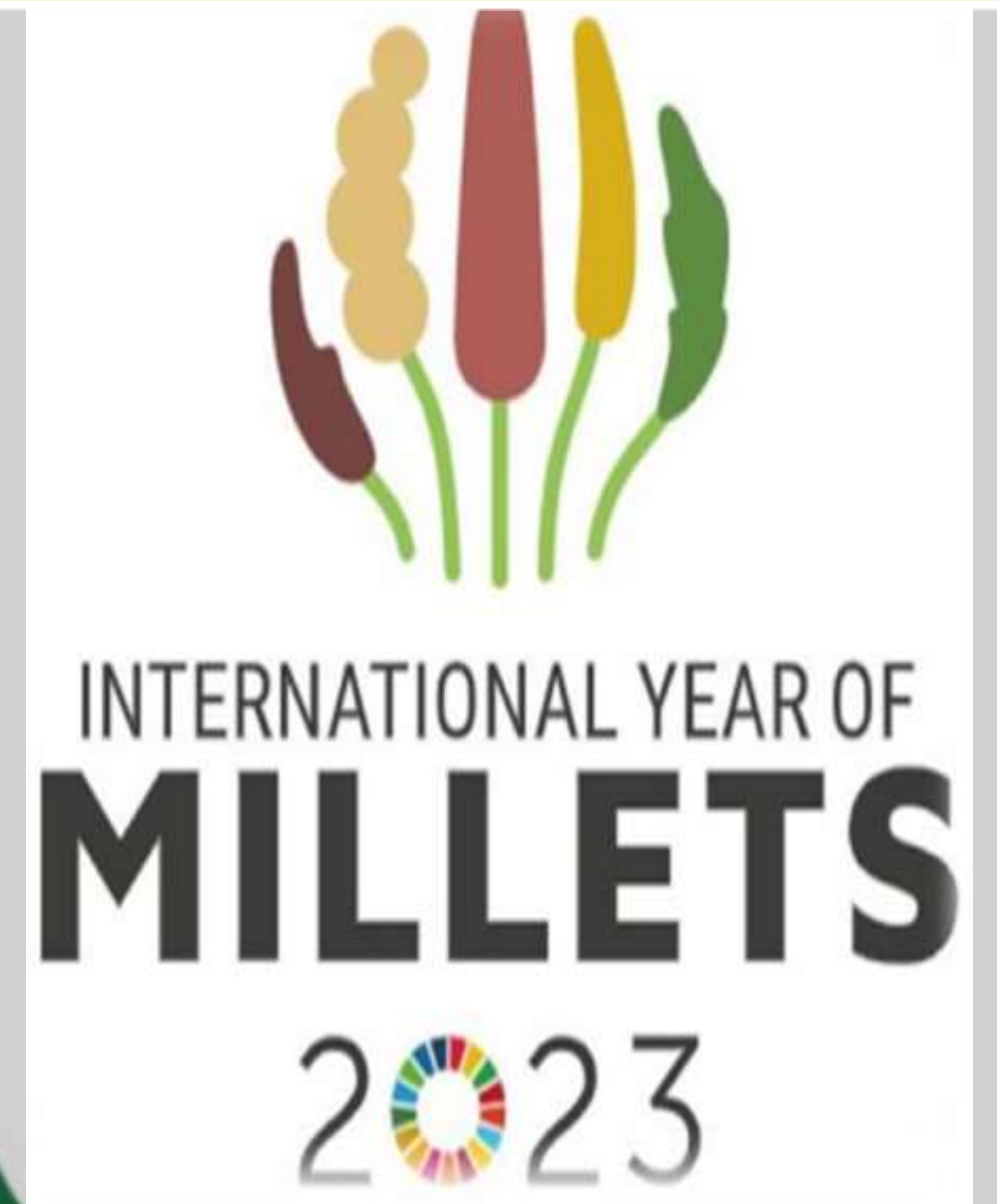
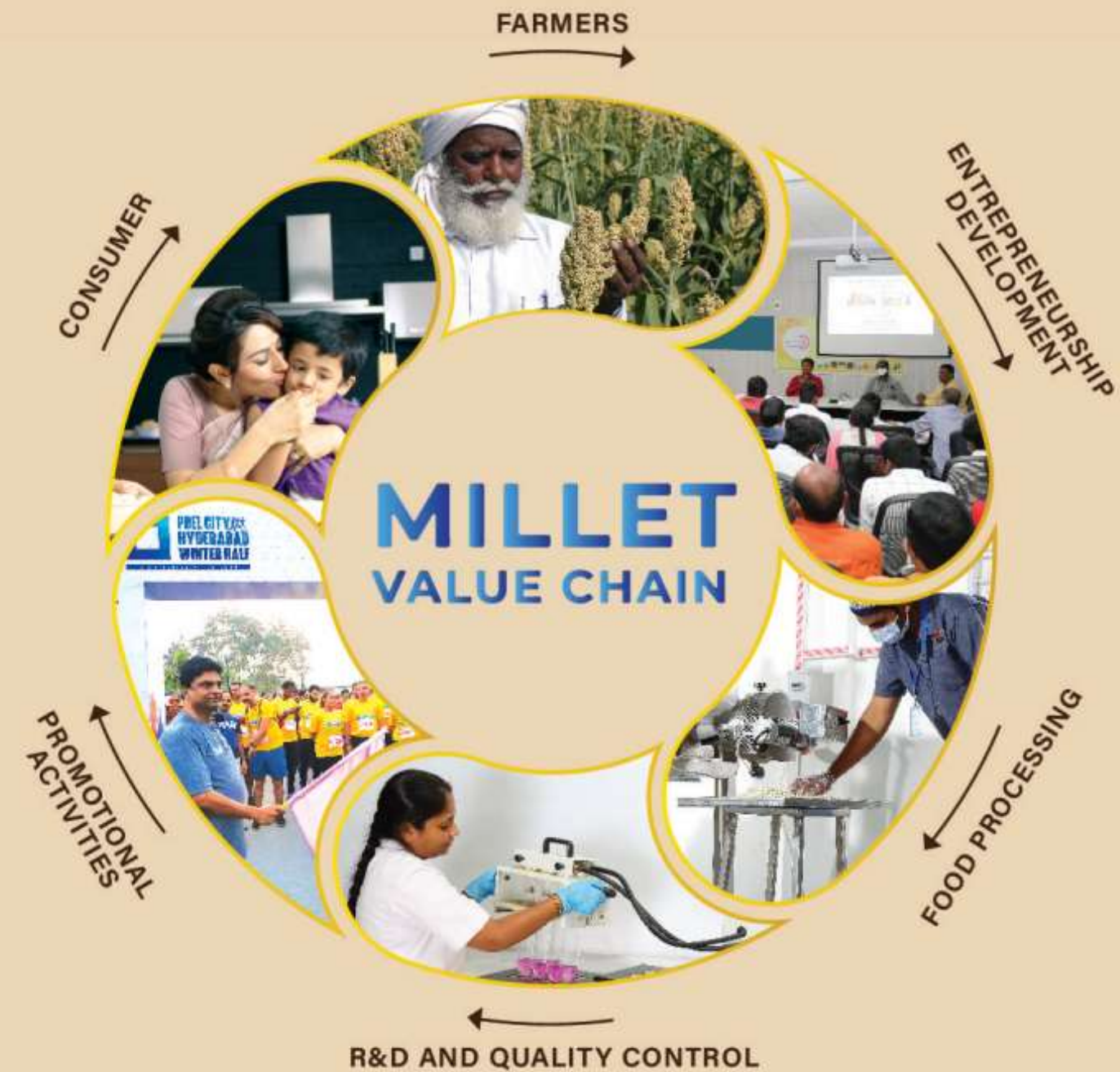


ASSAM MILLETS MISSION



2 Years Overview and Way Forward

10th September 2024



FINGER MILLET



LITTLE MILLET



PROSO MILLET



KODO MILLET



FOXTAIL MILLET



BARNYARD MILLET



SORGHUM



PEARL MILLET



BROWNTOP MILLET

MILLETS

**SMALL
GRAINED**

**HIGHLY
VARIED**

**FOOD &
FODDER
CROPS**

WHAT ARE MILLETS

- **EARLIER CATEGORIZED AS COARSE GRAINS**
- SMALL-GRAINED STAPLE CEREAL CROPS
- HIGHLY VARIED FOOD & FODDER CROPS
- NUTRIENT-DENSE & HEALTH FOOD
- HEART-FRIENDLY AND DIABETES FRIENDLY
- LOW GLYCEMIC INDEX & GLUTEN FREE

