Chapter VII

Chapter VII Table -1 Proposed Strategies for Integrated Nutrient Management

Dis	District : Hazaribagh			1	nasodo	orrane	gies ior iii	r roposeu Strategles for miegrateu (Aufriem Management	ılla					Crop:	: Paddy	ly
SI.	Dontionlone		AES-I					AES-II					AES-III			
No.		E.P	R.P.	G.A.	. R.G.	3. P.S.	i. 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	- 2		F	1,4	1,2	•		Н	1,4	1,2
7	Use of Manures(mt./ha.)															
	FYM	2 tone	2	Ь	2,3,4	4 1-5	5 2 tone	10+/ha	Р	2,3,4	1-5	2 tone		Ь	2,3,4	1-5
	Compost	ES.	IO+/ha	Ħ	1,2,3	3 1-5	IZ S		ഥ	1,2,3	1-5	Nil	10+/ha	H	1,2,3,	1-5
	Vermicompost	Nil		F	1,2,3	3 1-5	Nil		F	1,2,3	1-5	Nil		F	1,2,3,	1-5
3.	Use of major Fert.															
	Basal dose Kg./ha.															
	N kg/ha	20	20-50 kg/ha	Ь	1,2	1-5	5 20	20-50 kg/ha	Ь	1,2	1-5	40	20-50 kg/ha	Ь	1,2,4	1-5
	P kg/ha	30	20-40 kg/ha	Ь	1,2	1-5	30	20-40 kg/ha	Р	1,2	1-5	30	20-40 kg/ha	Ь	1,2,4	1-5
	K kg/ha	00	20-40 kg/ha	F	1,2,3	3 1-5	00	20-40 kg/ha	F	1,2,3	1-5	10	20-40 kg/ha	Ь	1,2,3,	1-5
4.	Top dress (Kg./ha.)															
	N	20	20-50 kg/ha	Ь	1,4	1-5	5 20	20-50 kg/ha	Ь	1, 4	1-5	30	20-50 kg/ha	Ь	1,3,4	1-5
ĸi	Cultivation of Legumes															
	As rotational crop	Not done	Pulse crop	F	1	1-4	Not done	Pulse crop	F	1	1-4	Not done	Pulse crop	F	1,2,4	1-4
	As inter crop	-	-	F	1,2	1-4		-	F	1,2	1-4	-	-	F	1,2,4	1-4
	As Green mannure	Not done	Greengram/Cowpea, Sunhemp/Sesbania etc	F	1, 4	1-4	4 Not done	Greengram/Cowpea, Sunhemp/Sesbania etc	F	1, 4	1-4	Not done	Greengram/Cowpea, Sunhemp/Sesbania etc	Ħ	1,2,4	1-4
	Use of bio-fertl.(Kg./ha.)	-	Blue Green algae 2 kg/ha	F	1,2,3	,3 1-4	- +	Blue Green algae 2 kg/ha	F	1,2,3	1-4		Blue Green algae 2 kg/ha	F	1,2,4	1-4
		-	Azolla	F	1,2,3	3 1-4	- +	Azolla	F	1,2,3	1-4		Azolla	F	1,2,4	1-4
		-	Phosphate Solubilizers	F	1,2,3	,3 1-4	- +	Phosphate Solubilizers	F	1,2,3	1-4	1	Phosphate Solubilizers	ч	1,2,4	1-4
9	Any other															
	t t	e	-			ľ	-		ŀ			Ç	.,		Γ	

	Gap in Adoption	I!N=N	P = Partial	F = Full		
p	Proposed strategy	1 Training and awareness campaign	2. Demonstration	3. Exposure visit	4. On farm trail/ORF	5. Soil testing based fertilizer use needed to be strengthened
i i	Keasons for gap	1. Lack of knowledge	2. Lack resources	3. Non availability of inputs	4. Unaware of Management practices	

Chapter VII Table -1 Proposed Strategies for Integrated Nutrient Management

Dis	District : Hazaribagh				asodori	a ou aregi	101 E	r roposcu oti aregies ioi mregi areu municini managemeni						Crop:	Wheat	
SI.	Dontier		AES-I					AES-II					AES-III			
No.		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			ſΉ	1,3,4	1,2			Ħ	1,3,4	1,2			Щ	1,3,4	1,2
7	Use of Manures(mt./ha.)															
	FYM	2 tone		Ь	1,2,3	1	2 tone		Ь	1,2,3	1	3 tone		Ь	1,2,3	1
	Compost	-	10-15/ha	F	1, 4	1	-	10-15/ha	F	1, 4	1	-	10-15/ha	F	1, 4	1
	Vermicompost			F	1,2,3,4	1	-		F	1,2,3,4	1	-		F	1,2,3,4	1
3	Use of major Fert.															
	Basal dose Kg./ha.															
	N	10	30 kg/ha	Ъ	1,2,3	1,2,3,4,5	10	30 kg/ha	Ъ	1,2,3	1,2,3,4,5	25	30 kg/ha	Ь	1,2,3	1,2,3,4,5
	Ъ	10	60 kg/ha	Ь	1,2,3	1,2,3,4,5	10	60 kg/ha	Ъ	1,2,3	1,2,3,4,5	20	60 kg/ha	Ь	1,2,3	1,2,3,4,5
	K	00	40 kg/ha	F	1,2,3	1,2,3,4,5	00	40 kg/ha	F	1,2,3	1,2,3,4,5	10	40 kg/ha	Ь	1,2,3	1,2,3,4,5
4	Top dress (Kg./ha.)															
	N	98	30-40 kg/ha	Ь	2	5	30	30-40 kg/ha	Ь	2	5	30	30-40 kg/ha	Ь	2	5
S	Cultivation of Legumes															
	As rotational crop	ı	Pigeonpea, Cowpea	Щ	1,4	1,2,3,4		Pigeonpea, Cowpea	Ħ	1, 4	1,2,3,4		Pigeonpea, Cowpea	ц	1,4	1,2,3,4
	As inter crop	Ground nut	Soybean, Groundnut Cowpea	b	1, 4	2,4	Groun dnut	Soybean, Groundnut Cowpea	d	1, 4	2,4	Ground nut	Soybean, Groundnut Cowpea	р	1, 4	2,4
	As Green mannure	-	1	F	1,2,3	2,4		-	F	1,2,3	2,4			F	1,2,3	2,4
	Use of bio-fertl.(Kg./ha.)	-	Azotobocter	F	1,2,4	2,4	-	Azotobocter	F	1,2,4	2,4	-	Azotobocter	F	1,2,4	2,4
			Phosphate Solubilizers	Ħ	1,2,4	2,4	ı	Phosphate Solubilizers	F	1,2,4	2,4		Phosphate Solubilizers	F	1,2,4	2,4
9	Any other															
															Γ	

Gap in Adoption N = Nil	
Gap in Adoption N = Nil	
D = Partial	
r - ralual	
F = Fu	TH.
F = FuII	
- A	st.
	pp dese dese finputs
	up edge es finputs
	ap edge es es f inputs

Chapter VII Table-1 Proposed Strategies for Integrated Nutrient Management

Dis	District : Hazaribagh			117	o nasodi	Laregi	101 83	r roposeu sar aregres for micegrateu muritent management						Crop:	: Maize	92	
SI.	Dontionlone		AES-I					AES-II					AES-III				
No.		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	
7	Use of Manures(mt./ha.)																
	FYM	2 tone		Ь	1,4	1	2 tone		Ь	1,4	1	2 tone		Ь	1,4	1	
	Compost	•	5-10/ha		-		-	5-10/ha			-	-	5-10/ha	-	-		
	Vermicompost	-		-	-		-			1	-	1		-	-	1	
3.	Use of major Fert.																
	Basal dose Kg./ha.																
	N	30	50 kg/ha	Ь	1,2,4	1-5	30	50 kg/ha	Ь	1,2,4	1-5	20	50 kg/ha	Ь	1,2,4	1-5	
	P	20	50 kg/ha	Ь	1,2,4	1-5	20	50 kg/ha	Ь	1,2,4	1-5	40	50 kg/ha	Ь	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	Ь	1,2,3,	1-5	
4	Top dress (Kg./ha.)																
	N	10	50 kg/ha	Ь	1,4	1-5	10	50 kg/ha	Ь	1,4	1-5	20	50 kg/ha	Ь	1,4	1-5	
ķ	Cultivation of Legumes																
	As rotational crop	ı	Moong/Urad/Soyabeen	F	1,2,4	1-4	•	Moong/Urad/Soyabeen	F	1,2,4	1-4	-	Moong/Urad/Soyabeen	F	1,2,4	1-4	
	As inter crop	-	•	-	-		-	-		-	-	-	-	-	-		
	As Green mannure	1	Sunhemp, Greengram, Cowpea etc.	F	1,2,4	1-4	-	Sunhemp, Greengram, Cowpea etc.	F	1,2,4	1-4	•	Sunhemp, Greengram, Cowpea etc.	H	1,2,4	1-4	
	Use of bio-fertl.(Kg./ha.)		Azotobocter Azospirillum	F	1,2,3	1,2	-	Azotobocter Azospirillum	F	1,2,3	1,2	Ī	Azotobocter Azospirillum	F	1,2,3	1,2	
			Phosphate Solubilizers	F	1,2,3	1,2		Phosphate Solubilizers	F	1,2,3	1,2		Phosphate Solubilizers	F	1,2,3	1,2	
9.	Any other																
	1.1 1.1.2 2 3. Non 4. Unaware	Reasons for gap 1. Lack of knowledge 2. Lack resources 3. Non availability of inputs naware of Management prac	Reasons for gap 1. Lack of knowledge 2. Lack resources 3. Non availability of inputs 4. Unaware of Management practices				<u>ö</u>	$\begin{aligned} & \textbf{Gap in Adoption} \\ & N = \text{Nil} \\ & P = \text{Partial} \\ & F = \text{Full} \end{aligned}$		5.	Soil te	1. Trainin 2. 4. 4. sting based fo	Proposed Strategy 1. Training & awareness campaigm 2. Demonstration 3. Exposure visit 4. On farm trail/ORF 5. Soil testing based fertilizer use needed to be strengthened	rengthen	ps		

Chapter VII Table -1 Proposed Strategies for Integrated Nutrient Management

Dis	District : Hazaribagh				nasodori	on areg	2011 101 821	r roposeu su aregres ioi miregiareu aurmentamagement	ıamagen				Crop:	: :	Arhar	
S.			AES-I					AF	AES-II				AES-III			
No.	raruculars	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	ī					1					1				
7	Use of Manures(mt./ha.)															
	FYM	1 tone	5 cm3 5	Ь	2,3,4	1-5	1 tone	5 tone	Ь	2,3,4	1-5	1 tone	5 tone	Ь	2,3,4	1-5
	Compost		2 tone	ı	1	ı			ı	-						1
	Vermicompost	-		-	-	1	1		1	1	1	-		-	1	-
3.	Use of major Fert.															
	Basal dose Kg./ha.															
	N	40	20 kg/ha	Ь	1, 4	1-5	90	20 kg/ha	Ь	1, 4	1-5	50	20 kg/ha	Ь	1, 4	1-5
	P	10	40 kg/ha	Ь	1,2,4	1-5	1	40 kg/ha	Ь	1,2,4	1-5	5	40 kg/ha	Ь	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
4	Top dress (Kg./ha.)															
	N	5	10	P	1, 4	1-5	5	10	Ь	1, 4	1-5	7	10	Ь	1, 4	1-5
ĸ	Cultivation of Legumes															
	As rotational crop		Greengram, Blackgram	F	1, 4	1-4	-	Greengram, Blackgram	F	1, 4	1-4	ı	Greengram, Blackgram	H	1, 4	1-4
	As inter crop	Upland rice	Upland rice	N	-	-	Uplan d rice	Upland rice	Z	•	-	Upland rice	Upland rice	Z	-	-
	As Green mannure	,	Sunhemp, Greengram, Cowpea	Ŧ	1, 4	1-4		Sunhemp, Greengram, Cowpea	F	1, 4	1-4		Sunhemp, Greengram, Cowpea	F	1, 4	1-4
	Use of bio-fertl.(Kg./ha.)	į	Rhizobium	F	1,3	1-4		Rhizobium	F	1,3	1-4	-	Rhizobium	F	1,3	1-4
9	Any other		Phosphate Solubilizers	Ħ	1,3	1-4	1	Phosphate Solubilizers	F	1,3	1-4	1	Phosphate Solubilizers	Н	1,3	1-4
	3. 4. Una	Reasons 1. Lack of 2. Lack r Non availat ware of Mar	Reasons for gap 1. Lack of knowledge 2. Lack resources 3. Non availability of inputs 4. Unaware of Management practices					$\begin{aligned} & \textbf{Gap in Adoption} \\ & N = Nil \\ & P = Partial \\ & F = Full \end{aligned}$	uo			1. 5. Soil testing	Proposed Strategy 1. Training & avareness campaigm 2. Demonstration 3. Exposure visit 4. On farm trail/ORF 5. Soil testing based fertilizer use needed to be strengthened	egy s campaig ion sit ORF	gm e strengthe	peu

