

ICAR – ATARI, Pune Zone-VIII
Technology Demonstration Component of NICRA

Annual Report of TDC for the year 2023

Village 1 : Umarani Village 2 : Bhujgaon Village 3 : Katri	KVK and District: Krishi Vigyan Kendra, Nandurbar	State: Maharashtra
---------------------------------------------------------------------------------------	--------------------------------------------------------------------	---------------------------

Table-1: Information about the NICRA villages and the focus of activities in these Villages

S No	Details	Village 1	Village 2	Village 3
1	Name of the village	Umarani	Bhujgaon	Katri
2	Involved in TDC since (year)	2011	2018	2022
3	Cultivated area (ha)	539	132	908
4	Rainfed Area (ha)	200	68	830
5	Flood prone Area (ha)	-	-	6
6	Irrigated Area (ha)	339	64	78
7	No. of households in the village	257	133	956

Activities Taken up in NICRA Villages during the Year

Details	Village 1	Village 2	Village 3
	Umarani	Bhujgaon	Katri
Demonstrations were taken up	Yes	Yes	Yes
Scaling up of promising technologies	Yes	Yes	Yes

Table-2: Summary of Interventions taken up during 2023

Villages	FST1		FST2		FST3		FST4	
	Rain-fed without Animals		Rain-fed with Animals		Irrigated without Animals		Irrigated with Animals	
	Technology	No of Farmers	Technology	No of Farmers	Technology	No of Farmers	Technology	No of Farmers
Umarani	0	0	13	25	0	0	12	25
Bhujgaon	0	0	13	25	0	0	12	25
Katri	0	0	13	25	0	0	12	25
Total	0	0	13	75	0	0	12	75

Table-3: Natural Resource Management Interventions taken up in farming system typology during the year 2023 (in all the villages)

Resilient practice	No. of Demonstrations/ Interventions	Farmers covered	Area covered (ha)
In situ moisture conservation - Ridges and furrows in maize	50	50	20
Water saving technology - Rain pipe Irrigation system	50	50	20
Water harvesting and recycling for supplement irrigation-Temporary check dams	12	60	24
Organic input production and usage	20	20	8

Table-4: Crop Production Interventions taken up in farming system typology during the year 2023 (in all the villages)

Resilient practice	No. of Demonstrations/ Interventions	Farmers covered	Area covered (ha)
Drought Tolerant varieties			
Drought tolerant pigeon pea	50	50	20
Drought tolerant variety of Chick pea (RVG-203)	40	40	16
Improved variety and drought tolerating measurable			
Improved sorghum (Yashoda Moti)	75	75	30
Heat stress tolerant variety of Green-Gram-(GM-6)	20	20	8
Short duration varieties			
Short Duration variety of Maize(GM-6)	50	50	20
Short duration Foxtail millet in Kharif (Suryanandi)	60	60	24
Short duration variety of foxtail millet (Phule Ekadashi)-	25	25	10
Crop diversification			
Cultivation of Potato under Crop-Diversification	15	15	0.8
Cultivation of pea under Crop-Diversification	30	30	2
Location specific intercropping system with high sustainable yield index			
Intercropping of Soybean and Pigeon pea(3:1)	10	10	4
Bio fortified pearl millet (Dhanshakti)	33	33	12

Table-5: Livestock and Fisheries Interventions taken up in farming system typology during the year 2023 (in all the villages)

Resilient practice	No. of Demonstrations/ Interventions	Farmers covered	No. of animals covered	Area covered (ha)
Animal health Camps	02	76	212	
Perennial fodder (COFS-29)	10	10	20	0.4
Perennial fodder (Dashrath)	20	20	40	1
Multicut perennial Lucerne (RL-88)	30	30	112	1.5
Shade net for cattle	10	10	27	
Area specific Mineral Mixture	30	30	60	

Table-7a: Impact of CRTs in each FST2* (Farming system typology – Rainfed with animals) during 2023

