## **Results of Front Line Demonstrations (Oilseeds crops)**

Crop/season	Technology demonstrated	No. of	Area	Yield (q/ha)		% Increase		Additional	BC Ratio
-		Farmers	(ha)	Demo	Check	in yield	Cost (Rs)	return (Rs)	/
Groundnut TG37A		25	10	15.5	12.5	23.9	28200	66667	2.36
Soybean NRC-37	ICM (Improved variety, Bio	10	5	18.5	15.8	17.2	27200	61314	2.25
Soybean KDS-344	Fertilizers, Bio Pesticide)	40	15	19.6	15.6	25.5	27426	64600	2.36
Sesame GT-5		50	20	7.9	6.1	29.5	18500	32997	1.78

#### **Feed Back**

Soybean > Higher number of pods and more yield as compared to JS-335 and local.

Crop

➤ Non-shattering, white colour flower and presence of hairs on pods which led to low insects –pests attacks.

Groundnut > TG37A variety of groundnut is high yielding, bold seeded, more haulm yield and having early maturity.



## **Results of Front Line Demonstrations (Pulses crops)**

Technology	No. of	Area	Yield (q/ha)%		% Increase	Additional	Additional	BC
demonstrated	Farmers	(ha)	Demo	Check	in yield	Cost (Rs)	return (Rs)	Ratio
ICM	25	10	15.9	14.13	13.0	27300	67074	2.46
(Improved	12	5	18.7	14.7	27.35	28000	78624	2.81
variety,	12	5	13.84	12.74	8.64	28000	58107	2.07
Bio Fertilizers,	75	30	14.6	11.12	30.36	18000	43672	2.42
Bio Pesticide)	50	20	8.7	6.7	29.5	22000	31277	1.42
			Fee	d Back				
	demonstrated ICM (Improved variety, Bio Fertilizers,	demonstratedFarmersICM25(Improved12variety,12Bio Fertilizers,75	demonstratedFarmers(ha)ICM2510(Improved125variety,125Bio Fertilizers,7530	demonstrated         Farmers         (ha)         Demo           ICM         25         10         15.9           (Improved         12         5         18.7           variety,         12         5         13.84           Bio Fertilizers,         75         30         14.6           Bio Pesticide)         50         20         8.7	demonstratedFarmers(ha)DemoCheckICM251015.914.13(Improved12518.714.7variety,12513.8412.74Bio Fertilizers,753014.611.12	demonstratedFarmers(ha)DemoCheckin yieldICM251015.914.1313.0(Improved12518.714.727.35variety,12513.8412.748.64Bio Fertilizers,753014.611.1230.36Bio Pesticide)50208.76.729.5	demonstratedFarmers(ha)DemoCheckin yieldCost (Rs)ICM251015.914.1313.027300(Improved12518.714.727.3528000variety,12513.8412.748.6428000Bio Fertilizers,753014.611.1230.3618000Bio Pesticide)50208.76.729.522000	demonstratedFarmers(ha)DemoCheckin yieldCost (Rs)return (Rs)ICM251015.914.1313.02730067074(Improved12518.714.727.352800078624variety,12513.8412.748.642800058107Bio Fertilizers,753014.611.1230.361800043672Bio Pesticide)50208.76.729.52200031277

#### Pigeon pea → BDN-711 variety of pigeon pea gave higher number of pods and more yield as compared to local and due to bold seeded fetches more market price.

Chickpea Chickpea GJG-5 having bold seeded and getting high market price. Moderately resistant to wilt and root rot.

Greengram →GM-6 having bold seeded and resistant against Yellow mosaic viral disease.









# **Results of Front Line Demonstrations (Other crops)**

Crop/	Technology demonstrated	No. of	Area	Yield	(q/ha)	% Increase	Additional	Additional	BC
season	reemology demonstrated	Farmers	(ha)	Demo	Check	in yield	Cost (Rs)	return (Rs)	Ratio
Paddy (Drilled)	Improved variety (Purna)	60	25	17.23	12.8	34.6	17500	34452	1.96
Paddy (T.P)	Improved variety (GNR-2)	100	40	44.3	34.8	27.3	26000	71008	2.73
Paddy (T.P)	Improved variety (GNR-6)	100	40	45.5	36.6	24.32	24500	63704	2.60
Paddy (T.P)	Improved variety (GNRH-2)	50	20	48.6	36.6	32.79	24600	68105	2.76

### **Feed Back**

## Paddy (Drilled) $\rightarrow Pa$

Paddy Purna having early maturity, more tillering and high yielding ability under drilled condition.
 Stem borer attack was less in Purna variety of drilled paddy

### Paddy (T.P)

Crop

GNR-2 gave better yield, lodging problem is less as compared to other varieties
 Paddy GNR-6 found higher yield in rain fed area.