Chapter VII Table -1 Proposed Strategies for Integrated Nutrient Management

District: Hazaribagh No. 1. Soil Testing/Soil J 2. Use of Manures(n FYM Compost Vermicompost Vermicompost Nkg/ha Rkg/ha Pkg/ha Rkg/ha As Top dress (Kg/ha N As ordational crop As inter crop As inter crop As of bio-fertl.(K, and other	ht./ha.) 15 15 20 20 20 40 MM MM MM MM 44 3. 3. 3. 3. 4. Unaa	E.P 5 5 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7	E.P R.P. 1		R.G. - 2,4 - 2,3,4 1,2 1,2 1,4 1,4 1,4 1,4 1,4 1	70posed 70pose	20 20 20 20 40 40 40	R.P. To be done 20-25 kg/ha 4-5 kg/ha 50 kg/ha 100 kg/ha 100 kg/ha 50 kg/ha Aqotobacter kg/ha Aqotobacter kg/ha Phosphate Solubilizers -	ES-II	R.G	P.S. 1.2 1.2 1.2 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5	E.P 20 20 30 60 60 60 60 60 60 60 60 60 60 60 60 60	Crop: R.P. R.P. To be done 20-25 kg/ha 4-5 kg/ha 100 kg/ha 100 kg/ha 50 kg/ha 50 kg/ha Cucumber - Aqotobacter Cucumber - Aqotobacter - Agotobacter	AES-III G.A.	Potato R.G.	P.S	uts	Gap in Adoption N = Nil		kg/ha F 1,2,3 1-4 - kg/ha F 1,2,3 1-4 - Phosphate F 1,2,3	r 0.5 Aqotobacter 0.5 Aqotobacter		Cabbage, P 1 1-4 Mustar Beans, Cabbage, P 1 1-4 A.Bean Cucumber Cucumber P 1 1-4 Dean Cucumber P 1 1-4 Dean Cucumber P 1 1 1-4 Cucumber P 1 1 1 1-4 Cucumber P 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Frenchbeen F 1.4 1.4 1.4 - Frenchbeen F 1.4 1.4 - Frenchbeen F 1.4 1.4 - Frenchbeen F 1.4	Cultivation of Legumes	P 1, 4 1-5 40 50 kg/ha P 1, 4 1-5 40 50 kg/ha P 1, 4	Top dress (Kg.ha.)	P 1,2 1-5 20 100 kg/ha P 1,2 1-5 25 100 kg/ha P 1,2 1-5 25 100 kg/ha P 1,2	P 1,2 1-5 50 90 kg/ha P 1,2 1-5 60 90 kg/ha P 1,2 1-5 1-5 60 90 kg/ha P 1,2	P 1,2 1-5 20 50 kg/ha P 1,2 1-5 30 50 kg/ha P 1,2	Basal dose Kg./ha.	Use of major Fert.	4-5 kg/ha F 2,3,4 1,2 - 4-5 kg/ha F 2,3,4 1,2 - 4-5 kg/ha F 2,3,4		P 2, 4 1,2 15 20-25 kg/ha P 2, 4 1,2 20 20-25 kg/ha P 2, 4 1,2 20 20-25 kg/ha P 2, 4	Use of Manures(mt./ha.)	To be done	E.P R.P. G.A R.G. P.S. E.P R.P. G.A R.G. P.S. E.P R.F. G.A. R.G.	AES-I AES-II	Crop:
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Chapter VII Table -1 Proposed Strategies for Integrated Nutrient Management

Distri	District : Hazarihaoh												Cron:			
S	9		AES-I					AES-II					AES-III			
	Particulars	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	ì	To be done	F	1, 2, 4	1-5	•	To be done	F	1, 2, 4	1-5	-	To be done	F	1, 2, 4	1-5
2.	Use of Manures(mt./ha.)															
I	FYM	<i>L</i>	15-20 kg/ha	Ь	2, 4	1,2	7	15-20 kg/ha	Ь	2, 4	1,2	7	15-20 kg/ha	Ь	2, 4	1,2
)	Compost	•	-	1	•	1	1	1	•	-		-	-	ı	-	į
_	Vermicompost	-	4 kg/ha	F	2,3,4	1,2	-	4 kg/ha	F	2,3,4	1,2	-	4 kg/ha	F	2,3,4	1,2
3.	Use of major Fert.															
I	Basal dose Kg./ha.															
I	N kg/ha	30	60 kg/ha	Ь	1,2	1-5	30	60 kg/ha	Ь	1,2	1-5	35	60 kg/ha	Ь	1,2	1-5
I	P kg/ha	40	80 kg/ha	Ъ	1,2	1-5	40	80 kg/ha	Ь	1,2	1-5	50	80 kg/ha	Ь	1,2	1-5
I	K kg/ha	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	F	1,2,3,4	1-5
4.	Top dress (Kg./ha.)															
I	N	20	60 kg/ha	Ь	1,4	1-5	20	60 kg/ha	ď	1,4	1-5	20	60 kg/ha	Ь	1,4	1-5
5. (Cultivation of Legumes															
~	As rotational crop	ı	Frenchbean	ഥ	П	1-4	ı	Frenchbean	ц	-	1-4	1	Frenchbean	щ	-	1-4
7	As inter crop		Cucumber	F	1, 4	1-4		Cucumber	F	1, 4	1-4		Cucumber	F	1, 4	1-4
7	As Green mannure	•	-	į	•	-	-	-	•	•	•	=	Ī	-	-	•
	Use of bio-fertl.(Kg./ha.)		Aqotobacter 0.5 kg/ha Phosphate Solubilizers	Ħ	1,3	1-4		Aqotobacter 0.5 kg/ha Phosphate Solubilizers	ſĽ,	1,3	1-4		Aqotobacter 0.5 kg/ha Phosphate Solubilizers	ы	1,3	1-4
.9	Any other					•				•	•			•		
	Reasons for gap 1. Lack of knowledge 2. Lack resources 3. Non availability of inputs 4. I havened of Management invocioes	Reasons for gap 1. Lack of knowledge 2. Lack resources 3. Non availability of inputs	dge .s inputs t mortions				$\begin{array}{c} \textbf{Gap in} \ . \\ N = \\ P = I \\ F = \end{array}$	$\begin{aligned} & \textbf{Gap in Adoption} \\ & N = Nil \\ & P = \textbf{Partial} \\ & F = \textbf{Full} \end{aligned}$				1.1	Proposed Strategy 1. Training & awareness campaigm 2. Demonstration 3. Exposure visit A. On form trailOPF	aigm		
	T. Chawanc of	Managomer	in practices								5. S	oil testing b	5. Soil testing based fertilizer use needed to be strengthened	be streng	thened	

Chapter VII Table -1 Proposed Strategies for Integrated Nutrient Management

Ö	District : Haz aribagh										-		Crop:		Tomato	nato
S.	Doutionlone		AES-I					AES-II					AES-III			
No.		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	1	To be done	F	1,3,4	1-5		To be done	F	1,3,4	1-5	-	To be done	F	1,3,4	1-5
2	Use of Manures(mt./ha.)															
	FYM	7	15-20 kg/ha	Ь	1,4	1-3	7	15-20 kg/ha	Ь	1,4	1-3	7	15-20 kg/ha	Р	1,4	1-3
	Compost	-	•	-			-	-	-			-	-	-	-	•
	Vermicompost	-	4 kg/ha	F	1,4	1-2	-	4 kg/ha	F	1,4	1-2	-	4 kg/ha	F	1,4	1-2
3.	Use of major Fert.															
	Basal dose Kg./ha.															
	N	10	60 kg/ha	Ь	1,2,4	1-5	10	60 kg/ha	Ь	1,2,4	1-5	20	60 kg/ha	Р	1,2,4	1-5
	Ъ	50	80 kg/ha	Ь	1,2,4	1-5	50	80 kg/ha	ď	1,2,4	1-5	09	80 kg/ha	Ь	1,2,4	1-5
	K	00	60 kg/ha	F	1,2,4	1-5 (00	60 kg/ha	F	1,2, 4	1-5	10	60 kg/ha	P	1,2,4	1-5
4	Top dress (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
S.	Cultivation of Legumes															
	As rotational crop	•	Frenchbean/Pea	H	1, 4	1-4		Frenchbean/Pea	F	1, 4	1-4	-	Frenchbean/Pea	F	1, 4	1-4
	As inter crop	•	Onion, Carrot, Radish, Chinies cabbage	F	1, 4	1-4	-	Onion, Carrot, Radish, Chinies cabbage	F	1, 4	1-4	-	Onion, Carrot, Radish, Chinies cabbage	F	1, 4	1-4
	As Green mannure	-	•	-	1	-	-	-	1		-	-	•	-	٠	•
	Use of bio-fertl.(Kg./ha.)	ı	Aqotobacter 0.5 kg/ha Phosphate Solubilizers	H	1,3	1-4	-	Aqotobacter 0.5 kg/ha Phosphate Solubilizers	F	1,3	1-4	-	Aqotobacter 0.5 kg/ha Phosphate Solubilizers	F	1,3	1-4
9	Any other								-	1	1			-		•
	4,	Rea 1. Lacl 2. La 3. Non av Unaware of	Reasons for gap 1. Lack of knowledge 2. Lack resources 3. Non availability of inputs 4. Unaware of Management practices					$\begin{aligned} & \textbf{Gap in Adoption} \\ & N = Nil \\ & P = Partial \\ & F = Full \end{aligned}$				S Coil teeti	Proposed Strategy 1. Training & awareness campaigm 2. Demonstration 3. Exposure visit 4. On farm trail/ORF 6. Online hand family and a change of the change	aigm	1	7
											-	J. DOH INSH	ng passa retrilled ass money i	200	SHIVING	,

Chapter VII Table -1	Proposed Strategies for Integrated Nutrient Management
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Ö	District : Hazaribagh				Proj	osed Si	trategies	Proposed Strategies for Integrated Nutrient Management	lanagem	ent			Crop:		Chilli	
SI.			AES-I					AES-II					AES-III			
No.). Faruculars	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.
ij	Soil Testing/Soil Health	1	To be done	'n	1,2,4	1-5	i	To be done	Щ	1,2,4	1-5	•	To be done	H	1,2,4	1-5
7	Use of Manures(mt./ha.)															
	FYM	8	15-20 kg/ha	Ь	1,4	1-2	8	15-20 kg/ha	Ь	1,4	1-2	8	15-20 kg/ha	Ь	1,4	1-2
	Compost	-	-		-	•	-	-	-	=	-	=	-	-	-	-
	Vermicompost	-	4 kg/ha	F	1,4	1-2	-	4 kg/ha	F	1,4	1-2	-	4 kg/ha	F	1,4	1-2
3.	Use of major Fert.															
	Basal dose Kg./ha.															
	N	10	50 kg/ha	Ь	1,2,4	1-5	10	50 kg/ha	d	1,2,4	1-5	20	50 kg/ha	Ь	1,2,4	1-5
	ď	20	60 kg/ha	Ь	1,2,4	1-5	20	60 kg/ha	d	1,2,4	5-1	98	60 kg/ha	Ь	1,2,4	1-5
	K	-	60 kg/ha	F	1,2, 4	1-5	-	60 kg/ha	F	1,2, 4	1-5	01	60 kg/ha	Ь	1,2, 4	1-5
4	Top dress (Kg./ha.)															
	N	10	50 kg/ha	P	1, 4	1-5	10	50 kg/ha	P	1, 4	1-5	15	50 kg/ha	P	1, 4	1-5
Ś	Cultivation of Legumes															
	As rotational crop	1	Frenchbean	Гц	1,4	1-4	,	Frenchbean	щ	1,4	1-4	ı	Frenchbean	ш	1,4	1-4
	As inter crop	-	-	F	1, 4	1-4	-	-	F	1, 4	1-4	-	-	F	1, 4	1-4
	As Green mannure	-	-	1	1	-	_	-	-	-			-	1	-	-
	Use of bio-fertl.(Kg./ha.)	•	Aqotobacter 0.5 kg/ha Phosphate Solubilizers	F	1,3	1-4	-	Aqotobacter 0.5 kg/ha Phosphate Solubilizers	F	1,3	1-4	-	Aqotobacter 0.5 kg/ha Phosphate Solubilizers	F	1,3	1-4
9	Any other	,	VAM	F	1,3	1-4		VAM	ഥ	1,3	1-4		VAM	F	1,3	1-4
	1.1 2. 3. Non 4. Unaware	Reasons for gap 1. Lack of knowledge 2. Lack resources 3. Non availability of inputs naware of Management pract	Reasons for gap 1. Lack of knowledge 2. Lack resources 3. Non availability of inputs 4. Unaware of Management practices					$\begin{aligned} & \textbf{Gap in Adoption} \\ & N = Nil \\ & P = Partial \\ & F = Full \end{aligned}$				5. Soil testi	Proposed Strategy 1. Training & awareness campaigm 2. Demonstration 3. Exposure visit 4. On farm trail/ORF 5. Soil testing based fertilizer use needed to be strengthened	npaigm to be stre	ngthened	