Villages	Crop/ Perennials	Technology adopted/ demonstrated	Area impacted by climatic stress, crop and stage	Rainfed					
				<i>Kharif and Rabi (NICRA farmers)</i>			<i>Kharif and Rabi (non-NICRA farmers)</i>		
				Area (ha)	Productivity (q/ha)	Net return (Rs./ha)	Area (ha)	Productivity (q/ha)	Net return (Rs./ha)
Village-Katri									
Farmer 1									
Crop based	Sorghum	Short Duration Variety (Yashoda- Moti)		0.4	20.13	21942	0.4	15.3	13846
NRM based	Maize	Ridges and Furrows in Maize(GM-6)		0.4	21.45	17696	0.4	16.3	10921
Animal based	Bullock	Improved shelter for Animals		Temperature reduced by 1 Degree Celsius					
	Perennial Fodder	Perennial Fodder (Dashrath) for goats		5 Nos.	36 kg	42550	5	27.5 kg	31120

	Poultry	Back yard poultry		25 Nos.	1.7 kg (Body weight) (160 Eggs/year)	19370	10 Nos.	1.2 kg (Body weight) (61 Eggs/year)	5790
	Total			0.8		101558	0.8		61677
Farmer 2									
Crop based	Sorghum	Short Duration Variety (Yashoda- Moti)		0.4	19.32	21252	0.4	13.56	12244
Crop based	Foxtail Millet	Short Duration Variety (SIA-3222)		0.4	12.5	40375	0.4	9.13	28303
Animal based	Perennial Fodder	Perennial Fodder (Dashrath) for goats		5 Nos.	36.5 kg (Body weight)	44250	5 Nos.	27 kg (Body weight)	29300
	Poultry	Back yard poultry		23 Nos.	1.7 kg (Body weight) (160 Eggs/year)	21210	15 Nos	1.35 kg (Body weight) (75 eggs/year)	11340
	Total			0.8		127087	0.8		81187

Farmer 3									
Crop based	Sorghum	Short Duration Variety (Yashoda- Moti)		0.4	20.10	22512	0.4	15.13	13451
NRM based	Maize	Ridges and Furrows in Maize(GM-6)		0.4	20.22	17267	0.4	16.3	11165
Animal based	Perennial Fodder	Perennial Fodder (Dashrath) for goats		6 Nos.	35 kg (Body weight)	44340	4 Nos.	26 kg (Body weight)	30210
		Back yard poultry		18 Nos.	1.62 kg (Body weight) (152 Eggs/year)	21130	12	1.4kg (Body weight) (76 eggs/year)	10045
	Total			0.8		105249	0.8		64871

Table-7b: Impact of CRTs in each FST2 (Farming system typology) during 2023

Animal (NICRA Farmer)	No.	Technology adopted/ demonstrated	Production/ year*	Selling price (Rs/unit)	Gross returns (Rs./animal)	By products quantity	Unit price (Rs.)	Net Returns (ha.)
Farmer 1								
Goat	12	Perennial fodder (Dashrath)	36 kg (Body weight)	300 Rs/kg	10860	-	-	42550
Back yard poultry	22	Brooded and vaccinated poultry chicks	1.7 kg (Body weight) (160 Eggs/year)	Rs.200-Chicken & Rs.8 –Egg	1620	-	-	19370
Farmer 2								
Goat	8	Perennial fodder (Dashrath)	36 kg (Body weight)	300 Rs/kg	10800	-	-	44250
Back yard poultry	20	Brooded and vaccinated poultry chicks	1.62 kg (Body weight) (154 Eggs/year)	Rs.200-Chicken & Rs.8 -Egg	1542	-	-	21210

Farmer 3								
Goat	7	Perennial fodder (Dashrath)	35 kg (Body weight)	300 Rs/kg	10500	-	-	44340
Back yard poultry	20	Brooded and vaccinated poultry	1.65 kg (Body weight)	Rs.200-Chicken & Rs.8 -Egg	1540	-	-	21130
Animal (Non NICRA farmer)	No.	Technology adopted/ demonstrated	Production/ year*	Selling price (Rs/unit)	Gross returns (Rs./animal)	By products quantity	Unit price (Rs.)	Net Returns (ha.)
Farmer 1								
Goat	12	Local grass feeding	27.5 kg (Body weight)	300 Rs/kg	7950			31120
Back yard poultry	10	Conventional practice	1.2 kg (Body weight) (61 eggs/year)	Rs.200 & Rs.8	704			5790
Farmer 2								
Goat	10	Local grass feeding	27 kg (Body weight)	300 Rs/kg	7890			29300
Back yard poultry	12	Conventional practice	1.35 kg (Body weight) (77 eggs/year)	Rs.200 & Rs.8	888			11340