# **Results of Front Line Demonstrations (Other crops)**

Crop/	Technology	No. of	Area	Yield (q/ha)		%	Additional	Additional	BC
season	demonstrated	Farmers	(ha)	Demo	Demo Check In		Cost (Rs)	return (Rs)	Ratio
Cotton	Improved variety (H-8)	30	12	10.55	9.68	9.01	30000	45374	1.51
Cotton	Improved variety (H-10)	30	12	17.7	14.9	18.7	30000	75947	2.53
Cotton	Improved variety (H-12)	50	20	19.57	17.65	10.95	30000	84160	2.81

### Crop

### **Feed Back**

> Cotton Bt. H.-12 having a greater number of balls with high yield.

Cotton > Bt. H.-12 Variety having a greater number of bolls and less sucking pest problem.

> H-10 variety having more adaptability as rainfed.



### **Results of Front Line Demonstrations ( Plant Protection)**

Crop	Technology demonstrated	No. of	Area	Yield	(q/ha)	% Increase	Additional	Additional	BC
Стор	rechnology demonstrated	Farmers	(ha)	Demo	Check	in yield	Cost (Rs)	return (Rs)	Ratio
Paddy	IPM (Pheromone Trap, Yellow	16	6	42.5	34.5	23.2	19800	67940	3.43
Cotton	Sticky Trap, Acetamipride, Neem oil 1500 ppm, Bavaria bassiana)	16	6	19.5	17.6	11.0	26000	83958	2.23
Brinjal	Bio-component	16	6	156	127.3	22.5	9686	25488	2.63
Chilli	(Pseudomonas liquid)	16	6	25.5	23.3	9.44	11086	31150	2.81

#### **Feed Back**

Paddy & Cotton having a greater number of bolls and less sucking pest problem.

Crop

Brinjal &

Cotton > Adopting of IPM practices reduce risks with maximum benefit and low cost.

Safety to environment and residue free food commodity and gets higher market value.



# **Results of Front Line Demonstrations (Horticulture crops)**

Technology demonstrated	No. of	Area	Yield (q/ha)					BC
	Farmers	(ha)	Demo	Check	in yield	Cost (Rs)	return (Rs)	Ratio
Improved variety GNIB-22	40	20	29.9	24.4	5.5	26600	86700	3.25
Improved variety (Local)	10	4	12	10	2	19600	112000	5.71
INM (Novel)	15	6	450	433	17	175000	360000	2.05
	Improved variety (Local)	Technology demonstratedFarmersImproved variety GNIB-2240Improved variety (Local)10	Technology demonstratedFarmers(ha)Improved variety GNIB-224020Improved variety (Local)104	Technology demonstrated FarmersFarmers(ha)DemoImproved variety GNIB-22402029.9Improved variety (Local)10412	Technology demonstrated Farmers(ha)DemoCheckImproved variety GNIB-22402029.924.4Improved variety (Local)1041210	Technology demonstrated FarmersFarmers(ha)DemoCheckin yieldImproved variety GNIB-22402029.924.45.5Improved variety (Local)10412102	Technology demonstrated FarmersFarmers(ha)DemoCheckin yieldCost (Rs)Improved variety GNIB-22402029.924.45.526600Improved variety (Local)1041210219600	Technology demonstrated FarmersFarmers(ha)DemoCheckin yieldCost (Rs)return (Rs)Improved variety GNIB-22402029.924.45.52660086700Improved variety (Local)1041210219600112000

Food Rook

Crop	I CCU DALK
Indian bean	<ul> <li>GNIB-22 is early maturing with a greater number of pods.</li> <li>Indian bean (GNIB-22) gave higher number of tillering (8-10) with 15-20 numbers of pods per tiller.</li> </ul>

Ajwain > Novel Gave even maturity and increase quality of Ajwain Seed

Cro

Water-melon →NOVEL (Organic liquid fertilizer) gave high fruit setting and yield of water melon.



## **Results of Front Line Demonstrations Drudgery Reducing tools**

Name of the technology demonstrated	Crop/ Animal		Major parameters	Field observation		% Change in	Labour reduction		t reduction or Rs./Unit	
uemonstrateu	Aiiiiiai	women		Demo	Check	parameter	(man days)	Implement	Labour	Total
Revolving type Milking stand and stool	Milking cow/buffalo	25	Time save, Safe and clean milking practices	56	59	39	1	1200	250	950
Electric Motor operated paddy thresher	paddy	2	Time saves	16	72	77.77	2	18000/-	500	17,500
Twin wheel hoe	Vegetable/ gram	25	Work efficiency improve	21	28	33.33	2	1650/-	250	1400

**NOTE:**\*One time investment (machine cost) for implements, \*\* labour cost calculated as per university labour wages.