Chapter VII Table -1 Proposed Strategies for Integrated Nutrient Management

ī	District : Hazaribagh			-	nacada	ou atr	101 calg	i i oposeu su aregies ioi micegiareu munient management						Crop:	: Onion	Ē
\$	SI. B. di		AES-I					AES-II					AES-III			
Z	No. Farticulars	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	ഥ	1,3,4	1-5		To be done	H	1,2,4	1-5	ı	To be done	Н	1,2,4	1-5
	2. Use of Manures(mt./ha.)															
<u> </u>	FYM	20	20-25	Ь	1,4	1-2	20	20-25	Ь	1,4	1-2	20	20-25	Ь	1,4	1-2
	Compost	ı	1					-		-		-	•			-
	Vermicompost	-	4	F	1,4	1-2		4	F	1,4	1-2	•	4	F	1,4	1-2
***	3. Use of major Fert.															
	Basal dose Kg./ha.															
<u> </u>	N	20	50	Ь	1,4	1-5	20	50	Ь	1,2,4	1-5	20	50	Ь	1,2,4	1-5
	Ъ	50	08	Ь	1,4	1-5	50	08	Ь	1,2,4	1-5	50	08	Ь	1,2,4	1-5
	K	10	08	Ь	1, 3,4	1-5	10	08	Ь	1,2,4	1-5	10	08	Ь	1,2, 4	1-5
	4. Top dress (Kg./ha.)															
	N	20	50	Ь	1, 4	1-5	20	09	Ь	1, 4	1-5	20	50	Ь	1,4	1-5
- '	5. Cultivation of Legumes															
	As rotational crop		Frenchbean	Ħ	1, 4	1-4	ı	Frenchbean	ഥ	1, 4	1-4	1	Frenchbean	ഥ	1,4	1-4
Ш	As inter crop	-	-	F	1,4	1-4	-	-	F	1, 4	1-4	-	-	F	1, 4	1-4
	As Green mannure	1	•	-	-	-	_	Ī		•	•	-	•	-	1	-
	Use of bio-fertl.(Kg./ha.)	-	Aqotobacter 0.5 kg/ha Phosphate Solubilizers	拓	1,3	1-4		Aqotobacter 0.5 kg/ha Phosphate Solubilizers	H	1,3	1-4		Aqotobacter 0.5 kg/ha Phosphate Solubilizers	H	1,3	1-4
	6. Any other		VAM	F	1,3	1-4		VAM	F	1,3	1-4	i	VAM	ы	1,3	1-4
	3. 4. Una	Reasons for gap 1. Lack of knowledge 2. Lack resources Non availability of inp ware of Management p	Reasons for gap 1. Lack of knowledge 2. Lack resources 3. Non availability of inputs 4. Unaware of Management practices					$\begin{aligned} & \textbf{Gap in Adoption} \\ & N = Nil \\ & P = Partial \\ & F = Full \end{aligned}$			5. S.	1. Tr oil testing ba	Proposed Strategy 1. Training & awareness campaigm 2. Demonstration 3. Exposure visit 4. On farm trail/ORF 5. Soil testing based fertilizer use needed to be strengthened	gm se streng	thened	

Chapter VII Table -II

2, 4,5 1,2,3 P.S. 1,2 1,2 1,2 1,4 1,2 1,2 1,2 1,2 1,2 1,2 R.G. 1,2,3 1,2,3 1,2,3 1,2,3 1,2,3 1,2,3 1, 4 1,2,3 4, 1,4 1,3 1,3 1,3 1,4 1,3 G.A. Z Д ŗ, Shallow ploughing varieties Local E.P Z Z Z Z Z Z Z Z Deep repeated ploughing Deep ploughing Trichogramma Trichogramma 5 trap/ha 5 trap/ha Proposed Strategies for Integrated Pest Management
Name of the Pest Stem Borer, Hispa, Leaf Folder, & Diseases like blast, Blight etc.

AES II R.P. 7 2, 4,5 1,2,3 P.S. 1,4 1,2 1,2 1,2 1,2 1,2 1,2 1,2 1,2 1,2 1,2 R.G. 1,2,3 1,2,3 1,2,3 1,2,3 1,2,3 1,2,3 1,4 1,2,3 1,4 1,4 1,3 1,3 1,3 1,3 1,4 G.A. H Z ш ŗ, Д [I Ľ щ щ Shallow ploughing varieties Local z E.PZ z z Z Z Z z Deep repeated ploughing Deep ploughing Trichogramma Trichogramma 5 trap/ha 5 trap/ha R.P. 7 2, 4,5 P.S. 1,2 1,2 1,2 1,2 1,2 1,2 1,2 1,2 1,2 1,2 1,2 R.G. 1,2,3 1,2,3 1,2,3 1,2,3 1,2,3 1,2,3 1,2,3 1,3 1, 4 1,4 1,4 1,4 1,3 1,3 1,3 Œ, G.A. Д Z ſŢ, Local varieties Shallow ploughing Z E.PZ Z z Z Z Z Deep ploughing Trichogramma Deep repeated ploughing Trichogramma 5 trap/ha 5 trap/ha R.P. 7 Conservation of natural Resistance Varieties Bio-pesticides (Y/N) Granular application **Cultural Practices** Summer ploughing Any other Seedling trreament Pheronmone Trap Clean Cultivation Pesticide (No. of application) Other practices District: Hazaribagh Seed Treatment Soil application Timely sowing Neem Products Bioagents Egg parasite Larvel prasite **Particulars** Light Trap Spraying Dusting NPV9

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

Di	<i>District</i> : Hazaribagh				Pı	roposed Str Name of th	Chapter vii <u>Table - II</u> Proposed Strategies for Integrated Pest Management Name of the Pest Stem Borer, Hispa, Leaf Folder, & Diseases like blast, Blight etc.	e <u>- 11</u> 2d Pest Mana _: Hispa, Leaf F	gemen 'older,	t & Disease	s like blast,	Blight etc.				
Ċ	Crop:Maize		AES I					AES II					AES III	II		
S.	Particulars	•													Ē	
No.		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	Д	-	1,2	Deep repeated ploughing	Shallow ploughing	Ь	1	1,2	Deep repeated ploughing	Shallow ploughing	Ъ	_	1,2
	Summer ploughing	Deep ploughing	Shallow ploughing	Ы	1,2,4	1,2	Deep ploughing	Shallow ploughing	Ь	1,2,4	1,2	Deep ploughing	Shallow ploughing	Ь	1,2,4	1,2
	Timely sowing	Y		Z			Y)	Z	-		Y	λ	Z		
	Clean Cultivation	Y	Z	H	1,2,4	1,2,3	Y	Z	F	1,2,4	1,2,3	Y	Z	币	1,2,4	1,2,3
7	Resistance Varieties	Y	Local varieties	H	1,2, 4	1,2,3,4,	Y	Local varieties	Н	1,2, 4	1,2,3,4,	Y	Local varieties	ſ <u>r</u>	1,2,4	1,2,3,4,5
3	Bio-pesticides (Y/N)															
	Neem Products	Y	Z	F	1,2, 4	1,2, 4	Y	Z	H	1,2,4	1,2,4	Y	Z	Ц	1,2, 4	1,2,4
	NPV	Bt-Spray	Z	щ	1,2,3,4	1,2,3,4	Bt-Spray	Z	F	1,2,3,4	1,2,3,4	Bt-Spray	N	Ц	1,2,3,4	1,2,3,4
	VT	Y	Z	Н	1,2,3,4	1,2,3,4	Y	Z	F	1,2,3,4	1,2,3,4	Y	N	Ц	1,2,3,4	1,2,3,4
4	Bioagents															
	Egg parasite	Trichogramma		щ	1,3,4	1,2,3,4	Trichogramma		ᄺ	1,3,4	1,2,3,4	Trichogramma		Н	1,3,4	1,2,3,4
	Larvel parasite	Trichogramma	1	F	1,3,4	1,2,3,4	Trichogramma	1	F	1,3,4	1,2,3,4	Trichogramma		F	1,3,4	1,2,3,4
S	Other practices															
	Pheronmone Trap	5 trap/ha	ı	ഥ	1,3,4	1,2,3	5 trap/ha		П	1,3,4	1,2,3	5 trap/ha	ı	щ	1,3,4	1,2,3
	Light Trap	5 trap/ha		Ъ	1,3,4	1,2,3	5 trap/ha		F	1,3,4	1,2,3	5 trap/ha		F	1,3,4	1,2,3
9	Pesticide (No. of application)															
	Spraying	2-3	1	Ъ	1,2	1,2	2-3	1	Ъ	1,2	1,2	2-3	1	Ь	1,2	1,2
	Dusting							ı	ı		·					
	Seed Treatment	-		F	1,4	1,2,	1	18	F	1,4	1,2,	1		F	1,4	1,2,
	Soil application	Y	Z	H	1, 4	1,2	Y	Z	H	1, 4	1,2	Y	Z	F	1, 4	1,2
	Granular application	Y	Z	F	1,2, 4	1,2	Y	Z	দ	1,2,4	1,2	Y	Z	F	1,2, 4	1,2
7	Any other															
	Seedling trreament			ı	ı				ı				i			
	Conservation of nuturala enemy (Frog)	Y	N	H	1, 4	1,2,3,4	Y	N	Ŧ	1, 4	1,2,3,4	Y	Z	F	1, 4	1,2,3,4
	1. Lack of knowledge 2. Lack resources	Reasons for gap 3. N 4. Unawa	r gap 3. Non availability of inputs 4. Unaware of Management practices	f inputs ent pra	s ctices	$\begin{aligned} & \textbf{Gap in Adoption} \\ & N = Nil \\ & P = Partial \\ & F = Full \end{aligned}$		Training & awareness campaigm Demonstration S. Exposure visit	ss cam tion tsit		Pro	Proposed Strategy 4. On farm trail/ORF 5. Research is needed for resistant variety having nearer taste to local variety	/ 4. On farm trail/ORF sistant variety having	F g neare	r taste to lo	cal variety

Chapter VII <u>Table - II</u>
Proposed Strategies for Integrated Pest Management
Name of the Pest Stem Borer, Hispa, Leaf Folder, & Diseases like blast, Blight etc.

Di	District: Hazaribagh				-	Vame of the I	Name of the Pest Stem Borer, Hispa, Leaf Folder, & Diseases like blast, Blight etc.	ispa, Leaf Folder,	& Di	seases like l	blast, Blight e	itc.				
Ċ	do.		AES I					AES II					AES II	III		
SI.	Particulars	пп	r F	-	5	5	q	i i	-	-	5	q	e E	•	5 4	r c
ġ.	\dashv	K.P.	E.P	G.A.	K.G.	P.S.	K.P.	K.P	G.A.	K.G.	F.S.	K.P.	E.P	G.A.	K.G.	P.S.
	Cultural Practices	Deep repeated	1-2 Shallow	Ъ	-	1,2	Deep repeated	1-2 Shallow	Ь	_	1,2	Deep	1-2	Ь		1,2
		guugnoid	bloughing				ploughing	bloughing				repeated ploughing	Shallow ploughing			
	Summer ploughing	Deep ploughing	Shallow	Ы	1,2,4	1,2	Deep ploughing	Shallow	Ь	1,2,4	1,2	Deep	Shallow	Ь	1,2,4	1,2
		78	Simignord			Ī	44	gungnord	, ,			giiiignoid	prougning	ž	Ì	
	I imely sowing	¥	¥	Z			X	ĭ	Z			ĭ	X	Z		
	Clean Cultivation	Y	Z	Н	1,2,4	1,2,3	Y	N	F	1,2,4	1,2,3	Y	Z	Н	4	1,2,3
77	Resistance Varieties	Y	Local varieties	ш	1,2,4	1,2,3,4,5	Y	Local varieties	Ц	1,2,4	1,2,3,4,5	Y	Local varieties	ഥ	1,2, 4	1,2,3,4,
3	Bio-pesticides (Y/N)	Ā	N				Λ	N				Ā	N			
	Neem Products	Y	Z	ц	1,2,4	1,2,4	Y	Z	F	1,2,4	1,2, 4	Y	z	ഥ	1,2,4	1,2,4
	NPV	Y	Z	ц	1,2,3,4	1,2,3,4	X	Z	F	1,2,3,4	1,2,3,4	Y	Z	H	1,2,3,4	1,2,3,4
	VT	Y	z	Н	1,2,3,4	1,2,3,4	Ā	Z	F	1,2,3,4	1,2,3,4	Y	N	F	1,2,3,4	1,2,3,4
4	Bioagents															
	Egg parasite	1	ı	ഥ	1,3,4	1,2,3,4	ı	ı	F	1,3,4	1,2,3,4	ı		ഥ	1,3,4	1,2,3,4
	Larvel parasite	Y	N	F	1,3,4	1,2,3,4	Ā	N	F	1,3,4	1,2,3,4	Y	N	F	1,3,4	1,2,3,4
S									J							
	Pheronmone Trap	5 trap/ha		F	1,3,4	1,2,3	5 trap/ha	-	F	1,3,4	1,2,3	5 trap/ha		F	1,3,4	1,2,3
	Light Trap	5 trap/ha		H	1,3,4	1,2,3	5 trap/ha		F	1,3,4	1,2,3	5 trap/ha	•	щ	1,3,4	1,2,3
9																
	Spraying	2	П	Ы	1,2	1,2	2	1	Ь	1,2	1,2	2	1	Ь	1,2	1,2
	Dusting	1					1		-			1		ı		
	Seed Treatment	1		ш	1,4	1,2,	1		F	1,4	1,2,	1		ഥ	1,4	1,2,
	Soil application	Ā	Z	ц	1, 4	1,2	Ā	Z	F	1, 4	1,2	X	N	F	1, 4	1,2
		Y	Z	ഥ	1,2,4	1,2	Y	N	F	1,2, 4	1,2	Y	Z	F	1,2,4	1,2
7	1															
	Seedling trreament								-					-		
	Conservation of nuturala enemy (Frog)	Y	Z	ш	1,4	1,2,3,4	Y	Z	ш	1, 4	1,2,3,4	Y	Z	[II	1,4	1,2,3,4
	Use of Karanj cack, Neem cake	250 kg/ha	Z	F	1,2,3	1,2,3,4	250 kg/ha	N	F	1,2,3	1,2,3,4	250 kg/ha	N	ഥ	1,2,3	1,2,3,4