Farmer 3								
Goat	12	Local grass feeding	26 kg (Body weight)	300 Rs/kg	7800			30210
Back yard poultry	10	Conventional practice	1.4kg (Body weight) (76eggs/year)	Rs.200 & Rs.8	870			10045

Table-9a: Impact of CRTs in each FST4* (Farming system typology- Irrigated with animal) during 2023

Villages	Crop/ Perennial s	Technology adopted/ demonstrated	Area impacted by climatic stress, crop and stage	Irrigated					
				<i>Kharif and rabi (NICRA farmers)</i>			<i>Kharif and rabi (non-NICRA farmers)</i>		
				Area (ha)	Productivity (q/ha)	Net return (Rs./ha)	Area (ha)	Productivity (q/ha)	Net return (Rs./ha)
Katri									
Farmer1									
Crop based	Chick pea	Rain pipe irrigation for efficient irrigation		0.4	20.6	111652	0.4	13.4	69814

	Soybean	Intercropping of soybean : Pigeon pea (3:1)		0.4	13.2	68904	0.4	10.10	21210
	Green gram	Heat stress tolerant variety (GM - 4)		0.4	5.40	21654	0.4	3.12	11076
NRM based	Maize	Ridges and Furrows in Maize (GM-6)		0.4	20.1	16683	0.4	15.5	12245
Animal based	Bullocks	Multicut perennial Lucerne (RL-88)			-	0		0	0
	Goat	Perennial Fodder (Dashrath) for goats			37.5 kg (Body weight)	47320		27.5 kg (Body weight)	34120
	Poultry	Back yard poultry			1.7 kg (Body weight) (165 Eggs/year)	20480		1.2 kg (Body weight) (60 eggs/year)	8330
	Total			0.8		286693			156795
Farmer 2									
Crop based	Chick pea	Rain pipe irrigation for efficient irrigation		0.4	21.7	117180	0.4	14.65	76473
	Soybean	Intercropping of soybean : Pigeon pea (3:1)		0.4	13.45	70343	0.4	10.2	22950
	Green gram	Heat stress tolerant variety (GM-6)		0.4	4.21	17766	0.4	3.2	11584

	NRM based	Ridges and Furrows in Maize (GM-6)		0.4	21.6	17928	0.4	14.37	11208
Animal based	Bullocks	Multicut perennial Lucerne (RL-88)				0			0
	Goat	Perennial Fodder (Dashrath) for goats			37 kg (Body weight)	45370		27 kg (Body weight)	30120
	Poultry	Back yard poultry			1.6 kg (Body weight) (155 Eggs/year)	22690		1.35 kg (Body weight) (68 eggs/year)	10370
Total				0.8		291277			162705
Farmer 3									
Crop based	Chick pea	Rain pipe irrigation for efficient irrigation		0.4	20.17	109119	0.4	14.4	73872
	Soybean	Intercropping of soybean : Pigeon pea (3:1)		0.4	12.5	66500	0.4	8.21	17323
	Green gram	Heat stress tolerant variety (GM-6)		0.4	4.5	1867	0.4	2.95	10413
	NRM based	Ridges and Furrows in Maize (GM-6)		0.4	21.35	16012	0.4	15.10	11174

Animal based	Bullocks	Multicut perennial Lucerne (RL-88)				44500		-	35800
	Goat	Perennial Fodder (Dashrath) for goats			37 kg (Body weight)	44410		26 kg (Body weight)	29860
	Poultry	Back yard poultry			1.7 kg (Body weight) (168 Eggs/year)	22145		1.3kg (Body weight) (81 eggs/year)	9765
	Total			0.8		304553			188207

Table-9b: Impact of CRTs in each FST4 (Farming system typology- Irrigated with animal) during 2023

Animal (NICRA Farmer)	No.	Technology adopted/ demonstrated	Production/ year*	Selling price (Rs/unit)	Gross returns (Rs./ animal)	By products quantity	Unit price (Rs.)	Net Returns (ha.)
Farmer 1								
Bullock	2	Multicut perennial Lucerne (RL-88)						
Goat	10	Perennial fodder (Dasharath)	37.5 kg (Body weight)	300 Rs/kg	11250	-	-	47320