- **LAST FEW YEARS TERMED AS NUTRI-CEREALS**

- CLIMATE RESILIENT & HIGH TOLERANCES
- LOW WATER REQUIRING & LOW SOIL FERTILITY

IN INDIA NOW KNOWN AS 'SRI ANNA'

"THE BEST AMONG ALL THE FOOD GRAINS,"

CLASSIFICATION

MAJOR MILLETS

1. SORGHUM (Jowar)
2. PEARL MILLET (Bajra)

MINOR MILLETS

1. FINGER MILLET (Maruadhan)
2. FOXTAIL MILLET (Kaunidhan)
3. PROSO MILLET (Cheena Bajra)
4. KODO MILLET (Kodo)
5. BARNYARD MILLET (Sawan)
6. LITTLE MILLET (Kutki)

IYoM-AMM: AN OPPORTUNITY

Considering that Year 2023 is the International Year of Millets (IYoM), it is an opportune time to bring awareness about these **‘SUSTAINABLE FUTURE CROPS’** by identifying potential **MILLET CLUSTERS**, make investments in **MILLET VALUE CHAIN** and improve **NUTRITIONAL outcomes** through focusing on

LOCAL PRODUCTION and LOCAL CONSUMPTION





Assam Millets Mission (AMM)

MISSION BACKGROUND

- The UN General Assembly adopted an India-sponsored resolution to mark **2023 as International year of millets (IYoM)**
- Government of India is committed to promoting millets and their cultivation
- Accordingly, Government of Assam also is going to observe 2023 as year of millets in full and true spirit.
- A full-fledged Mission called **Assam Millets Mission (AMM)** been set up for a period of seven years starting 2022-23
- Cabinet approval on 23rd May 2022 and **launch by Hon'ble Chief Minister on 16th Nov 2022**
- **Key focus:** to address nutritional needs of Assam's population particularly women (expecting, lactating) and children

MISSION OBJECTIVES

- **Increase household consumption of millets** to enhance rural household nutrition security
- **Promoting millet processing enterprises** to capture markets for value added products of millets
- **Improving productivity of millet based cropping systems** and make them profitable
- Inclusion of millets in **State nutrition programs and public distribution system & other schemes**
- Contributing to **doubling farmers' income**
- Contribute to **crop diversification**
- **Climate smart production**, particularly in resource poor, marginal and drylands

MILLETS IN ASSAM

Among different districts of Assam, Nagaon covers highest area of around **1586ha** followed by Bongaigaon (**1084 ha**) and Dhubri (**677ha**) whereas the production is highest in **Dhubri district (963 tonnes)** followed by **Nagaon (714 tonnes)** and **Bongaigaon (626 tonnes)**.

MISSION DISTRICTS

MISSION INTERVENTIONS WILL BE GUIDED BY

- GEOGRAPHIES (**DRYLAND**)
- CROP DIVERSIFICATION
- BRINGING FALLOW LAND UNDER CULTIVATION (PARTICULARLY POST RICE)
- INITIALLY INTERVENTIONS WILL BE TAKEN UP IN **15 PRIORITY DISTRICTS**

MISSION TARGETS

CURRENT AREA 5000 ha	MISSION TARGET 25000 ha in 7 YEARS
CURRENT PRODUCTIVITY 600 kg/ ha	TARGETED PRODUCTIVITY <u>1200 kg/ ha</u>

COMPONENTS & SUB-COMPONENTS

MARKET AND NUTRITION SUPPORTIVE PRODUCTION

- A**
- a) Technology demonstrations
 - b) Minikits distribution
 - c) Seed production & distribution,
 - d) Farm machinery
 - e) Cropping system demos with pulses

POST-HARVEST & VALUE ADDITION SIDE ASPECTS

- B**
- a) Post-harvest demonstrations on drying & quality
 - b) Post-harvest machinery: Dryers, Thresher, Pulveriser, Value Added products machinery
 - c) Static storage facilities & Storage bins
 - d) Nutritious millet products development fund

MARKET LINKAGES

- C**
- a) Millet based Farmer Producer Companies (FPCs)
 - b) Common Service Centres (CSCs) Under FPCs (for aggregation, cleaning, grading, drying, processing etc)
 - d) Buyer Seller Meets
 - e) Value Chain Schools (VCSs)
 - f) Product exhibitions

ENSURING BETTER NUTRITION, HEALTHY & DISEASE FREE ASSAM THROUGH MILLETS

- D**
- a) Distribution of millets based products in rural areas
 - b) Millets in PM POSHAN (MDM) Scheme (Dept- SSA)
 - a) Millets nutrition for expecting & lactating women and children in POSHAN Adhiyan Scheme (Dept- Social Welfare)

ADMINISTRATION, OPERATIONS, TRAINING & CAPACITY BUILDING

- E**
- a) Governing Body of the Mission at State level
 - b) Millets Mission Cell (Directorate level)
 - c) PMU at State level
 - d) Setting up of District level Millets Cell
 - e) Exposure visits, Trainings
 - f) Millets (& pulses) business conclaves
 - g) Millets Knowledge Bank (MKB)

ICRISAT – 4 Deliverables

D1: Introduction of suitable, high-potential germplasm of finger millet, foxtail millet and proso millet to Assam through Assam Agricultural University (AAU)

- Cultivars of 3 millets and Elite breeding lines for varietal development
- Conducting Crop Cafeteria for Selection of new millet varieties
- Seed Production - Strengthening Millet Seed Chain
- Capacitating AAU to Develop Millet Breeding Program and Millet Seed Production Technology

D2: Trainings, exposure visits and participation in global events focusing on key millet crops of Assam

- Scientific Package of Practices (PoP), seed production,
- Post Harvest Management & value addition
- Millets and millet-based products marketing
- Institutional dietary assessment
- Nutrient profiling and testing the products
- Recipe preparation, nutrition, health and hygiene for Anganwadi workers and mothers

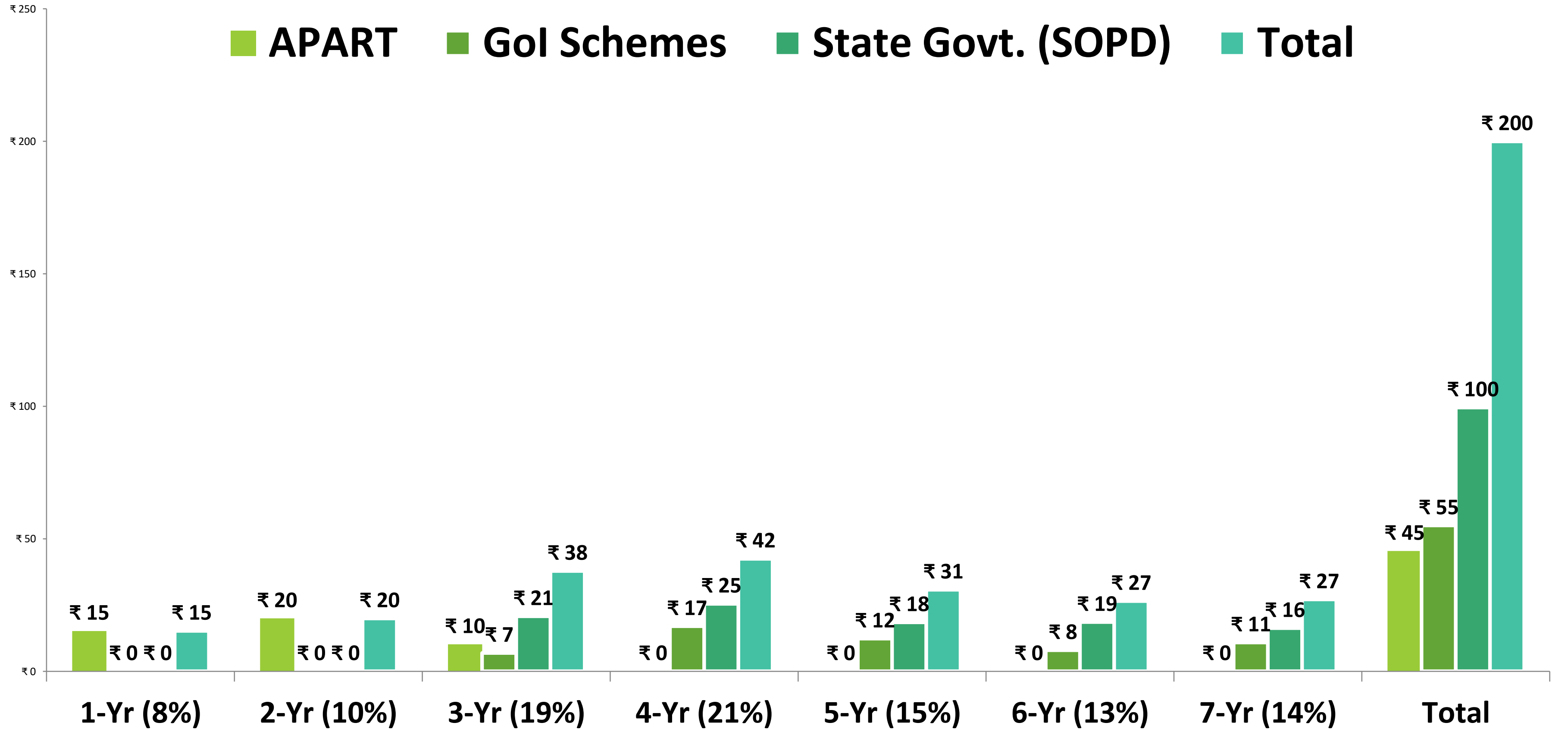
D3: Developing an Export-Oriented Millet Industry in Assam (Export of millets and millet-based products)

