



# ODISHA

## MILLETS MISSION

"SPECIAL PROGRAMME FOR PROMOTION  
OF MILLETS IN TRIBAL AREAS"



**ANNUAL  
REPORT**

**2018-19**



**DIRECTORATE OF AGRICULTURE AND FOOD PRODUCTION, BHUBANESWAR.**

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## Message from the Director, Agriculture and Food Production, Odisha

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The Special Programme for Promotion of Millets in Tribal Areas is an initiative of the Department of Agriculture and Farmers' Empowerment, Government of Odisha for supporting the forgotten and neglected crops grown by tribal communities in the rainfed areas of Odisha. The programme envisages easing constraints of millet growers by incentivizing investments into soil health, quality seed, improved agronomic practices and providing price support through procurement by state agencies and exploration of remunerative markets. The programme also aims to address the issues of food and nutrition security through the promotion of 'native' nutri-cereal crops that are integral part of the culture of the tribal communities.

The programme was budgeted for in the State Agriculture Budget of 2017-18 and was grounded in the Kharif of 2017-18. While the focus in the first year was on demonstrating improved agronomic practices in millets for higher productivity, the second year belonged to scaling up the programme and the historic step of Ragi procurement by the Government of Odisha. Identification and multiplication of local landraces preferred by farmers through Participatory Varietal Trials has also given hope for revitalization of biodiversity in millets.

Through successful demonstration of interventions on multiple fronts, the programme won accolades from the Government of India which recommended other states to follow the Odisha model. While millets reached the plates of the elite in the capital city's Mayfair Hotel during the visit of Chairman, 15<sup>th</sup> Finance Commission, the common person tasted millets through our rural food festivals conducted by our Civil Society partners and urban street side stalls set-up by our student interns.

I sincerely thank Principal Secretary, Agriculture & Farmers Empowerment and the members of the High Power Committee on Millets for their continuous and generous support. I also thank District, Block and Panchayat level staff of the department and our Civil Society and Community partners for their perseverance and hard work to take the programme to the last mile. I assure you that the churning of ideas for revival of millets in farms and on plates shall continue. I hope that this annual report will inspire all co-travelers in the journey to follow this dream.

**Dr. M Muthukumar IAS,**

Director of Agriculture and Food Production, Odisha, Bhubaneswar.

## Glossary

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AAO- Assistant Agriculture Officer

ATMA- Agriculture Technology Management Agency

CB- Capacity Building

CBO- Community Based Organization

CCE- Crop Cutting Exercise

DAFE- Department of Agriculture and Farmers' Empowerment

DAFP- Directorate of Agriculture and Food Production

DAO- District Agriculture Officer

DBT- Direct Benefit Transfer

DDA- Deputy Director of Agriculture

FA- Facilitating Agencies

FAQ-Fair Average Quality

FPO- Farmers' Producer Organization

FRA- Forest Rights Act

ICAR- Indian Council for Agriculture Research

ICDS- Integrated Child Development Services

IIMR-Indian Institute of Millets Research

LT- Line Transplanting

LS- Line Sowing

MDM- Mid Day Meals

MSP- Minimum Support Price

NABARD- National Bank for Agriculture and Rural Development

NBPGR- National Bureau of Plant Genetic Resources

NCDS- Nabakrushna Choudhury centre for Development Studies

NFSM- National Food Security Mission

NGO- Non-Governmental Organization

NIN-National Institute of Nutrition

OLM- Odisha Livelihoods Mission

OMM- Odisha Millets Mission

O TELP- Odisha Tribal Empowerment and Livelihoods Programme

OUAT- Orissa University of Agriculture and Technology

PD- Project Director

PDS- Public Distribution System

PVT- Participatory Varietal Trial

SMI- System of Millet Intensification

SSTL- State Seed Testing Laboratory

TDCCOL- Tribal Development Co-Operation Corporation of Odisha Limited

UC- Utilization Certificate

VAW- Village Agriculture Worker

WASSAN- Watershed Support Services and Activities Network

## 1. Introduction



The Odisha Millets Mission emerged from a consultative workshop on revival of millets in Southern Odisha organized by the Planning and Convergence Department, Government of Odisha in partnership with Nabakrushna Choudhury centre for Development Studies (NCDS), Bhubaneswar, Revitalizing Rainfed Agriculture (RRA) Network, Alliance for Sustainable and Holistic Agriculture (ASHA) Network and civil society groups from Odisha and other millet growing states.

The programme has not just helped farmers have access to seeds of preferred varieties and appropriate farm machinery on time to get better yields, but has also gone one step beyond to create a policy space for inclusion of Ragi and other millets in the Public Distribution System and state nutrition programmes. The procurement of Ragi by the state at Minimum Support Price has given price guarantee to farmers on millet crops for the first time in the history of the state. Thus, the programme has upheld the promise of fulfilling the following objectives originally envisaged:

1. Promoting household level Consumption
2. Setting up decentralized Processing facilities
3. Improving Productivity of Millet Crops
4. Promoting Farmer Collectives and Marketing
5. Inclusion of millets in State Nutrition Programmes and the Public Distribution System

## 2. Policy Milestones achieved



The Odisha Millets Mission crossed many hurdles to achieve the following on the policy front:

1. **Incentives for Millet Cultivation:** Odisha became the first state to declare monetary incentive to farmers for three years through Direct Benefit Transfer for adoption of improved agronomic practices for millets like System of Millet Intensification (SMI), Line Transplanting (LT), Line Sowing (LS) and intercropping.
2. **Procurement of Ragi:** In the first attempt itself, procurement of Ragi at MSP was demonstrated at scale. Tribal Development Cooperative Corporation of Odisha Limited (TDCCOL) was appointed as the State Procurement Agency and a detailed guideline for Ragi procurement was released by the Department of Agriculture and Farmers' Empowerment (DAFE). A total quantity of 17985 quintals of Ragi was procured from 6622 farmers in 8 districts of the state. A special portal- the Millet Procurement Automation System (M-PAS) was developed to register farmers for procurement of Ragi.
3. **Distribution of Ragi under PDS:** By distributing the Ragi procured during the Kharif Marketing Season 2018-19, under PDS in 7 districts of the state, Odisha became the third state to distribute millets in PDS in the country.
4. **Standardising Processing Machinery:** Odisha became the first state to develop standard specifications for the minor millet machinery through a recognised panel of experts from different scientific institutions including IMMR, OUAT, Dhan Foundation and WASSAN.

5. **Little Millet and Foxtail Millet:** Odisha became the first state in the country to complete benchmarking of prices for cultivation of little millet and foxtail millet. It is set to pave the way for procurement of these millets as well.

### 3. Recognition and Impact



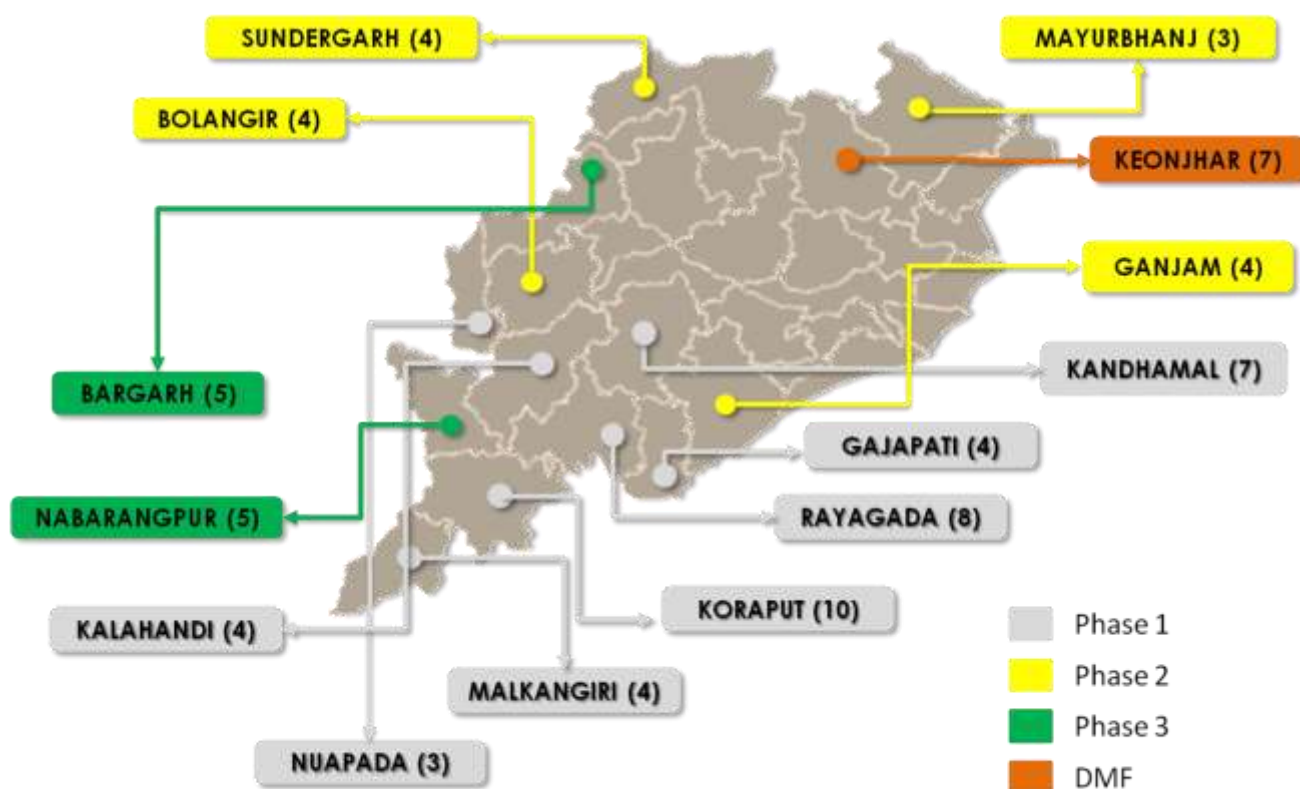
The Odisha Millets Mission has received recognition from many quarters.