Back yard poultry	20	Brooded and vaccinated poultry chicks	1.7 kg (Body weight) (165 Eggs/year)	Rs.200-Chicken & Rs.8 -Egg	1660	-	-	20480
Farmer 2								
Bullock	2	Multicut perennial Lucerne (RL-88)		45500	45500			40200
Goat	10	Perennial fodder (Dasharath)	37 kg (Body weight)	300 Rs/kg	11100	-	-	45370
Back yard poultry	22	Brooded and vaccinated poultry chicks	1.6 kg (Body weight) (155 Eggs/year)	Rs.200-Chicken & Rs.8 -Egg	1560	-	-	22690
Farmer 3								
Bullock	2	Multicut perennial Lucerne (RL-88)		43200	43200			40100
Goat	7	Perennial fodder (Dasharath)	37 kg (Body weight)	300 Rs/kg	11100	-	-	44410
Back yard poultry	20	Brooded and vaccinated poultry chicks	1.7 kg (Body weight) (170 Eggs/year)	Rs.200-Chicken & Rs.8 -Egg	1684	-	-	22145

Animal (Non NICRA farmer)	No.	Technology adopted/ demonstrated	Production/ year*	Selling price (Rs/unit)	Gross returns (Rs./animal)	By products quantity	Unit price (Rs.)	Net Returns (ha.)
Farmer 1								
Bullock		Local grass feeding						
Goat	10	Local grass feeding	27.5 kg (Body weight)	300 Rs/kg	8250	-		34120
Back yard poultry	12	Conventional practice	1.2 kg (Body weight) (60 eggs/year)	Rs.200 & Rs.8	1130	-		8330
Farmer 2								
Bullock		Local grass feeding		32200	32200			29300
Goat	10	Local grass feeding	27 kg (Body weight)	300 Rs/kg	8100	-		30120
Back yard poultry	10	Conventional practice	1.35 kg (Body weight) (68 eggs/year)	Rs.200 & Rs.8	814	-		10370
Farmer 3								
Bullock		Local grass feeding		30000	30000			27500

Goat	10	Local grass feeding	26 kg (Body weight)	300 Rs/kg	7800	-		29860
Back yard poultry	10	Conventional practice	1.3kg (Body weight) (81 eggs/year)	Rs.200 & Rs.8	875	-		9765

Table-10: Performance of Custom Hiring Centre during the year 2023

Name of Equipment in the custom hiring centre	Amount of rent obtained, Rs.	Farmers covered	Area covered (ha)
Allan cultivator	600	60	15
Mogi - Improved Wheel Hoe	400	120	52
Bullock Drawn Harrow	150	60	12
Knapsack Sprayer	150	40	40
Bullock drawn ridger	210	25	10

Table-11: Performance of seed systems during the year 2023

Crop & variety	Seed produced (tons)	Farmers involved	Revenue obtained by farmer (Rupees)
Chick pea (Phule Vikram)	1	25	3000
Short duration variety of Maize (GM-6)	0.75	25	2000
Stress tolerant variety of Green gram (GM-4)	0.50	25	4000

Table-12: Performance of fodder systems during the year 2023

Fodder crop & variety	Fodder produced (tons)	Farmers involved	Area involved (ha)	Revenue obtained by farmer (Rupees)
Lucern(RL-88)		25	0.40	1850
Hedge Lucern (Dashrath)		25	0.75	2000
Perrinial Fodder(COFS-29)		25	0.40	3200

Table-13: Capacity Building (HRD) taken up during the year 2023

Title of the program	No. of training programmes	Number of beneficiaries		
		Male	Female	Total
Management of Mango Blossom	1	22	10	32
Lumpy Disease Management	1	12	10	22
Fodder Management for Livestock	1	22	6	28
Importance of Minor Millets in daily diet	1	14	9	23
Small tools and Implements	1	10	11	21
Crop Diversification	1	10	12	22
Improved farm machinery and Implements	1	12	8	20
Safe Harvesting of farm produce	1	11	10	21
Scientific rearing of Honey Bee	2	10	12	22
Climate resilient varieties	2	26	13	39
Importance of Nutrition in animals	1	12	12	24
Ridges and furrows for insitu moisture conservation	1	11	12	23
Improved cultivation of Vegetables	3	53	20	73
Fall army worm management in maize	1	11	10	21
Animal health management	1	12	12	24
Pest and disease management of Kharif crops	1	11	10	21
Integrated pest management in Bengal gram	1	15	12	27
Integrated crop management in summer groundnut	2	42	21	63
Fodder management for farm animals	1	12	10	22
Maize production Technology	1	10	12	22
Integrated crop management in green gram	1	22	10	32
Crop Diversification	2	37	12	49
Integrated Nutrient Management in Rabi crops	1	12	12	24
Care and maintenance of Honey Bee Boxes	1	12	10	22

