop	-	Frenchbean	F	1,2,4	1-4	-	Frenchbean	F	1,2,4	1-4	-	Frenchbean	F	1,2,4	1-4	-	Frenchbean	F	1,2,4	1-4
	As inter crop	Mustard, Bean	Beans, Cabbage, Cucumber	P	1,2,4	1-4	Mustard, Bean	Beans, Cabbage, Cucumber	P	1,2,4	1-4	Mustard, Bean	Beans, Cabbage, Cucumber	P	1,2,4	1-4	Mustard, Bean	Beans, Cabbage, Cucumber	P	1,2,4	1-4
	As Green manure	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Use of bio-fertl.(Kg./ha.)	-	Aqotobacter 0.5 kg/ha Phosphate Solubilizers	F	1,2,4	1-4	-	Aqotobacter 0.5 kg/ha Phosphate Solubilizers	F	1,2,4	1-4	-	Aqotobacter 0.5 kg/ha Phosphate Solubilizers	F	1,2,4	1-4	-	Aqotobacter 0.5 kg/ha Phosphate Solubilizers	F	1,2,4	1-4
6.	Any other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Reasons for gap
1. Lack of knowledge
2. Lack resources
3. Non availability of inputs
4. Unaware of Management practices

Gap in Adoption
N = Nil
P = Partial
F = Full

Proposed Strategy
1. Training & awareness campaign
2. Demonstration
3. Exposer visit
4. On farm trail/ORF
5. Soil testing based fertilizer use needed to be strengthened

Chapter VII Table -1
Proposed Strategies for Integrated Nutrient Management

District : Chatra

Crop: Tomato

Sl. No.	Particulars	AES-I					AES-II					AES-III					AES-IV				
		E.P	R.P.	G.A.	R.G.	P.S.	E.P	R.P.	G.A.	R.G.	P.S.	E.P	R.P.	G.A.	R.G.	P.S.	E.P	R.P.	G.A.	R.G.	P.S.
1.	Soil Testing/ Soil Health	-	To be done	F	2,3,4	1-5	-	To be done	F	2,3,4	1-5	-	To be done	F	2,3,4	1-5	-	To be done	F	2,3,4	1-5
2.	Use of Manures(mt./ha.)																				
	FYM	7	15-20 kg/ha	P	2,3,4	1-5	7	15-20 kg/ha	P	2,3,4	1-5	7	15-20 kg/ha	P	2,3,4	1-5	7	15-20 kg/ha	P	2,3,4	1-5
	Compost	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Vermicompost	-	4 kg/ha	F	2,3,4	1-5	-	4 kg/ha	F	2,3,4	1-5	-	4 kg/ha	F	2,3,4	1-5	-	4 kg/ha	F	2,3,4	1-5
3.	Use of major Fert.																				
	Basal dose Kg./ha.																				
	N	10	60 kg/ha	P	1,2,4	1-5	10	60 kg/ha	P	1,2,4	1-5	20	60 kg/ha	P	1,2,4	1-5	10	60 kg/ha	P	1,2,4	1-5
	P	50	80 kg/ha	P	1,2,4	1-5	50	80 kg/ha	P	1,2,4	1-5	60	80 kg/ha	P	1,2,4	1-5	50	80 kg/ha	P	1,2,4	1-5
	K	00	60 kg/ha	F	1,2,3,4	1-5	00	60 kg/ha	F	1,2,3,4	1-5	10	60 kg/ha	P	1,2,3,4	1-5	00	60 kg/ha	F	1,2,3,4	1-5
4.	Top dress (Kg./ha.)																				
	N	10	60 kg/ha	P	1,2,3,4	1-5	10	60 kg/ha	P	1,2,3,4	1-5	20	60 kg/ha	P	1,2,3,4	1-5	10	60 kg/ha	P	1,2,3,4	1-5
5.	Cultivation of Legumes																				
	As rotational crop	-	Frenchbean/Pea	F	1,2,4	1-4	-	Frenchbean/Pea	F	1,2,4	1-4	-	Frenchbean/Pea	F	1,2,4	1-4	-	Frenchbean/Pea	F	1,2,4	1-4
	As inter crop	-	Onion, Carrot, Radish, Chinies cabbage	F	1,2,4	1-4	-	Onion, Carrot, Radish, Chinies cabbage	F	1,2,4	1-4	-	Onion, Carrot, Radish, Chinies cabbage	F	1,2,4	1-4	-	Onion, Carrot, Radish, Chinies cabbage	F	1,2,4	1-4
	As Green manure	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Use of bio-fertl.(Kg./ha.)	-	Aqotobacter 0.5 kg/ha Phosphate Solubilizers	F	1,2,4	1-4	-	Aqotobacter 0.5 kg/ha Phosphate Solubilizers	F	1,2,4	1-4	-	Aqotobacter 0.5 kg/ha Phosphate Solubilizers	F	1,2,4	1-4	-	Aqotobacter 0.5 kg/ha Phosphate Solubilizers	F	1,2,4	1-4
6.	Any other																				

Reasons for gap
1. Lack of knowledge
2. Lack resources
3. Non availability of inputs
4. Unaware of Management practices

Gap in Adoption
N = Nil
P = Partial
F = Full

Proposed Strategy
1. Training & awareness campaign
2. Demonstration
3. Exposer visit
4. On farm trail/ORF
5. Soil testing based fertilizer use needed to be strengthened

Chapter VII Table -1
Proposed Strategies for Integrated Nutrient Management

District : Chatra

Crop: Chilli

Sl. No.	Particulars	AES-I					AES-II					AES-III					AES-IV				
		E.P	R.P.	G.A.	R.G.	P.S.	E.P	R.P.	G.A.	R.G.	P.S.	E.P	R.P.	G.A.	R.G.	P.S.	E.P	R.P.	G.A.	R.G.	P.S.
1.	Soil Testing/ Soil Health	-	To be done	F	2,3,4	1-5	-	To be done	F	2,3,4	1-5	-	To be done	F	2,3,4	1-5	-	To be done	F	2,3,4	1-5
2.	Use of Manures(mt./ha.)																				
	FYM	8	15-20 kg/ha	P	2,3,4	1-5	8	15-20 kg/ha	P	2,3,4	1-5	8	15-20 kg/ha	P	2,3,4	1-5	8	15-20 kg/ha	P	2,3,4	1-5
	Compost	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Vermicompost	-	4 kg/ha	F	2,3,4	1-5	-	4 kg/ha	F	2,3,4	1-5	-	4 kg/ha	F	2,3,4	1-5	-	4 kg/ha	F	2,3,4	1-5
3.	Use of major Fert.																				
	Basal dose Kg./ha.																				
	N	10	50 kg/ha	P	1,2,4	1-5	10	50 kg/ha	P	1,2,4	1-5	20	50 kg/ha	P	1,2,4	1-5	10	50 kg/ha	P	1,2,4	1-5
	P	20	60 kg/ha	P	1,2,4	1-5	20	60 kg/ha	P	1,2,4	1-5	30	60 kg/ha	P	1,2,4	1-5	20	60 kg/ha	P	1,2,4	1-5
	K	-	60 kg/ha	F	1,2,3,4	1-5	-	60 kg/ha	F	1,2,3,4	1-5	10	60 kg/ha	P	1,2,3,4	1-5	-	60 kg/ha	F	1,2,3,4	1-5
4.	Top dress (Kg./ha.)																				
	N	10	50 kg/ha	P	1,2,3,4	1-5	10	50 kg/ha	P	1,2,3,4	1-5	15	50 kg/ha	P	1,2,3,4	1-5	10	50 kg/ha	P	1,2,3,4	1-5
5.	Cultivation of Legumes																				
	As rotational crop	-	Frenchbean	F	1,2,4	1-4	-	Frenchbean	F	1,2,4	1-4	-	Frenchbean	F	1,2,4	1-4	-	Frenchbean	F	1,2,4	1-4
	As inter crop	-	-	F	1,2,4	1-4	-	-	F	1,2,4	1-4	-	-	F	1,2,4	1-4	-	-	F	1,2,4	1-4
	As Green manure	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Use of bio-fertl.(Kg./ha.)	-	Aqotobacter 0.5 kg/ha Phosphate Solubilizers	F	1,2,4	1-4	-	Aqotobacter 0.5 kg/ha Phosphate Solubilizers	F	1,2,4	1-4	-	Aqotobacter 0.5 kg/ha Phosphate Solubilizers	F	1,2,4	1-4	-	Aqotobacter 0.5 kg/ha Phosphate Solubilizers	F	1,2,4	1-4
6.	Any other	-	VAM	F	1,2,4	1-4	-	VAM	F	1,2,4	1-4	-	VAM	F	1,2,4	1-4	-	VAM	F	1,2,4	1-4

Reasons for gap
1. Lack of knowledge
2. Lack resources
3. Non availability of inputs
4. Unaware of Management practices

Gap in Adoption
N = Nil
P = Partial
F = Full

Proposed Strategy
1. Training & awareness campaign
2. Demonstration
3. Exposer visit
4. On farm trail/ORF
5. Soil testing based fertilizer use needed to be strengthened

Chapter VII **Table -II**

Proposed Strategies for Integrated Pest Management

Name of the Pest Stem Borer, Hispa, Leaf Folder, & Diseases like blast, Blight etc.