1. The Government of India has asked all states to adopt Odisha Millets Mission model for promotion of millets, pulses and oilseeds.
2. The Niti Aayog, Government of India has chosen Odisha and Karnataka as two progressive models for promotion of millets and will facilitate the learnings from these states for other states.
3. The State Planning Commission of Chhattisgarh has asked the Government of Chhattisgarh to start a millet mission on the lines of “Odisha Millets Mission”.
4. The Governor of Maharashtra has asked Government of Maharashtra to explore initiating a project on millets considering the Odisha Millets Mission.
5. The Government of India has set up a task force to understand the framework of the Odisha Millets Mission and to revise the National sub mission on millets based on the learnings of the OMM.
6. Cambridge University partnered with Odisha Millets Mission to explore possibility of design of OMM as alternative to Green Revolution framework.
7. UN-IFAD and UN-FAO have supported the framework of Odisha Millets Mission as suitable for taking up agro-ecological initiatives.

## 4. Expansion to 7 new districts in 2018-19

Launched in 30 blocks of 7 districts of Southern Odisha in the Kharif of 2017-18, the programme has now been expanded to 72 blocks of 14 districts of the state<sup>1</sup>. The programme envisages reviving millets in farms and on plates of tribal communities in Odisha. It intends to promote processing and business enterprises, in addition to increasing productivity by promotion of improved agronomic practices through organic inputs. It also has a research component for assessing impacts and policy development related to millets.

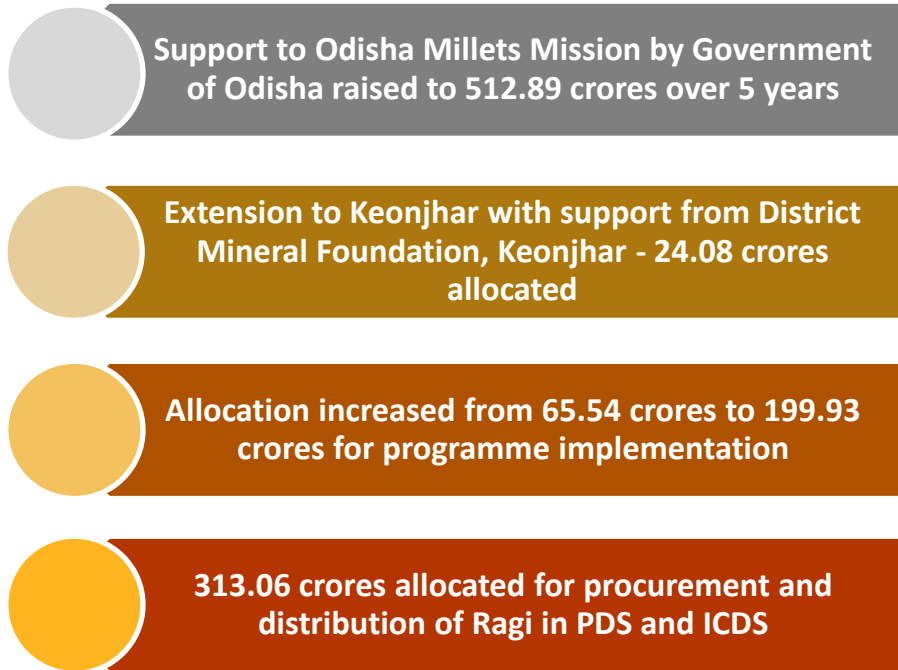
The programme was expanded to 25 new blocks in the Kharif of 2018-19 while 10 new blocks were added during the second half of 2018-19. Another 7 blocks were added in the tribal-cum-mining affected areas in Keonjhar with the support of District Mineral Foundation, Keonjhar in December 2018.



**Scale of the programme- districts and blocks in 2018-19**

<sup>1</sup> At the time of drafting this report

## 5. Budget Allocation in 2018-19



In 2018-19, the Government of Odisha took major decisions to provide incentive to millet growing farmers for three years, increase support for processing machineries, Farmer Producer Organizations and introduced newer components to promote millets in urban areas. It also took the historic decision to procure Ragi at Minimum Support Price to be distributed under PDS and ICDS.

Thus, the financial support to the Odisha Millets Mission was increased from Rs 65.54 crores to Rs. 512.89 crores. Out of this fund, Rs. 199.83 crores was allocated for project implementation and Rs 313.06 crores for procurement and distribution of Ragi in PDS and ICDS. The entire support was made from state plan for 65 blocks in 13 districts of the state.

Owing to the enthusiasm generated by the programme amongst the millet growing farmers in the first phase, the District Collector of Keonjhar, Mr. Ashish Thakre took the initiative to extend the programme to 7 blocks in Keonjhar district with financial support from District Mineral Foundation of Keonjhar. A fund of Rs. 24.08 crores was allocated for five years.

This took the total allocation for the Odisha Millets Mission by the state government agencies to 536.98 crores. This push was made consciously to revive the entire millets economy in the state with a focus on the tribal communities.

The following is a summary of the funds allocated for programme implementation:

#	Budget components approved in 2018-19 by the High Power Committee on Millets	Budget in Cr for 2017-18	Budget in Cr for 2018-19	Budget in Cr for 2019-20	Budget in Cr for 2020-21	Budget in Cr for 2021-22	Budget in Cr for 2022-23	Total in Cr
1	Approved budget allocation for 30 blocks in Rs. Cr	12.41	22.29	17.76	9.06	4.02	0.00	65.54
2	Extension of OMM to another 25 blocks in Rs Cr	0.00	10.25	18.41	14.54	7.23	2.92	53.36
3	Extension to Bargarh and Nabarangpur to another 10 blocks in Rs Cr	0.00	1.24	8.05	5.04	4.03	3.24	21.60
4	Extension of Incentive for Agronomic practices for another 2 yrs for 30 blocks	0.00	0.63	2.44	2.36	1.80	0.00	7.23
5	Extension of Incentive for Agronomic practices for another 2 yrs for 25 blocks	0.00	0.00	0.94	1.50	1.50	1.50	5.44
6	Extension of Incentive for Agronomic practices for another 2 yrs for 10 blocks	0.00	0.00	0.38	0.60	0.60	0.60	2.18
7	Additional Budget Allocation for existing components for 55 blocks in 2018-19 and 65 blocks for 2019-2023	0.00	12.77	9.93	2.00	0.70	0.70	26.11
8	Additional new components	0.00	0.52	0.84	0.68	0.68	0.60	3.32
9	Setting up of Project Management Unit	0.00	2.93	2.87	2.95	3.08	3.23	15.07
	<b>Grand Total in Rs. Cr</b>	<b>12.41</b>	<b>50.63</b>	<b>61.62</b>	<b>38.73</b>	<b>23.65</b>	<b>12.79</b>	<b>199.83</b>

*The Tribal Development Cooperative Corporation of Odisha Limited (TDCCOL) was chosen as the state procurement agency for Ragi.* TDCCOL was tasked at building an automated system for registration of farmers for procurement followed by setting up of mandi points to buy Ragi from farmers. TDCCOL was also given the responsibility to store Ragi and supply to PDS and ICDS as per requirement.