Table-14: Other extension activities being taken up during the year 2023

Name of program	Participants
News	32
Farmers Meetings (11)	235
VCRMC Meeting	49
Field day on Diversification of wheat with Potato (2)	67
Scientists visit to farmers field	52
Meeting of Progressive farm women for drudgery reduction	12
Demonstration of bee keeping	35
Kharif pre plan Meeting	71
Field day on Pea	35
Demonstration on Gravity based irrigation system	21
Kharip pre- planning meeting	35
Field day on Short duration sorghum (Yashoda Moti)	18
Field day on foxtail- Millet	21
Pre planning Meet on Rabi	22
Kisan mela	65
Method demonstration On Temporary check dam	11
Youth farmers meeting	35
Exposure visit (2)	72
Method demonstration of Hand push seeder	53

Table-15: Summary of Up scaling of technologies taken up during the year 2023 and the amount mobilized through convergence from various departments

Village name	Technology scaling up/out	No. of farmers reached	Coverage (ha) / number	Convergence with the programme
Umarani	Rain pipe irrigation system	20	15	Development Support Centre
	Drought tolerant variety of pigeon pea (BDN-721)	23	10	State Agril.department
Bhujgaon	Rain pipe irrigation system	15	12	Development Support Centre

	Heat stress tolerant green gram(GM-6)	10	5	Farmer to farmer
	Lucerne (RL-88)	15	0.5	CiNi (TATA initiative)
Katri	Heat stress tolerant green gram(GM-6)	10	4	Farmer to farmer
	Vermi composting with vermin tetra bed technology	100	40	Yuva Mitra-NGO

Table-16: Extreme events, high intensity rains and dry spells, heat wave, cold wave, hail storms, etc. observed during 2023-24

Nature of event	Quantify the event	When it has occurred (Date)	Impact on crop, animal, horticulture, fisheries, etc.
Heat wave	Temperature range (40.7-43.4)	7 May -14 May 2023	Mortality in poultry birds was observed.
Heat wave	Temperature range (40.2- 41.8)	17 May -22 May 2023	Heat stress was observed in animals.
Cold wave	Temperature (11 -16 degree Celsius)	10 Dec to 21 Dec 2023	The crop growth of groundnut observed to be stunted.
Cold wave	10 degree Celsius	10 January 2023	Infestation of powdery mildew on pea was observed.
Coldest day	8.9 degree Celsius	15 Jan 2023	Infestation of late blight was increased on potato.
Stormy wind	65km/hr	4 June 2023	-
Stormy wind	-	8 Sept 2023	Lodging of crops

Table-17: Distinguished visitors during the year 2023

Name of visitors	Date	Remarks
Sau. Manisha Khatri District collector ,Nandurbar	28.08.2023 14.10.2023	Appreciated the NICRA activities and assured for assistance.
Dr. Shivaji Damame Shri. Navle ,Shri.Padvi Fodder Research Station, MPKV,Rahuri	13.1.2023 26.10.2023 8.11.2023 8.12.2023 22.12.2023	Appreciation for large scale adoption of fodder crops.
Shri. Navle ,Shri.Padvi Fodder Research Station, MPKV,Rahuri	3.3.2023	Visited to Fodder plots.
Shri. Jatrya Nimba Pawara Director, Dr.Hedgewar Seva Samiti and KVK team	19.04.2023 16.07.2023 12.09.2023	Satisfactory remarks about NICRA activities.
Shri.Raskar ,Shri .Padvi Circle Agril. Officer, State Agril.Dept., Dhadgaon	13.1.2023 3.3.2023 05.06.2023	Visit to crop demonstration plots
Dr.Sunil Karad with his Team Maize Research Station,Kolhapur	19.04.2023 14.07.2023	Appreciation for the short duration variety of Maize(GM-6)
Shri. Pramod Patil, DDM, NABARD	15.07.2023 05.06.2023 12.09.2023 28.10.2023	Delighted to see the water storage with temporary check dam
Shri.Krushnadas Patil Chairman, Dr.Hedgewar Seva Samiti ,Nandurbar	16.07.2023 23.10.2023 30.10.2023	Satisfactory remarks about farmers participation in NICRA activities.
Dr. Suhas Bhingarde and his team Maize Research Station, Kolhapur.	15.07.2023 28.08.2023	Good remarks for maize demonstrations.
Sau. Jui Pethe REEDS, (NGO) ,Hyderabad	14.10.2023 23.10.2023	Good potential for up scaling in other areas.
Dr.Mahesh Ganapure. Veterinary Consultant, Nandurbar	28.10.2023	Demonstration plots of fodder are good.