District: Chattra

Crop: Paddy

Sl. No.	Particulars	AES I					AES II					AES III					AES IV				
		R.P.	E.P	G.A.	R.G.	P.S.	R.P.	E.P	G.A.	R.G.	P.S.	R.P.	E.P	G.A.	R.G.	P.S.	R.P.	E.P	G.A.	R.G.	P.S.
1	Cultural Practices	Deep repeated ploughing	-	P	1,2,3,4	1,2,3,4	Deep repeated ploughing	-	P	1,2,3,4	1,2,3,4	Deep repeated ploughing	-	P	1,2,3,4	1,2,3,4	Deep repeated ploughing	-	P	1,2,3,4	1,2,3,4
	Summer ploughing	Deep ploughing	Shallow ploughing	P	1,3,4	1,2,3,4	Deep ploughing	Shallow ploughing	P	1,3,4	1,2,3,4	Deep ploughing	Shallow ploughing	P	1,3,4	1,2,3,4	Deep ploughing	Shallow ploughing	P	1,3,4	1,2,3,4
	Timely sowing	Y	Y	N	-		Y	Y	N	-		Y	Y	N	-		Y	Y	N	-	
	Clean Cultivation	Y	N	F	1,2,3,4		Y	N	F	1,2,3,4		Y	N	F	1,2,3,4		Y	N	F	1,2,3,4	
2	Resistance Varieties	Y	Local varieties	F	1,2,3,4	1,2,3,4,5	Y	Local varieties	F	1,2,3,4	1,2,3,4,5	Y	Local varieties	F	1,2,3,4	1,2,3,4,5	Y	Local varieties	F	1,2,3,4	1,2,3,4,5
3	Bio-pesticides (Y/N)	Y	N	F	1-4	1,2,3,4	Y	N	F	1-4	1,2,3,4	Y	N	F	1-4	1,2,3,4	Y	N	F	1-4	1,2,3,4
	Neem Products	Y	N	F	1,2,3,4	1,2,3,4	Y	N	F	1,2,3,4	1,2,3,4	Y	N	F	1,2,3,4	1,2,3,4	Y	N	F	1,2,3,4	1,2,3,4
	NPV	Y	N	F	1,2,3,4	1,2,3,4	Y	N	F	1,2,3,4	1,2,3,4	Y	N	F	1,2,3,4	1,2,3,4	Y	N	F	1,2,3,4	1,2,3,4
	VT	Y	N	F	1,2,3,4	1,2,3,4	Y	N	F	1,2,3,4	1,2,3,4	Y	N	F	1,2,3,4	1,2,3,4	Y	N	F	1,2,3,4	1,2,3,4
4	Bioagents																				
	Egg parasite	Trichogramma	-	F	1,2,3,4	1,2,3,4	Trichogramma	-	F	1,2,3,4	1,2,3,4	Trichogramma	-	F	1,2,3,4	1,2,3,4	Trichogramma	-	F	1,2,3,4	1,2,3,4
	Larvel prasite	Trichogramma	-	F	1,2,3,4	1,2,3,4	Trichogramma	-	F	1,2,3,4	1,2,3,4	Trichogramma	-	F	1,2,3,4	1,2,3,4	Trichogramma	-	F	1,2,3,4	1,2,3,4
5	Other practices																				

	Pheromone Trap	5 trap/ha	-	F	1,2,3 ,4	1,2,3 ,4	5 trap/ha	-	F	1,2,3 ,4	1,2,3 ,4	5 trap/ha	-	F	1,2,3 ,4	1,2,3 ,4	5 trap/ha	-	F	1,2,3 ,4	1,2,3 ,4
	Light Trap	5 trap/ha	-	F	1,2,3 ,4	1,2,3 ,4	5 trap/ha	-	F	1,2,3 ,4	1,2,3 ,4	5 trap/ha	-	F	1,2,3 ,4	1,2,3 ,4	5 trap/ha	-	F	1,2,3 ,4	1,2,3 ,4
6	Pesticide (No. of application)																				
	Spraying	2	1	P	1,2,3 ,4	1,2,3 ,4	2	1	P	1,2,3 ,4	1,2,3 ,4	2	1	P	1,2,3 ,4	1,2,3 ,4	2	1	P	1,2,3 ,4	1,2,3 ,4
	Dusting	1	-	F	1,2,3 ,4	1,2,3 ,4	1	-	F	1,2,3 ,4	1,2,3 ,4	1	-	F	1,2,3 ,4	1,2,3 ,4	1	-	F	1,2,3 ,4	1,2,3 ,4
	Seed Treatment	1	-	F	1,2,3 ,4	1,2,3 ,4	1	-	F	1,2,3 ,4	1,2,3 ,4	1	-	F	1,2,3 ,4	1,2,3 ,4	1	-	F	1,2,3 ,4	1,2,3 ,4
	Soil application	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4
	Granular application	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4
7	Any other																				
	Seedling treatment	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4
	Conservation of natural enemy (Frog)	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4

Reasons for gap 1. Lack of knowledge 2. Lack resources	3. Non availability of inputs 4. Unaware of Management practices	Gap in Adoption N = Nil P = Partial F = Full	Proposed Strategy 1. Training & awareness campaign 2. Demonstration 3. Exposer visit	4. On farm trail/ORF 5. Research is needed for resistant variety having nearer taste to local variety
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Chapter VII **Table -II**

Proposed Strategies for Integrated Pest Management

Name of the Pest Stem Borer, Hispa, Leaf Folder, & Diseases like blast, Blight etc.

District: Chatra

Crop:Maize

Sl. No.	Particulars	AES I					AES II					AES III					AES IV				
		R.P.	E.P	G.A.	R.G.	P.S.	R.P.	E.P	G.A.	R.G.	P.S.	R.P.	E.P	G.A.	R.G.	P.S.	R.P.	E.P	G.A.	R.G.	P.S.
1	Cultural Practices	Deep repeated ploughing	Shallow ploughing	P	1,2,3,4	1,2,3,4	Deep repeated ploughing	Shallow ploughing	P	1,2,3,4	1,2,3,4	Deep repeated ploughing	Shallow ploughing	P	1,2,3,4	1,2,3,4	Deep repeated ploughing	Shallow ploughing	P	1,2,3,4	1,2,3,4
	Summer ploughing	Deep ploughing	Shallow ploughing	P	1,3,4	1,2,3,4	Deep ploughing	Shallow ploughing	P	1,3,4	1,2,3,4	Deep ploughing	Shallow ploughing	P	1,3,4	1,2,3,4	Deep ploughing	Shallow ploughing	P	1,3,4	1,2,3,4
	Timely sowing	Y	Y	N	-	-	Y	Y	N	-	-	Y	Y	N	-	-	Y	Y	N	-	-
	Clean Cultivation	Y	N	F	1,2,3,4	-	Y	N	F	1,2,3,4	-	Y	N	F	1,2,3,4	-	Y	N	F	1,2,3,4	-
2	Resistance Varieties	Y	Local varieties	F	1,2,3,4	1,2,3,4,5	Y	Local varieties	F	1,2,3,4	1,2,3,4,5	Y	Local varieties	F	1,2,3,4	1,2,3,4,5	Y	Local varieties	F	1,2,3,4	1,2,3,4,5
3	Bio-pesticides (Y/N)	Y	N	F	1-4	1,2,3,4	Y	N	F	1-4	1,2,3,4	Y	N	F	1-4	1,2,3,4	Y	N	F	1-4	1,2,3,4
	Neem Products	Y	N	F	1,2,3,4	1,2,3,4	Y	N	F	1,2,3,4	1,2,3,4	Y	N	F	1,2,3,4	1,2,3,4	Y	N	F	1,2,3,4	1,2,3,4
	NPV	Bt-Spray	N	F	1,2,3,4	1,2,3,4	Bt-Spray	N	F	1,2,3,4	1,2,3,4	Bt-Spray	N	F	1,2,3,4	1,2,3,4	Bt-Spray	N	F	1,2,3,4	1,2,3,4
	VT	Y	N	F	1,2,3,4	1,2,3,4	Y	N	F	1,2,3,4	1,2,3,4	Y	N	F	1,2,3,4	1,2,3,4	Y	N	F	1,2,3,4	1,2,3,4
4	Bioagents																				
	Egg parasite	Trichogramma	-	F	1,2,3,4	1,2,3,4	Trichogramma	-	F	1,2,3,4	1,2,3,4	Trichogramma	-	F	1,2,3,4	1,2,3,4	Trichogramma	-	F	1,2,3,4	1,2,3,4
	Larvel parasite	Trichogramma	-	F	1,2,3,4	1,2,3,4	Trichogramma	-	F	1,2,3,4	1,2,3,4	Trichogramma	-	F	1,2,3,4	1,2,3,4	Trichogramma	-	F	1,2,3,4	1,2,3,4

5	Other practices																				
	Pheromone Trap	5 trap/ha	-	F	1,2,3 ,4	1,2,3 ,4	5 trap/ha	-	F	1,2,3 ,4	1,2,3 ,4	5 trap/ha	-	F	1,2,3 ,4	1,2,3 ,4	5 trap/ha	-	F	1,2,3 ,4	1,2,3 ,4
	Light Trap	5 trap/ha	-	F	1,2,3 ,4	1,2,3 ,4	5 trap/ha	-	F	1,2,3 ,4	1,2,3 ,4	5 trap/ha	-	F	1,2,3 ,4	1,2,3 ,4	5 trap/ha	-	F	1,2,3 ,4	1,2,3 ,4
6	Pesticide (No. of application)																				
	Spraying	2-3	1	P	1,2,3 ,4	1,2,3 ,4	2-3	1	P	1,2,3 ,4	1,2,3 ,4	2-3	1	P	1,2,3 ,4	1,2,3 ,4	2-3	1	P	1,2,3 ,4	1,2,3 ,4
	Dusting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Seed Treatment	1	-	F	1,2,3 ,4	1,2,3 ,4	1	-	F	1,2,3 ,4	1,2,3 ,4	1	-	F	1,2,3 ,4	1,2,3 ,4	1	-	F	1,2,3 ,4	1,2,3 ,4
	Soil application	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4
	Granular application	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4
7	Any other																				
	Seedling treatment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Conservation of natural enemy (Frog)	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4

Reasons for gap 1. Lack of knowledge 2. Lack resources 3. Non availability of inputs 4. Unaware of Management practices	Gap in Adoption N = Nil P = Partial F = Full	Proposed Strategy 1. Training & awareness campaign 2. Demonstration 3. Exposer visit 4. On farm trail/ORF 5. Research is needed for resistant variety having nearer taste to local variety
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Chapter VII **Table -II**

Proposed Strategies for Integrated Pest Management

Name of the Pest Stem Borer, Hispa, Leaf Folder, & Diseases like blast, Blight etc.