Following is a summary of funds budgeted for procurement and distribution of Ragi:

<b>Total Budget allocated for Procurement and Distribution of Ragi</b>				
Year	2018-19 in Rs Cr	2019-20 in Rs Cr	2020-21 in Rs Cr	Total in Rs Cr
TDCCOL (State Procurement Agency)	75.10	99.87	125.64	300.62
ICDS (For Ragi Laddus to pre-school children)	3.82	3.82	3.82	11.45
PDS (For Ration Card holders)	0.33	0.33	0.33	0.99
<b>Total in Rs Cr</b>	<b>79.25</b>	<b>104.02</b>	<b>129.79</b>	<b>313.06</b>

## 6. Area Coverage under improved agronomic practices

The Odisha Millets Mission has been promoting improved agronomic practices for improvement in quality and diversity of millet seeds as well as higher productivity and incomes from millets. Thus, a monetary incentive is transferred to farmers' accounts on the completion of the following practices:

- a. Application of adequate quantity of farm yard manure, compost, etc. for soil health
- b. Seed treatment as prevention from diseases and pests and to enhance purity and yield
- c. Improved agronomic practices like System of Millet Intensification (SMI), Line Transplanting (LT) and Line Sowing (LS)
- d. Use of organic preparations for disease and pest management

These practices are promoted by provision of hand-holding support by Community Resource Persons (CRPs) at the village level. Local NGOs acting as facilitating agencies monitor the work. On the successful completion of all the activities, an amount of Rs. 5000 per ha for SMI and Rs. 2500 per ha for LT and LS is provided to farmers via the Direct Benefit Transfer (DBT) route.

In 2018-19, over 29000 farmers cultivated millets on over 12000 hectares. The following is a summary:

Summary of Area Coverage under improved agronomic practices in 2018-19								
#	District	Kharif			Rabi		Total for 2018-19	
		No of Blocks	No of Farmers	Area (ha)	No of Farmers	Area (ha)	No of farmers	Area (ha)
1	Bolangir	4	1179	542.5	21	4.4	1200	546.9
2	Gajapati	4	3335	1405.6	329	91.4	3664	1497.0
3	Ganjam	4	Prog Started in Rabi		41	12.6	41	12.6
4	Kalahandi	4	2493	1095.3	5	1.2	2498	1096.5
5	Kandhamal	7	4244	1725.6	259	159.4	4503	1885.0
6	Koraput	10	6407	2659.0	145	50.8	6552	2709.8
7	Malkangiri	4	2810	1275.5	0	0.0	2810	1275.5
8	Mayurbhanj	3	416	221.2	10	3.8	426	225.0
9	Nuapada	3	1148	448.4	15	4.2	1163	452.6
10	Rayagada	8	4439	2305.4	355	173.6	4794	2479.1
11	Sundargarh	4	1405	599.9	0	0.0	1405	599.9
<b>Total</b>		<b>55</b>	<b>27876</b>	<b>12278.4</b>	<b>1180</b>	<b>501.4</b>	<b>29056</b>	<b>12779.8</b>

Although Ragi is the most popular millet crop in the state, improved agronomic practices are being promoted in other small millets as well. The following is a summary of crop wise area covered under these practices.

<b>Crop-wise Area Coverage in Kharif 2018-19</b>											
#	District	No of Blocks	No of Farmers	Ragi	Little Millet	Foxtail Millet	Sorghum	Kodo Millet	Pearl Millet	Barnyard Millet	Total
1	Bolangir	4	1179	338.4	202.1	-	-	2.0	-	-	542.5
2	Gajapati	4	3335	1,015.8	227.1	106.0	56.7	-	-	-	1,405.6
3	Kalahandi	4	2493	532.7	543.6	7.0	7.0	-	5.0	-	1,095.3
4	Kandhamal	7	4244	1,487.9	131.1	23.6	56.4	-	16.6	10.0	1,725.6
5	Koraput	10	6407	2,408.0	231.2	19.8	-	-	-	-	2,659.0
6	Malkangiri	4	2810	1,261.5	12.0	2.0	-	-	-	-	1,275.5
7	Mayurbhanj	3	416	221.2	-	-	-	-	-	-	221.2
8	Nuapada	3	1148	161.4	282.8	-	-	4.2	-	-	448.4
9	Rayagada	8	4439	1,846.0	61.4	114.4	283.6	-	-	-	2,305.4
10	Sundergarh	4	1405	599.9	-	-	-	-	-	-	599.9
<b>Total</b>			<b>27876</b>	<b>9,872.8</b>	<b>1,691.3</b>	<b>272.8</b>	<b>403.7</b>	<b>6.2</b>	<b>21.6</b>	<b>10.0</b>	<b>12,278.4</b>

The following is a summary of crop-coverage under improved agronomic practices in Rabi.

<b>Practice-wise Area Coverage under Rabi 2018-19</b>									
#	District	No of Farmers	Area in Ha.	SMI		LT		LS	
				No of Farmers	Area in Ha	No of Farmers	Area in Ha	No of Farmers	Area in Ha
1	Bolangir	21	4.40	18	3.60	3	0.80	0	-
2	Gajapati	329	91.40	145	49.40	184	42.00	0	-
3	Ganjam	41	12.56	0	-	41	12.56	0	-
4	Kalahandi	5	1.20	5	1.20	0	-	0	-
5	Kandhamal	259	159.35	67	54.10	190	103.25	2	2.00
6	Koraput	145	50.80	20	9.60	125	41.20	0	-
7	Mayurbhanj	10	3.80	-	-	10	3.80	0	-
8	Nuapada	15	4.20	15	4.20	0	-	0	-
9	Rayagada	355	173.64	257	114.44	86	55.80	12	3.40
		<b>1180</b>	<b>501.35</b>	<b>527</b>	<b>236.54</b>	<b>639</b>	<b>259.41</b>	<b>14</b>	<b>5.40</b>

The following is a cost break-up of the incentive being provided to farmers:

<b>Cost Structure of Reduced Farmer Incentive for System of Millet Intensification (Costs per ha in Rs.)</b>							
#	Unit	Unit Type	Nos.	Rate	Total in Rs		
					1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year
1	Arrangement of Seed	kgs	2.0	50	100	100	100
2	Bed Preparation	person days	2	200	400	400	200
3	Organic Manuring	person days	1	200	200	0	0
4	Watering	person days	1.5	200	300	0	0
5	Seed treatment with Beejamruta	cost			100	100	100
6	Incentive for Transplantation	person days	7.5	200	1500	1500	1500
7	Weeding @3 times	person days	5	200	1000	700	0
8	Harvesting	person days	2.5	200	500	0	0
9	Jeevamrut Preparation @3times				900	200	100
10	<b>Total per Hectare</b>				<b>5000</b>	<b>3000</b>	<b>1500</b>

<b>Cost Structure for Reduced Farmer Incentive for Line Transplanting/ Line Sowing (Costs per ha in Rs.)</b>							
#	Unit	Unit Type	Nos.	Rate	Total in Rs		
					1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year
1	Arrangement of Seed	kgs	5.0	30	150	150	150
2	Bed Preparation	person days	1	250	250	250	150
3	Watering	person days			0	0	0
4	Seed treatment with Beejamrutha	cost			100	100	100
5	Incentive for Transplantation/Sowing	person days	5	200	1000	500	300
6	Weeding @3 times	person days	4	200	800	300	100
7	Jeevamrut Preparation @3times				200	200	200
8	<b>Total per Hectare</b>				<b>2500</b>	<b>1500</b>	<b>1000</b>



From Left to Right:

1. Preparation of Handi Khat (Organic Manure) |
2. Seed Beds prepared in standard size
3. Furrow Preparation before transplanting |
4. Marking using wooden marker for SMI planting
5. Transplanting under SMI method using rope marker |
6. Weeding using cycle weeder

## 7. Crop Cutting Experiments



Crop Cutting Exercise of Little Millet in Koraput

Crop Cutting Experiments were carried out in every district to arrive at a scientifically derived valid figure of yield per ha in presence of the officials of ATMA, farmers and Facilitating Agencies. Through these crop cutting exercises, it was revealed that the average yield recorded for all crops was 13.63 quintals/ha.

The same recorded for Ragi through SMI method was 15.15 q/ha and the highest yield recorded was 36.8 q/ha. Average yield in Little Millet recorded through the Line Sowing and Line Transplanting methods was 8.58 q/ha.

Crop Cutting Experiments have become a great opportunity to infuse enthusiasm amongst farmers and for functionaries of Odisha Millets Mission to be able to scientifically assess the results of improved agronomic practices.

