

# ACHIEVEMENTS OF CLUSTER DEMONSTRATION (KHARIF, 2016)

Crops: Groundnut : 30 ha  
Sesamum : 30 ha &  
Blackgram : 20 ha

Crop & Variety	Season & year	Area (ha)	No. of farmers	Village	Block
Groundnut (Smruti)	Kharif, 2016	30	75	Tukuda	Chhendipada

Problem	Improper crop management (absence of seed treatment, herbicide and micro-nutrient application) leading to low yield		
Technology demonstrated	Seed treatment with carboxin + thiram, Application of herbicide (pendimethalin), Application of micro-nutrient (sulphur), Timely plant protection measures (application of prophenophos + cypermethrine against thrips)		
Growth Parameters	Result indicators	Performance	
		Demo	Local check
Plant height : 38.7 cm	Yield (q/ha)	19.1	17.2
Branches /plant : 7.8 nos	Gross Cost (Rs/ha)	40000	38000
Pods / plant : 20.8 nos.	Gross Return (Rs/ha)	76400	68800
Seeds/pod : 2.1 nos.	Net Return (Rs/ha)	36400	30800
	B:C Ratio	1.91	1.81









Crop & Variety	Season & year	Area (ha)	No. of farmers	Village	Block
Sesamum (Uma)	Kharif, 2016	30	75	Jamunali	Chhendipada

Problems	Improper crop management (absence of seed treatment, herbicide application) leading to low yield		
Technology demonstrated	Seed treatment with carboxin + thiram, Application of micro-nutrient (sulphur), Application of herbicide (pendimethalin), Timely plant protection measures (application of prophenophos + cypermethrine against leaf webber and capsule borer)		
Growth Parameters	Result indicators	Performance	
		Demo	Local check
Plant height : 87.5 cm	Yield (q/ha)	6.1	4.9
Branches /plant : 5.2 nos	Gross Cost (Rs/ha)	20000	18000
Capsules / plant : 22.4 nos.	Gross Return (Rs/ha)	48800	39200
Seeds/capsule : 52.3 nos.	Net Return (Rs/ha)	28800	21200
	B:C Ratio	2.44	2.18







Crop & Variety	Season & year	Area (ha)	No. of farmers	Village	Block
Blackgram (PU-35)	Kharif, 2016	20	50	Damodarpur Balipata	Athamallik

Problems	Traditional variety with improper crop management (absence of seed treatment and herbicide application) leading to low yield		
Technology demonstrated	Tillage by tractor operated rotavator, Line sowing by tractor operated multi-crop planter, Use of good variety / quality of seed (PU-35), Seed treatment with carboxin + thiram, Application of herbicide (pendimethalin), Timely plant protection measures (application of prophenophos + cypermethrine against aphids and white fly)		
Growth Parameters	Result indicators	Performance	
		Demo	Local check
Plant height : 44.6 cm	Yield (q/ha)	5.1	4.2
Branches /plant : 8.2 nos	Gross Cost (Rs/ha)	15000	13000
Pods / plant : 19.6 nos.	Gross Return (Rs/ha)	35700	29400
Seeds/pod : 8.1 nos.	Net Return (Rs/ha)	20700	16400
	B:C Ratio	2.38	2.26







# PROGRESS OF CLUSTER DEMONSTRATION (RABI, 2016 -17)

Crops: Groundnut	: 30 ha
Sesamum	: 30 ha
Mustard	: 30 ha &
Greengram	: 30 ha



Crop & Variety	Season & year	Area (ha)	No. of farmers	Village	Block
Groundnut (Devi)	Rabi, 2016-17	30	75	Jaripal	Chhendipada

<b>Problems</b>		Traditional variety with improper crop management (absence of seed treatment) leading to low yield		
<b>Technology demonstrated</b>		Good variety / quality of seed (Devi), Seed treatment with carboxin + thiram		
<b>Growth Parameters</b>		<b>Result indicators</b>	<b>Performance</b>	
			<b>Demo</b>	<b>Local check</b>
Plant height	: 37.5 cm	Yield (q/ha)	23.6	19.2
Branches /plant	: 7.5 nos.	Gross Cost (Rs/ha)	42000	40000
Pods / plant	: 24.4	Gross Return (Rs/ha)	94400	76800
Seeds/pod	: 2.04	Net Return (Rs/ha)	52400	36800
		B:C Ratio	2.25	1.92









Crop & Variety	Season & year	Area (ha)	No. of farmers	Village	Block
Mustard (Mahyco Bold)	Rabi, 2016-17	30	75	Dangapal, Nuagaon & Jaripal	Chhendipada

Problems	Traditional variety with improper crop management (absence of seed treatment, micro-nutrient application) leading to low yield		
Technology demonstrated	Good variety (var. Mahyco bold), Seed treatment with caboxin + thiram, Application of prophenophos + cypermethrin for control of aphid		
Growth Parameters	Result indicators	Performance	
		Demo	Local check
Plant height : 141.2 cm	Yield (q/ha)	8.6	6.5
Branches /plant : 7.3 nos.	Gross Cost (Rs/ha)	20000	18000
Siliquae / plant :184.6 nos.	Gross Return (Rs/ha)	60200	45500
Seeds/silique : 12.4 nos.	Net Return (Rs/ha)	40200	27500
	B:C Ratio	3.01	2.53
Status	Harvested during last week of January		









Crop & Variety	Season & year	Area (ha)	No. of farmers	Village	Block
Sesamum (Kalika)	Rabi, 2016-17	30	75	Tukuda	Chhendipada

Problems	Traditional variety with improper crop management (absence of seed treatment, micro-nutrient application) leading to low yield		
Technology demonstrated	Seed (var. Kalika), Seed treatment with carboxin + thiram, Application of micro-nutrient (S), spraying of prophenophos + cypermethrin against leaf webber and capsule borer		
Growth Parameters	Result indicators	Performance	
		Demo	Local check
Plant height : 125 cm	Yield (q/ha)	6.5	5.1
Branches /plant : 6.7 nos.	Gross Cost (Rs/ha)	17000	15000
Capsules / plant : 116.4nos.	Gross Return (Rs/ha)	45500	35700
Seeds/capsule : 51.4 nos.	Net Return (Rs/ha)	28500	20700
	B:C Ratio	2.68	2.38



Crop & Variety	Season & year	Area (ha)	No. of farmers	Village	Block
Greengram (TARM-1)	Rabi, 2016-17	30	75	Sanjamura	Kishorenagar

Problems	Traditional variety with improper crop management (absence of seed treatment, micro-nutrient application) leading to low yield		
Technology demonstrated	Good variety with good quality seed (var. TARM-1), seed treatment with carboxin + thiram, application of micro-nutrient (Boron) and appln. of imidachloprid against aphid		
Growth Parameters	Result indicators	Performance	
		Demo	Local check
Plant height : 43.2 cm	Yield (q/ha)	7.2	5.3
Branches /plant : 7.6	Gross Cost (Rs/ha)	17500	15000
Pods / plant : 41.3	Gross Return (Rs/ha)	50400	37100
Seeds/pod : 10	Net Return (Rs/ha)	32900	22100
	B:C Ratio	2.88	2.47
Status	Harvested during 3 <sup>rd</sup> week of March		