District: Chattra

Crop:Wheat

Sl. No.	Particulars	AES I					AES II					AES III					AES IV				
		R.P.	E.P	G.A.	R.G.	P.S.	R.P.	E.P	G.A.	R.G.	P.S.	R.P.	E.P	G.A.	R.G.	P.S.	R.P.	E.P	G.A.	R.G.	P.S.
1	Cultural Practices	Deep repeated ploughing	1-2 Shallow ploughing	P	1,2,3,4	1,2,3,4	Deep repeated ploughing	1-2 Shallow ploughing	P	1,2,3,4	1,2,3,4	Deep repeated ploughing	1-2 Shallow ploughing	P	1,2,3,4	1,2,3,4	Deep repeated ploughing	1-2 Shallow ploughing	P	1,2,3,4	1,2,3,4
	Summer ploughing	Deep ploughing	Shallow ploughing	P	1,3,4	1,2,3,4	Deep ploughing	Shallow ploughing	P	1,3,4	1,2,3,4	Deep ploughing	Shallow ploughing	P	1,3,4	1,2,3,4	Deep ploughing	Shallow ploughing	P	1,3,4	1,2,3,4
	Timely sowing	Y	Y	N	-		Y	Y	N	-		Y	Y	N	-		Y	Y	N	-	
	Clean Cultivation	Y	N	F	1,2,3,4		Y	N	F	1,2,3,4		Y	N	F	1,2,3,4		Y	N	F	1,2,3,4	
2	Resistance Varieties	Y	Local varieties	F	1,2,3,4	1,2,3,4,5	Y	Local varieties	F	1,2,3,4	1,2,3,4,5	Y	Local varieties	F	1,2,3,4	1,2,3,4,5	Y	Local varieties	F	1,2,3,4	1,2,3,4,5
3	Bio-pesticides (Y/N)	Y	N	F	1-4	1,2,3,4	Y	N	F	1-4	1,2,3,4	Y	N	F	1-4	1,2,3,4	Y	N	F	1-4	1,2,3,4
	Neem Products	Y	N	F	1,2,3,4	1,2,3,4	Y	N	F	1,2,3,4	1,2,3,4	Y	N	F	1,2,3,4	1,2,3,4	Y	N	F	1,2,3,4	1,2,3,4
	NPV	Y	N	F	1,2,3,4	1,2,3,4	Y	N	F	1,2,3,4	1,2,3,4	Y	N	F	1,2,3,4	1,2,3,4	Y	N	F	1,2,3,4	1,2,3,4
	VT	Y	N	F	1,2,3,4	1,2,3,4	Y	N	F	1,2,3,4	1,2,3,4	Y	N	F	1,2,3,4	1,2,3,4	Y	N	F	1,2,3,4	1,2,3,4
4	Bioagents																				
	Egg parasite	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Larvel parasite	Y	N	F	1,2,3,4	1,2,3,4	Y	N	F	1,2,3,4	1,2,3,4	Y	N	F	1,2,3,4	1,2,3,4	Y	N	F	1,2,3,4	1,2,3,4
5	Other practices																				

	Pheronmone Trap	5 trap/ha	-	F	1,2,3 ,4	1,2,3 ,4	5 trap/ha	-	F	1,2,3 ,4	1,2,3 ,4	5 trap/ha	-	F	1,2,3 ,4	1,2,3 ,4	5 trap/ha	-	F	1,2,3 ,4	1,2,3 ,4
	Light Trap	5 trap/ha	-	F	1,2,3 ,4	1,2,3 ,4	5 trap/ha	-	F	1,2,3 ,4	1,2,3 ,4	5 trap/ha	-	F	1,2,3 ,4	1,2,3 ,4	5 trap/ha	-	F	1,2,3 ,4	1,2,3 ,4
6	Pesticide (No. of application)																				
	Spraying	2	1	P	1,2,3 ,4	1,2,3 ,4	2	1	P	1,2,3 ,4	1,2,3 ,4	2	1	P	1,2,3 ,4	1,2,3 ,4	2	1	P	1,2,3 ,4	1,2,3 ,4
	Dusting	1	-	F	1,2,3 ,4	1,2,3 ,4	1	-	F	1,2,3 ,4	1,2,3 ,4	1	-	F	1,2,3 ,4	1,2,3 ,4	1	-	F	1,2,3 ,4	1,2,3 ,4
	Seed Treatment	1	-	F	1,2,3 ,4	1,2,3 ,4	1	-	F	1,2,3 ,4	1,2,3 ,4	1	-	F	1,2,3 ,4	1,2,3 ,4	1	-	F	1,2,3 ,4	1,2,3 ,4
	Soil application	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4
	Granular application	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4
7	Any other																				
	Seedling treatment	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4
	Conservation of natural enemy (Frog)	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4
	Use of Karanj cack, Neem cake	250 kg/ha	N	F	1,2,3 ,4	1,2,3 ,4	250 kg/ha	N	F	1,2,3 ,4	1,2,3 ,4	250 kg/ha	N	F	1,2,3 ,4	1,2,3 ,4	250 kg/ha	N	F	1,2,3 ,4	1,2,3 ,4

Reasons for gap 1. Lack of knowledge 2. Lack resources 3. Non availability of inputs 4. Unaware of Management practices	Gap in Adoption N = Nil P = Partial F = Full	Proposed Strategy 1. Training & awareness campaign 2. Demonstration 3. Exposer visit 4. On farm trail/ORF 5. Research is needed for resistant variety having nearer taste to local variety
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Chapter VII **Table -II****Proposed Strategies for Integrated Pest Management**

Name of the Pest Stem Borer, Hispa, Leaf Folder, & Diseases like blast, Blight etc.

District: Chatra

Crop: Arhar		AES I					AES II					AES III					AES IV				
Sl. No.	Particulars	R.P.	E.P	G.A.	R.G.	P.S.	R.P.	E.P	G.A.	R.G.	P.S.	R.P.	E.P	G.A.	R.G.	P.S.	R.P.	E.P	G.A.	R.G.	P.S.
1	Cultural Practices	Deep repeated ploughing	1-2 Shallow ploughing	P	1,2,3,4	1,2,3,4	Deep repeated ploughing	1-2 Shallow ploughing	P	1,2,3,4	1,2,3,4	Deep repeated ploughing	1-2 Shallow ploughing	P	1,2,3,4	1,2,3,4	Deep repeated ploughing	1-2 Shallow ploughing	P	1,2,3,4	1,2,3,4
	Summer ploughing	Deep ploughing	N	P	1,3,4	1,2,3,4	Deep ploughing	N	P	1,3,4	1,2,3,4	Deep ploughing	N	P	1,3,4	1,2,3,4	Deep ploughing	N	P	1,3,4	1,2,3,4
	Timely sowing	Y	Y	N	-		Y	Y	N	-		Y	Y	N	-		Y	Y	N	-	
	Clean Cultivation	Y	N	F	1,2,3,4		Y	N	F	1,2,3,4		Y	N	F	1,2,3,4		Y	N	F	1,2,3,4	
2	Resistance Varieties	Y	Local varieties	F	1,2,3,4	1,2,3,4,5	Y	Local varieties	F	1,2,3,4	1,2,3,4,5	Y	Local varieties	F	1,2,3,4	1,2,3,4,5	Y	Local varieties	F	1,2,3,4	1,2,3,4,5
3	Bio-pesticides (Y/N)	Y	N	F	1-4	1,2,3,4	Y	N	F	1-4	1,2,3,4	Y	N	F	1-4	1,2,3,4	Y	N	F	1-4	1,2,3,4
	Neem Products	Y	N	F	1,2,3,4	1,2,3,4	Y	N	F	1,2,3,4	1,2,3,4	Y	N	F	1,2,3,4	1,2,3,4	Y	N	F	1,2,3,4	1,2,3,4
	NPV	Y	N	F	1,2,3,4	1,2,3,4	Y	N	F	1,2,3,4	1,2,3,4	Y	N	F	1,2,3,4	1,2,3,4	Y	N	F	1,2,3,4	1,2,3,4
	Trichodrama specific	Y	N	F	1,2,3,4	1,2,3,4	Y	N	F	1,2,3,4	1,2,3,4	Y	N	F	1,2,3,4	1,2,3,4	Y	N	F	1,2,3,4	1,2,3,4
4	Bioagents																				
	Egg parasite	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Larvel parasite	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

5	Other practices																				
	Pheromone Trap	5 trap/ha	-	F	1,2,3 ,4	1,2,3 ,4	5 trap/ha	-	F	1,2,3 ,4	1,2,3 ,4	5 trap/ha	-	F	1,2,3 ,4	1,2,3 ,4	5 trap/ha	-	F	1,2,3 ,4	1,2,3 ,4
	Light Trap	5 trap/ha	-	F	1,2,3 ,4	1,2,3 ,4	5 trap/ha	-	F	1,2,3 ,4	1,2,3 ,4	5 trap/ha	-	F	1,2,3 ,4	1,2,3 ,4	5 trap/ha	-	F	1,2,3 ,4	1,2,3 ,4
6	Pesticide (No. of application)																				
	Spraying	2-3	1	P	1,2,3 ,4	1,2,3 ,4	2-3	1	P	1,2,3 ,4	1,2,3 ,4	2-3	1	P	1,2,3 ,4	1,2,3 ,4	2-3	1	P	1,2,3 ,4	1,2,3 ,4
	Dusting	-	-	F	1,2,3 ,4	1,2,3 ,4	-	-	F	1,2,3 ,4	1,2,3 ,4	-	-	F	1,2,3 ,4	1,2,3 ,4	-	-	F	1,2,3 ,4	1,2,3 ,4
	Seed Treatment	1	-	F	1,2,3 ,4	1,2,3 ,4	1	-	F	1,2,3 ,4	1,2,3 ,4	1	-	F	1,2,3 ,4	1,2,3 ,4	1	-	F	1,2,3 ,4	1,2,3 ,4
	Soil application	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4
	Granular application	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4
7	Any other																				
	Seedling treatment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Conservation of natural enemy (Frog)	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4
	Use of Karanj cake, Neem cake	250 kg/ha	N	F	1,2,3 ,4	1,2,3 ,4	250 kg/ha	N	F	1,2,3 ,4	1,2,3 ,4	250 kg/ha	N	F	1,2,3 ,4	1,2,3 ,4	250 kg/ha	N	F	1,2,3 ,4	1,2,3 ,4

Reasons for gap 1. Lack of knowledge 2. Lack resources 3. Non availability of inputs 4. Unaware of Management practices	Gap in Adoption N = Nil P = Partial F = Full	Proposed Strategy 1. Training & awareness campaign 2. Demonstration 3. Exposer visit 4. On farm trail/ORF 5. Research is needed for resistant variety having nearer taste to local variety
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Chapter VII **Table -II**

Proposed Strategies for Integrated Pest Management

Name of the Pest Stem Borer, Hispa, Leaf Folder, & Diseases like blast, Blight etc.