A summary of crop cutting experiments is presented below-

#	District	Blocks	No of CCEs	No of CCEs attended by Officials	Yield in Quintal per ha									Avg per ha for the district
					SMI			LT			Others			
					No of CCEs	Lowest Yield	Highest Yield	No of CCEs	Lowest Yield	Highest Yield	No of CCEs	Lowest Yield	Highest Yield	
1	Bolangir	4	52	52	25	6.0	20.2	10	9.0	17.6	17	3.6	9.5	11.52
2	Gajapati	4	40	40	12	11.5	30.0	20	6.0	25.0	8	6.4	9.8	15.49
3	Kalahandi	4	46	46	31	6.6	20.4	15	6.8	15.1				12.43
4	Kandhamal	7	32	29	15	5.3	19.9	12	6.0	17.2	5	4.2	8.0	10.30
5	Koraput	10	367	314	232	3.7	36.8	122	2.5	36.4	13	4.9	25.2	16.75
6	Malkangiri	3	119	117	35	6.8	22.8	83	5.4	22.7	1	6.3	6.3	13.14
7	Mayurbhanj	3	32	32	18	2.0	6.4	11	1.8	5.1	3	2.6	3.0	8.58
8	Nuapada	3	12	10	6	8.0	17.6	3	4.0	15.6	3	2.0	2.8	8.53
9	Rayagada	8	49	35	41	5.0	30.3	8	8.0	15.4				15.12
10	Sundargarh	4	135	135	47	1.8	22.4	72	1.5	22.0	16	2.0	15.4	8.15
		<b>50</b>	<b>884</b>	<b>810</b>	<b>462</b>			<b>356</b>			<b>66</b>			
<b>Average Yield for all CCEs combined</b>														<b>13.63</b>

## Summary of Crop Cutting Experiments (Practice-wise and Crop-wise)

<b>Crop Cutting Experiments 2018-19</b> <b>System of Millet Intensification</b>	
No of observations	461
Average yield per ha	15.15

<b>Crop Cutting Experiments 2018-19</b> <b>Line Transplanting</b>	
No of observations	337
Average yield per ha	12.58

<b>Crop Cutting Experiments 2018-19</b> <b>Line Sowing</b>	
No of observations	82
Average yield per ha	9.75

<b>Crop Cutting Experiments 2018-19</b> <b>Ragi (All practices)</b>	
No of observations	842
Average yield per ha	13.88

<b>Crop Cutting Experiments 2018-19</b> <b>Little Millet (All Practices)</b>	
No of observations	41
Average yield per ha	8.58

## 8. Capacity Building of Facilitating Agencies and Farmers



Two-day workshop on Mobile Application of OMM

The programme envisages a trained cadre of workers in government, voluntary organizations and community leaders and farmers for promotion of millets. Hence, various capacity building programmes have been designed to train individuals and groups that include:

- i. residential and non-residential trainings at the state, district, block and village levels
- ii. field demonstrations of improved agronomic practices
- iii. exposure visits within and outside the state for farmers
- iv. field days

The following is a summary of capacity building programmes conducted centrally by Programme Secretariat in the year:

#	Activity	Target	State	Districts	Total
1	District Level Review/Convergence Meetings /Selection Meetings	58	-	101	101
2	State Level Review/Consultations	4	22	0	22
3	Trainings/Exposure Visit/Workshops on Agronomic Practices/Pest Management	22	3	10	13
4	Trainings/Exposure Visit/Workshops on Processing/Value addition/Inclusion of millets in SNPs	11	14	6	20
5	Trainings/Exposure Visit/Workshops on Seed production/PVT/ CSC	11	2	2	4
6	Training on FA/CBO Management/Record Keeping/Accounting	15	2	5	7
7	Trainings/Exposure Visit/Workshops/Write shops on Mobile/Web Application/Documentation	16		2	2
8	Monthly Progress Report/SoE to D.A.F.P.	6		0	0
	<b>Total no of events conducted</b>	<b>143</b>	<b>43</b>	<b>126</b>	<b>169</b>

## 9. Community Managed Seed Systems



The programme envisages a revival in seed diversity of millets through its interventions. The following are two key interventions in the programme pertaining to seeds:

- i. Participatory Varietal Trials
- ii. Community Seed Centres

In the first year of the programme (2017-18), seed support was provided by procuring seeds from Government-run mixed seed farm, Semiliguda in Koraput district and farmer-to-farmer seed exchange with the help of progressive farmers. Wherever the seeds were provided to farmers, the cost for seeds was deduced from the incentive that the farmer received. In the first year, many farmers used their own seed saved from previous years. Under the programme, farmers are free to use their own seed, saved over generations for multiple purposes and qualities, and not just the yield. In 2018-19, the second year of the programme, Participatory Varietal Trials were undertaken to identify farmer preferred varieties suited to the agro-ecological situation of the area.

### **Participatory Varietal Trials (PVTs)**

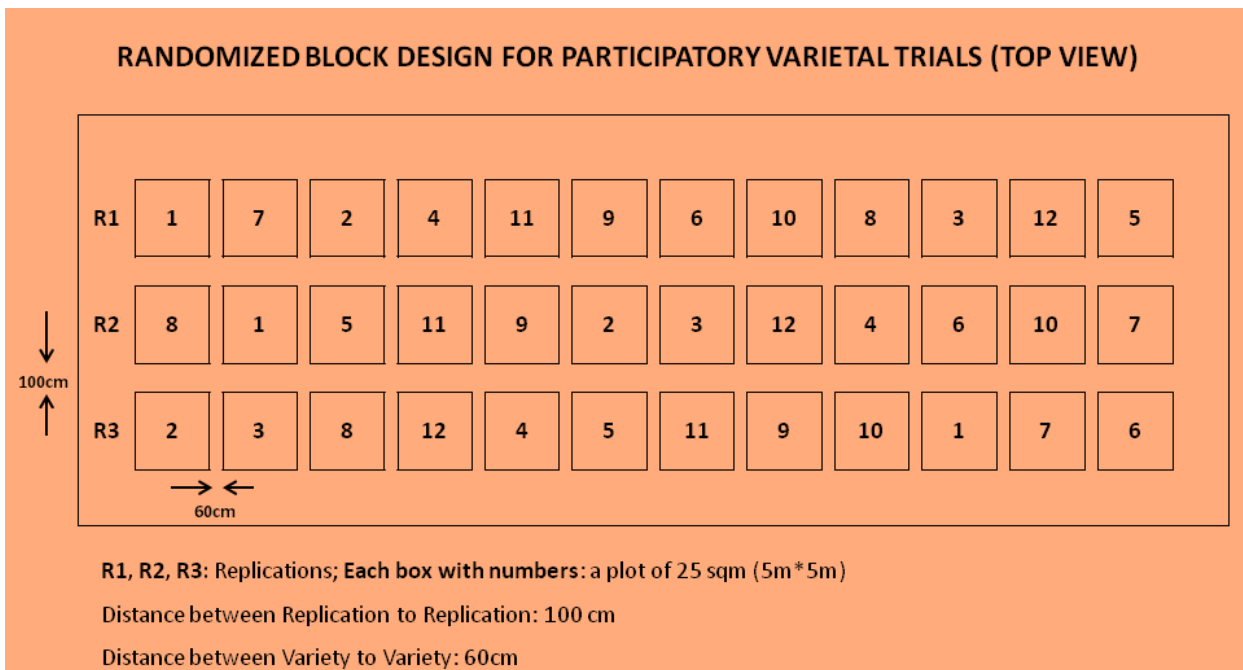
Typically, plant breeders develop varieties isolated from active farmers and release varieties that are most productive under ideal conditions; often they are not suitable for marginal farm conditions. Therefore, PVTs facilitate development of varieties suitable for marginal soils and farmers' interests. In the experience in Odisha Millets Mission as well,

traditional farmer-saved varieties have been performing better than improved varieties. Incidence of blast has also been higher in the improved varieties.

Participatory Varietal Trial (PVT) is a simple way for breeders and agronomists to learn which varieties perform well in on-farm conditions and are preferred by farmers. The trial is to identify preferred varieties in three phases: identifying farmers’ needs; searching for suitable material to test with farmers; and experimentation on farmers’ fields. Once identified, the seed of farmer-preferred varieties or land races are taken up for mass production. Introducing PVTs into a variety development programme can increase the chances that its varieties will be well adopted.

### How the trials were done

1. Seeds of local landraces were collected from farmers within the block or district and those of checked varieties collected from department of Agriculture Government of Odisha.
2. The Facilitating Agencies and progressive farmers were trained on the advantages and methodology of Participatory Varietal Trials.
3. The FAs selected interested progressive farmers for these trials with the help of Community Resource Persons (CRPs) placed at the Cluster level.
4. Participatory Varietal Trials were undertaken with Randomized Block Design (RBD) method. 10 to 11 local or traditional landraces along with 1 or 2 government-released improved varieties were grown with 3 replications of each variety.
5. Each replication was divided into 12 equal parts. The minimum size of a plot / variety / replication was 25sqm (5m\*5m). Please the diagram below for better understanding.