Shri. Swapnil Kamodkar Yuvamitra (NGO),Dhadgaon	30.10.2023 17.11.2023	Association with the farmers is good.
Shri.Kiran Gore Yuvamitra (NGO),Dhadgaon	26.10.2023 30.11.2023	NICRA interventions should be up scaled.

**Table-18: Publications from the project
(Research paper, folder, bulletin etc. With citation)**

Description (Nature of publication)	Citation of the publication
Folder – Bullock drawn improved implements	Shri. J.N.Uttarwar and Shri. R.S.Dahatonde
Poster - Improved farm implements for millet farming in hilly areas of Nandurbar district.	Shri. J.N.Uttarwar and A.S.Kadam

Table-19: Adoption of successful interventions in the NICRA village & the adjoining villages

Successful interventions	Crop	Variety	Extent of adoption in the village in ha (2023)
Rain pipe Irrigation System	Chick pea, garlic, foxtail millet	NA	56
Vermi-composting	Vegetable crops- Brinjal	NA	75
Short Duration variety of Maize (GM-6)	Maize	GM-6	42
Drought Tolerant pigeon-pea (BDN-711)	Pigeon-pea	BDN-711	56
Heat stress tolerant variety Green-gram (GM-4)	Green-gram	GM-4	21

Mineral Mixture	Animals	Area specific	-
Lucerne (RL-88)	Lucerne	(RL-88)	14
Hedge-Lucerne	Hedge-Lucerne	Dashrath	17

Name of technology	Area (ha) (Adoption with the technology)	Farmers (No)	Mode of spread (Process)
Rain pipe Irrigation	85	110	Convergence
Mineral Mixture	-	75	Convergence
Vermi composting	40	100	Convergence
Heat stress tolerant variety of green gram (GM-4)	15	40	Farmer to farmer
Soybean and pigeon-pea intercropping	120	260	Farmer to farmer

Table-20: Popularization of Climate Resilient Varieties

Crop*	Climate Resilient Varieties incorporated in the <i>Kharif</i> 2023 plan of the State Department	Approx. area brought under the variety by the state department during the <i>Kharif</i> 2023 (ha)	Crop	Climate Resilient Varieties incorporated in the <i>Rabi</i> 2023 plan of the State Department	Approx. area brought under the variety by the state department during the <i>Rabi</i> 2023 (ha)
Soybean	MAUS-1128	200	Chick pea	Phule Vikram	260
Pigeon pea	BDN-711	150			
Little millet	Phule Ekadashi	50			

Table-21: Rainfall characteristics for the year 2023

KVK	Kharif 2023		June	July	August	Sept.	Annual
Nandurbar	Rainfall received in (mm)		97.2	401.2	84.3	333.9	916.6
	No. of dry spells during Kharif season	>10 days	0	0	1	0	0
		>15 days	0	0	0	0	0
		>20 days	0	0	0	0	0
	No. of intensive rain spells	>60 mm per Day	0	1	0	0	0
	Water logging observed (days)		0	4 Days	0	0	0

**Table-22: Day-wise rainfall distribution in the village during *kharif* 2023;
Rainfall recorded at NICRA village-Katri**

1	0	0	0	14.5	3.6	0	0	0	0	0	0	0
2	0	0	0	20.8	8.2	0	0	0	0	0	0	00
3	0	0	0	1.6	4.7	0	0	0	0	0	0	0
4	0	0	0	0.5	3.2	0	0	0	0	0	0	0
5	0	0	6.2	7.5	6.8	0	0	0	0	0	0	0
6	0	0	0	19.2	2.5	0	0	0	0	0	0	0
7	0	0	0	6.3	1.8	54.2	00	00	0	0	0	0
8	0	0	0	3.8	0	15.3	0	0	0	0	0	0
9	0	0	0	4.7	1.2	29.9	0	00	0	0	0	0
10	0	0	0	17	3.4	30.4	0	0	0	0	0	0
11	0	0	0.8	20.6	7.1	0	0	0	0	0	0	0
12	0	0	0.4	12.4	0.3	0	00	0	0	0	0	0
13	0	0	0.5	119.3	8.3	0	0	00	0	0	0	0
14	0	0	0	0.2	3.3	0.2	0	0	0	0	0	0
15	0	0	0	9.2	1.9	0.2	0	0	0	0	0	0
16	0	0	0	27.2	1.7	62.6	0	0	0	0	0	0
17	0	0	10.2	1	0.3	54.1	0.8	0	0	0	0	0