District: Chattra

Crop: Potato

Sl. No.	Particulars	AES I					AES II					AES III					AES IV				
		R.P.	E.P	G.A.	R.G.	P.S.	R.P.	E.P	G.A.	R.G.	P.S.	R.P.	E.P	G.A.	R.G.	P.S.	R.P.	E.P	G.A.	R.G.	P.S.
1	Cultural Practices	Deep repeated ploughing Crop rotation	Shallow ploughing	P	1,2,3 ,4	1,2,3 ,4	Deep repeated ploughing Crop rotation	Shallow ploughing	P	1,2,3 ,4	1,2,3 ,4	Deep repeated ploughing Crop rotation	Shallow ploughing	P	1,2,3 ,4	1,2,3 ,4	Deep repeated ploughing Crop rotation	Shallow ploughing	P	1,2,3 ,4	1,2,3 ,4
	Summer ploughing	Deep ploughing	Shallow ploughing	P	1,3,4 ,4	1,2,3 ,4	Deep ploughing	Shallow ploughing	P	1,3,4 ,4	1,2,3 ,4	Deep ploughing	Shallow ploughing	P	1,3,4 ,4	1,2,3 ,4	Deep ploughing	Shallow ploughing	P	1,3,4 ,4	1,2,3 ,4
	Timely sowing	Y	Y	N	-		Y	Y	N	-		Y	Y	N	-		Y	Y	N	-	
	Clean Cultivation	Y	Y	P	1,2,3 ,4		Y	Y	P	1,2,3 ,4		Y	Y	P	1,2,3 ,4		Y	Y	P	1,2,3 ,4	
2	Resistance Varieties	Y	Local varieties	F	1,2,3 ,4	1,2,3 ,4,5	Y	Local varieties	F	1,2,3 ,4	1,2,3 ,4,5	Y	Local varieties	F	1,2,3 ,4	1,2,3 ,4,5	Y	Local varieties	F	1,2,3 ,4	1,2,3 ,4,5
3	Bio-pesticides (Y/N)	Y	N	F	1-4 ,4	1,2,3 ,4	Y	N	F	1-4 ,4	1,2,3 ,4	Y	N	F	1-4 ,4	1,2,3 ,4	Y	N	F	1-4 ,4	1,2,3 ,4
	Neem Products	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4
	NPV	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4
	VT	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4
4	Bioagents																				
	Egg parasite	Trichogramma	N	F	1,2,3 ,4	1,2,3 ,4	Trichogramma	N	F	1,2,3 ,4	1,2,3 ,4	Trichogramma	N	F	1,2,3 ,4	1,2,3 ,4	Trichogramma	N	F	1,2,3 ,4	1,2,3 ,4
	Larvel parasite	Trichoderma Viridi	-	F	1,2,3 ,4	1,2,3 ,4	Trichoderma Viridi	-	F	1,2,3 ,4	1,2,3 ,4	Trichoderma Viridi	-	F	1,2,3 ,4	1,2,3 ,4	Trichoderma Viridi	-	F	1,2,3 ,4	1,2,3 ,4

		@ 2-4 gram/kg seed					@ 2-4 gram/kg seed					@ 2-4 gram/kg seed					@ 2-4 gram/kg seed					
5	Other practices																					
	Pheromone Trap	5 trap/ha	-	F	1,2,3 ,4	1,2,3 ,4	5 trap/ha	-	F	1,2,3 ,4	1,2,3 ,4	5 trap/ha	-	F	1,2,3 ,4	1,2,3 ,4	5 trap/ha	-	F	1,2,3 ,4	1,2,3 ,4	
	Light Trap	5 trap/ha	-	F	1,2,3 ,4	1,2,3 ,4	5 trap/ha	-	F	1,2,3 ,4	1,2,3 ,4	5 trap/ha	-	F	1,2,3 ,4	1,2,3 ,4	5 trap/ha	-	F	1,2,3 ,4	1,2,3 ,4	
6	Pesticide (No. of application)																					
	Spraying	3-4	1	P	1,2,3 ,4	1,2,3 ,4	3-4	1	P	1,2,3 ,4	1,2,3 ,4	3-4	1	P	1,2,3 ,4	1,2,3 ,4	3-4	1	P	1,2,3 ,4	1,2,3 ,4	
	Dusting	1	-	F	1,2,3 ,4	1,2,3 ,4	1	-	F	1,2,3 ,4	1,2,3 ,4	1	-	F	1,2,3 ,4	1,2,3 ,4	1	-	F	1,2,3 ,4	1,2,3 ,4	
	Seed Treatment	1	-	F	1,2,3 ,4	1,2,3 ,4	1	-	F	1,2,3 ,4	1,2,3 ,4	1	-	F	1,2,3 ,4	1,2,3 ,4	1	-	F	1,2,3 ,4	1,2,3 ,4	
	Soil application	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	
	Granular application	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	
7	Any other																					
	Seedling treatment	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	
	Conservation of natural enemy (Frog)	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	
	Use of Karanj cake, Neem cake	250 kg/ha	N	F	1,2,3 ,4	1,2,3 ,4	250 kg/ha	N	F	1,2,3 ,4	1,2,3 ,4	250 kg/ha	N	F	1,2,3 ,4	1,2,3 ,4	250 kg/ha	N	F	1,2,3 ,4	1,2,3 ,4	

Reasons for gap 1. Lack of knowledge 2. Lack resources 3. Non availability of inputs 4. Unaware of Management practices				Gap in Adoption N = Nil P = Partial F = Full				Proposed Strategy 1. Training & awareness campaign 2. Demonstration 3. Exposer visit 4. On farm trail/ORF 5. Research is needed for resistant variety having nearer taste to local variety			
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Chapter VII **Table -II**

Proposed Strategies for Integrated Pest Management

Name of the Pest Stem Borer, Hispa, Leaf Folder, & Diseases like blast, Blight etc.

District: Chattra

Crop: Tomato

Sl. No.	Particulars	AES I					AES II					AES III					AES IV				
		R.P.	E.P	G.A.	R.G.	P.S.	R.P.	E.P	G.A.	R.G.	P.S.	R.P.	E.P	G.A.	R.G.	P.S.	R.P.	E.P	G.A.	R.G.	P.S.
1	Cultural Practices	Deep repeated ploughing Crop rotation Use of trap crop	Shallow ploughing	P	1,2,3 ,4	1,2,3 ,4	Deep repeated ploughing Crop rotation Use of trap crop	Shallow ploughing	P	1,2,3 ,4	1,2,3 ,4	Deep repeated ploughing Crop rotation Use of trap crop	Shallow ploughing	P	1,2,3 ,4	1,2,3 ,4	Deep repeated ploughing Crop rotation Use of trap crop	Shallow ploughing	P	1,2,3 ,4	1,2,3 ,4
	Summer ploughing	Deep ploughing	Shallow ploughing	P	1,3,4 ,4	1,2,3 ,4	Deep ploughing	Shallow ploughing	P	1,3,4 ,4	1,2,3 ,4	Deep ploughing	Shallow ploughing	P	1,3,4 ,4	1,2,3 ,4	Deep ploughing	Shallow ploughing	P	1,3,4 ,4	1,2,3 ,4
	Timely sowing	Y	Y	N	-		Y	Y	N	-		Y	Y	N	-		Y	Y	N	-	
	Clean Cultivation	Y	N	F	1,2,3 ,4		Y	N	F	1,2,3 ,4		Y	N	F	1,2,3 ,4		Y	N	F	1,2,3 ,4	
2	Resistance Varieties	Y	N	F	1,2,3 ,4	1,2,3 ,4,5	Y	N	F	1,2,3 ,4	1,2,3 ,4,5	Y	N	F	1,2,3 ,4	1,2,3 ,4,5	Y	N	F	1,2,3 ,4	1,2,3 ,4,5
3	Bio-pesticides (Y/N)	Y	N	F	1-4 ,4	1,2,3 ,4	Y	N	F	1-4 ,4	1,2,3 ,4	Y	N	F	1-4 ,4	1,2,3 ,4	Y	N	F	1-4 ,4	1,2,3 ,4
	Neem Products	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4
	NPV	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4
	VT	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4
4	Bioagents																				
	Egg parasite	Trichogramma	-	F	1,2,3 ,4	1,2,3 ,4	Trichogramma a	-	F	1,2,3 ,4	1,2,3 ,4	Trichogramma a	-	F	1,2,3 ,4	1,2,3 ,4	Trichogramma a	-	F	1,2,3 ,4	1,2,3 ,4

	Larvel prasite	Trichoderma Viridi @ 2-4 gram/kg seed	-	F	1,2,3 ,4	1,2,3 ,4	Trichoderma Viridi @ 2-4 gram/kg seed	-	F	1,2,3 ,4	1,2,3 ,4	Trichoderma Viridi @ 2-4 gram/kg seed	-	F	1,2,3 ,4	1,2,3 ,4	Trichoderma Viridi @ 2-4 gram/kg seed	-	F	1,2,3 ,4	1,2,3 ,4	
5	Other practices																					
	Pheronmone Trap	5 trap/ha	-	F	1,2,3 ,4	1,2,3 ,4	5 trap/ha	-	F	1,2,3 ,4	1,2,3 ,4	5 trap/ha	-	F	1,2,3 ,4	1,2,3 ,4	5 trap/ha	-	F	1,2,3 ,4	1,2,3 ,4	
	Light Trap	5 trap/ha	-	F	1,2,3 ,4	1,2,3 ,4	5 trap/ha	-	F	1,2,3 ,4	1,2,3 ,4	5 trap/ha	-	F	1,2,3 ,4	1,2,3 ,4	5 trap/ha	-	F	1,2,3 ,4	1,2,3 ,4	
6	Pesticide (No. of application)																					
	Spraying	3-4	1-2	P	1,2,3 ,4	1,2,3 ,4	3-4	1-2	P	1,2,3 ,4	1,2,3 ,4	3-4	1-2	P	1,2,3 ,4	1,2,3 ,4	3-4	1-2	P	1,2,3 ,4	1,2,3 ,4	
	Dusting	1	-	F	1,2,3 ,4	1,2,3 ,4	1	-	F	1,2,3 ,4	1,2,3 ,4	1	-	F	1,2,3 ,4	1,2,3 ,4	1	-	F	1,2,3 ,4	1,2,3 ,4	
	Seed Treatment	1	-	F	1,2,3 ,4	1,2,3 ,4	1	-	F	1,2,3 ,4	1,2,3 ,4	1	-	F	1,2,3 ,4	1,2,3 ,4	1	-	F	1,2,3 ,4	1,2,3 ,4	
	Soil application	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	
	Granular application	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	
7	Any other																					
	Seedling trreatment	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	
	Conservation of nuturala enemy (Frog)	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	Y	N	F	1,2,3 ,4	1,2,3 ,4	
	Use of Karanj cack, Neem cake	250 kg/ha	N	F	1,2,3 ,4	1,2,3 ,4	250 kg/ha	N	F	1,2,3 ,4	1,2,3 ,4	250 kg/ha	N	F	1,2,3 ,4	1,2,3 ,4	250 kg/ha	N	F	1,2,3 ,4	1,2,3 ,4	

Reasons for gap	Gap in Adoption	Proposed Strategy
1. Lack of knowledge 2. Lack resources 3. Non availability of inputs 4. Unaware of Management practices	N = Nil P = Partial F = Full	1. Training & awareness campaign 2. Demonstration 3. Exposer visit 4. On farm trail/ORF 5. Research is needed for resistant variety having nearer taste to local variety

Chapter VII Table -III
STRATEGIES FOR INTEGRATED PEST MANGT.