Body Parts	Methods	Sum of discomfort rating	Average of discomfort rating
13 - Head, Neck, Shoulder, Upper arms, Lower arms, chest Waist, Wrist,	Traditional	183.6	12.53
Hips, upper leg, lower leg, Upper back, lower back.	Improved	92	7.2

**B** D S - Body Discomfort Symptoms (Itching-1), (Burning-2), (Numbness-3), (Stiffness-4), (Swelling-5), (Pain-6), **B** P R - Body pain rating (Very painful - 5), (Painful -4), (Moderate -3), (Mild 2), (No pain -1), **P** F - Pain Frequency (Never -1), (Less often -2), (Sometimes -3, (Very often -4) (Always -5)

**Feed Back:** Twin wheel hoe eliminates pain, avoids bending and squatting postures, reduces drudgery of farm women in weeding operation.

➤ Paddy thresher reduces the time and pain in shoulder, increase the work efficiency and saves money and manpower. Although it's a good source of income generation for farming community.

> The farm women took out 10.2 lit. of milk in 7-8 min. from one animal with revolving stand and stool as compared to the traditional way of milking animal who took 11.00 min. for milking 8.6 lit. of milk from one animal. So, time spent on activity decreased in improved method as compared to squatting method. He or she can freely use both hands for milking.



	<b>Results of Fr</b>	ont Line	Dem	onstrat	ions	(Kitc	hen Gar	dening)	)		
Category	Name of the technology		Inputs		parame		% change in			BC	
Kitchen Garden	<b>demonstrated</b> Seedlings of vegetables	women 50	<b>given</b> 50	Parameter Yield	<b>Demo</b> 80.30	Check 46	parameter 74.56	<b>Cost (Rs)</b> 3600	<b>return (Rs)</b> 9000	Ratio 6.7	
Category	Seedings of vegetables	-	74.30	5000	9000	0.7					
Kitchen Garden       Kitchen Garden provides continuous supply of fresh vegetables and fruits throughout the year.         Main and fruits       Adaptive Trial Scheme 20-21											
							Activity	7	Benefici	ary	
<b>Kitchen</b> g	arden					FLD T	urmeric GNT	-1 & GNT-2	200		
demonstr	ation Field	Visit				Expos	ure Visit		1		
farm women, M much proud of of demonstration kitchen garden good production 10 to 20 kg tur sell it at amoun home. This p hardworking tri	taking one step ahead We are glad to share these farm women with ons on GT-2 variety of tu these tribal women rece in and processed it rang meric powder. They we not of Rs 240 per kg fa proved to be helpful ibal women and served in amidst covid pandemic	and very the help rmeric in ived very ging from re able to rom their to our as a mini							Method nstrat	ion	