***All these trials were conducted on farmers’ fields.***

6. 21 to 25-day seedlings sown on raised beds were uprooted and planted in rows of 20cm x 10cm.
7. Distance between replication to replication was kept 100cm and variety to variety in the replication was 60cm.
8. During physiological maturity stage, the plots were treated with 5ql good dried FYM as basal dose and were ploughed thoroughly.
9. Equal amount of Jibamruta was applied to each plot after 1<sup>st</sup> weeding (15days after DAT) and after 30days & 45days of DAT.
10. Protective irrigation was applied during the flowering period.
11. The District and Block coordinators regularly visited the PVT plots and kept records of date of sowing, planting, weeding and flowering.



## Process of varietal selection by farmers

1. The names of the varieties were decoded from all the replications and numerical numbers were put for each variety.
2. Male and female farmers (20-60yrs) were invited from a cluster of villages to the PVT plots. The purpose of their visit was explained to them.
3. Three tags in different colors were prepared:
  - a. Best variety: Green
  - b. Good: Blue
  - c. Poor: Red
4. The participants were divided into the following groups:
  - a. Only Male group (5-10 members)
  - b. Only Female group (5-10 members)
  - c. Mixed Group (5 Male & 5 Female members)
  - d. Youth female (5-10 members)
  - e. Youth Male (5-10 members)
  - f. Mixed Youth (5 Female & 5 Male members)
5. The groups visited the PVT plots with tags and put on the tags as best, good and poor after discussion amongst themselves.
6. The CRPs collected the information on the following aspects:
  - a. Why the group ranked some varieties as best or good or poor?
  - b. What were the characters of selected varieties? (Yield, taste, tillers, fingers, pest, drought, cultural, grain size and others)
  - c. Any other information the group wanted to give.
7. The researchers collected both visual characters from the varieties from each replication and scored it as per some set parameters and collected quantitative characters from 10 plants / plot / variety / replication and compiled it.
8. This information was compiled and the best varieties were selected for large scale seed production in the Kharif of 2019-20.

The PVT was successfully conducted in 17 blocks of 6 districts. A total of 185 varieties were tried. The following is a summary of seed varieties and land races found suitable in different blocks:

**Final selection of varieties from PVT exercise 2018- 19 for quality seed production in 2019-20 Kharif**

District	Block	Facilitating Agency	Best performing varieties
Rayagada	Gunupur	Asha	Sana Mandia Bada Mandia
Rayagada	Rayagada	OPDSC	Kurkuti Mandia Telugu Mandia
Kalahandi	Narla	SVA	Lalsaru Mandia F - 28
Koraput	Semiliguda	Dhan foundation	Kerenga Mandia GPU - 67
Koraput	Nandapur	Pragati	MR - I Bada Mandia
Koraput	Kundra	MSSRF	Bati Mandia Chilika Mandia
Koraput	Boipariguda	CYSD	Kempu Mandia Dhala Bagada
Koraput	Boriguma	Harsha trust	Sri Chaitanya GPU - 48
Koraput	Lamtapat	PRADAN	Budel Mandia Mami Mandia
Gajapati	Mohana	SACAL	Kantamara Chilika
Nuapada	Sinapalli	SVA	Pankakhai Mandia Bada Mandia
Nuapada	Komna - i	Ahinsha club	Bada Mandia (Haladia) Bhoda Mandia

### Community Seed Centers

In order to enhance the availability of good quality seeds of diverse varieties on time locally, community seed centres were set up in every block. Community Seed Centers are managed by Community Based Organizations (CBOs) with support from the Odisha Millets Mission. The CSCs are supported with infrastructure for maintaining quality seeds viz. storage bins, tarpaulin sheets, weighing machines and moisture meters. They are also provided with a fund for taking a storage space on rent and a working capital for purchasing seeds or managing the operational costs for having buy-back arrangements.

## 10. Procurement of Ragi at Minimum Support Price

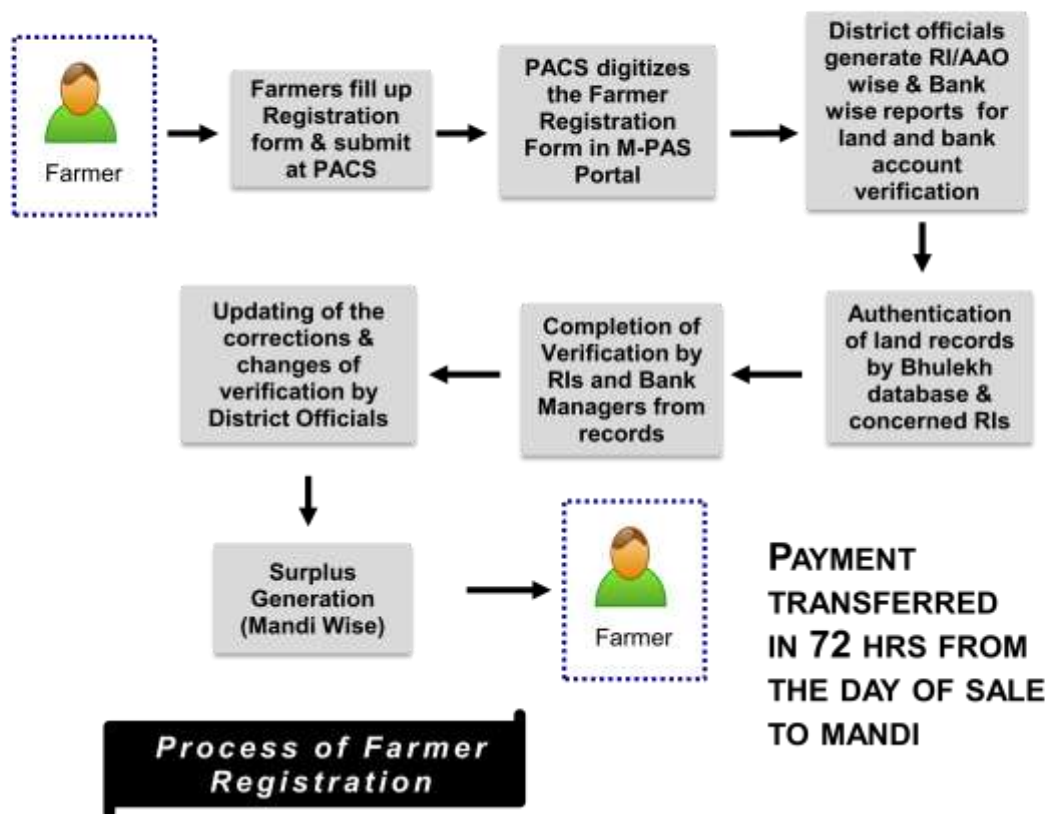


- Tribal Development Cooperation Corporation of Odisha Limited (TDCCOL) selected as the State Procurement Agency
- Millet Procurement Automation System (MPAS) developed on the lines of Paddy procurement to ease farmer registration and operations
- Ragi procured at Minimum Support Price of Rs. 2897/quintal
- Over 25000 farmers registered for procurement of Ragi
- A total volume of 17985 quintals of Ragi procured in 2018-19 from 8 districts