District:Chatra						Crop:	Paddy	
Sl. No.	Particulars	Gap in adoption in the Pest Mngt. in different AES in the dist.				Reasons for gap in adoption as perceived by the farmers *	Strategies as perceived by the farmers **	Strategies proposed to overcome the gap ***
		AES-I	AES-II	AES-III	AES-IV			
1	Cultural Practices	Simple Tick mark or dash	Simple Tick mark or dash	Simple Tick mark or dash	Simple Tick mark or dash	1	1	1
						2	2	2
						3	3	3
						4	4	4
						5		5
	Summer ploughing	•	•	•	•	1,2,4	1,2,3,4	1,2,3,4,5
	Timely sowing	•	•	•	•	1,2,4	1,2,3,4	1,2,3,4
	Clean Cultivation	•	•	•	•	1,2,4	1,2,3,4	1,2,3,4
2	Resistance Varieties	•	•	•	•	1,2,3, 4	1,2,3	1,2,3
3	Bio-pesticides (Y/N)							
	Neem Products	•	•	•	•	1,2,3,4	1,2,3,4	1,2,3,4
	NPV	•	•	•	•	1,2,3,4	1,2,3,4	1,2,3,4
	VT	•	•	•	•	1,2,3,4	1,2,3,4	1,2,3
4	Bioagents							
	Egg parasite	•	•	•	•	1,2,3,4	1,2,3,4	1,2,3,4
	Larvel prasite	•	•	•	•	1,2,3,4	1,2,3,4	1,2,3,4
5	Other practices							
	Pheronmone Trap	•	•	•	•	1,2,3,4	1,2,3,4	1,2,3,4
	Light Trap	•	•	•	•	1,2,3,4	1,2,3,4	1,2,3,4
6	Pesticide (No. of application)							
	Spraying	•	•	•	•	1,2,3,4	1,2,3,4	1,2,3,4
	Dusting	•	•	•	•	1,2,3,4	1,2,3,4	1,2,3,4
	Seed Treatment	•	•	•	•	1,2,3,4	1,2,3,4	1,2,3,4
	Soil application	•	•	•	•	1,2,3,4	1,2,3,4	1,2,3,4
	Granular application	•	•	•	•	1,2,3,4	1,2,3,4	1,2,3,4
7	Any other							
	Seedling treament	•	•	•	•	1,2	3,4	1,2,3,4
	Conservation of nuturala enemy (Frog)	•	•	•	•	1,2	3,4	1,2,3,4
	Use of Karanj cack, Neem cake	•	•	•	•	1,2	3,4	1,2,3,4

* Code for Reasons for gap in adoption as perceived by the farmers

1. Lack of awareness
2. Non availability of required quantity of quality seed
3. Plant protection is not economical under rainfed conditions
4. Lack of knowledge
5. Lack of resource

** code for Strategies as perceived by the farmers

1. On farm trails / Demonstration
2. Training
3. Soil testing and application of fertilizers as per recommendation
4. Use of locally available materials for nutrient management & plant protection

*** code for Strategies proposed to overcome the gap

1. Training & awareness campaign
2. Demonstration
3. Exposure visit
4. On farm trail/ORF
5. Research is needed for resistant variety having nearer taste to local variety

Chapter VII Table -III
STRATEGIES FOR INTEGRATED PEST MANGT.

District:Chatra

Crop: Maize

Sl. No.	Particulars	Gap in adoption in the Pest Mngt. in different AES in the dist.				Reasons for gap in adoption as perceived by the farmers *	Strategies as perceived by the farmers **	Strategies proposed to overcome the gap ***
		AES-I	AES-II	AES-III	AES-IV			
1	Cultural Practices	Simple Tick mark or dash	Simple Tick mark or dash	Simple Tick mark or dash	Simple Tick mark or dash	1	1	1
						2	2	2
						3	3	3
						4	4	4
						5		5
	Summer ploughing	•	•	•	•	1,2,	1,2,3,4	1,2,3,4,5
	Timely sowing	•	•	•	•	1,2,	1,2,3,4	1,2,3,4
	Clean Cultivation	•	•	•	•	1,2,	1,2,3,4	1,2,3,4
2	Resistance Varieties	•	•	•	•	1,2,3, 4	1,2,3	1,2,3
3	Bio-pesticides (Y/N)							
	Neem Products	•	•	•	•	1,2,3,4	1,2,3,4	1,2,3,4
	NPV	•	•	•	•	1,2,3,4	1,2,3,4	1,2,3,4
	VT	•	•	•	•	1,2,3,4	1,2,3,4	1,2,3
4	Bioagents							
	Egg parasite	•	•	•	•	1,2,3,4	1,2,3,4	1,2,3,4
	Larvel prasite	•	•	•	•	1,2,3,4	1,2,3,4	1,2,3,4
5	Other practices							
	Pheronmone Trap	•	•	•	•	1,2,3,4	1,2,3,4	1,2,3,4
	Light Trap	•	•	•	•	1,2,3,4	1,2,3,4	1,2,3,4
6	Pesticide (No. of application)							
	Spraying	•	•	•	•	1,2,4	1,2,3,4	1,3,4
	Dusting	•	•	•	•	1,2,4	1,2,3,4	1,3,4
	Seed Treatment	•	•	•	•	1,2,,4	1,2,3,4	1,3,4
	Soil application	•	•	•	•	1,2,4	1,2,3,4	1,3,4
	Granular application	•	•	•	•	1,2,4	1,2,3,4	1,3,4
7	Any other							
	Seedling trreatment	•	•	•	•	1,2	3,4	1,2,3,4
	Conservation of nuturala enemy (Frog)	•	•	•	•	1,2	3,4	1,2,3,4
	Use of Karanj cack, Neem cake	•	•	•	•	1,2	3,4	1,2,3,4

* Code for Reasons for gap in adoption as perceived by the farmers

1. Lack of awareness
2. Non availability of required quantity of quality seed
3. Plant protection is not economical under rainfed conditions
4. Lack of knowledge
5. Lack of resource

** code for Strategies as perceived by the farmers

1. On farm trails / Demonstration
2. Training
3. Soil testing and application of fertilizers as per recommendation
4. Use of locally available materials for nutrient management & plant protection

*** code for Strategies proposed to overcome the gap

1. Training & awareness campaign
2. Demonstration
3. Exposure visit
4. On farm trail/ORF
5. Research is needed for resistant variety having nearer taste to local variety

Chapter VII Table -III
STRATEGIES FOR INTEGRATED PEST MANGT.

District:Chatra

Crop: Wheat

Sl. No.	Particulars	Gap in adoption in the Pest Mngt. in different AES in the dist.				Reasons for gap in adoption as perceived by the farmers *	Strategies as perceived by the farmers **	Strategies proposed to overcome the gap ***
		AES-I	AES-II	AES-III	AES-IV			
1	Cultural Practices	Simple Tick mark or dash	Simple Tick mark or dash	Simple Tick mark or dash	Simple Tick mark or dash	1	1	1
						2	2	2
						3	3	3
						4	4	4
						5		5
	Summer ploughing	•	•	•	•	1,2,4	1,2,3,4	1,2,3,4,5
	Timely sowing	•	•	•	•	1,2,4	1,2,3,4	1,2,3,4,5
	Clean Cultivation	•	•	•	•	1,2,4	1,2,3,4	1,2,3,4,5
2	Resistance Varieties	•	•	•	•	1,2,3, 4	1,2,3	1,2,3,4,5
3	Bio-pesticides (Y/N)							
	Neem Products	•	•	•	•	1,2,3,4	1,2,3,4	1,2,3,4
	NPV	•	•	•	•	1,2,3,4	1,2,3,4	1,2,3,4
	VT	•	•	•	•	1,2,3,4	1,2,3,4	1,2,3,4
4	Bioagents							
	Egg parasite	•	•	•	•	3,4	1,2,3,4	1,2,3,4
	Larvel prasite	•	•	•	•	3,4	1,2,3,4	1,2,3,4
5	Other practices							
	Pheronmone Trap	•	•	•	•	3,4	1,2,3,4	1,2,3,4
	Light Trap	•	•	•	•	3,4	1,2,3,4	1,2,3,4
6	Pesticide (No. of application)							
	Spraying	•	•	•	•	1,2,3	1,2,3,4	1,3,4
	Dusting	•	•	•	•	1,2,3	1,2,3,4	1,3,4
	Seed Treatment	•	•	•	•	1,2,,3	1,2,3,4	1,3,4
	Soil application	•	•	•	•	1,2,3	1,2,3,4	1,3,4
	Granular application	•	•	•	•	1,2,3	1,2,3,4	1,3,4
7	Any other							
	Seedling trreatment	•	•	•	•	1,2,3	3,4	1,2,3,4
	Conservation of nuturala enemy (Frog)	•	•	•	•	1,2,3	3,4	1,2,3,4
	Use of Karanj cack, Neem cake	•	•	•	•	1,2,3	3,4	1,2,3,4

* Code for Reasons for gap in adoption as perceived by the farmers

1. Lack of awareness
2. Non availability of required quantity of quality seed
3. Plant protection is not economical under rainfed conditions
4. Lack of knowledge
5. Lack of resource

** code for Strategies as perceived by the farmers

1. On farm trails / Demonstration
2. Training
3. Soil testing and application of fertilizers as per recommendation
4. Use of locally available materials for nutrient management & plant protection

*** code for Strategies proposed to overcome the gap

1. Training & awareness campaign
2. Demonstration
3. Exposure visit
4. On farm trail/ORF
5. Research is needed for resistant variety having nearer taste to local variety

Chapter VII Table -III
STRATEGIES FOR INTEGRATED PEST MANGT.