- Assessment of domestic millet production potential in Assam
- Market analysis
- Development of export strategy, product selection, sampling and testing for export markets
- Assam Focused Millets Export Manual
- Distribution Chain Set-up
- Product promotion and participation in trade fairs

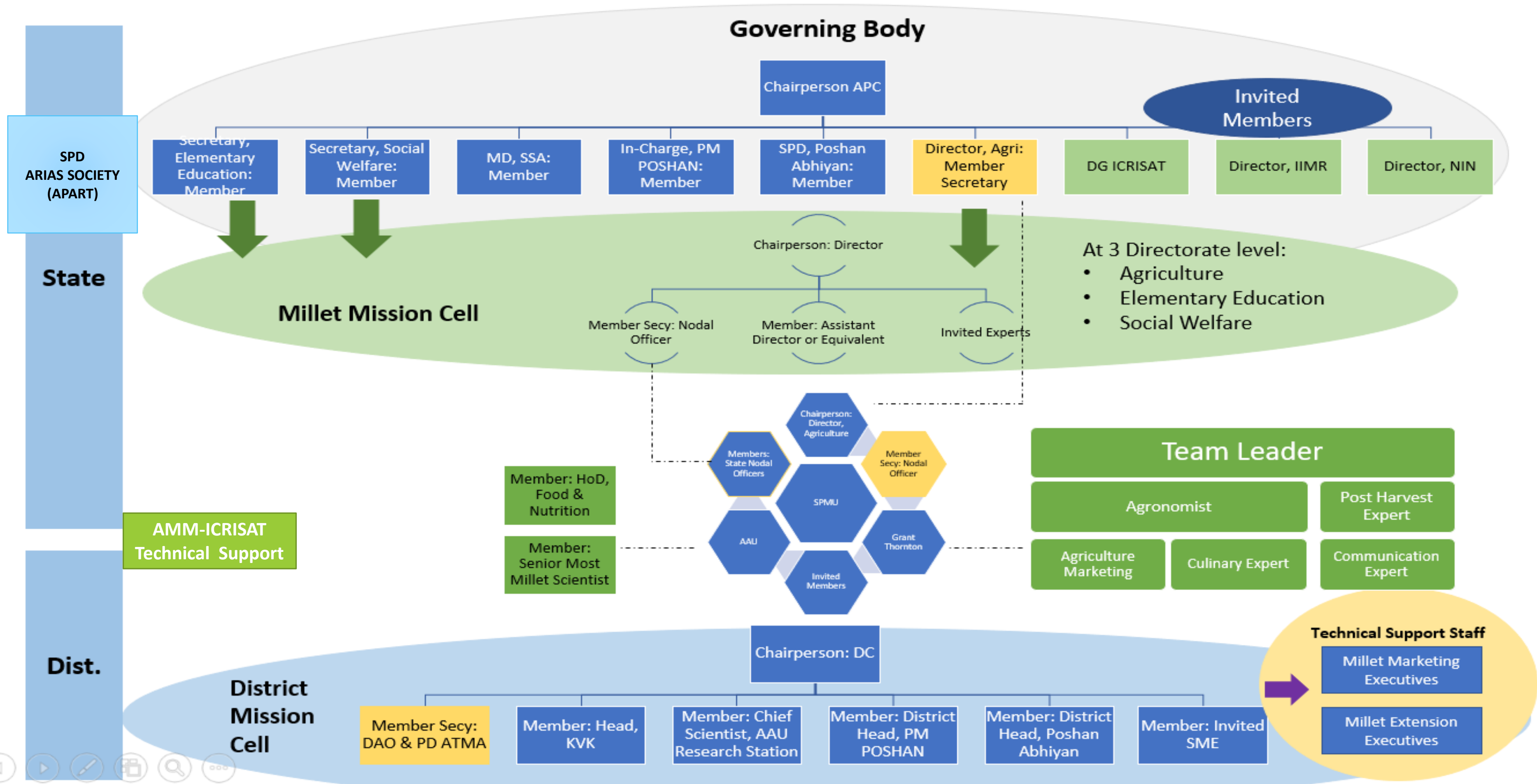
D3: New recipe development

- SNP Need Assessment
- Optimizing the ingredient ratio
- Optimizing the processing parameters
- Nutritional profiling and validating the millet products
- Shelf-life studies
- Microbiological analysis
- Acceptability/field testing
- Technology transfer
- Millet awareness programs and Nutritional intervention Pilot

Assam Millets Mission: Source of Funds (in Cr)



AMM-GOVERNANCE STRUCTURE



Mission Districts

District Wise Cropped Area and Potential Millet Area (ha) based on Very Low Flood Hazard*

District name	District Status	VL-FH Area	10 % of VL-FH
DHEMAJI	NON-AMM, APART	47119	4712
LAKHIMPUR	NON-AMM, APART	46790	4679
BARPETA	AMM, APART	42396	4240
NAGAON	AMM, APART	41848	4185
JORHAT	AMM, APART	40234	4023
BISWANATH	NON-AMM, APART	37559	3756
DIBRUGARH	NON-AMM, NON-APART	36024	3602
KAMRUP	AMM, APART	35329	3533
SONITPUR	AMM, APART	32540	3254
GOLAGHAT	AMM, APART	32181	3218
UDALGURI	AMM, NON-APART	29998	3000
K. ANGLONG	AMM, APART	29627	2963
GOALPARA	AMM, APART	27061	2706
SIVASAGAR	NON-AMM, APART	25388	2539
DARRANG	NON-AMM, APART	25222	2522
DHUBRI	AMM, APART	24041	2404
CACHAR	NON-AMM, APART	23037	2304

District name	District Status	VL-FH Area	10 % of VL-FH
CACHAR	NON-AMM, APART	23037	2304
TINSUKIA	AMM, NON-APART	21768	2177
NALBARI	NON-AMM, APART	20676	2068
KOKRAJHAR	AMM, APART	20358	2036
HOJAI	NON-AMM, APART	20348	2035
MORIGAON	AMM, APART	20159	2016
CHARAIDEO	NON-AMM, APART	19960	1996
BAKSA	AMM, NON-APART	19068	1907
BONGAIGAON	AMM, APART	14999	1500
KARIMGANJ	NON-AMM, NON-APART	14041	1404
HAILAKANDI	NON-AMM, APART	10310	1031
CHIRANG	NON-AMM, NON-APART	7167	717
S. SALMARA	NON-AMM, NON-APART	6971	697
KAMRUP(M)	NON-AMM, APART	2746	275
DIMA HASAO	NON-AMM, NON-APART	110	11

Summary		
Category	VL-FH-Area (Ha)	Potential Millet Area (Ha)
AMM, APART	431607	43161
NON-AMM, APART	221726	22173
NON-AMM, NON-APART	121742	12174

**Source: Flood Hazard Atlas for Assam State (1998- 2015), National Remote Sensing Center and Assam State Disaster Management Authority*

A-MARKET AND NUTRITION SUPPORTIVE PRODUCTION

II- Mission Components and Current Status (2Yrs)		
A-MARKET AND NUTRITION SUPPORTIVE PRODUCTION		
Activities and 7 Yr- Targets	2 Yr-Targets	Current Status
<i>A.1 Demonstrations</i>		
A.1.1. Technology Demonstration:	Ha - 3400	3677.25 (108%)
A.1.2 Minikit Demonstration:	Kg - 6500	5244 (81%)
<i>A.2. Seed Production and Introduction of New Germplasm:</i>		
A.2.1. Seed Production with FPC (OPIU-AGRI)	Ha - 180	134 (74%)
A.2.2. (ICRISAT-D1: New GermPla Dev State Seed System)	Cafeteria-23	Cafeteria-23(100%)
A.3. Farm Mechanization:	-	<i>From 3rd Year Onwards (24-25)</i>
A.4. Cropping System Demo Millet-Pulses:	330	255 (77%)

A-MARKET AND NUTRITION SUPPORTIVE PRODUCTION



2470 Ha

Area covered under Foxtail and Finger millet cultivation in the state



15 Districts

Demonstration, awareness campaigns and capacity building are carried out across the state



20K+

Beneficiaries covered under technology demonstration and minikit distribution

Partnerships

Enabling Partnerships at the national, state and local level with Private and Public stakeholders



- **285 Ha area covered under pulses demonstration** as cropping based demo.
- Exposure visits and participation in various state and national exhibition and trade fairs.
- Knowledge material preparation, documentation and distribution. Training videos prepared.