18	0	0	0.7	0.1	1	14.7	2.4	0	0	0	0	0
19	0	0	0.7	2.4	0.2	14.4	0	0	0	0	0	0
20	0	0	0	8.5	10.6	1.9	0	0	0	0	0	0
21	0	0	0.8	1.9	5	0.1	0	0	0	0	0	0
22	0	0	0	2.8	0.9	0.5	0	0	0	0	0	0
23	0	0	0	36.8	2.8	5.7	0	0	0	0	0	0
24	0	0	6	4.7	1.8	19.2	0	0	0	0	0	0
25	0	0	3.2	1.8	0.5	1.4	0	0	0	0	0	0
26	0	0	10.3	2.9	0	11.8	0	0	0	0	0	0
27	0	0	2.5	3.5	3.2	9.6	0	77.1	0	0	0	0
28	0	0	2.2	24.6	0	4	0	1	0	0	0	0
29	0	0	16.6	3.7	0	3.7	0	0	0	0	0	0
30	0	0	36.1	11.1	0	0	0	0	0	0	0	0
31	0	0	0	10.6	0	0	0	0	00	00	0	0
		Total rainfall	97.2	401.2	84.3	333.9	3.2	78.1				
		Rainy Days	7	23	13	14	0	1				

Table-23: Impact of contingency measures taken up in the village (Relate the dry spells/floods/heat wave/cold wave/etc., with crops and their growth stages)

Duration of dry spell	Crop stage impacted and duration	Interventions taken
28 August to 6 September 2023	Pod formation of Black -gram	Spraying of KNO ₃ on crop
	Vegetative growth of Maize	Life saving irrigation
	Vegetative growth of Sorghum	Life saving irrigation
Duration of flood	Crop stage impacted and duration	Interventions taken

Table-24: Details about agro advisories issued Organization giving the forecast:

Organization giving the forecast: Department of Meteorology, IMD

Forecast is based on the district or the block: District,

Organization giving the agro met advisory: DAMU-KVK-Nandurbar

The advisories and Agromet advisory Bulletins are issued and disseminated in the NICRA village:

1. Through WhatsApp groups
2. Through News papers
3. Through Face book
4. Written on Notice boards in villages

Month	June	July	Aug.	Sept.	October	Novemb er	Decembe r	Janua ry
Number of agro- met bulletins issued	14	14	12	10	11	12	10	14
Other advisories issued (Mobile Advisory)	2	1	1	0	1	0	2	1

How the advisories are disseminated and their reach

Method	Number of farmers reached during the year
Whatsapp groups	1230
Display on Notice boards	830

Significant achievements of the year 2023-24



Short duration of Foxtail millet (Suryanandi)



Biofortified variety of Pearl millet (Dhanshakti)



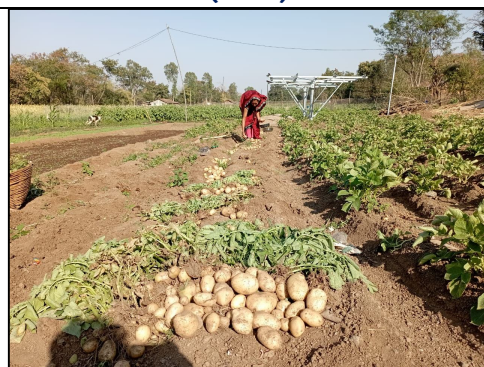
Short duration variety of Sorghum (Yashoda moti)



Heat stress tolerant variety of green gram (GM-4)



Line sowing of foxtail millet (Suryanandi)



Crop diversification with Potato



Visit of Dr. U.B.Hole ,Asso.Dean,College of Agriculture, Nandurbar



Visit of MPKV scientists to fodder plots.



Method demonstration of hand push seeder



Diagnostic visit of KVK scientists in NICRA villages



Fodder production of Multicut sorghum fodder (COFS-29)



Fodder production of Multicut Lucerne (RL-88)

Newspaper coverage