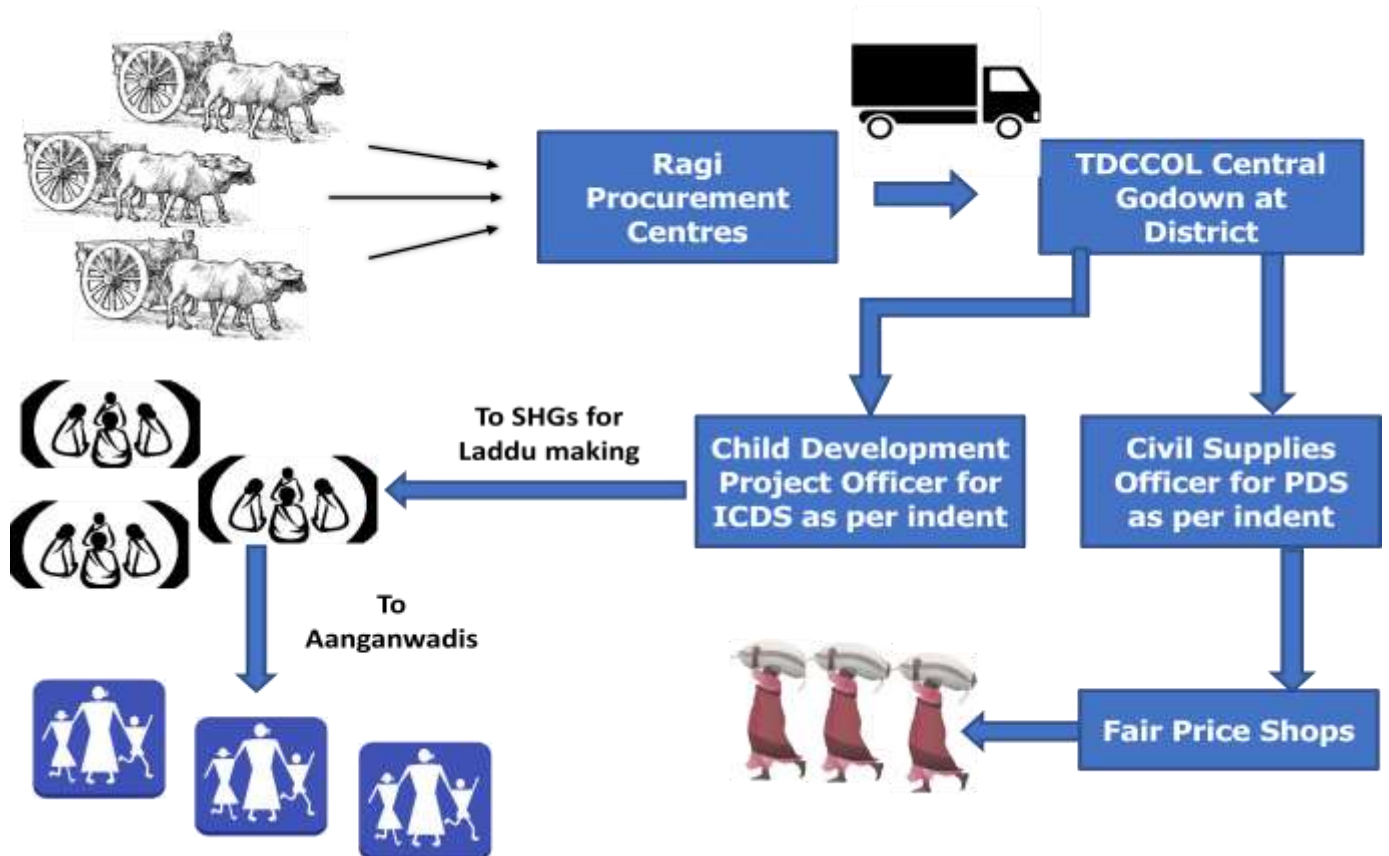


Farmer at Procurement Centre in Nuagaon block in Sundargarh district

## MILLET – PROCUREMENT AUTOMATION SYSTEM (M-PAS)



## FLOW-CHART FOR RAGI PROCUREMENT & DISTRIBUTION





### PROCUREMENT OF RAGI IN KHARIF MARKETING SEASON 2018-19

Name of the District	Number of Societies	Societies procured from	Quantity Procured	No. of Farmers sold Ragi	Total farmer registration	Place of Storage
Gajapati	4	4	671.77	847	3010	TDCCOL, R Udaygiri CG
Kalahandi	11	9	920.29	684	2435	CWC Junagarh
Kandhamal	12	10	1365.02	1169	3759	TDCCOL Balliguda, CG
Koraput	18	16	8904.69	1663	8256	TDCCOL Jeypore: 6155.53 qtl TDCCOL Sunabeda: 2749.16 qtl
Malkangiri	4	4	1793.54	794	3166	Korukonda RMC
Nuapada	23	11	247.25	305	2396	RMC Godown, Khariar Road
Raygada	10	10	3589.78	814	2941	TDCCOL Godown, Raygada
Sundergarh	4	4	493.44	346	532	Badgaon Godown, AGR Dept
<b>TOTAL</b>	<b>86</b>	<b>68</b>	<b>17985.78</b>	<b>6622</b>	<b>26495</b>	

## 11. Increasing household consumption of millets



Generally agriculture programmes have yield or productivity as the central objective. The Odisha Millets Mission is a unique with household consumption as its central objective. Giving millets visibility and acceptance in public food culture is being actively promoted. The programme has funded components on awareness campaigns for household consumption of millets, organizing millet food festivals, establishing small eateries and inclusion of millets under ICDS and PDS. While Facilitating Agencies are organizing consumption related events at the block and GP level, the Programme Secretariat has been tasked with doing so at the state level in Bhubaneswar and other major cities of the state. These events are receiving overwhelming response. People from the older generations are appreciating the encouragement of millets while younger people are learning about nutritious values of millets through these events. The following is a list of recipes that have been served on these occasions:

Millet Recipes prepared and served at different events	
Name of Millet Grain	Recipes Made
Ragi	Biscuits, Wada, Idli, Laddu, Cake, Muffin, Pakudi, Pyaaji, Beguni, Mixture, Murukku, Soup, Tea
Suan (Little Millet)	Biscuits, Curd Rice, Vegetable Rice, Upma, Kheer, Halwa, Wada, Idli, Laddu, Cake, Muffin, Mixture, Murukku
Kangu (Foxtail Millet)	Biscuits, Curd rice, Vegetable Rice, Upma, Kheer, Halwa, Wada, Idli, Laddu, Cake, Muffin, Mixture, Murukku
Jowar	Jowar Pop, Wada, Idli, Laddu, Cake, Muffin, Biscuits, Mixture, Murukku
Kodo	Biscuits, Vegetable Rice, Upma, Kheer, Halwa, Wada, Idli, Laddu, Cake, Muffin, Mixture, Murukku
Mixed Millets	Biscuits, Laddu, Veg Rice, Pulao, Mixture

Full recipes for the above are available on the website of Odisha Millets Mission at the following address: <http://www.milletsodisha.com/recipe>

## 12. Popularizing millets in urban areas

### Urban Internship on popularizing millets



Due to lifestyle changes over the years, related disorders have engulfed the urban population of our country. Diabetes and heart disease are more common than ever before. The Odisha Millets Mission aims to increase consumption of millets in urban areas, thus taking urban people to a more healthy food culture while also creating demand for millets being produced by farmers in the state.

A summer internship was organized by the State Programme Secretariat (NCDS and WASSAN) with the support of the Department of Agriculture in this regard. Millet food stalls were set up and managed by student interns in 26 different locations in Bhubaneswar.

These stalls received very good response with widespread demands for government run eateries and millet grain stores, where good quality millet grains and products could be made available on affordable prices.

In addition to these stalls, recipe training events were conducted, and food and exhibition stalls were set up during the International Hockey World Cup 2018, Krushi Odisha, Adivasi Mela, Damana Food Festival in 2018 and 2019.

## Participation at the International Hockey World Cup



As part of its objective to popularize millets in urban areas, the Odisha Millets Mission collaborated with the Trishakti Federation of SHGs promoted by Mission Shakti and a millets-based food stall called "Mandia Café" was put up at the Fan Village inside Kalinga Stadium during the International Hockey World Cup 2018. The members of the federation managed the café and interacted with visitors. The women had been trained and technically supported by State Programme Secretariat hosted by Nabakrushna Choudhury centre for Development Studies (NCDS), Bhubaneswar.

Packaged and bakery products like biscuits, laddoos, muffins and fresh hot-cooked recipes like salad, sandwiches, vada, biryani and kheer were served to audiences and other attendees. Encouraging response was received, especially by families who were looking for healthier options while not compromising on taste.

Through Mandia Café, we didn't just provide people with healthy and tasty food but also communicated the nutritional benefits of millets. Having experienced millet recipes, people didn't just eat at the café but also took back biscuits, laddoos and other recipes for their family and friends.

The initiative got good media coverage and gave the members of Trishakti skills and opportunity to initiate millet-based enterprises.

## Visit of Chairperson, 15<sup>th</sup> Finance Commission, Government of India to Odisha



In January 2019, during visit of the Chairperson of the 15th Finance Commission, Mr. N. K. Singh along with other officers and his family, different delicacies of millets were served. This was done at the request of the Finance Department, which was tasked to host the Chairman during the visit.

Ragi laddus, Ragi Murukku and three varieties of Ragi Cookies were placed in the goodie-bag prepared for the team. The Programme Secretariat also set up a small exhibition stall at Mayfair Convention to display the initiatives being taken in the state for promotion of millets. The chairperson was very happy to see the scale and scope of the programme presented through the stall and suggested to the Secretaries of Agriculture and Finance department in Odisha that millets must be aggressively promoted in the state.

Mr. Ramesh Chand, Member, NITI Ayog who was also part of the visiting team visited the Millets Mission stall as well and appreciated the efforts being taken under the programme. It was a unique occasion where forgotten millets found space in showcasing Odisha and the efforts to preserve the state's cultural diversity.