- **Foxtail millet area has been increased** to 1780 Ha in FY 23-24, compared to the 1000 Ha in FY 22-23.
- **ML 365 has been introduced and the yield has increased** drastically showing upto 8-10 q/Ha compared to 6 q/ha of last year.



- **Seed Production activity by involving 11 FPCs** to make the state seed-sufficient.
- **5 millet processing machineries** installed at KVKs of 15 districts for farmers' use and demonstration.
- **Developing Millet processing ecosystem** by finding various existing and potential processors of millets and facilitating various exhibitions.

Capacity building of Govt. officials and district teams. Training completion of **300 master trainers**. Awareness building activity done in **300 schools and 45 blocks**.



A-MARKET AND NUTRITION SUPPORTIVE PRODUCTION

Case study: Millet Seed Sufficiency in Assam

Existing Challenges



Unavailability of Seed



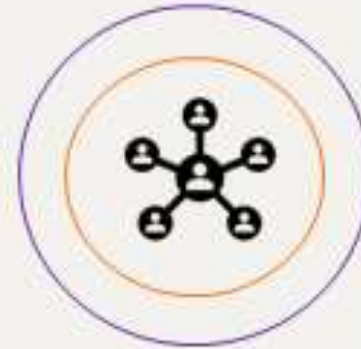
New Crop



Limited Awareness of Farmers



No PoP for Assam



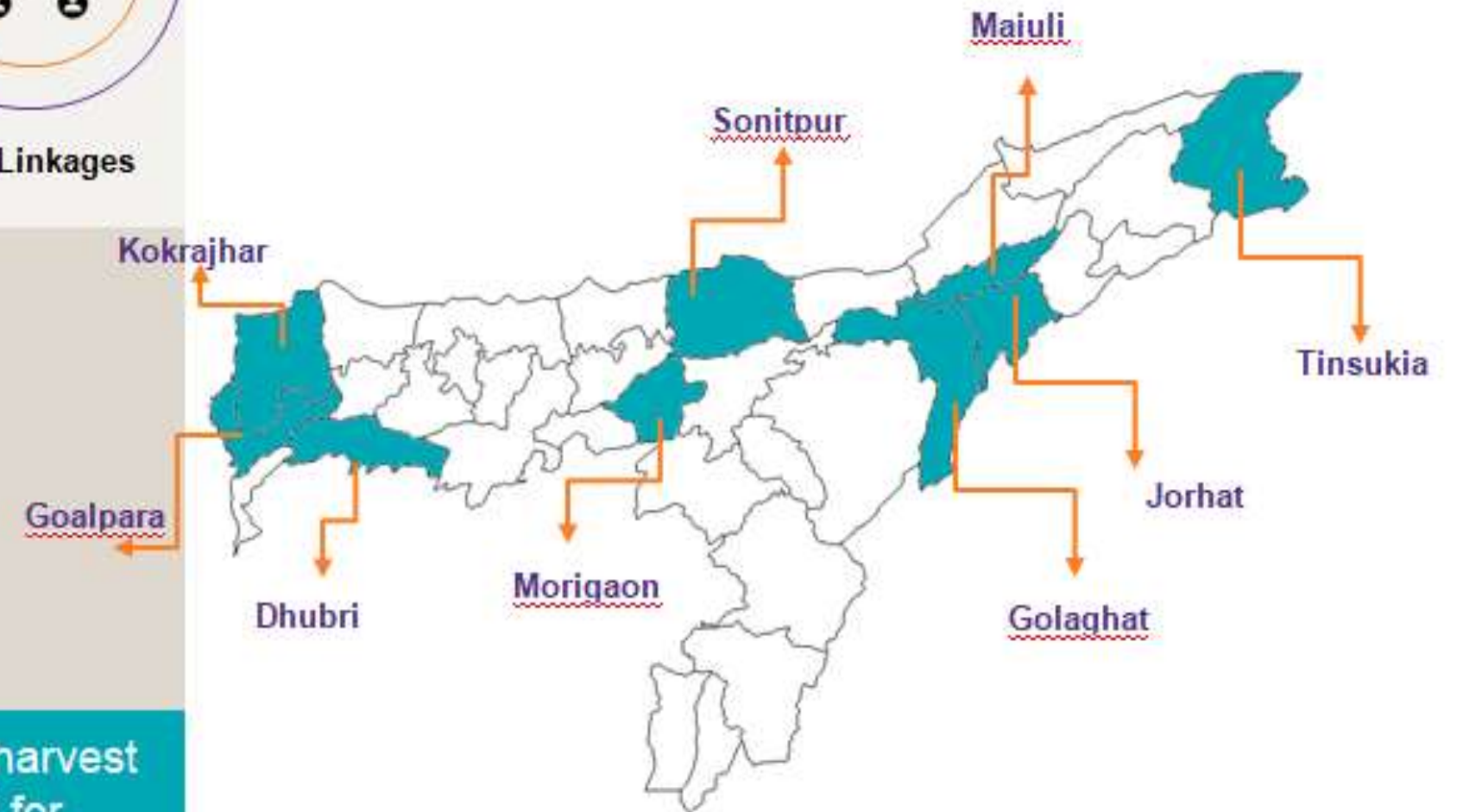
No Linkages

Our involvement as State Project Management Unit has enabled **11 FPCs in 9 districts** of Assam to produce **Finger and Foxtail millet Certified seed** and provide the same for Tech demo and Minikit purposes of the mission.

GT's Intervention

- Awareness creation among farmers for seed production
- Identification of enthusiastic and suitable FPCs
- Foundation/ CS-I Seed sourcing from GKVK and HIL
- Capacity building and handholding support to farmer beneficiaries
- Crop Monitoring

Outcome: For the Finger millet season of 23-24, 5 FPCs were able to harvest around **75 Qtl of Certified seed** which **satisfies 60% demand** of seed for Finger tech demo and minikit distribution of Assam Millets Mission for the upcoming season.



A-MARKET AND NUTRITION SUPPORTIVE PRODUCTION

Key Highlights of 2 Years Progress:

- a) The number of farmer beneficiary (Technology and Minikit Demonstrations) across 15 Mission Districts totals to 20,000 under OPIU-AGRI;
- b) Specific to Seed Production 100 number of farmers from 10 FPCs of 9 Districts spread across 4 agro-climatic zones have been involved in Millet Seed Production under OPIU-AGRI and OPIU-AAU;
- c) 1 HQ, 2 ZRS, 2 KVKs and 1 Agri-College across 03 agro-climatic zones have been involved in Introduction of New Millet Germplasm Activity under OPIU-AAU;
- d) Environmentally sustainable practice of pulses followed by Millets demonstrated to 1020 no of farmers across 15 Mission Districts.