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

4. On farm trail/ORF 5. Research is needed for resistant variety having nearer taste to local variety

Training & awareness campaigm
 Demonstration
 Exposure visit

 $\begin{tabular}{ll} \label{eq:Gap in Adoption} \begin{tabular}{ll} $A = Nil \\ $P = Partial \\ $F = Full \\ \end{tabular}$

Reasons for gap
3. Non availability of inputs
4. Unaware of Management practices

Lack of knowledge
 Lack resources

Proposed Strategy

Chapter VII <u>Table -II</u>
Proposed Strategies for Integrated Pest Management
Name of the Pest Stem Borer, Hispa, <u>Leaf Folder</u>, & Diseases like blast, Blight etc.

Dis	District: Hazaribagh					Name of the	Name of the Pest Stem Borer. Hispa. Leaf Folder. & Diseases like blast. Blight etc.	Name of the Pest Stem Borer. Hispa. Leaf Folder. &	& Dise	ases like b	last. Blight	etc.				
$C_{r_{\ell}}$	Crop:Arhar		AES]	I				AES II					AES II	I		
SI.	Particulars															
No.		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.
	Cultural Practices	Deep repeated ploughing	1-2 Shallow ploughing	Ъ		1,2	Deep repeated ploughing	1-2 Shallow ploughing	Ъ	-	1,2	Deep repeated ploughing	1-2 Shallow ploughing	Ь	1	1,2
	Summer ploughing	Deep ploughing	Z	Ь	1,2,4	1,2	Deep ploughing	Z	Ь	1,2,4	1,2	Deep ploughing	Z	Ь	1,2,4	1,2
	Timely sowing	Y	Y	z	ı		Y	Y	Z	ı		Y	Y	Z	ı	
	Clean Cultivation	Y	Z	F	1,2,4	1,2,3	Y	Z	щ	1,2,4	1,2,3	Y	Z	H	1,2,4	1,2,3
7	Resistance Varieties	Ā	Local varieties	H	1,2, 4	1,2,3,4,5	Y	Local varieties	ഥ	1,2,4	1,2,3,4,	Ā	Local varieties	ഥ	1,2, 4	1,2,3,4,
3	Bio-pesticides (Y/N)	Y	Z				Y	Z				Y	Z			
	Neem Products	Y	Z	ч	1,2, 4	1,2, 4	Y	Z	Ŧ	1,2,4	1,2,4	Y	Z	H	1,2,4	1,2, 4
	NPV	Y	Z	H	1,2,3,4	1,2,3,4	Y	Z	ш	1,2,3,4	1,2,3,4	Y	Z	F	1,2,3,4	1,2,3,4
	Trichodrama specific	Y	Z	ч	1,2,3,4	1,2,3,4	Y	Z	Ŧ	1,2,3,4	1,2,3,4	Y	Z	F	1,2,3,4	1,2,3,4
4	Bioagents															
	Egg parasite		-	F	1,3,4	1,2,3,4	-	-	F	1,3,4	1,2,3,4	-		F	1,3,4	1,2,3,4
	Larvel parasite	1	1	F	1,3,4	1,2,3,4		•	F	1,3,4	1,2,3,4	-		F	1,3,4	1,2,3,4
ĸ	Other practices															
	Pheronmone Trap	5 trap/ha	ı	ц	1,3,4	1,2,3	5 trap/ha	1	ഥ	1,3,4	1,2,3	5 trap/ha		Н	1,3,4	1,2,3
	Light Trap	5 trap/ha		F	1,3,4	1,2,3	5 trap/ha	•	Н	1,3,4	1,2,3	5 trap/ha		F	1,3,4	1,2,3
9	Pesticide (No. of application)															
	Spraying	2-3	_	Ь	1,2	1,2	2-3	П	Ь	1,2	1,2	2-3		Ь	1,2	1,2
	Dusting	ı	•	ı	-	-	1	•	ı	ı	-	-	1	ı	ı	ı
	Seed Treatment	1		Ľ	1,4	1,2,	1		F	1,4	1,2,	1		F	1,4	1,2,
	Soil application	Y	Z	F	1,4	1,2	Y	Z	щ	1,4	1,2	Y	Z	H	1,4	1,2
	Granular application	Y	Z	H	1,2, 4	1,2	Y	Z	Ħ	1,2,4	1,2	Y	Z	F	1,2, 4	1,2
7	Any other															
	Seedling trreament	1	-	1			-	-	•		-	1			-	
	Conservation of nuturala enemy (Frog)	Y	Z	F	1, 4	1,2,3,4	Y	z	F	1, 4	1,2,3,4	Ā	Z	F	1,4	1,2,3,4
	Use of Karanj cack, Neem cake	250 kg/ha	Z	F	1, 3,4	1,2,3,4	250 kg/ha	N	F	1,2,3	1,2,3,4	250 kg/ha	N	F	1,2,3	1,2,3,4

Chapter VII <u>Table -II</u>
Proposed Strategies for Integrated Pest Management
Name of the Pest Stem Borer, Hispa, Leaf Folder, & Diseases like blast, Blight etc.

DISTRICT: THAT ALLDA SIL																
Cr_{θ}	Crop:Potato		AES I					AES II					AES III			
S.	Particulars			ļ				 	ŀ	Ĺ				-	-	
No.		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.
-	Cultural Practices	Deep repeated ploughing Crop rotation	Shallow ploughing	Ъ	-	1,2,3	Deep repeated ploughing Crop rotation	Shallow ploughing	<u> </u>		1,2,3	Deep repeated ploughing Crop rotation	Shallow ploughing	Ь	-	1,2,3
	Summer ploughing	Deep ploughing	Shallow ploughing	പ	1,4	1,2	Deep ploughing	Shallow ploughing	Ъ	1, 4	1,2	Deep ploughing	Shallow ploughing	Ъ	1, 4	1,2
	Timely sowing	Y	Y	z			Y	Y	Z			Y	Y	Z	-	
	Clean Cultivation	Y	Y	Ь	1, 4	1	Y	Y	Ь	1, 4	1	Y	Y	P	1, 4	1
7	Resistance Varieties	Y	Local varieties	F	1,2,3	2,5	Y	Local varieties	s F	1,2,3	2,5	Ā	Local varieties	Ц	1,2,3	2,5
3	Bio-pesticides (Y/N)	Y	Z	щ	1-3	2	Y	Z	124	1-3	2	Y	Z	Щ	1-3	2
	Neem Products	Y	Z	ы	1,4	2	Y	Z	Ľ,	1,4	2	Y	Z	F	1,4	2
	NPV	Y	Z	ч	1,3	1,2	Y	Z	H	1,3	1,2	Y	Z	Н	1,3	1,2
	VT	Y	Z	H	1,3	1,2	Y	Z	F	1,3	1,2	Y	Z	H	1,3	1,2
4	Bioagents															
	Egg parasite	Trichgramma	N	F	1, 3	1,2	Trichgramma	Z	Н	1,3	1,2	Trichgramma	Z	F	1, 3	1,2
	Larvel parasite	Trichoderma Viridi		H	1,3	1,2	Trichoderma Viridi	1	ч	1,3	1,2	Trichoderma Viridi		F	1,3	1,2
		@ 2-4 gram/kg seed					@ 2-4 gram/kg seed					@ 2-4 gram/kg seed				
S	Other practices				<u> </u>											
	Pheronmone Trap	5 trap/ha	-	F	1, 3	1,2	5 trap/ha		ц	1,3	1,2	5 trap/ha		F	1, 3	1,2
	Light Trap	5 trap/ha	-	F	1, 4	2	5 trap/ha		F	1, 4	2	5 trap/ha	-	F	1, 4	2
9	Pesticide (No. of															
	Spraying	3-4	1	Ь	1,2,3	2	3-4	1	Ь	1,2,3	2	3-4	-	Ъ	1,2,3	2
	Dusting	1		Ы	1,2,3	2	1		Ц	1,2,3	2	1	•	F	1,2,3	2
	Seed Treatment	1	-	F	1,2,3	2	1	-	F	1,2,3	2	1	-	F	1,2,3	2
	Soil application	Y	N	F	1,2,3,4	2	Y	N	F	1,2,3,4		Y	N	F	1,2,3,4	2
	Granular application	Y	N	F	1,2,3,4	2	Y	N	H	1,2,3,4	2	Y	N	F	1,2,3,4	2
7	Any other															
	Seedling trreament	Y	Z	F	1	1,4	Y	Z	H	1	1,4	Y	Z	F	1	1,4
	Conservation of nuturala enemy (Frog)	Ā	N	F	1	1	Y	N	F	1	1	Y	N	F	1	1
	Use of Karanj cack, Neem cake	250 kg/ha	Z	H	1, 4	1,2	250 kg/ha	Z	H	1, 4	1,2	250 kg/ha	Z	F	1, 4	1,2
	1. Lack of knowledge 2. Lack resources	Reasons for ga	19 3. Non availability of inputs 4. Unaware of Management practices	ility of agemen	inputs it practices	Gap	$\begin{aligned} & \textbf{Gap in Adoption} \\ & N = Nil \\ & P = Partial \\ & F = Full \end{aligned}$	Training & awareness campaigm Demonstration Exposure visit	reness c stration re visit	ampaigm	5. Rese	Proposed Strategy 4. On farm trail/ORF 5. Research is needed for resistant variety having nearer taste to local variety	4. On farm trail/ORF sistant variety having	, nearer	taste to loc	ıl variety

Chapter VII <u>Table - II</u>
Proposed Strategies for Integrated Pest Management
Name of the Pest Stem Berer Histor I nof Folder & Diseases