	<b>Results of F</b>	ront	Line Demo	nstrations (	Livesto	ock)		
Ν	ame of the technology	No. of	No. of Units (Animal/	Majoi	r parameters		% change in	
	demonstrated	Farmer	<b>Poultry/etc.</b> )	Parameter	Demo	Check	parameter	
Che	elated Mineral Mixture	50	50	Service period	96 Day	140 Day	31.43	
Fod	Ider Sorghum (COFS-29)5050Fodder production405 Qtl./ha.205 Qtl./ha.							
Ect	oparasiticide drug	100	100	Incidence	05	20	75	
Enc	loparasiticide drug	100	100	Incidence	02	26	92.31	
Ruł	ober cow mat	25	25	Milk Production	2.8	2.4	16.67	
			I	Feed Back				
	-			• •	rmance, Milk Pr	oduction, Promo	tes growth and	
		the year as	a multicut variety under irr	igated conditions which v	ery useful manag	e of green fodder	requirement of	
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	Durable, Eco-friendly, Excel	lent Insulat	tion and Cost-Effective long	g-lasting Product.				
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WI		29)	Kit Distribu	tion inter	raction	<b>Fal</b>	mbg	
	N Che Foc Ect Enc Rul	Name of the technology demonstrated         Chelated Mineral Mixture         Fodder Sorghum (COFS-29)         Ectoparasiticide drug         Endoparasiticide drug         Rubber cow mat         Rubber cow mat         Area specific Chelated Min development and also reduce         It Can be grown throughout year.         Ig       Tick problem is very commo         Good result of treatment of animals         Rubber cow mat is very usef slip surfaces, Increase milk Durable, Eco-friendly, Excel	Name of the technology demonstratedNo. of FarmerChelated Mineral Mixture50Fodder Sorghum (COFS-29)50Ectorasiticide drug100Endoparasiticide drug100Ruber cow mat25Area specific Chelated Mineral Mixtur development and also reduce calving in It Can be grown throughout be year as livestock throughout year.ugTick problem is very common in cattle Good result of treatment of diarrhea c animalsrugRubber cow mat is very useful in dairy slip surfaces, Increase milk production Durable, Eco-friendly, Excellent InsulaImage: State of the state of treatment of the state of treatment of the state of	Name of the technology demonstratedNo. of FarmerNo. of Units (Animal/ Poultry/etc.)Chelated Mineral Mixture5050Fodder Sorghum (COFS-29)5050Ectoparasiticide drug100100Endoparasiticide drug100100Rubber cow mat2525FArea specific Chelated Mineral Mixture helpful in digestion, fer development and also reduce calving interval & age of first parturi It Can be grown throughout the year as a multicut variety under irr livestock throughout year.ugTick problem is very common in cattle specially in crossbred cattle Good result of treatment of diarrhea cause by Gastrointestinal ne animalsRubber cow mat is very useful in dairy animal specially pregnant a slip surfaces, Increase milk production, Easy to clean & Hygier Durable, Eco-friendly, Excellent Insulation and Cost-Effective longFodder Sorghum	Name of the technology demonstratedNo. of FarmerNo. of Units (Animal/ Poultry/etc.)Major MajorChelated Mineral Mixture5050Service periodFodder Sorghum (COFS-29)5050Fodder productionEctoparasiticide drug100100IncidenceEndoparasiticide drug100100IncidenceRubber cow mat2525Milk ProductionVerlagVerlag100100Rubber cow mat2525Milk ProductionRubber cow mat2525Milk ProductionIt can be grown throughout the year as a multicut variety under irrigated conditions which valivestock throughout year.ugTick problem is very common in cattle specially in crossbred cattle. this drug is very useful i Good result of treatment of diarrhea cause by Gastrointestinal nematode worm in livestoc animalsRubber cow mat is very useful in dairy animal specially pregnant and milch animals which I slip surfaces, Increase milk production, Easy to clean & Hygienic maintain in animal sl Durable, Eco-friendly, Excellent Insulation and Cost-Effective long-lasting Product.Image: Fodder SorghumFodder SorghumFodder SorghumFodder SorghumFodder SorghumFodder Sorghum	Name of the technology demonstratedNo. of FarmerNo. of Units (Animal/ Poultry/etc.)Major parametersChelated Mineral Mixture5050Service period96 DayFodder Sorghum (COFS-29)5050Fodder production405 Qtl./ha.Ectoparasiticide drug100100Incidence05Endoparasiticide drug100100Incidence02Rubber cow mat2525Milk Production2.8Feed BackArea specific Chelated Mineral Mixture helpful in digestion, fertility, Reproductive Performance, Milk Pr development and also reduce calving interval & age of first parturition. It Can be grown throughout the year as a multicut variety under irrigated conditions which very useful manag livestock throughout year.Incidence worm in livestock and also good animalsugTick problem is very common in cattle specially in crossbred cattle. this drug is very useful in controlling tick Good result of treatment of diarrhea cause by Gastrointestinal nematode worm in livestock and also good animalsRubber cow mat is very useful in dairy animal specially pregnant and milch animals which help in Increase p slip surfaces, Increase milk production, Easy to clean & Hygienic maintain in animal shed, Reduces the Durable, Eco-friendly, Excellent Insulation and Cost-Effective long-lasting Product.Image: Durable,	demonstratedFarmerPoultry/etc.)ParameterDemoCheckChelated Mineral Mixture5050Service period96 Day140 DayFodder Sorghum (COFS-29)5050Fodder production405 Qtl./ha.205 Qtl./ha.Ectoparasiticide drug100100Incidence0520Endoparasiticide drug100100Incidence0226Rubber cow mat2525Milk Production2.82.4Feed BackArea specific Chelated Mineral Mixture helpful in digestion, fertility, Reproductive Performance, Milk Production, Promo development and also reduce calving interval & age of first parturition.It Can be grown throughout the year as a multicut variety under irrigated conditions which very useful manage of green fodder tivestock throughout year.ugTick problem is very common in cattle specially in crossbred cattle. this drug is very useful in controlling ticks and other ectop Good result of treatment of diarrhea cause by Gastrointestinal nematode worm in livestock and also good result in regular animalsRubber cow mat is very useful in dairy animal specially pregnant and milch animals which help in Increase productivity & pro slip surfaces, Increase milk production, Easy to clean & Hygienic maintain in animal shed, Reduces the risk of leg inju Durable, Eco-friendly, Excellent Insulation and Cost-Effective long-lasting Product.Fodder SorghumFodder SorghumForder SorghumForder SorghumForder Sorghum	