A-MARKET AND NUTRITION SUPPORTIVE PRODUCTION

Key Learnings/ Takeaways and Way Forward:

- (a) Successful Re-Introduction, Acceptance of Millet Farming by Farmers and Way Forward to Increase Area and Yield
- (b) Successful Seed Production with FPOs, Introduction of New Germplasm and Way Forward for Buy-Back, Distribution and Release of Varieties
- (c) Adaptation of Available Farm Machinery by Farmers and Way Forward to Decrease Cost of Cultivation through Mechanization

Flood Hazard Map

Assam State Disaster Management Authority

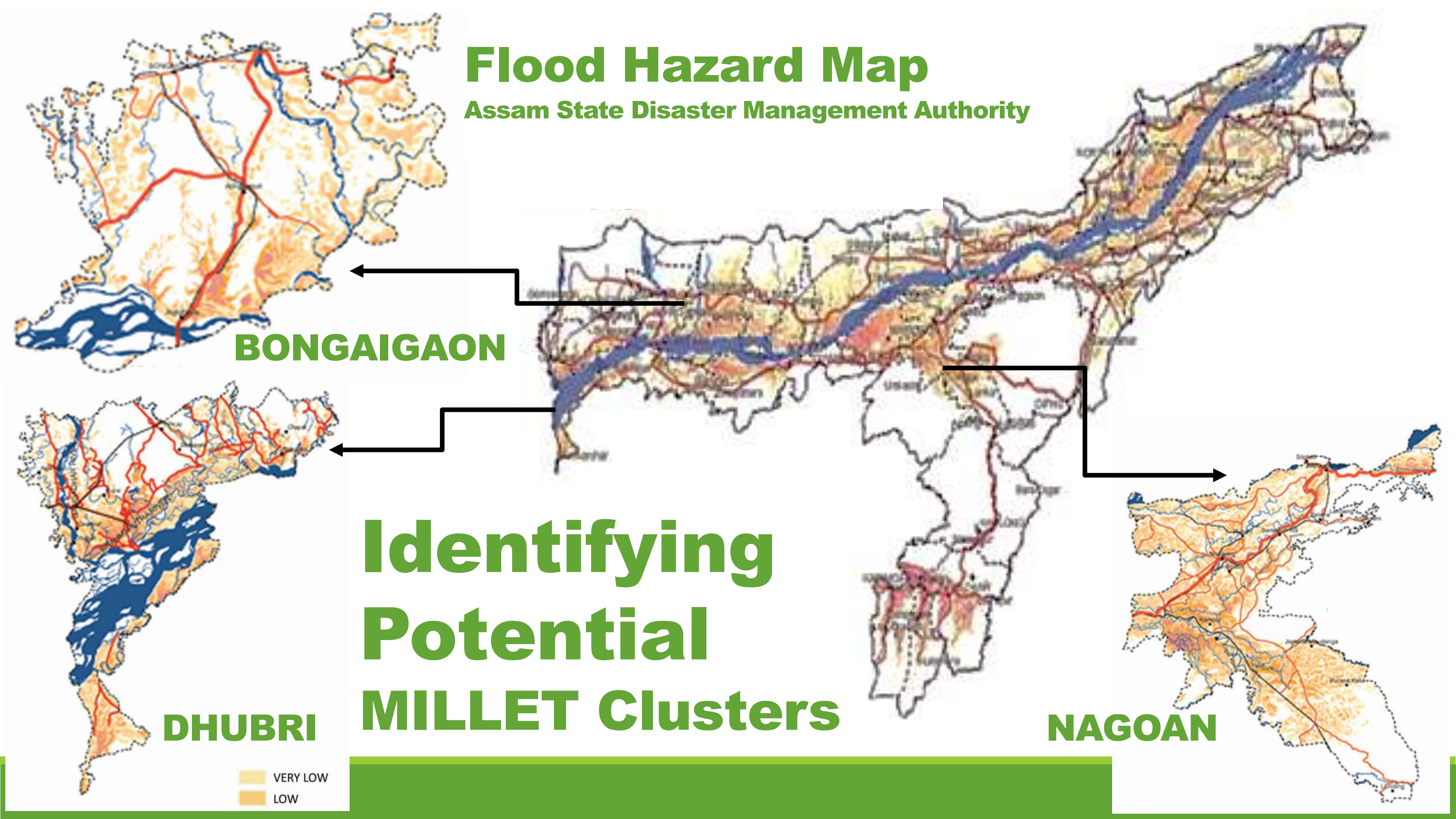
BONGAIGAON

DHUBRI

NAGOAN

Identifying Potential MILLET Clusters

VERY LOW
LOW



B-POST HARVEST, VALUE ADDITION, PROCESSING AND RECIPE DEVELOPMENT

II- Mission Components and Current Status (2Yrs)		
B-POST HARVEST, VALUE ADDITION, PROCESSING AND RECIPE DEVELOPMENT		
B.1. Post-Harvest Demonstrations:	00	<i>From 3rd Year Onwards (24-25)</i>
<i>B.2. Millet Machinery/ Equipment</i>		
B.2.1. Post Harvest Machinery: (Dryer, Thresher)	Dryer, Thresher-15	Threshers-15 (50%)
B.2.2. Primary Processing Machines (15 DMPPC–KVK/ZRS)	4 Types-45	45 (100%)
B.2.3. Value Addition Machinery/ Equipment: (FPCs/ Entps.)	5 Types-15	- (After selection FPCs/ Entps.)
B.3. Static Storage Facility:	00	<i>From 3rd Year Onwards (24-25)</i>
B.4. Storage Bin:	00	<i>From 3rd Year Onwards (24-25)</i>
<i>B.5. Millet Product and Recipe Dev. Fund: (FSN-AAU)</i>		
B.5.1. (ICRISAT-D4: Millet Product Dev (MPD-HUB)	Products - 06	2 Developed; 4 Ongoing
B.5.2. (ICRISAT-D4: Millet Product Dev. Tech. Transfer	FPOs/Entps.- 08	Ongoing (at Jorhat & Kokrajhar)

B-POST HARVEST, VALUE ADDITION, PROCESSING AND RECIPE DEVELOPMENT

Key Highlights of 2 Years Progress:

- a) The total number 45 Millet Machinery procured and supplied to 15 KVKs/ZRS under OPIU-AGRI;
- b) Six (6) Millet Products are being developed by Food and Nutrition Department of AAU with support from ICRISAT under OPIU-AAU;
- c) Four (4) out of six (6) new products are Ready to Cook (RTC) products: (*i- Foxtail Millet Khichidi Mix, ii- Foxtail Millet Porridge Mix, iii- Finger Millet Khichidi Mix and iv-Finger Millet Sweet Mix*) and Two (2) out of six (6) are Ready to Eat (RTE) products: (*i-Millet Nutri Bar and, ii-Millet Laddu Mix*);
- d) Short listing of 08 FPCs/ Entps is ongoing to proceed with Stage-4 i.e. Transfer of technology to entrepreneurs under OPIU-AAU;
- e) 26 nos. of Potential FPOs/ Entps. have been shortlisted under OPIU–AGRI for Supporting under MPD HUB;
- f) SPOs developed for conducting on online campaign for Branding and of Assam Millets.

B-POST HARVEST, VALUE ADDITION, PROCESSING AND RECIPE DEVELOPMENT

Key Learnings/ Takeaways and Way Forward:

- (a) Completion of Procurement of Post Harvest and Primary Processing Machinery Procurement and Way Forward for Installation at ZRS/ KVKs towards Operationalising/ setting-up of 15 **District Millet Primary Processing Center (DMPPC)**.
- (b) Need for Demo. on Millet Machinery and Way Forward for Utilization of Processing Facility by Farmers/ FPOs (Developing Norms/ Guidelines)
- (c) Completion of Institutional Capacity Building of FSN-AAU towards Ready to Cook (RTC) and Ready to Eat (RTE) Millet Product Development and Way Forward for / Institutionalizing/ Setting-up **Millet Product Development HUB (MPD-HUB)** at FSN-Jorhat: (Norms/ Guidelines)
- (d) Completion of Short listing of Potential (25) of FPOs/ Entps. (currently making/ experimenting millet products locally) and Way Forward for Providing Technical Support through MPD-HUB (supporting on product standardization (quality testing), labeling standards, packaging norms/ material and linkages with schemes for supporting FPOs/ Entps.
- (e) Completing of Identification of Potential Millet Products and Way Forward for Handholding FPOs/ Entps. For Commercialization of Products and Procurement and Supply of Value Addition Machinery (pulverizer, extruder, roasting, flaking and blending and baking etc.) to the Identified/ Designated FPOs/ Entps.