Dis	District: Haz aribagh					Name of th	A reposed Set are given for investment at the primary memory. Name of the Pest Stem Borer, Hispa, Leaf Folder, & Diseases like blast, Blight etc.	spa, Leaf Fold	er, & I	i Diseases lik	e blast, Bligl	ıt etc.				
Š	Crop: Brinjal		AES I					AES II					AES III			
Z.	Particulars				•			•							•	
Š.		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	Ь	1	1,2,3	Deep repeated ploughing	Shallow ploughing	Ъ	-1	1,2,3	Deep repeated ploughing	Shallow ploughing	Ь		1,2,3
		Crop rotation Use of trap crop) -				Crop rotation Use of trap crop) -				Crop rotation Use of trap crop) -			
<u> </u>	Summer ploughing	Deep ploughing	Shallow ploughing	Ь	1,4	1,2	Deep ploughing	Shallow ploughing	Ь	1,4	1,2	Deep ploughing	Shallow ploughing	Ь	1,4	1,2
	Timely sowing	Y	> >	Z			X	λ	z			Y	λ	z		
	Clean Cultivation	Y	N	Ъ	1, 4	1	Y	Z	Ь	1, 4	1	Y	Z	Ь	1, 4	1
7	Resistance Varieties	Y	N	Щ	1,2,3	2,5	Λ	Z	Ŧ	1,2,3	2,5	Y	N	Ŧ	1,2,3	2,5
3	Bio-pesticides (V/N)			Ε.	1-3	2			ഥ	1-3	2			ഥ	1-3	2
	Neem Products	Y	Z	Ľ	1,4	2	X	z	Н	1,4	2	Y	Z	H	1,4	2
L	NPV	Y	Z	H	1,3	1,2	Ā	Z	Н	1,3	1,2	Y	Z	щ	1,3	1,2
	VT	Y	N	F	1,3	1,2	Ā	N	F	1,3	1,2	Y	N	Н	1,3	1,2
4	Bioagents															
	Egg parasite	Trichgramma	•	ц	1,3	1,2	Trichgramma	1	ц	1,3	1,2	Trichgramma		H	1,3	1,2
	Larvel parasite	Trichoderma Viridi @ 2-4 gram/kg seed	ı	ഥ	1,3	1,2	Trichoderma Viridi @ 2-4 gram/kg seed	1	ഥ	1,3	1,2	Trichoderma Viridi @ 2-4 gram/kg seed	ı	ഥ	1,3	1,2
S	Other practices)														
	Pheronmone Trap	5 trap/ha	-	F	1,3	1,2	5 trap/ha	-	F	1, 3	1,2	5 trap/ha	•	F	1, 3	1,2
	Light Trap	5 trap/ha	-	F	1, 4	2	5 trap/ha	-	F	1, 4	2	5 trap/ha	-	F	1, 4	2
9	Pesticide (No. of application)															
<u></u>	Spraying	3-4	1-2	P	1,2,3	2	3-4	1-2	Ъ	1,2,3	2	3-4	1-2	Ъ	1,2,3	2
	Dusting	1	-	F	1,2,3	2	1	-	F	1,2,3	2	1	-	F	1,2,3	2
	Seed Treatment	1	-	H	1,2,3	2	1	•	F	1,2,3	2	1	-	F	1,2,3	2
	Soil application	Y	Z	Ħ	1,2,3,4	2	Y	Z	Ŧ	1,2,3,4	2	Y	Z	F	1,2,3,4	2
	Granular	Y	Z	F	1,2,3,4	2	Ā	Z	Н	1,2,3,4	2	Y	N	F	1,2,3,4	2
7	Any other															
	Seedling trreament	Y	Z	ഥ	1	1,4	Y	Z	ഥ	1	1,4	Y	Z	ч	1	1,4
	Conservation of nuturala enemy (Frog)	Ā	Z	Ā	1	1	Ā	N	F	1	1	Ā	Z	F	1	1
	Use of Karanj cack, Neem cake	250 kg/ha	Z	Ľ,	1, 4	1,2	250 kg/ha	Z	щ	1, 4	1,2	250 kg/ha	Z	ഥ	1, 4	1,2
	1. Lack of knowledge	Reasons for gap owledge	gap 3. Non availability of inputs	lability	stndui Jo		on	 Training & awareness campaigm 	ceness	ampaigm	[Proposed Strategy 4. On	4. On farm trail/ORF	Ŧ		
	2. Lack resu	ources	4. Unaware of Management practices	/anage	ment practic		P = Partial F = Full	2. Demonstration 3. Exposure visit	istration ire visi	c 1	5. Resea	Research is needed for resistant variety having nearer taste to local variety	t variety havin	ıg near	er taste to le	cal variety
							٠									

Chapter VII Table - II Proposed Strategies for Integrated Pest Management Name of the Pest Stem Borer, Hispa, Leaf Folder, & Diseases like blast, Blight etc.

Dis	District: Hazaribagh					Name of the	Name of the Pest Stem Borer, Hispa, Leaf Folder, & Diseases like blast, Blight etc.	a, Leaf Fold	er, &	Diseases L	ike blast, B	light etc.				
Ç	Crop: Tomato		AES I					AES II					AES III			
S.	Particulars															
No.		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	Ъ	1	1,2,3	Deep repeated ploughing Crop rotation Use of trap crop	Shallow ploughing	Ъ		1,2,3	Deep repeated ploughing Crop rotation Use of trap crop	Shallow ploughing	ď	1	1,2,3
	Summer ploughing	Deep ploughing	Shallow ploughing	Д	1, 4	1,2	Deep ploughing	Shallow ploughing	Ь	1, 4	1,2	Deep ploughing	Shallow ploughing	Ъ	1,4	1,2
	Timely sowing	Y	Ϋ́	z			Y	λ	Z			Y		Z		
	Clean Cultivation	Y	N	Ь	1, 4	1	Y	N	Ь	1, 4	1	Y	Ν	Ь	1, 4	1
7	Resistance Varieties	Ā	N	Н	1,2,3	2,5	Y	N	F	1,2,3	2,5	Y	N	ഥ	1,2,3	2,5
3	Bio-pesticides (Y/N)	Y	Z	щ	1-3	2	Y	Z	F	1-3	2	Y	Z	Ц	1-3	2
	Neem Products	Y	Z	щ	1,4	2	Y	z	F	1,4	2	Y	Z	ഥ	1,4	2
	NPV	Y	Z	H	1,3	1,2	Y	Z	H	1,3	1,2	Y	Z	ц	1,3	1,2
	VT	Y	Z	ы	1,3	1,2	Y	Z	F	1,3	1,2	Y	Z	F	1,3	1,2
4	Bioagents															
	Egg parasite	Trichgramma	•	щ	1,3	1,2	Trichgramma	-	F	1,3	1,2	Trichgramma	-	ц	1,3	1,2
	Larvel prasite	Trichoderma	,	ഥ	1,3	1,2	Trichoderma Viridi	ı	F	1,3	1,2	Trichoderma Viridi	ı	Н	1,3	1,2
		(a) 2-4 gram/kg seed					(a) 2-4 gram/kg seed					@ 2-4 gram/kg seed				
2	Other practices															
	Pheronmone Trap	5 trap/ha	Ť	Щ	1,3	1,2	5 trap/ha	ı	H	1,3	1,2	5 trap/ha		ഥ	1,3	1,2
	Light Trap	5 trap/ha		ഥ	1,4	2	5 trap/ha		F	1, 4	2	5 trap/ha		щ	1, 4	2
9	Pesticide (No. of application)															
	Spraying	3-4	1-2	Ь	1,2,3	2	3-4	1-2	Ь	1,2,3	2	3-4	1-2	Ь	1,2,3	2
	Dusting	1	-	ч	1,2,3	2	1	-	F	1,2,3	2	1	-	F	1,2,3	2
	Seed Treatment	1	-	F	1,2,3	2	1	-	F	1,2,3	2	1	-	F	1,2,3	2
	Soil application	Y	Z	щ	1,2,3,4	2	Y	Z	ഥ	1,2,3,4	2	Y	Z	F	1,2,3,4	2
	Granular application	Y	z	Щ	1,2,3,4	2	Y	Z	Щ	1,2,3,4	7	Y	Z	ц	1,2,3,4	2
7	Any other															
	Seedling trreament	Y	N	ഥ	1	1,4	Y	N	F	1	1,4	Y	N	H	1	1,4
	Conservation of	Y	Z	H	1	1	Y	Z	F	1	1	Y	Z	ഥ	1	1
	Use of Karanj cack, Neem cake	250 kg/ha	N	ഥ	1, 4	1,2	250 kg/ha	Z	H	1, 4	1,2	250 kg/ha	Z	ഥ	1, 4	1,2
	1. Lack of knowledge 2. Lack resources	Reasons for gap 3. Non 4. Unaware	or gap 3. Non availability of inputs 4. Unaware of Management practices	Finputs at prac	tices	$\begin{aligned} & \textbf{Gap in Adoption} \\ & N = Nil \\ & P = Partial \\ & P = P \end{aligned}$	1. Trainir	ig & awareness ca 2. Demonstration	ımpai		Prop Research is	Proposed Strategy 4. On farm trail/ORF 5. Research is needed for resistant variety having nearer taste to local variety	trail/ORF ety having nea	arer tas	te to local v	ariety
						F = Full		Exposure visit								

Chapter VII <u>Table - II</u>
Proposed Strategies for Integrated Pest Management

Dis	District: Hazaribagh					Name of	Name of the Pest Stem Borer, Hispa, Leaf Folder, & Diseases like blast, Blight etc.	pa, Leaf Fold	er, &	Diseases l	ike blast, Blig	ht etc.				
Ç	Crop: Chilli		AES I					AES II					AES III			
SI.	Particulars															
No.		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.
-	Cultural Practices	Deep repeated ploughing Crop rotation Use of trap crop	Shallow ploughing	Ъ	1	1,2,3	Deep repeated ploughing Crop rotation Use of trap crop	Shallow ploughing	Д	-	1,2,3	Deep repeated ploughing Crop rotation Use of trap crop	Shallow ploughing	Ъ	П	1,2,3
	Summer ploughing	Deep ploughing	Shallow ploughing	Ь	1, 4	1,2	Deep ploughing	Shallow ploughing	Ъ	1,4	1,2	Deep ploughing	Shallow ploughing	Ь	1, 4	1,2
	Timely sowing	Y	Ϋ́	Z			Y	×	Z			Y	, ,	Z		
	Clean Cultivation	Y	Z	Ь	1, 4	1	Y	z	Ь	1, 4	-	Y	Z	Ь	1,4	1
7	Resistance Varieties	Y	Z	F	1,2,3	2,5	Y	Z	щ	1,2,3	2,5	Y	Z	H	1,2,3	2,5
3	Bio-pesticides (Y/N)	Y	Z	F	1-3	2	Y	z	14	1-3	2	Y	Z	H	1-3	2
	Neem Products	Y	Z	F	1,4	2	Y	Z	ഥ	1,4	2	Y	N	F	1,4	2
	NPV	Y	N	F	1,3	1,2	Y	N	ഥ	1,3	1,2	Y	N	F	1,3	1,2
	VT	Y	N	F	1,3	1,2	Y	Z	H	1,3	1,2	Y	N	F	1,3	1,2
4	Bioagents															
	Egg parasite	Trichgramma	•	F	1,3	1,2	Trichgramma		Щ	1,3	1,2	Trichgramma		Ц	1,3	1,2
	Larvel prasite	Trichoderma Viridi @ 2-4 gram/kg seed	1	Ħ	1,3	1,2	Trichoderma Viridi @ 2-4 gram/kg seed		ഥ	1,3	1,2	Trichoderma Viridi @ 2-4 gram/kg seed	ı	H	1,3	1,2
ĸ	Other practices	a					3					,				
	Pheronmone Trap	5 trap/ha		F	1,3	1,2	5 trap/ha	,	Ā	1,3	1,2	5 trap/ha	ı	F	1,3	1,2
	Light Trap	5 trap/ha		F	1, 4	2	5 trap/ha	ı	F	1,4	2	5 trap/ha	1	F	1, 4	2
9	Pesticide (No. of application)															
	Spraying	3-4	1-2	Ь	1,2,3	2	3-4	1-2	Ь	1,2,3	2	3-4	1-2	Ъ	1,2,3	2
	Dusting	1	-	F	1,2,3	2	1	1	ഥ	1,2,3	2	1	1	F	1,2,3	2
	Seed Treatment	1	-	F	1,2,3	2	1	•	ŭ	1,2,3	2		•	F	1,2,3	2
	Soil application	Y	Z	F	1,2,3,4	2	Y	Z	ഥ	1,2,3,4	2	Y	Z	ī,	1,2,3,4	2
ļ	Granular application	Y	Z	Н	1,2,3,4	2	Y	z	[14	1,2,3,4	2	Y	z	F	1,2,3,4	2
7	Any other	**	Ĭ.	ŗ		,	^^	,	ŗ			4	2	F		,
	Seedling trreament	Y	Z;	T I		1,4	Y	z ;	<u>т</u> (_,	1,4	Y	z ;	ı,	٦,	t, 1
	Conservation of nuturala enemy (Frog)	Y	Z	F	1	1	Y	Z	Έ,	1	Ι	Y	Z	F	1	1
	Use of Karanj cack, Neem cake	250 kg/ha	Z	H	1, 4	1,2	250 kg/ha	Z	'n	1,4	1,2	250 kg/ha	Z	ഥ	1, 4	1,2
	1. Lack of knowledge	Reasons for gap	p 3. Non availability of inputs	ındui	s	$\begin{aligned} & \textbf{Gap in Adoption} \\ & N = Nil \end{aligned}$		1. Training & awareness campaigm	ampai		Propose	Proposed Strategy 4. On farm trail/ORF	i/ORF			
	2. Lack resources	4. Unaware	4. Unaware of Management practices	nt pra	ctices	P = Partial F = Full		 Demonstration Exposure visit 		3	Research is n	5. Research is needed for resistant variety having nearer taste to local variety	having neare	r taste	to local var	iety