District:Chatra

Crop: Niger

Sl. No.	Particulars	Gap in adoption in the Pest Mngt. in different AES in the dist.				Reasons for gap in adoption as perceived by the farmers *	Strategies as perceived by the farmers **	Strategies proposed to overcome the gap ***
		AES-I	AES-II	AES-III	AES-IV			
1	Cultural Practices	Simple Tick mark or dash	Simple Tick mark or dash	Simple Tick mark or dash	Simple Tick mark or dash	1	1	1
						2	2	2
						3	3	3
						4	4	4
						5		5
	Summer ploughing	•	•	•	•	1,2,4	2,3	1,2,3,4,5
	Timely sowing	•	•	•	•	1,2,4	2,3	1,2,3,4,5
	Clean Cultivation	•	•	•	•	1,2,4	2,3	1,2,3,4,5
2	Resistance Varieties	•	•	•	•	1,2,3, 4	2,3	1,2,3,4,5
3	Bio-pesticides (Y/N)							
	Neem Products	•	•	•	•	1,2,3,4	1,2,3,4	1,2,3,4
	NPV	•	•	•	•	1,2,3,4	1,2,3,4	1,2,3,4
	VT	•	•	•	•	1,2,3,4	1,2,3,4	1,2,3,4
4	Bioagents							
	Egg parasite	•	•	•	•	3,4	1,2,3,4	1,2,3,4
	Larvel prasite	•	•	•	•	3,4	1,2,3,4	1,2,3,4
5	Other practices							
	Pheronmone Trap	•	•	•	•	3,4	1,2,3,4	1,2,3,4
	Light Trap	•	•	•	•	3,4	1,2,3,4	1,2,3,4
6	Pesticide (No. of application)							
	Spraying	•	•	•	•	1,2,3	1,2,3,4	1,3,4
	Dusting	•	•	•	•	1,2,3	1,2,3,4	1,3,4
	Seed Treatment	•	•	•	•	1,2,,3	1,2,3,4	1,3,4
	Soil application	•	•	•	•	1,2,3	1,2,3,4	1,3,4
	Granular application	•	•	•	•	1,2,3	1,2,3,4	1,3,4
7	Any other							
	Seedling trreatment	•	•	•	•	1,2,3	3,4	1,2,3,4
	Conservation of nuturala enemy (Frog)	•	•	•	•	1,2,3	3,4	1,2,3,4
	Use of Karanj cack, Neem cake	•	•	•	•	1,2,3	3,4	1,2,3,4

* Code for Reasons for gap in adoption as perceived by the farmers

1. Lack of awareness
2. Non availability of required quantity of quality seed
3. Plant protection is not economical under rainfed conditions
4. Lack of knowledge
5. Lack of resource

** code for Strategies as perceived by the farmers

1. On farm trails / Demonstration
2. Training
3. Soil testing and application of fertilizers as per recommendation
4. Use of locally available materials for nutrient management & plant protection

*** code for Strategies proposed to overcome the gap

1. Training & awareness campaign
2. Demonstration
3. Exposure visit
4. On farm trail/ORF
5. Research is needed for resistant variety having nearer taste to local variety

Chapter VII Table -III
STRATEGIES FOR INTEGRATED PEST MANGT.

District:Chatra

Crop: Arhar

Sl. No.	Particulars	Gap in adoption in the Pest Mngt. in different AES in the dist.				Reasons for gap in adoption as perceived by the farmers *	Strategies as perceived by the farmers **	Strategies proposed to overcome the gap ***
		AES-I	AES-II	AES-III	AES-IV			
1	Cultural Practices	Simple Tick mark or dash	Simple Tick mark or dash	Simple Tick mark or dash	Simple Tick mark or dash	1	1	1
						2	2	2
						3	3	3
						4	4	4
						5		5
	Summer ploughing	•	•	•	•	1,2,3,4	1,2,3	1,2,3,4,5
	Timely sowing	•	•	•	•	1,2,3,4	1,2,3	1,2,3,4,5
	Clean Cultivation	•	•	•	•	1,2,3,4	1,2,3	1,2,3,4,5
2	Resistance Varieties	•	•	•	•	1,2,3,4	1,2,3	1,2,3,4,5
3	Bio-pesticides (Y/N)							
	Neem Products	•	•	•	•	1,2,3,4	1,2,3,4	1,2,3,4
	NPV	•	•	•	•	1,2,3,4	1,2,3,4	1,2,3,4
	VT	•	•	•	•	1,2,3,4	1,2,3,4	1,2,3,4
4	Bioagents							
	Egg parasite	•	•	•	•	3,4	1,2,3,4	1,2,3,4
	Larvel prasite	•	•	•	•	3,4	1,2,3,4	1,2,3,4
5	Other practices							
	Pheronmone Trap	•	•	•	•	3,4	1,2,3,4	1,2,3,4
	Light Trap	•	•	•	•	3,4	1,2,3,4	1,2,3,4
6	Pesticide (No. of application)							
	Spraying	•	•	•	•	1,2,3	1,2,3,4	1,3,4
	Dusting	•	•	•	•	1,2,3	1,2,3,4	1,3,4
	Seed Treatment	•	•	•	•	1,2,,3	1,2,3,4	1,3,4
	Soil application	•	•	•	•	1,2,3	1,2,3,4	1,3,4
	Granular application	•	•	•	•	1,2,3	1,2,3,4	1,3,4
7	Any other							
	Seedling trreatment	•	•	•	•	1,2,3	1,3,4	1,2,3,4
	Conservation of nuturala enemy (Frog)	•	•	•	•	1,2,3	1,3,4	1,2,3,4
	Use of Karanj cack, Neem cake	•	•	•	•	1,2,3	1,3,4	1,2,3,4

* Code for Reasons for gap in adoption as perceived by the farmers

1. Lack of awareness
2. Non availability of required quantity of quality seed
3. Plant protection is not economical under rainfed conditions
4. Lack of knowledge
5. Lack of resource

** code for Strategies as perceived by the farmers

1. On farm trails / Demonstration
2. Training
3. Soil testing and application of fertilizers as per recommendation
4. Use of locally available materials for nutrient management & plant protection

*** code for Strategies proposed to overcome the gap

1. Training & awareness campaign
2. Demonstration
3. Exposure visit
4. On farm trail/ORF
5. Research is needed for resistant variety having nearer taste to local variety

Chapter VII Table -III
STRATEGIES FOR INTEGRATED PEST MANGT.

District:Chatra						Crop:	Tomato	
Sl. No.	Particulars	Gap in adoption in the Pest Mngt. in different AES in the dist.				Reasons for gap in adoption as perceived by the farmers *	Strategies as perceived by the farmers **	Strategies proposed to overcome the gap ***
		AES-I	AES-II	AES-III	AES-IV			
1	Cultural Practices	Simple Tick mark or dash	Simple Tick mark or dash	Simple Tick mark or dash	Simple Tick mark or dash	1	1	1
						2	2	2
						3	3	3
						4	4	4
						5		5
	Summer ploughing	•	•	•	•	1,2,3,4	1,2,3	1,2,3,4,5
	Timely sowing	•	•	•	•	1,2,3,4	1,2,3	1,2,3,4,5
	Clean Cultivation	•	•	•	•	1,2,3,4	1,2,3	1,2,3,4,5
2	Resistance Varieties	•	•	•	•	1,2,3	1,2,3	1,2,3,,5
3	Bio-pesticides (Y/N)							
	Neem Products	•	•	•	•	1,2,3,4	1,2,3,4	1,2,3,4
	NPV	•	•	•	•	1,2,3,4	1,2,3,4	1,2,3,4
	VT	•	•	•	•	1,2,3,4	1,2,3,4	1,2,3,4
4	Bioagents							
	Egg parasite	•	•	•	•	2,3,4	1,2,3,4	1,2,3,4
	Larvel prasite	•	•	•	•	2,3,4	1,2,3,4	1,2,3,4
5	Other practices							
	Pheronmone Trap	•	•	•	•	2,3,4	1,2,3,4	1,2,3,4
	Light Trap	•	•	•	•	2,3,4	1,2,3,4	1,2,3,4
6	Pesticide (No. of application)							
	Spraying	•	•	•	•	1,2,3	1,2,3,4	1,3,4
	Dusting	•	•	•	•	1,2,3	1,2,3,4	1,3,4
	Seed Treatment	•	•	•	•	1,2,,3	1,2,3,4	1,3,4
	Soil application	•	•	•	•	1,2,3	1,2,3,4	1,3,4
	Granular application	•	•	•	•	1,2,3	1,2,3,4	1,3,4
7	Any other							
	Seedling trreatment	•	•	•	•	1,2,3	1,3,4	1,2,3,4
	Conservation of nuturala enemy (Frog)	•	•	•	•	1,2,3	1,3,4	1,2,3,4
	Use of Karanj cack, Neem cake	•	•	•	•	1,2,3	1,3,4	1,2,3,4

* Code for Reasons for gap in adoption as perceived by the farmers

1. Lack of awareness
2. Non availability of required quantity of quality seed
3. Plant protection is not economical under rainfed conditions
4. Lack of knowledge
5. Lack of resource

** code for Strategies as perceived by the farmers

1. On farm trails / Demonstration
2. Training
3. Soil testing and application of fertilizers as per recommendation
4. Use of locally available materials for nutrient management & plant protection

*** code for Strategies proposed to overcome the gap

1. Training & awareness campaign
2. Demonstration
3. Exposure visit
4. On farm trail/ORF
5. Research is needed for resistant variety having nearer taste to local variety

Chapter VII Table -III
STRATEGIES FOR INTEGRATED PEST MANGT.