POST- HARVEST MACHINERY

Sl no	Name of Machine	Name of Manufacture	Name of Supplier	No of Machines
1	Cleaner cum Grader	M/S OSAW Agro industries pvt ltd	M/S J.K. Engineering and Agro services	15
2	De-Stoner	M/S OSAW Agro industries pvt ltd	M/S J.K. Engineering and Agro services	15
3	Millet Threshing Machine	M/S Pragati Engineering	M/S J.K. Engineering and Agro services	15
4	Gravity Separator	M/S Agro Asian Industries	M/S Rashi Enterprise	15
5	Millet De-Husker	Perfura Technologies India pvt Ltd	N/A	15



C-MARKET LINKAGES

(FPCs, CSCs, Buyer Sellers Meets, VCS and Exhibitions)

II- Mission Components and Current Status (2Yrs)		
C-MARKET LINKAGES (FPCs, CSCs, Buyer Sellers Meets, VCS and Product Exhibitions)		
C.1. Millet Based FPCs:	00	<i>From 3rd Year Onwards (24-25)</i>
C.2. CSCs under FPCs:	00	<i>From 3rd Year Onwards (24-25)</i>
C.3. Buyer Seller Meets (BSMs):	15	1 (7%) (Pilot 40 Qtl Foxtail)
C.4. Value Chain Schools (VCSs):	00	<i>From 3rd Year Onwards (24-25)</i>
C.4.1. (ICRISAT-D3: Millet Market Study, Distri. Chain etc.)	Respondents - 2000	Respondents - 1956
C.5. Millet Product Exhibitions:	10	1 (7%) (XX Events)

C-MARKET LINKAGES

(FPCs, CSCs, Buyer Sellers Meets, VCS and Exhibitions)

Key Highlights of 2 Years Progress:

- (a) 30 nos. of FPCs across 30 nos. of blocks spread over 15 Mission Dist. being screened/ shortlisted to promote Millet FPCs and Support CSCs under OPIU-AGRI;
- (a) At Nagaon District Buyer Seller Meet 40 qt of Foxtail Millet aggregated by farmers was purchased by NW Jorhat FPC at Rs 40/Qt under OPIU-AGRI;
- (b) 07 exhibitions were attended by 35 number of FPOs/ Entps. across Assam and in other states;
- (c) Market Survey by ICRISAT of 1956 respondents is ongoing under PCU-ARIAS Soc with respondents across the value chain consisting of 909 Farmers, 206 Women, 773 Consumers, 36 Processors, 32 Shop Owners, 10 Traders, 10 Exporters (also 32 FGDs have been conducted), the purpose of the study is to identifying potential millet distribution chains and promote Millet Value Chain Schools for building market linkages.

C-MARKET LINKAGES

(FPCs, CSCs, Buyer Sellers Meets, VCS and Exhibitions)

Farmer Level (Preliminary Findings):

- Positive indication is that farmers are mostly cultivating millet in the fallow lands adding to cropping intensity (98% millets area on fallow lands; 2% millets replacing other crop area), and accordingly specific areas in mission districts with fallow lands may be prioritised for promoting cultivation of millet.
- However, farmers currently lack scientific production knowledge and average productivity is low (Finger Millet 837 kg/ha and Foxtail Millet 654 kg/ha) compared to mission target of 1200 kg/ ha, as the farmers often select unsuitable land and so face crop loss due to poor drainage of soils (millet crops cannot withstand water logging for more than 1-2 days).
- Further, farmers face shortage of seeds and machinery for timely sowing and also lack access to post harvest machinery such as de-husker and storage facility to protect the harvested grains from spoilage due to high moisture.
- The reasons/ motivation with which farmers are taking up millet cultivation constitute of: 37% of farmers consider millets to be important food for the family (average household consumption of millets by farmer household is 14%; Wheat 11% and Rice 75 %); 28% farmers expect millets to be more profitable crop compared to other crops that they have been growing; 25% grow millet as it requires less water and 18% see millets to be less risky compared to other crops and; 52% farmers are growing millets as it is recommended to be suitable for their lands by the extension agency (agriculture department).

C-MARKET LINKAGES

(FPCs, CSCs, Buyer Sellers Meets, VCS and Exhibitions)

Consumer level (Preliminary Findings):

- Being new crop mass consumer awareness is lacking. However small, but a section of consumers in urban areas are aware about millets.
- The current average monthly consumption of millets at household level is 2.55 kg for Finger Millet, Foxtail Millet 5.05 kg while Rice consumption is at 24.26 kg/ month, and the major hindrance for the consumers to eat millet on a regular basis is market prices which are about 5-6 times of Rice/ Wheat.
- Among the consumers who currently eat millets, the most common reason for eating millets is that, millet are nutritious and health food (86.98%), for some consumers it is a part of traditional food (20.32%) and some eat millet because of the good taste (19.27%) and a small percentage of consumers eat millets as it is recommended to them by the Doctor (07.81%). In terms of preference to millets, consumers who eat millets on a regular basis/ as staple diet prefer Foxtail (28.65%) when compared to Finger (09.90%). Further, most of the consumers prefer to eat millets by preparing Payse (71.35%) or Khichri (44.79%) and some consumers prepare either Roti or Pitha (about 30%) made out of millets.

C-MARKET LINKAGES

(FPCs, CSCs, Buyer Sellers Meets, VCS and Exhibitions)

Market Level (Preliminary Findings):

- Incoherence in pricing of millet is one of the key challenges in further development of millet markets in Assam for instance:
- **Consumer Willingness to Pay** for millets is about Rs 30-80 / kg of Foxtail Millet and Rs 23-53 for Finger Millets; **Shop Level Average Selling Price** is much higher at Rs 167/ kg of Foxtail Millet and Rs 100 /kg of Finger Millet. **Shop Level Buying Price** for millets averages to Rs 91/ kg of Foxtail Millet and Rs 76/ kg of Finger Millet; **Traders/ Processors Accrual Price** of Millets ranges from Rs 37-80 / kg of Foxtail Millet and Rs 30-80 / kg of Finger Millet and;
- **Traders/ Processors Selling Price** of Millets ranges from Rs 90-200/ kg of Foxtails Millet and Rs 100-150/ kg of Finger Millet. In the above scenario, the
- **Farmers Price Expectation** at the farm gate is to get Rs 260-300/ kg which otherwise in the
- **Current Market Price Ranges** from Rs 35-50/ kg only.
- Other challenges to address are: (a) low productivity and small quantity of surplus with farmers; (b) Farmers unable to aggregate and fetch better price as the market demand from buyers is erratic/ inconsistent and scattered; (c) Some FPOs have prepared value added products such as biscuits, poha, cake, laddu and cookies but cost of production/ transaction/ transportation cost of preparing and marketing is very high.

C-MARKET LINKAGES

(FPCs, CSCs, Buyer Sellers Meets, VCS and Exhibitions)

Key Learnings/ Takeaways and Way Forward:

- (a) Completion of Short Listing of Potential Blocks and FPCs and Way Forward to Develop Millet Based Clusters, Notification of Blockwise designated FPCs for **Blockwise Integrated Millet Cluster Development**
- (b) Ongoing Millet Market Study and Way Forwards for Setting-up of Zonal/ Regional Millet Distribution Channels and Value Chain Schools
- (c) Ongoing/ Planned Open Campaign for Selection of Brand Name, Logo, Symbolic Icon/ Amine (such as Rangmon, 33rd National Games) and Way Forward for Developing a System of Accrediting Millet Products Developed by Blockwise Notified/ Designated FPOs/ Entps. Supported under AMM.

Open Campaign for Selection of Brand Name, Logo, Symbolic Icon/ Amine for Assam Millets Mission



1st Draft.



2nd Draft



2nd Draft



2nd Draft



3rd Draft



Final Draft



D-ENSURING BETTER NUTRITION, HEALTH THROUGH MILLETS

II- Mission Components and Current Status (2Yrs)		
D-ENSURING BETTER NUTRITION, HEALTH THROUGH MILLETS		
D.1. Rural Area Millet Distribution:		
<i>D.1.1. Rural Area Millet Distri. (Mobile Outlets/ Van):</i>	<i>Mobile Van- 00</i>	<i>From 3rd Year Onwards (24-25)</i>
D.1.2. Rural Area Millet Distri. (Awareness):	Events- 300	45 (15%)
D.1.3. Rural Area Millet Distri. (Supply of Millets):	MT-100	- (After selection FPCs/ Entps.)
<i>D.2. Millets in Schools (with DoEE-SSA)</i>		
D.2.1. Millets in Schools (Awareness):	Schools -300	300 (100%)
D.2.2. Millets in Schools (Supply of Millets):	MT-300	-(After Notifying ASAMB & Revolving Fund)
<i>D.3. Millet in Anganwadis: (with DoSW-WCD)</i>		
D.3.1. Millets in Anganwadis (Nutri-Camps):	AWCs-200	-(After Manuf. - 2-RTC Products)
D.3.2. Millets in Anganwadies (Supply of Millets):	MT-200	-(After Notifying ASAMB & Revolving Fund)