Chapter VII <u>Table - II</u>
Proposed Strategies for Integrated Pest Management
Name of the Pest Stem Borer, Hispa, Leaf Folder, & Dise

is.	District: Hazaribagh					Name of	Name of the Pest Stem Borer, Hispa, Leaf Folder, & Diseases like blast, Blight etc.	spa, Leaf Fold	der, &	Diseases li	ke blast, Blig	ht etc.				
9	Crop:Onion		AES I					AES II					AES III			
_	Particulars				F					-				-		
No.		R.P.	E.P	G.A.	R.G.	P.S.	R.P.	E.P	G.A.	R.G.	P.S.	R.P.		G.A.	R.G.	P.S.
	Cultural Practices	Deep repeated ploughing Crop rotation Use of trap crop	Shallow ploughing	Д	1	1,2,3	Deep repeated ploughing Crop rotation Use of trap crop	Shallow ploughing	വ	1	1,2,3	Deep repeated ploughing Crop rotation Use of trap crop	Shallow ploughing	<u>a</u>	1	1,2,3
1	Summer ploughing	Deep ploughing	Shallow ploughing	Ъ	1,4	1,2	Deep ploughing	Shallow ploughing	Ь	1,4	1,2	Deep ploughing	Shallow ploughing	Ъ	1,4	1,2
1	Timely sowing	Y	Y	z			Y	Y	Z			Y	Y	z		
1	Clean Cultivation	Y	z	Ь	1,4	-	Y	z	Ь	1,4	-	Y	z	Ь	1, 4	-
ΙĪ	Resistance Varieties	Y	N	Ь	1,2,3	2,5	Y	N	F	1,2,3	2,5	Y	N	F	1,2,3	2,5
3	Bio-pesticides (Y/N)	Ā	N	H	1-3	2	Ā	N	Ŧ	1-3	2	Y	N	伍	1-3	2
l -	Neem Products	Y	Z	ч	1,4	2	Y	z	Ч	1,4	2	Y	Z	н	1,4	2
l	NPV	Y	Z	Ь	1,3	1,2	Y	Z	F	1,3	1,2	Y	N	F	1,3	1,2
1]	VT	Ā	N	Ь	1,3	1,2	Y	N	F	1,3	1,2	Y	N	F	1,3	1,2
4	Bioagents															
Ī	Egg parasite	Trichgramma	-	Ы	1, 3	1,2	Trichgramma	-	Ц	1,3	1,2	Trichgramma	-	F	1,3	1,2
	Larvel prasite	Trichoderma	•	F	1, 3	1,2	Trichoderma	•	H	1,3	1,2	Trichoderma	1	ш	1,3	1,2
		v iridi @ 2-4 gram/kg seed					V iridi @ 2-4 gram/kg seed					v iridi @ 2-4 gram/kg seed				
5	Other practices															
	Pheronmone Trap	5 trap/ha		ഥ	1,3	1,2	5 trap/ha	•	Щ	1,3	1,2	5 trap/ha	i	Щ	1,3	1,2
1	Light Trap	5 trap/ha		ч	1, 4	2	5 trap/ha		П	1,4	2	5 trap/ha		ഥ	1, 4	2
9	Pesticide (No. of application)															
1	Spraying	3-4	1-2	Ь	1,2,3	2	3-4	1-2	Ь	1,2,3	2	3-4	1-2	Ь	1,2,3	2
	Dusting	1	-	F	1,2,3	2	1	-	F	1,2,3	2	1	-	F	1,2,3	2
	Seed Treatment	1	-	F	1,2,3	2	1	-	F	1,2,3	2	1	-	F	1,2,3	2
	Soil application	Ā	N	F	1,2,3,4	2	Y	N	F	1,2,3,4	2	Y	N	F	1,2,3,4	2
	Granular application	Ā	N	ч	1,2,3,4	2	Y	N	F	1,2,3,4	2	Y	N	F	1,2,3,4	2
I	Any other															
ſ	Seedling trreament	Y	Z	H	1	1,4	Y	Z	ц		1,4	Y	Z	F	1	1,4
	Conservation of nuturala enemy (Frog)	Y	N	Ц	1	1	Y	Z	F	1	1	Y	N	Н	1	1
_	Use of Karanj cack, Neem cake	250 kg/ha	Z	Ц	1, 4	1,2	250 kg/ha	Z	F	1, 4	1,2	250 kg/ha	N	F	1, 4	1,2
1																

	1
Proposed Strategy 4. On farm trail/ORF 5. Research is needed for resistant variety having nearer taste to local variety	
Training & awareness campaigm Demonstration Exposure visit	
$\begin{aligned} & \textbf{Gap in Adoption} \\ & N = Nil \\ & P = Partial \\ & F = Full \end{aligned}$	
sons for gap 3. Non availability of inputs 4. Unaware of Management practices	
Reas 1. Lack of knowledge 2. Lack resources	1

Distr	ict:Hazaribagh					Crop:	Paddy
SI. No.	Particulars	diffe	erent AES in		Reasons for gap in adoption as perceived by the	Strategies as perceived by the farmers	Strategies proposed to overcome the
		AES-I	AES-II	AES-III	farmers*	* *	gap ***
					1	1	1
		Simple	Simple	0: 1 7: 1	2	2	2
1.	Cultural Practices	Tick mark	Tick mark	Simple Tick mark or dash	3	3	3
		or dash	or dash	IIIaik Oi uasii	4	4	4
					5		5
	Summer ploughing	•	•	•	1,4	1	1,2
	Timely sowing	-	-	-	-	-	-
	Clean Cultivation	•	•	•	1,4	1,2	1,2,3
2.	Resistannt	•	•	•	1,2,4	1,2	2, 5
	Varieties						
3.	Bio-pesticides (Y/N)						
	Neem Products	•	•	•	1,4	1, 4	2,4
	NPV	•	•	•	1, 4,5	1	1,2,4
	VT	•	•	•	1,4,5	1	1,2,4
4.	Bioagents						
	Egg parasite	•	•	•	1,4,5	1	2,3,4
	Larvel prasite	•	•	•	1,4,5	1	2,3,4
5.	Other practices						
	Pheronmone Trap	•	•	•	1, 4,5	1	2,4
	Light Trap	•	•	•	1,4	1,2	2,4
6.	Pesticide (No. of						
	application) Spraying	•	•	•	1,4,5	2,4	1, 4
	Dusting	•	•	•	1,4,5	2,4	1, 4
	Seed Treatment	•	•	•	1,4,5	1,4	1, 4
	Soil application	•	•	•	1,4,5	1,4	2,4
	Granular	•	•	•	1,4,5	1,4	2
	application				1,17,0	1,17	
7.	Any other						
	Seedling trreament	•	•	•	1,4	1	2
	Conservation of natural enemy (Frog)	•	•	•	1,4	2	1
	Use of Karanj cack, Neem cake	•	•	•	1,5	1,4	1

- * Code for Reasons for gap in adoption as perceived by the farmers
- Lack of awareness
 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
- Training
 Soil testing and application of fertilizers as per recommendation
- Use of locally available materials for nutrient management & plant protection
- $\ensuremath{^{*\,*\,*}}$ code for Strategies proposed to overcome the gap
- Training & awareness campaigm
 Demonstration
- 3. Exposure visit
- 4. On farm trail/ORF
- 5. Research is needed for resistant variety having nearer taste to local variety

District: Hazaribagh Maize Crop: Reasons for gap Strategies as Strategies Gap in adoption in the Pest Mngt. in in adoption as perceived by proposed to SI. different AES in the dist. Particulars perceived by the the farmers overcome the No. gap *** farmers AES-I AES-II AES-III 1 2 2 2 Simple Simple Simple Tick 3 3 3 1. **Cultural Practices** Tick mark Tick mark mark or dash or dash or dash 4 4 4 5 5 1,2 Summer ploughing 1,2,4 1,2,4 1,2 Timely sowing --Clean Cultivation • • • 1,2 1,2,4 1,2,3 1, 2, 5 Resistannt • • Varieties Bio-pesticides 1,2, 4 1,2,3,4,5 (Y/N) Neem Products 2,4 • • • 1,2,4 NPV • 1,2, 4 2,4 1,2,3,4 1,2,3,4 VT 2,4 1,2,3,4 1,2,3,4 Bioagents 4. 2, 4 Egg parasite • • • 1,2,3,4 Larvel prasite 1,3,4 2.4 1,2,3,4 1,3,4 5. Other practices Pheronmone Trap • • • 2,4 1.3.4 1.2.3 Light Trap • 2,3 1,2,3 Pesticide (No. of 1,3,4 6. application) Spraying 1, 4 • • 1,2 1,2 • • 1 Dusting Seed Treatment 1 Soil application • • • 1,4 1,2, 1,4 1, 4 1,2 1,4 Granular application 7. Any other 1,2, 4 1,2 Seedling trreament 2,4 Conservation of 1, 4 1,2,3,4 12,4 natural enemy (Frog)

- * 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
- Use of locally available materials for nutrient management & plant protection
- *** code for Strategies proposed to overcome the gap
- 1. Training & awareness campaigm
- 2. Demonstration
- 3. Exposure visit
- 4. On farm trail/ORF
- 5. Research is needed for resistant variety having nearer taste to local variety

District: Hazaribagh Wheat Crop: Reasons for gap Strategies as Strategies Gap in adoption in the Pest Mngt. in in adoption as perceived by proposed to SI. different AES in the dist. Particulars perceived by the the farmers overcome the No. gap *** farmers AES-I AES-II AES-III 1 2 2 2 Simple Simple Simple Tick 3 3 3 1. **Cultural Practices** Tick mark Tick mark mark or dash or dash or dash 4 4 4 5 5 Summer ploughing 1.4 1 1.2 Timely sowing -_ -Clean Cultivation • • • 1,4 1,2 1,2,3 Resistannt • • 1,2,4 1,2 2, 5 Varieties Bio-pesticides (Y/N) Neem Products 1,4 2,4 • • • 1, 4 NPV • 4,5 1 1,2,4 VT 1,4,5 1 1,2,4 Bioagents 4. 2,3,4 Egg parasite • • • 1,4,5 1 Larvel prasite 1,4,5 1 2,3,4 5. Other practices • Pheronmone Trap • • 1, 4,5 1 2,4 Light Trap • 1,4 1,2 2,4 Pesticide (No. of 6. application) 1,4,5 2,4 1, 4 Spraying • • • • 1,4,5 2,4 1, 4 Dusting Seed Treatment 1,4,5 1.4 1 Soil application • • • 1,4,5 1,4 2,4 2 Granular 1,4,5 1,4 application Any other 2 Seedling trreament • 1,4 1 Conservation of 1.4 2 1 natural enemy (Frog) Use of Karanj 1.5 1.4 1 cake, Neem cake

- 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 campaigm
- 2. Demonstration
- 3. Exposure visit
- 4. On farm trail/ORF
- 5. Research is needed for resistant variety having nearer taste to local variety

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

District: Hazaribagh Crop: Arhar Reasons for gap Strategies as Strategies Gap in adoption in the Pest Mngt. in SI. in adoption as perceived by proposed to different AES in the dist. **Particulars** perceived by the the farmers No. overcome the farmers * gap *** AES-I AES-II AES-III 1 1 1 2 2 2 Simple Simple Simple Tick 3 3 3 **Cultural Practices** Tick mark Tick mark mark or dash or dash or dash 4 4 4 5 5 Summer ploughing • • • 1,4 1 1,2,4 Timely sowing _ Clean Cultivation • 1,4 1,2 1,2 1,4,5 1, 2, 5 2. Resistannt Varieties 3. Bio-pesticides (Y/N) Neem Products • • • 2,4 1,4 1, 4 NPV 1,4,5 2.4 1 VT• • • 1,4,5 1 2,4 Bioagents Egg parasite • 1,4,5 1 2, 4 Larvel prasite • • 1,4,5 1 2.4 5. Other practices Pheronmone Trap 1, 4,5 2,4 1 Light Trap 1,2 1, 4,5 2,3 Pesticide (No. of application) 1,4 1, 4 • • 1,5 Spraying Dusting • • 1,4 1,4 1 Seed Treatment • 1,4 1,4 1 Soil application • 1,3,4 1.4 1.4 Granular 1,3,4 2,4 1,4 application Any other Seedling trreament • • 1.4 1 2.4 Conservation of 1,4 1 natural enemy

cake, Neem cake

Lack of awareness

(Frog)
Use of Karani

- 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

1,4

- 1. Training & awareness campaigm
- 2. Demonstration

1,4,5

- 3. Exposure visit
- 4. On farm trail/ORF
- 5. Research is needed for resistant variety having nearer taste to local variety

12,4

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

District: Hazaribagh Crop: Potato Reasons for gap Strategies as Strategies Gap in adoption in the Pest Mngt. in SI. in adoption as perceived by proposed to different AES in the dist. **Particulars** perceived by the the farmers No. overcome the farmers * gap *** AES-I AES-II AES-III 1 1 1 2 2 2 Simple Simple Simple Tick 3 3 3 **Cultural Practices** Tick mark Tick mark mark or dash or dash or dash 4 4 4 5 5 Summer ploughing • • • 1,4 1 2, 4 Timely sowing _ _ Clean Cultivation • 1,4 1 2,4 1,2,5 2. Resistannt 2, 5 Varieties 3. Bio-pesticides (Y/N) Neem Products • • • 2,4 4,5 1,4 NPV 1,2,4 4.5 1 VT• • • 4,5 1 1,2,4 Bioagents Egg parasite • 4,5 1 2,4 Larvel prasite • • 4,5 1 2.4 5. Other practices Pheronmone Trap 4 2,4 1 Light Trap 1,4 1,4 2 Pesticide (No. of application) 2.4 1.4 1,2,4 • • • Spraying Dusting • • 1,3,4 1 2,4 Seed Treatment • • 1, 4 2 2.4 1,2,4 Soil application • 1,3,4 1,2,4 Granular 1, 4 1,4 2,4 application Any other Seedling trreament • • 1.4 1 2.4 Conservation of 1,4 1 2,4 natural enemy (Frog) Use of Karanj 1,4 1 2,4 cake, Neem cake