## Millets Stall at Krushi Bhawan Inauguration



The new building of Krushi Bhawan in Bhubaneswar was inaugurated on 20<sup>th</sup> September 2018. The Hon'ble Chief Minister of Odisha graced the occasion with his august presence. On this occasion, Millets Rangoli was made at the centre of the exhibition hall and an exhibition stall to demonstrate millets and millets products was set up. Millet food items were distributed to farmers and other visitors.

Through such attempts, we are trying to make millets a part of public culture and especially during celebrations and festivals.

## Participation at International Trade Fair, Organic and Millets at Bangalore



The International Trade Fair on Organic and Millets was organized in Bangalore from 18<sup>th</sup> to 20<sup>th</sup> January 2018 by the Government of Karnataka to showcase the potential and opportunities existing in organic products and millets. The emphasis was to create market linkage between the producers and marketers with the ultimate aim of significantly improving farmers' income from organic farming and from growing millets in less-endowed

regions with less irrigation and without any chemical inputs. A two-member team from the Programme Secretariat participated in the event and set a display stall for showcasing the initiatives undertaken by the Government of Odisha for promoting millets. Millet grains and millet-based value-added products were also displayed for the public.

### Food Festival in Keonjhar



A one-day millet food festival cum consultation was conducted by the Programme Secretariat with DMF, Keonjhar on 14<sup>th</sup> August 2018. Department officials from Agriculture, Education and WCD departments, women from 10 selected Anganwadis & children from 10 schools, one welfare hostel, mothers, children, students, village heads, mothers' committee's members, school management committee members attended the programme. Different millet items were served to the participants in the events and its nutritional aspects were shared with them. A focused group discussion was also held to get feedback from the participants as well as from the Department officials, Mothers, Children, Students and PRI representatives to understand their preferences.

The District Collector, Keonjhar was the chief guest for the occasion. He assured the gathering that the administration in Keonjhar shall support millet farming and inclusion in nutrition programmes through DMF in the interest of the tribal communities in the district.

## Millet Food Stalls at Krishi Mela and Adivasi Mela



These gatherings receive a large footfall every year. The Programme Secretariat had set up recipe stalls where millet recipes were sold at nominal rates for promotion. Exceptional demand was experienced and the stalls went out of recipe stock in the first 3 hours of setting up. The Programme Secretariat received numerous requests from the visitors for a permanent stall in Bhubaneswar and Cuttack for millet food items and millet grains.

Exhibition stalls were also set up to educate people on different types of millets, their nutritive values, benefits of cultivating and consuming millets and the initiatives taken by the Government of Odisha to promote millets in the state.



## Making Millet Products available in Bhubaneswar

Due to the long standing demand of visitors in OMM stalls, the Programme Secretariat worked with Chappan Bhog, a popular sweets and food outlet in Bhubaneswar, and Suprava Bakery, a supplier of bakery products across the city, to make millet products available on a regular basis for people. Suprava Bakery has been producing biscuits and muffins while Chappan Bhog has been producing Ragi bread, biscuits, rusk, muffins, idlis, malpua, jalebi and many other items out of Ragi. With facilitation from the SPMU of OMM, Chappan Bhog also invested in taking training and technological assistance from the Central Food Technology Research Institute (CFTRI), Mysore. They have also been producing Jowar bread and biscuits since.

More such entrepreneurs will be encouraged for promotion of millets in urban areas in the time to come.

### 13. Improving Processing of millets

The programme envisages setting up processing units for de-stoning, de-hulling and pulverization in every block to ease the labour constraints in millet processing, as this drudgery on women to perform these tasks on a daily basis manually for small quantities has been a discouraging factor in millet cultivation.

Technical specifications for machinery were finalized with a committee in which the following officers and organizations were members: Director, Agriculture and Food Production, Chief Engineer, Department of Agriculture & Farmers' Empowerment, Representative from College of Agriculture Engineering and Technology, OUAT, Indian Institute of Millets Research (IIMR), Hyderabad, Dhan Foundation and WASSAN.

Tender process for selection of manufactures is ongoing for the following machines:

- Ragi Thresher-cum-Pearler
- Ragi Pre-Cleaning Unit (Cleaner-cum-Grader with matching separate Destoner)
- Ragi Pre-Cleaning Unit (Cleaner-cum-Grader-cum-Destoner)

## 14. Support to Community Institutions and building FPOs

- One of the core objectives of the Odisha millets mission (OMM) is to ensure better marketing of the millets. In this regard, OMM has embarked on the formation of farmer producer organizations (FPOs) which can act as localized institutions for aggregation and primary value addition. More importantly, the programme supports these institutions to develop as service centres for key services for millet cultivation, processing, small entrepreneurship and marketing.
- These FPO's are expected to be a platform for small and marginal millet farmers to collectively sell processed grains and value-added products of millets. They are also expected to anchor community institutions envisaged in the programme viz. Millet Processing Unit, Community Managed Seed System and Custom-Hiring Centre. Thus, in addition to the revenue from collective sale of millet grains, the FPO shall earn its revenue from:
  1. Supply of products to farmers like
    - a. locally produced or sourced seeds of preferred varieties of different millet crops
    - b. bio-manures and bio-pesticides
    - c. processed grains and value-added products
  2. Provision of services to farmers like
    - a. primary processing of millet grains: threshing, de-stoning, de-husking and pulverization (Managing Processing Units)
    - b. farm implements on hiring basis: Weeders, markers, power-sprayers, tarpaulin sheets, electronic weighing machines (Managing Custom Hiring Centres)
    - c. Storage of seeds (through Community Seed Centres) and other value-added products
  3. Opening up of millet-based eateries or outlets in small towns (Managing Millet Enterprises)
  4. Facilitating procurement of Ragi by providing services to farmers for FAQ maintenance
- Further, the FPOs may also benefit farmers by:
  1. Availing work guaranteed under MGNREGA
  2. Opening up of bank accounts of farmers and linking those accounts to a Direct Benefit Transfer (DBT)-ID.
  3. Availing life insurance, health insurance and crop insurance for farmers from various Government schemes
  4. Availing benefits of agriculture and other department schemes/ programmes

- As per the programme guidelines of Odisha Millets Mission, the nodal CBO in every block will take the form of a Farmer's Producer Organization- which is a representative organization of farmers meant to them provide services and help them negotiate with market agencies for better price realization on their produce through organized efforts. Legally, the FPO could be a Cooperative Society (State Cooperatives act or MACS act or Multi-State Cooperative Act), a Producer Company (Section 581 C of Companies Act) or a Private Limited Company.
- *The choice of registration lies with the facilitating agency that is providing hand-holding support to the nodal CBO considering the institutional and financial health of the CBO.*
- A special FPO strategy document has been developed for strengthening the FPOs through multiple consultations with support of Mr. Shirish Joshi, Consultant, Programme Secretariat (WASSAN). One of the key insights that emerged from the consultations is that in order to be viable, FPOs should take up few more agricultural commodities in addition to millets for reaching economies of scale.
- A preliminary exercise has been initiated through state level, district level and block level training workshops to identify list of millets, their by-products and other agriculture commodities in programme block for initiation of work. A business plan template has also been developed for the same.
- Support for Registration of FPOs, office running cost and honorarium for a Chief Executive Officer for FPOs have also been made to bolster the cooperative spirit in achieving a revival of the millets economy.



## 15. Custom Hiring Centers



CBOs are being supported with costs for rent for a storage space and agriculture equipment to be used on sharing basis. These centres are being managed by Community Based Organizations who maintain inventory and records for the same. A nominal user charge is collected for ensuring sustainability. The following is a gist of the equipment stocked with the Custom Hiring Centers:

Sr. No	District	Blocks	No of Cycle-Weeders in stock	No of Sprayers in stock	No of Pump-sets in stock	No of markers in stock	No of drums in stock	No of Sieves in stock	No of rose cans in stock	No of small sieves in stock	No of winnowers in stock	No of multi-threshers in stock	No. of Water Delivery Pipes in Stock
1	Bolangir	4	160	0	0	0	0	0	0	0	0	0	0
2	Gajapati	4	218	29	8	28	40	7	30	30	0	0	0
3	Kalahandi	4	243	5	5	34	0	0	5	0	5	0	0
4	Kandhamal	7	151	0	3	0	0	0	0	0	0	0	0
5	Keonjhar	7	126	0	0	0	0	0	0	0	0	0	0
6	Koraput	10	84	7	7	7	0	0	0	0	0	7	0
7	Malkangiri	4	200	72	14	70	0	16	0	0	10	0	10
8	Mayurbhanj	3	180	6	0	0	0	0	0	0	0	0	0
9	Nuapada	3	120	0	1	35	15	0	0	0	0	0	0
10	Rayagada	8	304	8	12	150	30	0	0	0	0	0	4
11	Sundargarh	4	100	0	4	0	0	0	0	0	0	0	0
<b>Total</b>		<b>58</b>	<b>2061</b>	<b>127</b>	<b>54</b>	<b>324</b>	<b>85</b>	<b>23</b>	<b>35</b>	<b>30</b>	<b>15</b>	<b>7</b>	<b>14</b>

## 16. Partnership with IIMR at Make in Odisha

In order to strengthen the capacities of different stake holders in Odisha Millet Mission, collaboration was explored with the Indian Institute of Millets Research (IIMR), Hyderabad. After multiple rounds of consultation, a Memorandum of Understanding was signed between IIMR, Hyderabad, Director of Agriculture and Food Production (O), WASSAN and NCDS during the Make in Odisha Conclave 2018 in the august presence of the Hon'ble Chief Minister, Shri Naveen Patnaik.