District:Chatra						Crop:	Potato	
Sl. No.	Particulars	Gap in adoption in the Pest Mngt. in different AES in the dist.				Reasons for gap in adoption as perceived by the farmers *	Strategies as perceived by the farmers **	Strategies proposed to overcome the gap ***
		AES-I	AES-II	AES-III	AES-IV			
1	Cultural Practices	Simple Tick mark or dash	Simple Tick mark or dash	Simple Tick mark or dash	Simple Tick mark or dash	1	1	1
						2	2	2
						3	3	3
						4	4	4
						5		5
	Summer ploughing	•	•	•	•	1,2,3,4	1,2,3	1,2,3,4,5
	Timely sowing	•	•	•	•	1,2,3,4	1,2,3	1,2,3,4,5
	Clean Cultivation	•	•	•	•	1,2,3,4	1,2,3	1,2,3,4,5
2	Resistance Varieties	•	•	•	•	1,2,3	1,2,3	1,2,3,,5
3	Bio-pesticides (Y/N)							
	Neem Products	•	•	•	•	1,2,3,4	1,2,3,4	1,2,3,4,5
	NPV	•	•	•	•	1,2,3,4	1,2,3,4	1,2,3,4,5
	VT	•	•	•	•	1,2,3,4	1,2,3,4	1,2,3,4,5
4	Bioagents							
	Egg parasite	•	•	•	•	2,3,4	1,2,3,4	1,2,3,4,5
	Larvel prasite	•	•	•	•	2,3,4	1,2,3,4	1,2,3,4,5
5	Other practices							
	Pheronmone Trap	•	•	•	•	2,3,4	1,2,3,4	1,2,3,4,5
	Light Trap	•	•	•	•	2,3,4	1,2,3,4	1,2,3,4,5
6	Pesticide (No. of application)							
	Spraying	•	•	•	•	1,2,3,4	1,2,3,4	1,2,3,4,5
	Dusting	•	•	•	•	1,2,3,4	1,2,3,4	1,2,3,4,5
	Seed Treatment	•	•	•	•	1,2,,3,4	1,2,3,4	1,2,3,4,5
	Soil application	•	•	•	•	1,2,3,4	1,2,3,4	1,2,3,4,5
	Granular application	•	•	•	•	1,2,3,4	1,2,3,4	1,2,3,4,5
7	Any other							
	Seedling trreatment	•	•	•	•	1,2,3	1,3,4	1,2,3,4,5
	Conservation of nuturala enemy (Frog)	•	•	•	•	1,2,3	1,3,4	1,2,3,4,5
	Use of Karanj cack, Neem cake	•	•	•	•	1,2,3	1,3,4	1,2,3,4,5

* Code for Reasons for gap in adoption as perceived by the farmers

1. Lack of awareness
2. Non availability of required quantity of quality seed
3. Plant protection is not economical under rainfed conditions
4. Lack of knowledge
5. Lack of resource

** code for Strategies as perceived by the farmers

1. On farm trails / Demonstration
2. Training
3. Soil testing and application of fertilizers as per recommendation
4. Use of locally available materials for nutrient management & plant protection

*** code for Strategies proposed to overcome the gap

1. Training & awareness campaign
2. Demonstration
3. Exposure visit
4. On farm trail/ORF
5. Research is needed for resistant variety having nearer taste to local variety

Table A
PROPOSED STRATEGY FOR PROMOTING SUPPLY OF SEED AND ITS MULTIPLICATION

Name of crop: Paddy

Village: Kunda

Preferred variety: MTU 7029, IR 36, IR 64, Hybrid, Gora Dhan

Agro-ecological situation: AES-I

Sl. No.	Source of seed of preferred variety/ hybrid	Quantity of seed used (of preferred variety)	Area sown (ha) under the crop with different variety		Quality of seed of preferred variety (G/A/P)
			Preferred variety	Other varieties	
A	Purchase form outside:				
	- From Private dealer	MTU 7029 - 20 q Hybrid - 1 q	MTU 7029 - 29 ha IR 36 - 25 ha	Local Variety - 5 ha	G G
	- From Public sector	IR 36 - 10 q IR 64 - 15 q	IR 64 - 35 ha Gora Dhan - 10 ha		G
B	Use of self produced seed:		Hybrid - 5 ha		
	- From own field	Gora Dhan - 10 q IR 36 - 5 q Local Variety - 20 q	Local Variety - 30 ha		A
	- From others field	IR 36 - 5 q MTU 7029 - 5 q		A	
C	Any other				
	Total	91 q			

Table A
PROPOSED STRATEGY FOR PROMOTING SUPPLY OF SEED AND ITS MULTIPLICATION

Name of crop: Paddy

Village: Utrathi

Preferred variety: IR 36, IR 64, Gora Dhan, Lal Sawarna and Local Variety

Agro-ecological situation: AES-II

Sl. No.	Source of seed of preferred variety/ hybrid	Quantity of seed used (of preferred variety)	Area sown (ha) under the crop with different variety		Quality of seed of preferred variety (G/A/P)	
			Preferred variety	Other varieties		
A	Purchase form outside:					
	- From Private dealer		IR 36 - 50 ha	Local Variety - 5 ha	G	
	- From Public sector	IR 36 - 20 q IR 64 - 25 q	IR 64 - 50 ha Gora Dhan - 30 ha		G G	
B	Use of self produced seed:		Lal Sawarna - 4 ha			
	- From own field	Gora Dhan - 30 q IR 36 - 5 q IR 64 - 5 q Lal Sawarna - 2 q Local Variety - 20 q	Local Variety - 60 ha			A
	- From others field	IR 36 - 5 q Local Variety - 10 q			A	
C	Any other					
	Total	142 q				

Table A
PROPOSED STRATEGY FOR PROMOTING SUPPLY OF SEED AND ITS MULTIPLICATION

Name of crop: Paddy

Village: Manahari

Preferred variety: IR 36, IR 64, Gora Dhan, Lal Sawarna and Local Variety

Agro-ecological situation: AES-III

Sl. No.	Source of seed of preferred variety/ hybrid	Quantity of seed used (of preferred variety)	Area sown (ha) under the crop with different variety		Quality of seed of preferred variety (G/A/P)
			Preferred variety	Other varieties	
A	Purchase form outside:				
	- From Private dealer		IR 36 - 75 ha	Local Variety - 10 ha	G
	- From Public sector	IR 36 - 25 q IR 64 - 30 q Lal Sawarna - 5 q	IR 64 - 70 ha Gora Dhan - 25 ha Lal Sawarna - 10 ha		G G
B	Use of self produced seed:		Local Variety - 20 ha		
	- From own field	Gora Dhan - 25 q IR 36 - 10 q IR 64 - 10 q Local Variety - 20 q			A
	- From others field	IR 36 - 5 q Local Variety - 10 q			A
C	Any other				
	Total	150 q			

Table A
PROPOSED STRATEGY FOR PROMOTING SUPPLY OF SEED AND ITS MULTIPLICATION

Name of crop: Paddy

Village: Bhagawar

Preferred variety: MTU 7029, IR 36, IR 64, Hybrid, Gora Dhan

Agro-ecological situation: AES-IV

Sl. No.	Source of seed of preferred variety/ hybrid	Quantity of seed used (of preferred variety)	Area sown (ha) under the crop with different variety		Quality of seed of preferred variety (G/A/P)
			Preferred variety	Other varieties	
A	Purchase form outside:				
	- From Private dealer	MTU 7029 - 5 q Hybrid - 1 q	MTU 7029 - 25 ha IR 36 - 45 ha	Local Variety - 5 ha	G G
	- From Public sector	IR 36 - 15 q IR 64 - 20 q MTU 7029 - 10 q	IR 64 - 50 ha Gora Dhan - 20 ha Hybrid - 5 ha		G
B	Use of self produced seed:		Local Variety - 25 ha		
	- From own field	Gora Dhan - 20 q IR 36 - 5 q IR 64 - 5 q Local Variety - 50 q			A
	- From others field	IR 36 - 5 q IR 64 - 5 q		A	
C	Any other				
	Total	141 q			

Table A
PROPOSED STRATEGY FOR PROMOTING SUPPLY OF SEED AND ITS MULTIPLICATION

Name of crop: Maize

Village: Kunda

Preferred variety: Kanchan - 5, Suwan Composite, Local Variety, Hybrid

Agro-ecological situation: AES-I

Sl. No.	Source of seed of preferred variety/ hybrid	Quantity of seed used (of preferred variety)	Area sown (ha) under the crop with different variety		Quality of seed of preferred variety (G/A/P)
			Preferred variety	Other varieties	
A	Purchase form outside:				
	- From Private dealer	Kanchan 5 - 1 q Hybrid - 1 q Suwarn Composite - 1 q	Kanchan 5 - 5 ha Hybrid - 5 ha Suwarn Composite - 4 ha		G G G
	- From Public sector		Local Variety - 15 ha		
B	Use of self produced seed:				
	- From own field	Local Variety - 3 q			A
	- From others field	Local Variety - 1 q			A
C	Any other				
	Total	7 q			

Table A
PROPOSED STRATEGY FOR PROMOTING SUPPLY OF SEED AND ITS MULTIPLICATION

Name of crop: Maize

Village: Utrathi

Preferred variety: IR 36, IR 64, Gora Dhan, Lal Sawarna and Local Variety

Agro-ecological situation: AES-II

Sl. No.	Source of seed of preferred variety/ hybrid	Quantity of seed used (of preferred variety)	Area sown (ha) under the crop with different variety		Quality of seed of preferred variety (G/A/P)
			Preferred variety	Other varieties	
A	Purchase form outside:				
	- From Private dealer	Kanchan 5 - .5 q Hybrid - .5 q	Kanchan 5 - 2.5 ha Hybrid - 2.5 ha		G G
	- From Public sector		Local Variety - 12 ha		G
B	Use of self produced seed:				
	- From own field	Local Variety - 2 q			A
	- From others field	Local Variety - 1 q			A
C	Any other				
	Total	4 q			

Table A
PROPOSED STRATEGY FOR PROMOTING SUPPLY OF SEED AND ITS MULTIPLICATION

Name of crop: Maize

Village: Manahari

Preferred variety: IR 36, IR 64, Gora Dhan, Lal Sawarna and Local Variety

Agro-ecological situation: AES-III

Sl. No.	Source of seed of preferred variety/ hybrid	Quantity of seed used (of preferred variety)	Area sown (ha) under the crop with different variety		Quality of seed of preferred variety (G/A/P)
			Preferred variety	Other varieties	
A	Purchase form outside:				
	- From Private dealer	Kanchan 5 - .5 q Hybrid - 1 q	Kanchan 5 - 2 ha Hybrid - 4 ha		G G
	- From Public sector		Local Variety - 14 ha		G
B	Use of self produced seed:				
	- From own field	Local Variety - 2.5 q			A
	- From others field	Local Variety - 1 q			A
C	Any other				
	Total	5 q			

Table A
PROPOSED STRATEGY FOR PROMOTING SUPPLY OF SEED AND ITS MULTIPLICATION

Name of crop: Maize

Village: Bhagawar

Preferred variety: MTU 7029, IR 36, IR 64, Hybrid, Gora Dhan

Agro-ecological situation: AES-IV

Sl. No.	Source of seed of preferred variety/ hybrid	Quantity of seed used (of preferred variety)	Area sown (ha) under the crop with different variety		Quality of seed of preferred variety (G/A/P)
			Preferred variety	Other varieties	
A	Purchase form outside:				
	- From Private dealer	Kanchan 5 - 1 q Hybrid - 1 q	Kanchan 5 - 5 ha Hybrid - 5 ha		G G
	- From Public sector		Local Variety - 16 ha		G
B	Use of self produced seed:				
	- From own field	Local Variety - 4 q			A
	- From others field	Local Variety - 1 q			A
C	Any other				
	Total	7 q			