- 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 campaigm
- 2. Demonstration
- 3. Exposure visit
- 4. On farm trail/ORF
- 5. Research is needed for resistant variety having nearer taste to local variety

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

Tomato District: Hazaribagh Crop: Reasons for gap Strategies as Strategies Gap in adoption in the Pest Mngt. in in adoption as perceived by proposed to SI. different AES in the dist. Particulars perceived by the the farmers overcome the No. gap *** farmers AES-I AES-II AES-III 1 2 2 2 Simple Simple Simple Tick 3 3 3 1. **Cultural Practices** Tick mark Tick mark mark or dash or dash or dash 4 4 4 5 5 Summer ploughing 1, 4 1 2, 4 Timely sowing ---Clean Cultivation • • • 1,4 1 2,4 Resistannt • • 1,2,5 1 2, 5 Varieties Bio-pesticides (Y/N) Neem Products 4,5 1,4 2,4 • • • NPV • 4,5 1 1,2,4 VT 4,5 1 1,2,4 Bioagents 4. 2,4 Egg parasite • • • 4,5 1 Larvel prasite 4.5 1 2.4 5. Other practices Pheronmone Trap • • • 4 1 2,4 Light Trap • 1,4 1, 4 2 Pesticide (No. of 6. application) Spraying 1,4 1,2,4 2,4 • • • • • 1,3,4 1 2,4 Dusting Seed Treatment 1, 4 2 2.4 Soil application • • • 1,3,4 1,2,4 1,2,4 2,4 Granular 1, 4 1,4 application 7. Any other Seedling trreament • 1,4 1 2,4 Conservation of 1.4 1 2.4 natural enemy (Frog) Use of Karanj 1.4 1 2.4 cake, Neem cake

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

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

Gap in adoption in the Pest Mngt. in

•

•

•

•

•

•

Reasons for gap

4,5

4,5

1,4

1,4,5

1,3,4,5

4,5

1,3,4,5

1, 4

1.4

1,4

1,4

SI. in adoption as perceived by proposed to different AES in the dist. **Particulars** perceived by the the farmers No. overcome the gap *** farmers * AES-I AES-II AES-III 1 1 1 2 2 2 Simple Simple Simple Tick 3 3 3 **Cultural Practices** Tick mark Tick mark mark or dash or dash or dash 4 4 4 5 5 Summer ploughing • • • 1,4 1 2 Timely sowing _ Clean Cultivation • 1,4 1,2 2,4 2. Resistannt 1,2,4,5 2, 3, 4, 5 Varieties 3. Bio-pesticides (Y/N) Neem Products • • • 1,4 2,4 1,4 NPV 1,2 1, 4 4.5 VT• • • 4,5 1,2 1, 4 Bioagents Egg parasite • 4,5 1,2 1,2,4

•

•

•

•

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

Larvel prasite

Light Trap

Spraying Dusting

Granular

application
Any other
Seedling trreament

Other practices
Pheronmone Trap

Pesticide (No. of application)

Seed Treatment

Soil application

Conservation of

cake, Neem cake

natural enemy (Frog) Use of Karanj

5.

1. Lack of awareness

District: Hazaribagh

- 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
- 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

1.2

1,2

1, 4

1,4

1,4

1,4

1,2,3,4

1

1

2

1

Crop:

Strategies as

Brinjal

Strategies

1,2,4

1,2,4

2,4

1,4

2,4

2.4

1,2,4

2,4

2.4

1,4

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

Distr	ict: Hazaribagh	SIRA	AILGILSIC	OR INTEGRATE	EDPEST MANGT.	Crop:	Mustrad
SI.	Particulars	diffe	erent AES in		Reasons for gap in adoption as perceived by the	Strategies as perceived by the farmers	Strategies proposed to overcome the
		AES-I	AES-II	AES-III	farmers*	**	gap ***
					1	1	1
		Simple	Simple		2	2	2
1.	Cultural Practices	Tick mark	Tick mark	Simple Tick	3	3	3
		or dash	or dash	mark or dash	4	4	4
					5		5
	Summer ploughing	•	•	•	1, 4	2	1
	Timely sowing	-	-	-	-	-	-
	Clean Cultivation	•	•	•	1,4	1,2	1,4
2.	Resistannt	•	•	•	1,2,4,5	1	1, 4, 5
	Varieties						
3.	Bio-pesticides (Y/N)						
	Neem Products	•	•	•	1,4	1,4	2,4
	NPV	•	•	•	1,4,5	1,2	2, 4
	VT	•	•	•	1,4,5	1,2	2, 4
4.	Bioagents						
	Egg parasite	•	•	•	4,5	2	2,4
	Larvel prasite	•	•	•	4,5	2	2,4
5.	Other practices						
	Pheronmone Trap	•	•	•	4,5	1,2	2,4
	Light Trap	•	•	•	1,4	1, 4	2
6.	Pesticide (No. of application)						
	Spraying	•	•	•	1,4,5	2,4	1,4
	Dusting	•	•	•	1,3,4	2,4	1,4
	Seed Treatment	•	•	•	1,4	1	2
	Soil application	•	•	•	1, 4,5	1,2,4	1,2,4
	Granular	•	•	•	4, 5	1,4	2,4
	application						
7.	Any other						
	Seedling trreament	•	•	•	4	1	2,4
	Conservation of natural enemy (Frog)	•	•	•	1,4	1	4
	Use of Karanj cake, Neem cake	•	•	•	1,4,5	1,4	1,2

- * Code for Reasons for gap in adoption as perceived by the farmers
- Lack of awareness
 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
- On farm trails / Demonstration
 Training
- 3. Soil testing and application of fertilizers as per recommendation
- Use of locally available materials for nutrient management & plant protection
- *** code for Strategies proposed to overcome the gap
- Training & awareness campaigm
 Demonstration
- 3. Exposure visit
- 4. On farm trail/ORF
- 5. Research is needed for resistant variety having nearer taste to local variety

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

Name of crop: Paddy

SI.	Source of seed of	Ouantity of seed		used of preferred variety (q)	ariety (q)	Area sowi	Area sown (ha) under the crop	the crop	Ouali	Ouality of seed of	ed of
No.	preferred variety/ hybrid	•				with differ	with different preferred variety	ed variety	prefe	preferred variety (G/A/P)	riety
A	Purchase form outside:	e:	AES - I	AES - II	AES - III	AES - I	AES - II	AES - III	AES	AES	AES
									Ι-	Ξ-	Ш-
	- From Private dealer	Hybrid	4	3.50	2.50	20	17.5	12.5	G	Ð	Ð
		IR 36	10	10	8	25	25	20	А	A	A
		IR 64	18	16.50	14.50	45	41.25	35.63	G	G	G
	- From Public sector	IR 36	9	2		15	5		G	G	G
		IR 64	2	4	2	5	10	5	G	Ŋ	Ŋ
		Sarju-52	1.48	1	2	3.7	2.5	5	A	A	A
		Sita		1	1	2.5	2.5	2.5	G	G	G
В	Use of self produced seed:	eed:									
	- From own field	IR 34 -	3	2	.50	7.5	5	1.25	G	Ð	G
		Sarju-52	3	5	9	7.5	12.5	15	G	G	G
		Lalat	2	3	2.50	5	7.5	6.25	G	G	G
		Sita	2	2	1	5	5	2.5	Ð	Ð	G
	- From others field										
С	Any other										
	Total		52.48	50.00	40.00	141.2	133.75	105.63			

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

Name of crop: Wheat

SI. No.	Source of seed of preferred variety/	Quantity of seed	_	used of preferred variety (q)	rriety (q)	Area sowi	Area sown (ha) under the crop with different preferred variety	the crop ed variety	Quali prefe (Quality of seed of preferred variety (G/A/P)	ed of riety	
A	Purchase form outside:	e:	AES - I	AES - II	AES - III	AES - I	AES - II	AES - III	AES	AES	AES	
									Ι-	П-		
	- From Private dealer	Sonalika		20	2		16.67	1.67		Ç	G	
		H.D. 2402		3	.50		2.5	0.42		A	A	
		Ganga		4	.50		3.33	0.42		A	A	
	- From Public sector	C-306		5	-		4.17	0.83		Ь	Ь	
		H.D.R. 77		1.5			1.25			A	A	
		K 8962		1.62			1.35			A	A	
		H.D. 2643		2			1.67			A	A	
В	Use of self produced seed:	eed:										
	- From own field	Sonalika		2	.20		1.67			Ð	G	
		Local		3	09.		2.5			A	A	
	- From others field											
C	Any other											
	Total			45.12	4.80		35.11	3.34				

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

Name of crop: Maize

Sol	Source of seed of	Quantity of seed		used of preferred variety (q)	ariety (q)	Area sow	Area sown (ha) under the crop	the crop	Quali	Quality of seed of	ed of	
preferred variety/ hybrid	riety/	•				with differ	with different preferred variety	ed variety	prefe	preferred variety (G/A/P)	riety	
Purchase form outside:	m outside	e:	AES - I	AES - II	AES - III	AES - I	AES - II	AES - III	AES	AES	AES	
									Ι-	П-	Η-	
- From Private dealer	e dealer	Hybrid -	7	3	4	35	15	20	Ŋ	Ç	G	
		(Proagro										
		4212,										
		Kanchan etc.)										
		Swan - 1		1	1.50	5	5	7.50	G	G	G	
- From Public sector	sector	Swan - 1	1.50	08.	1.50	7.50	4	7.50	G	Ğ	G	
		Birsa Maize -	.56	.40	.50	2.80	2	2.5	G	G	Ð	
		1										
Use of self produced seed:	s paonpo.	eed:										
- From own field	ield	Swan - 1	-	ı		S			G	G	Ð	
		Local	1.50	1	5.	7.5	5	2.5	A	A	A	
- From others field	s field											
Any other												
Total			12.56	6.20	∞	62.8	31	40				

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

Name of crop: Arhar

S. S.	Source of seed of	Quantity of seed		used of preferred variety (q)	ariety (q)	Area sow	Area sown (ha) under the crop	the crop	Quali	Quality of seed of	ed of
V	preferreu variety/ hybrid						with anierent preierred variety	ed variety))	preferred variety (G/A/P)	riety
A	Purchase form outside:	e:	AES - I	AES - II	AES - III	AES - I	AES - II	AES - III	AES	AES	AES
									Ι-	П-	Η-
	- From Private dealer	IT -21		.30	1.75		1.5	8.75		A	A
		BR-65		.20	1.25		1	6.25		G	G
		Bahar		.40	2.00		2	10		A	A
	- From Public sector	IT -21		.10	.50		0.5	2.5		A	A
		Birsa Arhar -1		.30	1.50		1.5	7.5		G	G
В	Use of self produced seed:	eed:									
	- From own field	Local		.10	1.00		0.5	5		\mathbf{A}	A
	- From others field										
С	Any other										
	Total			1.40	8.00		7	40			

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

Name of crop: Mustard

Purchase form outside:	Si.	Source of seed of nreferred variety/	Quantity of seed	_	used of preferred variety (q)	ariety (q)	Area sow	Area sown (ha) under the crop with different preferred variety	r the crop	Quali	Quality of seed of	ed of
Purchase form outside: AES - I AES - II AES - III AES - IIIIIII AES - IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII		hybrid									(G/A/P)	
- From Private dealer Proagro Swarna .13 .18 2.6 - Proagro Pila .10 .12 1.67 Sona T-9 .05 .8 1 - From Public sector B.R23 .05 .06 .15 Use of self produced seed: .5 - From own field Any other Any other Total .38 .54 7.1	A	Purchase form outsid	e:	AES - I	AES - II	AES - III	AES - I	AES - II	AES - III	AES	AES	AES
- From Private dealer Proagro Swama .13 .18 .26										Ι-	П-	П-
Proagro Pila .10 .12 1.67 Sona T-9 .05 .8 1 T-9 .05 .8 1 Shivani .05 .06 1 Shivani .03 .06 .5 Pusa bold .02 .04 0.33 - From own field - From others field .0 .0 Any other Any other .2 Total .38 .54 Total .7.1		- From Private dealer	Proagro Swarna	.13	.18		2.6	3		A	A	
- From Public sector B.R23 .05 .06 1 Shivani .03 .06 .5 . Pusa bold .02 .04 0.33 . Use of self produced seed: .02 .04 0.33 . - From own field .5 .0 .0 . - From others field .5 .0 .0 . Any other .54 .54 .7.1			Proagro Pila Sona	.10	.12		1.67	2		Û	Ð	
- From Public sector B.R23 .05 .06 1 Shivani .03 .06 .5 Pusa bold .02 .04 0.33 Lse of self produced seed: - From own field .05 .04 0.33 - From others field .03 .06 .5 Any other .71 .71			6 - L	50.	8:		1	1.33		G	G	
Shivani .03 .06 .5 Pusa bold .02 .04 0.33 Use of self produced seed:		- From Public sector	B.R23	50.	90.		1	-		А	A	
Pusa bold .02 .04 0.33 Use of self produced seed:			Shivani	.03	90.		5.	1		A	A	
Use of self produced seed:			Pusa bold	.02	.04		0.33	99.0		A	A	
Use of self produced seed: - From own field - From others field - From others - From other - From other												
- From own field - From others field Any other Total - From own field - From other	В	Use of self produced s	eed:									
- From others field Any other Total - From others field - Any other - From other 5.4 7.1		- From own field										
- From others field Any other Total - From other 38 .54 7.1												
Any other Any other 7.1		- From others field										
38 .54 7.1	С	Any other										
		Total		.38	.54		7.1	8.99				