The following are major areas of collaboration with IIMR:

1. Technical capacities of Odisha Millets Mission functionaries
2. Enhancement of the Pool of varieties and landraces suited to OMM areas
3. Support to millet entrepreneurs
4. Nutritional analysis of millet varieties and landraces



Centre: Hon'ble Chief Minister of Odisha Shri Naveen Patnaik  
L from centre: Dr. Vilas Tonapi, Director, IIMR  
R from centre: Dr. M Muthukumar IAS, Director, A&FP (O),  
Director, NCDS  
and State Coordinator, WASSAN

## 17. Research



Nabakrushna Choudhury centre for Development Studies (NCDS), Bhubaneswar, in addition to being the State Secretariat also anchors the Research Secretariat for Odisha Millets Mission and is coordinating collaborations with various stakeholders to ensure smooth implementation of the programme and to develop relevant insights towards the Mission.

Research Secretariat is responsible for developing Baseline Indicators, Mid Term Evaluation, End line assessment, Impact Assessment and for policy development on millets. It works on actionable research related to Millets Policy Development in the state (markets, production, inclusion in state nutrition programmes, PDS etc.) with the Directorate of Agriculture and Food Production.

The following are the highlights of the Research Secretariat's work in 2018-19:

1. It has forged a research collaboration with University of Cambridge as part of TIGR2ESS (Transforming India's Green Revolution by Research to Empower Sustainable Food Supplies) and as part of this it Director, also a co-investigator of TIGR2ESS has visited Cambridge in November 2018 and scholars associated with TIGR2ESS have also visited Odisha including to field areas of Odisha Millets Mission. Together, we are exploring research possibilities through nutritional interventions at the All Indian Institute of Medical Sciences (AIIMS). A team of scholars from NCDS will also be visiting International Crop Research Institute for the Semi-Arid Tropics for training and to explore additional research possibilities.

2. In May and June 2018, a Summer Internship programme was organized by NCDS involving youth from Odisha and outside. The interns were divided into two groups: rural and urban. While the rural interns were tasked with conducting baseline surveys, the urban interns set up millet stalls in 26 locations across the city.
3. NCDS also conducted a survey on the benchmark pricing for Suan (Little Millet) and Kangu (Foxtail Millet) with field support from the Programme Secretariat. This is expected to pave the way for arriving at a Minimum Support Price for these crops and design for inclusion in state nutrition programmes.
4. As an effort to course correct the implementation of the programme, the NCDS came out with policy briefs on specific issues of concern like FAQ on transfer of funds, Procurement of Ragi, etc. The policy briefs can be accessed at: <http://ncds.nic.in/?q=policy-briefs>
5. An interactive space for learning was set up inside the NCDS campus where multiple varieties of millets were cultivated along with vegetables for researchers, visitors and farmers visiting Bhubaneswar for various training programmes.



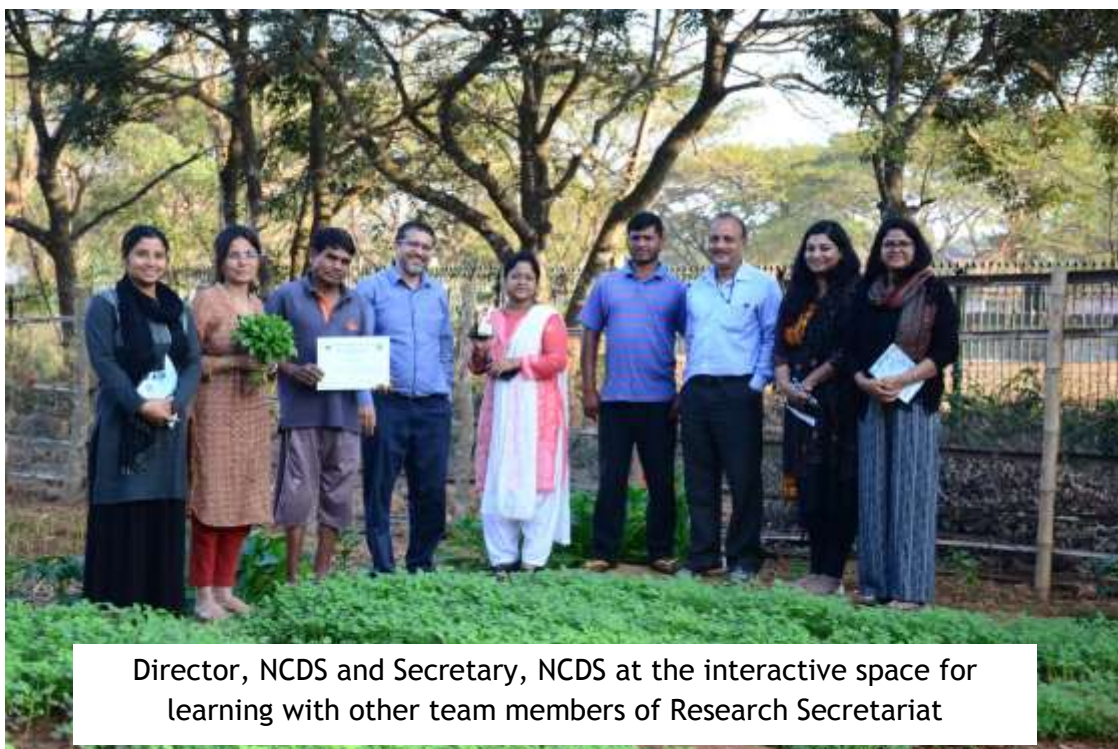
Director, NCDS interacting with trainees from Mission Shakti



SHG members from Mission Shakti being trained at NCDS campus

### Interactive Space for Learning at NCDS

- 10000 sq.ft. of space in NCDS backyard turned into organic farmland
- 22 varieties of green vegetables cultivated and sold to staff to meet labour costs
- 22 indigenous varieties of millets being cultivated using standard SMI and Varietal trial methods
- Organic manures and compost being prepared and used under the guidance of agriculture experts
- Received 2<sup>nd</sup> prize in Kitchen Garden competition in Bhubaneswar



Director, NCDS and Secretary, NCDS at the interactive space for learning with other team members of Research Secretariat

## 18. Future Plans



The programme envisages the following in the upcoming year:

- Scaling up of activities to other rainfed districts.
- Collaborating with Start-up Odisha: Developing small enterprises on millets in Bhubaneswar and other cities.
- Expansion of urban campaign on millet consumption to other cities of Odisha.
- Developing value chain of millets: Front end and Back end support to millet growers and entrepreneurs.
- Setting up permanent stall of millet-based value-added products in Bhubaneswar.
- Building networks among hotels in Bhubaneswar to introduce millet-based recipes.
- Pilot on addressing nutritional needs of migrant workers/ slums in Bhubaneswar through millet consumption.

## 15. Financial Achievement

<b>District wise Financial Achievement for the FY 2018-19 under OMM</b> ( as per data available from SOE uploaded by FAs and ATMA)					
<b>#</b>	<b>District</b>	<b>Total No of Blocks</b>	<b>Budget</b>	<b>Released</b>	<b>Expenditure</b>
<b>1</b>	Bolangir	4	240.20	26.56	39.40
<b>2</b>	Gajapati	4	372.46	155.20	121.40
<b>3</b>	Kalahandi	4	372.46	106.10	35.60
<b>4</b>	Kandhmal	7	552.61	83.29	94.29
<b>5</b>	Koraput	10	830.45	164.52	85.40
<b>6</b>	Malkangiri	4	372.46	112.16	86.83
<b>7</b>	Mayurbhanj	3	177.53	28.59	28.44
<b>8</b>	Nuapada	3	279.34	75.68	51.27
<b>9</b>	Rayagada	8	612.66	182.49	52.31
<b>10</b>	Sundergarh	4	240.20	36.28	27.32
<b>Total</b>		<b>51</b>	<b>4,050.35</b>	<b>970.87</b>	<b>622.26</b>





**State Secretariat (NCDS and WASSAN)**

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