Table A
PROPOSED STRATEGY FOR PROMOTING SUPPLY OF SEED AND ITS MULTIPLICATION

Name of crop: Tomato

Village: Kunda

Preferred variety: Pusa Rubi, Suraksha, Hybrid

Agro-ecological situation: AES-I

Sl. No.	Source of seed of preferred variety/ hybrid	Quantity of seed used (of preferred variety) (kg)	Area sown (ha) under the crop with different variety		Quality of seed of preferred variety (G/A/P)
			Preferred variety	Other varieties	
A	Purchase form outside:				
	- From Private dealer	Pusa Rubi - .700 kg Suraksha - 1 kg Hybrid - 1 kg	Pusa Rubi - 1 ha Suraksha - 2 ha Hybrid - 2 ha		G G G
	- From Public sector				
B	Use of self produced seed:				
	- From own field				
	- From others field				
C	Any other				
	Total	2.700 kg			

Table A
PROPOSED STRATEGY FOR PROMOTING SUPPLY OF SEED AND ITS MULTIPLICATION

Name of crop: Tomato

Village: Utrathi

Preferred variety: Pusa Rubi, Suraksha, Hybrid

Agro-ecological situation: AES-II

Sl. No.	Source of seed of preferred variety/ hybrid	Quantity of seed used (of preferred variety) (kg)	Area sown (ha) under the crop with different variety		Quality of seed of preferred variety (G/A/P)
			Preferred variety	Other varieties	
A	Purchase form outside:				
	- From Private dealer	Pusa Rubi - .5 kg Suraksha - .5 kg Hybrid - .5 kg	Pusa Rubi -.5 ha Suraksha - .75 ha Hybrid - 1 ha		G G G
	- From Public sector				
B	Use of self produced seed:				
	- From own field				
	- From others field				
C	Any other				
	Total	1.5 kg			

Table A
PROPOSED STRATEGY FOR PROMOTING SUPPLY OF SEED AND ITS MULTIPLICATION

Name of crop: Tomato

Village: Manahari

Preferred variety: Pusa Rubi, Suraksha, Hybrid

Agro-ecological situation: AES-III

Sl. No.	Source of seed of preferred variety/ hybrid	Quantity of seed used (of preferred variety) (kg)	Area sown (ha) under the crop with different variety		Quality of seed of preferred variety (G/A/P)
			Preferred variety	Other varieties	
A	Purchase form outside:				
	- From Private dealer	Pusa Rubi - .5 kg Suraksha - .75 kg Hybrid - .75 kg	Pusa Rubi -.5 ha Suraksha - 1 ha Hybrid - 1.5 ha		G G G
	- From Public sector				
B	Use of self produced seed:				
	- From own field				
	- From others field				
C	Any other				
	Total	2 kg			

Table A
PROPOSED STRATEGY FOR PROMOTING SUPPLY OF SEED AND ITS MULTIPLICATION

Name of crop: Tomato

Village: Bhagawar

Preferred variety: Pusa Rubi, Suraksha, Hybrid

Agro-ecological situation: AES-IV

Sl. No.	Source of seed of preferred variety/ hybrid	Quantity of seed used (of preferred variety) (kg)	Area sown (ha) under the crop with different variety		Quality of seed of preferred variety (G/A/P)
			Preferred variety	Other varieties	
A	Purchase form outside:				
	- From Private dealer	Pusa Rubi - 1 kg Suraksha - 1 kg Hybrid - 1 kg	Pusa Rubi - 1.5 ha Suraksha - 1.5 ha Hybrid - 2 ha		G G G
	- From Public sector				
B	Use of self produced seed:				
	- From own field				
	- From others field				
C	Any other				
	Total	3 kg			

Table A
PROPOSED STRATEGY FOR PROMOTING SUPPLY OF SEED AND ITS MULTIPLICATION

Name of crop: Brinjal

Village: Kunda

Preferred variety: Hybrid, Local Variety, Pusa Purple Long

Agro-ecological situation: AES-I

Sl. No.	Source of seed of preferred variety/ hybrid	Quantity of seed used (of preferred variety) (kg)	Area sown (ha) under the crop with different variety		Quality of seed of preferred variety (G/A/P)
			Preferred variety	Other varieties	
A	Purchase form outside:				
	- From Private dealer	Hybrid - 1 kg Pusa Purple Long - 1 kg	Hybrid - 1 ha Local Variety - 1 ha		G P
	- From Public sector		Pusa Purple Long - 1ha		A
B	Use of self produced seed:				
	- From own field	Local Variety - 1 kg			
	- From others field				
C	Any other				
	Total	3 kg			

Table A
PROPOSED STRATEGY FOR PROMOTING SUPPLY OF SEED AND ITS MULTIPLICATION

Name of crop: Brinjal

Village: Utrathi

Preferred variety: Hybrid, Local Variety, Pusa Purple Long

Agro-ecological situation: AES-II

Sl. No.	Source of seed of preferred variety/ hybrid	Quantity of seed used (of preferred variety) (kg)	Area sown (ha) under the crop with different variety		Quality of seed of preferred variety (G/A/P)
			Preferred variety	Other varieties	
A	Purchase form outside:				
	- From Private dealer	Hybrid - .5 kg Pusa Purple Long - .5 kg	Hybrid - 1 ha Local Variety - 1 ha Pusa Purple Long - .5 ha		G P A
	- From Public sector				
B	Use of self produced seed:				
	- From own field	Local Variety - 1 kg			
	- From others field				
C	Any other				
	Total	2 kg			

Table A
PROPOSED STRATEGY FOR PROMOTING SUPPLY OF SEED AND ITS MULTIPLICATION

Name of crop: Brinjal

Village: Manahari

Preferred variety: Hybrid, Local Variety, Pusa Purple Long

Agro-ecological situation: AES-III

Sl. No.	Source of seed of preferred variety/ hybrid	Quantity of seed used (of preferred variety) (kg)	Area sown (ha) under the crop with different variety		Quality of seed of preferred variety (G/A/P)
			Preferred variety	Other varieties	
A	Purchase form outside:				
	- From Private dealer	Hybrid - .5 kg Pusa Purple Long - .5 kg	Hybrid - 1 ha Local Variety - 1 ha		G P
	- From Public sector		Pusa Purple Long - .5 ha		A
B	Use of self produced seed:				
	- From own field	Local Variety - 1 kg			
	- From others field				
C	Any other				
	Total	2 kg			

Table A
PROPOSED STRATEGY FOR PROMOTING SUPPLY OF SEED AND ITS MULTIPLICATION

Name of crop: Brinjal

Village: Bhagawar

Preferred variety: Hybrid, Local Variety, Pusa Purple Long

Agro-ecological situation: AES-IV

Sl. No.	Source of seed of preferred variety/ hybrid	Quantity of seed used (of preferred variety) (kg)	Area sown (ha) under the crop with different variety		Quality of seed of preferred variety (G/A/P)
			Preferred variety	Other varieties	
A	Purchase form outside:				
	- From Private dealer	Hybrid - 1 kg Pusa Purple Long - 1 kg	Hybrid - 1 ha Local Variety - 1 ha		G P
	- From Public sector		Pusa Purple Long - 1ha		A
B	Use of self produced seed:				
	- From own field	Local Variety - 1 kg			
	- From others field				
C	Any other				
	Total	3 kg			

Table A
PROPOSED STRATEGY FOR PROMOTING PREFERRED HORTICULTURAL PLANTING MATERIAL

Sl. No.	Source of preferred planting material of horticultural crops	Quantity of planting material used of preferred variety	Area sown (ha) under the crop with different variety		Quality of preferred planting material required for the district
			Preferred variety	Other varieties	
A	Purchase form outside:				
	- From Private dealer	125000	Mango (Amrapali,		A
	- From Public sector	25000	Langra, Malika, Dashari,		A
			Alphanso)		A
B	Use of self produced planting material		Guava (L 49, Ilaahabad		
	- From own field	10000	Safeda)		
	- From others field				
C	Any other				
	Total	3 kg			

PROPOSED STRATEGY FOR PROMOTING MARKETING

Sl. No.	Critical gap	Proposed marketing Strategies
1.	Very high fluctuating market demand & Unpredictable market price	Creating awareness on market led extension
		Encouraging farmer organization/commodity growers groups to create local marketing centers
		Encouraging FO/CGs to serve as market intelligence in association with reputed market organization
		Arranging market survey exposure visits for farmers to different marketing systems
		Establishing direct linkage between rural market and urban consumers
		Arranging buy back arrangements for farmers' produce
		Training farmers in supply chain and facilitate direct linkage with urban market
		Propaganda and publicity on the quality products
		Establishing linkage between industries and producers
2.	Lack of post harvest technologies	Motivating farmers to go for value addition, product diversification and other post harvest technologies
3.	Absence of backward and forward linkages	Establishing single window service to provide backward and forward linkages
		Encouraging cooperatives to support farmers in providing inputs and arranging for assured market

PROPOSED STRATEGY FOR PROMOTING MEDIA SUPPORT

Sl. No.	Critical gap	Proposed marketing Strategies
1.	Very high fluctuating market demand & Unpredictable market price	Establishment of region based exclusive agricultural channels to deliver specific information needs of farmers in local language
		Reengineering radio programmes through incorporating farmers innovation, success stories in local language
2.	Nonexistence of market intelligence information	Strengthening information communication technology
		Strengthening Kisan call centers, portals of department of agriculture and cooperation and other related agricultural research, extension and marketing organisations
		Market intelligence through SMS on mobile telephone
3.	Poor and inadequate columns devoted exclusively for agriculture in daily newspapers	Strengthening the agriculture columns in the dailies by earmarking adequate columns and adequate information for the existing farmers' needs
4.	Lack of capsule form information to meet the urgent information requirement in production and marketing	Production of capsule form information on region basis through radio, television and dailies
5.	Lack of quality printed technical	Encouraging development departments, NGOs, etc. to produce technical literatures like leaflets, folders, booklets etc. in local language
6.	Non existence of farmers' discussion groups in villages/taluks/district level	Encouraging FO/CG/others to organize farmer discussion groups
7.	Lack of opportunity for farmers to interact with scientists and extension specialists	Conducting region specific agricultural seminars to provide opportunity for farmers to participate
		Organising farmer-scientist - extension personnel interactions