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

Name of crop: Gram

S. S.	Source of seed of nreferred variety/	Quantity of seed		used of preferred variety (q)	ariety (q)	Area sow	Area sown (ha) under the crop with different preferred variety	the crop	Quali	Quality of seed of preferred variety	ed of
	hybrid									(G/A/P)	
A	Purchase form outside:	٠. نه:	AES - I	AES - II	AES - III	AES - I	AES - II	AES - III	AES	AES	AES
									Ι-	П-	Ш-
	- From Private dealer	B.G 256	.30	2		0.4	2.67		Ð	G	G
		Radhe	.20			0.27	1.33		A	A	А
		C - 235	.10	.50		0.13	0.67		A	A	A
	- From Public sector	B.G 256	.10	.50		0.13	0.67		G	G	G
		H - 208	.11	.34		0.15	0.45		A	A	A
		C - 235	.05	.10		0.07	0.13		\mathbf{A}	\mathbf{A}	\mathbf{A}
В	Use of self produced seed:	eed:									
	- From own field	Local	.10	1		0.13	1.33		P	P	P
	- From others field										
C	Any other										
	Total		96'	5.44		1.28	7.25				

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

Name of crop: Potato

SI. No.	Source of seed of preferred variety/ hybrid	Quantity of seed	_	used of preferred variety (q)	ariety (q)	Area sowi	Area sown (ha) under the crop with different preferred variety	r the crop ed variety	Quali prefe	Quality of seed of preferred variety (G/A/P)	ed of riety
A	Purchase form outside:	e:	AES-I	AES - II	AES - III	AES - I	AES - II	AES - III	AES	AES	AES
									Ι-	Π-	Ш-
	- From Private dealer	Kufri Chandramukhi	008	20	160	26.67	0.67	5.33	Ð	Ð	Ŋ
		Kufri Jyoti	500	50	120	16.67	1.67	4	G	G	G
		Kufri Sinduri	200	50	08	6.67	1.67	2.67	A	A	A
	- From Public sector	Kufri Jyoti	276	30	150	9.2		5	G	Ŋ	G
		Kufri Badshah	200	10	40	6.67	0.33	1.33	A	A	A
В	Use of self produced seed:	eed:									
	- From own field	Kufri Jyoti	100		01	3.33		0.33	Ð	G	Ð
		Local	300	09	40	10	1.67	1.33	Y	A	A
С	Any other										
	Total		2376	210	009	79.21	7.01	19.99			

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

Name of crop: Seasonal Vegetable

SI.	Source of seed of	Quantity of seed	_	used of preferred variety (q)	rriety (q)	Area sowi	Area sown (ha) under the crop	the crop	Quali	Quality of seed of	ed of
No.	preferred variety/ hybrid				i ·	with differ	with different preferred variety	ed variety	prefe	preferred variety (G/A/P)	riety
A	Purchase form outside:	e:	AES - I	AES - II	AES - II AES - III	AES - I	AES - II	AES - III		AES AES AES	AES
									Τ.	П-	Η-
	- From Private dealer	Hybrid	0.015	500.	0.008				A	A	A
		Improved	0.025	0.01	0.01				G	G	Ŋ
		Variety									
	- From Public sector	Improved	0.02	0.005	0.005				Ð	G	G
		Variety									
В	Use of self produced seed:	eed:									
	- From own field	Local	0.01	0.005	0.007				Ь	Ь	Ь
	- From others field										
C	Any other										
	Total		20.0	0.025	0.03						

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

Name of crop: Cole Crops

S	Source of seed of	Ouantity of seed		used of preferred variety (a)	ariety (a)	Area sow	Area sown (ha) under the crop	r the crop	Ouali	Ouality of seed of	ed of
N ₀ .	preferred variety/ hybrid					with differ	with different preferred variety	ed variety	prefe	preferred variety (G/A/P)	riety
A	Purchase form outside:	e:	AES -	AES - II	AES - III	AES - I	AES - II	AES - III	AES	AES	AES
			Ι						Ι-	П-	Ш-
	- From Private dealer	Hybrid	80.	0.03	0.025	13.33	5	4.16	Ð	Ŋ	G
		Erly Kunwari	0.02	0.005	0.005	3.33	.83	.83	A	A	А
		Erly Synthetic	0.01		0.005	1.66		.83	A	A	A
		Pusa Snasbol-21	0.03	0.005	900'0	5	.83	83	G	G	G
		Golden Acre	0.03	0.01	0.005	5	1.66	.83	Ŋ	G	G
		Pride of India	0.01		0.005	1.66		83	G	G	G
	- From Public sector										
В	Use of self produced seed:	eed:									
	- From own field										
	- From others field										
၁	Any other										
	Total		0.18	0.05	0.05	29.98	8.32	8.31			

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

Name of crop: Tomato

SI.	Source of seed of	Ouantity of seed	l Jo pasn	used of preferred variety (q)	ariety (q)	Area sow	Area sown (ha) under the crop	the crop	Oual	Ouality of seed of	ed of
No.	preferred variety/		•		•	with differ	with different preferred variety	ed variety	prefe	preferred variety	riety
	hybrid									(G/A/P)	
A	Purchase form outside:	e:	AES -	AES - II	AES - III	AES - I	AES - II	AES - III	AES	AES	AES
			Н						Ι-	П-	Ш-
	- From Private dealer	Hybrid	0.01	0.015	0.015	1.67	2.5	2.5	G	G	G
		Pusa Rubi	600.0	900'0	0.005	1.5	1	0.83	G	G	G
		Swarn Navin	0.005	0.004	0.005	0.83	9.0	0.83	G	G	G
	- From Public sector	Swarn Lalima	0.005	0.0025	0.0025	0.83	0.42	0.42	G	G	G
		Arka Aabha		0.0025	0.0025		0.42	0.42		G	G
		Swarn Navin									
		Swarna Bhaibhav		0.0025			0.42				
		Swarna Sampda	0.004	0.0025		9.0	0.42		A	\mathbf{A}	
		Pusa Rubi			0.005			0.83			G
В	Use of self produced seed:	eed:									
	- From own field	Pusa Rubi	0.005	0.002		0.83	0.33		G	G	
		Local	0.002	0.005	0.005	0.33	0.83	0.83	A	A	A
	- From others field										
С	Any other										
	Total		0.04	0.042	0.04	6.59	6.94	99.9			

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

Name of Animal: Cow

SI.	Source of breed of	Number of bre	Number of breed used of preferred variety					
No.	preferred variety/		(No.)			preferred variety		
	hybrid					(G/A/P)		
Α	Purchase form outsid	e:	AES - I	AES -	AES -	AES -	AES	AES -
				П	Ш	I	- 11	Ш
	- From Private dealer	Exotic	150	10		G	G	
		Cross	200	20		G	G	
	- From Public sector	Exotic	50	10		G	G	
В	Use of self produced s	eed:						
	- From own field	Cross	300	40		G	G	
		Local	800	120		Α	Α	
	- From others field							
С	Any other			·				
	Total		1500	200				

Name of Animal: Buffalo

	varie of Aminat. Barrato							
SI.	Source of breed of	Number of bre	Number of breed used of preferred variety					
No.	preferred variety/		(No.)			preferred variety		
	hybrid		, ,			(G/A/P)		
Α	Purchase form outsid	e:	AES - I	AES -	AES -	AES -	AES	AES -
				Ш	Ш	I	- 11	Ш
	- From Private dealer							
	- From Public sector							
В	Use of self produced s	eed:						
	- From own field	Cross						
		Local	800	25		Α	Α	
	- From others field							
С	Any other							
	Total		800	25				

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

Name of Animal: Goat

SI. No.	Source of breed of preferred variety/ hybrid	Number of breed used of preferred variety (No.)				Quality of breed of preferred variety (G/A/P)		
Α	Purchase form outsid	e:	AES - I	AES -	AES -	AES -	AES	AES -
				Ш	Ш	I	- 11	III
	- From Private dealer	Black Bengal	200	65		G	G	
	- From Public sector	Black Bengal	200	50		G	G	
		Beetal	20	5		G	G	
В	Use of self produced s	eed:						
	- From own field	Black Bengal	800	200		G	G	
		Cross	280	80		Α	Α	
	- From others field							
С	Any other							
	Total		1500	400	· · · · · · · · · · · · · · · · · · ·			

Name of Animal: Piggery

SI.	Source of breed of	Number of breed used of preferred variety						
No.	preferred variety/		(No.)			preferred variety		
	hybrid					(G/A/P)		
Α	Purchase form outsid	e:	AES - I	AES -	AES -	AES -	AES	AES -
				Ш	Ш	1	- 11	III
	- From Private dealer							
	- From Public sector	T&D	15	10	8	G	G	G
В	Use of self produced s	eed:						
	- From own field	Local	30	30	39	Α	Α	Α
	- From others field							
С	Any other							
	Total		45	40				

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

Name of Livestock: Poultry

SI.	Source of cheeks of	Number of cheeks used of preferred variety						
No.	preferred variety/		(No.)			preferred variety		
	hybrid					(G/A/P)		
Α	Purchase form outsid	e:	AES - I	AES -	AES -	AES -	AES	AES -
				Ш	Ш	1	- 11	III
	- From Private dealer	Broiler	800	120		G	G	
		Layer	250	30		G	G	
	- From Public sector	Broiler	400	40		G	G	
		Layer	40	10				
В	Use of self produced s	eed:						
	- From own field	Local	1500	200		Α	Α	
	- From others field							
С	Any other							
	Total		2990	400				

Name of Livestock: Fishery

SI. No.	Source of breed of preferred variety/ hybrid	Number of br	Number of breed used of preferred variety (No.)					eed of ariety)
Α	Purchase form outsid	e:	AES - I	AES -	AES -	AES -	AES	AES -
				Ш	Ш	I	- 11	III
	- From Private dealer	Rehu	3000			G		
		Katla	3500			G		
		Silvercarp	1800			G		
		Mrigal	2000			G		
	- From Public sector	Silvercarp	500			G		
		Rehu	2000			G		
		Katla	3000			G		
		Mrigal	800			G		
В	Use of self produced s	seed:						
	- From own field	Rehu	2200			G		
		Katla	1000			G		
		Mrigal	200			G		
		Local (Catfish)	4000			А		
	- From others field							
С	Any other							
	Total		24000					

Table A PROPOSED STRATEGY FOR PROMOTING PREFERRED HORTICULTURAL PLANTING MATERIAL

SI.	Source of preferred	Quantity of	Area sown (ha) ur	nder the	Quality of
No.	planting material of	planting	crop with differen	t variety	preferred
	horticultural crops	material used	Preferred variety	Other	planting
		of preferred		varieties	material
		variety			required for the
					district
Α	Purchase form				
	outside:				
	5 5	105000			
	- From Private dealer	125000	Mango (Amrapali,		Α
	E. D. D. P. C. C.	25000	Lamana Malika		Δ.
	- From Public sector	25000	Langra, Malika,		Α
			Dashari, Alphanso)		A
			Dashari, Alphanso)		A
В	Use of self produced		Guava (L 49,		
	planting material		Cuava (E 17,		
	- From own field	10000	Hahabad Safeda)		
	- From others field		†		
С	Any other				
	Total	160000 kg			

PROPOSED STRATEGY FOR PROMOTING MARKETING

SI. No.	Critical gap	Proposed marketing Strategies
1.	Very high fluctuating	Creating awareness on market led extension
	market demand &	Encouraging farmer organization/commodity growers
	Unpredictable market	groups to create local marketing centers
	price	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/organic product
		Establishing linkage between industries and
		producers
		Promotion of producer-exporter interface
2.	Lack of post harvest	Motivating farmers to go for value addition, product
	technologies	diversification and other post harvest technologies
3.	Absence of backward and	Establishing single window service to provide
	forward linkages	backward and forward linkages
		Encouraging cooperatives to support farmers in
		providing inputs and arranging for assured market

PROPOSED STRATEGY FOR PROMOTING MEDIA SUPPORT

SI.	Critical gap	Proposed marketing Strategies
No. 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	Conducting region specific agricultural seminars to provide opportunity for farmers to participate
	scientists and extension specialists	Organising farmer-scientist - extension personnel interactions