D-ENSURING BETTER NUTRITION, HEALTH THROUGH MILLETS

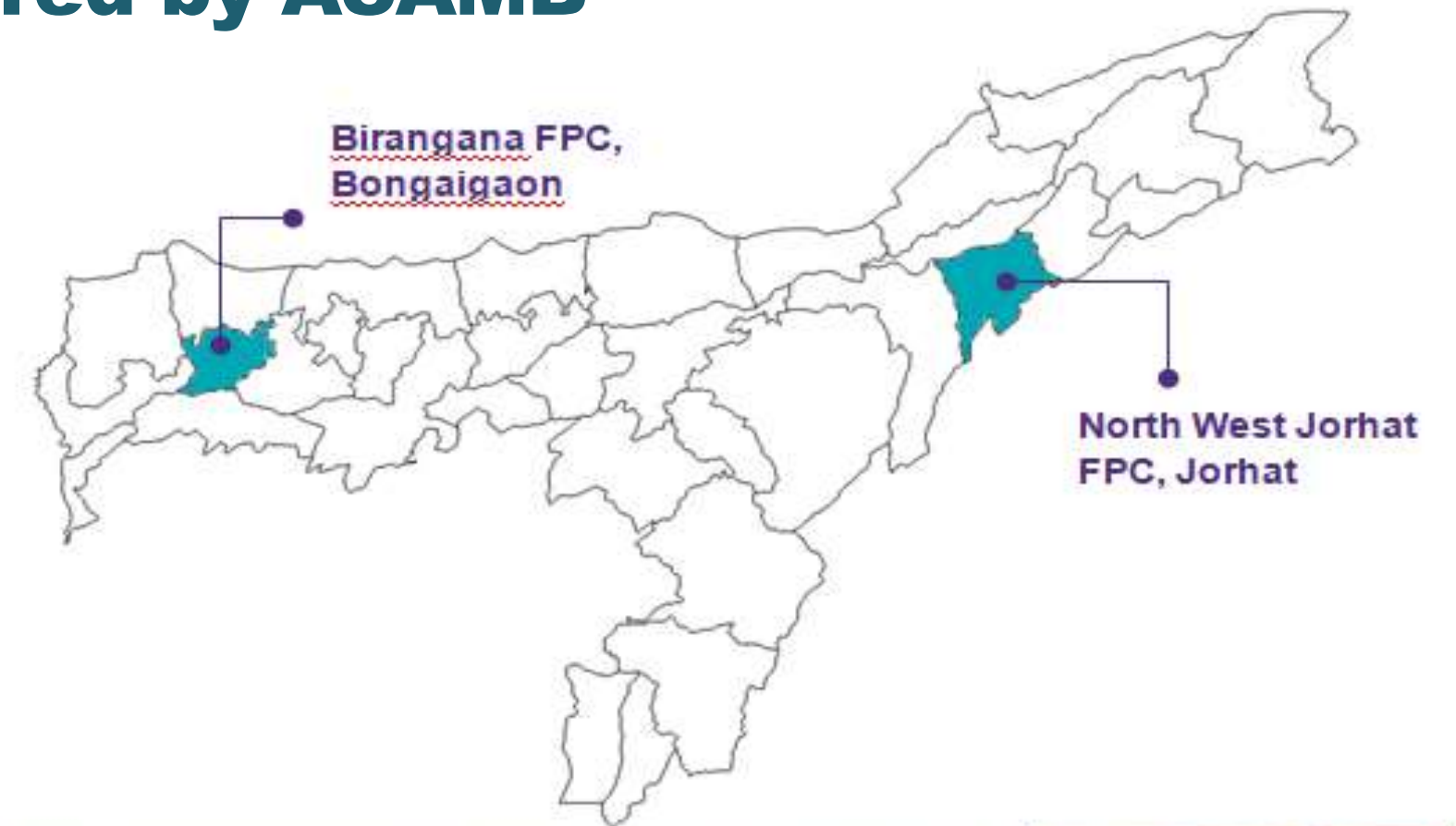
Key Highlights of 2 Years Progress:

- (a) 45 no. of farmers awareness were conducted across 15 Mission Districts reaching out to 1350 number of persons under OPIU-AGRI;
- (b) 300 nos. of awareness campaigns at schools were conducted across 15 Mission Districts reaching out to 10,080 students under OPIU-AGRI;
- (c) 47.25 Qt quantity of Finger Millet was procured on pilot basis through ASAMB across 9 districts covering 42 farmers at MSP of Rs 3578/Qt, thus disbursing Rs 16,9,060 and primary processed completed after capacity assessment of 2 FPOs under PCU ARIAS Soc.;
- (d) 3 nos. of consultations with stakeholder departments involving ASAMB, AFCSCL, FCI, NAFEED, DoWCD, DoEE (SSA) conducting on millet procurement and Draft SPOs developed along with developing technical specifications for setting-up of Online Millet Procurement System (OMPS) for designating ASAMB (with technical support from AFCSCL) as Nodal Agency for Millet Procurement.

B-POST HARVEST, VALUE ADDITION, PROCESSING AND RECIPE DEVELOPMENT

Pilot Primary Processing of Millets Procured by ASAMB

Around 50q Finger millet was procured from farmers through ASAMB in FY 22-23. The same was stored in the godowns of ASAMB for almost a year and the grain was losing its quality. SPMU envisioned to process the available grain and make value-added products out of it to use in school feeding programme. An action plan was prepared to achieve the same.



Identification of available processing facilities in the state



Selection of FPCs for processing



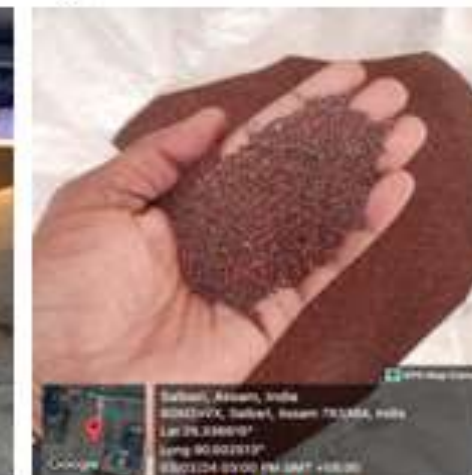
Facilitating Collection & Transportation of grain



FAQ and MoA Preparation



Processing and Delivery of millet to TSI for value-addition



Finger Millet before and after processing

D-ENSURING BETTER NUTRITION, HEALTH THROUGH MILLETS

Key Learnings/ Takeaways and Way Forward:

- (a) Successful Completion of Awareness Campaigns across 15 Mission Districts and Way Forwards to Popularizing Millets Across Assam
- (b) Successful Pilot Procurement of Finger Millet (47Qt) by ASAMB, de-husking by FPC and Way Forwards to Pilot Millet Feeding in Assam
- (c) Draft SOP for Millet Procurement, Supply & Distribution, and Way Forwards for Notification of ASAMB (with technical support from AFCSCL) as Nodal Agency for Millet Procurement in Assam.

E-ADMIN., OPERATIONS, GOVERNANCE, TRAINING & CAPACITY BUILDING

II- Mission Components and Current Status (2Yrs)		
E-ADMIN., OPERATIONS, GOVERNANCE, TRAINING & CAPACITY BUILDING		
<i>E.1. Setting-up of AMM-SPMU at State Level:</i>		
E.1.1. Technical Team/ Manpower for AMM-SPMU	Persons-12	Persons- 12 (100%)
E.1.2. Technical Team/ Manpower AMM-ICRISAT	Persons-23	Persons- 20 (87%)
<i>E.2. Setting-up of DLMC at 15 Mission Dist.:</i>		
E.2.1. Technical Team/ Manpower for 15 DLMC	MEE+MME-30	Persons-19 (57%)
E.2.2. ICRISAT Technical Team/ Manpower for 15 DLMC	DMC-07	Persons-06 (85%)
E.3. Exposure Visits:	Persons- 154	Persons- 30 (20%)
E.4. Trainings – (OPIU-AGRI + OPIU-AAU + ICRISAT)	Persons- 640	Persons- 535 (83%)
E.5. Millets and Pulses Business Conclave:	00	<i>From 3rd Year Onwards (24-25)</i>
E.6. Millet Knowledge Bank (MKB): 1 Portal	Portal- 01	MIS Portal – Expanded to MKB

E-ADMIN., OPERATIONS, GOVERNANCE, TRAINING & CAPACITY BUILDING

Key Highlights of 2 Years Progress:

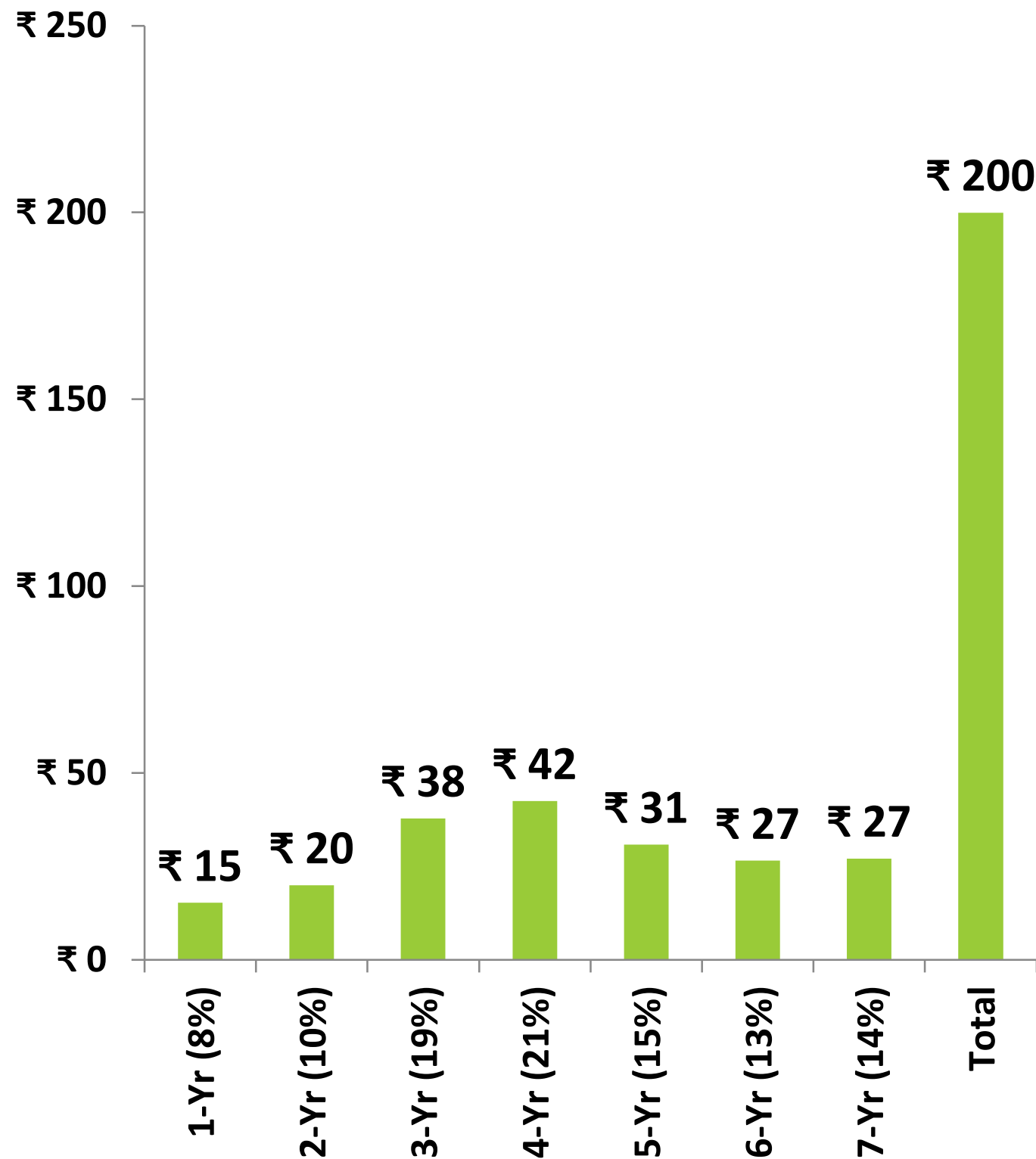
- a) 02 number of AMM Governing Body meetings have been held over the last 2 Years;
- b) 44 number of AMM DLMCs have been held across 15 Mission districts over the last 2 Years (as of Dec 2023);
- c) 12 out of 12 persons: GT (06- TL, Agro., PHM, Seed, Trai & Commu. Econo.); OPIU-AGRI (04- Extn. Acc. MIS & M&E) and; PCU-AS (02- MA, AA) provided professional
- d) 19 nos. of District Millet Executive provide technical support across 15 DLCLM under OPIU-AGRI;
- e) 20 nos. of professional Team (TL, RC, Seed, Mkt, PPM, PHM, TBC, 6 DMC) from ICRISAT provide technical support under OPIU-AGRI, AAU and DLCLM's;
- f) Exposure visits for 30 nos. and Trainings 535 nos. of farmers/ officials conducted towards institutional capacity building of all stakeholders
- g) 01 portal is developed for MIS with access to District Officials for updating data on millet activities under PCU- ARIAS Soc.

E-ADMIN., OPERATIONS, GOVERNANCE, TRAINING & CAPACITY BUILDING

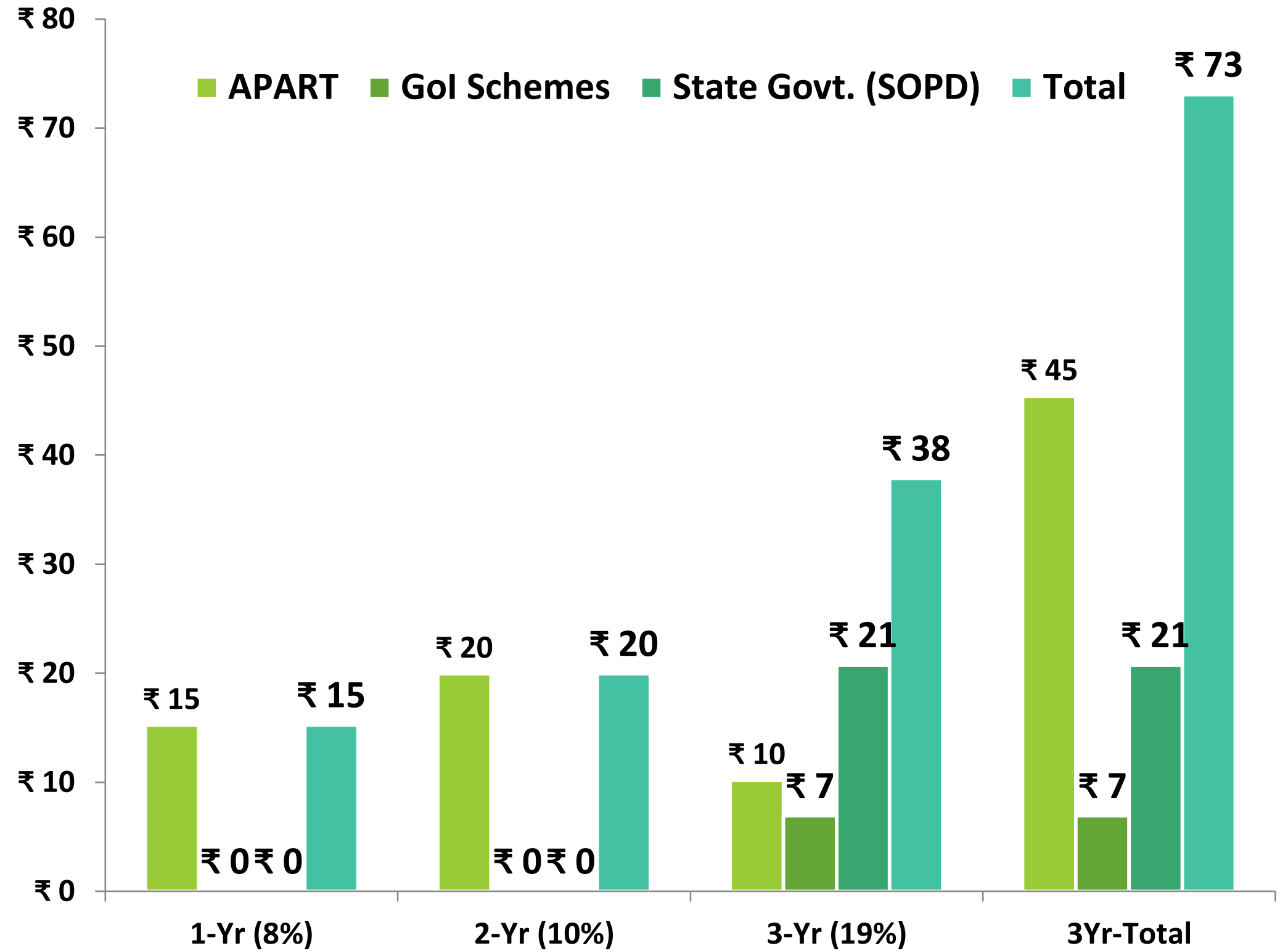
E-Key Learnings/ Takeaways and Way Forward:

- (a) Completion of Tenure of AMM-SPMU (GT June '24) and ICRISAT (September '24) petmebrr and Way Forwards For deploying Technical Support Team of AMM-SPMU and DLMCs
- (b) Current Status of 10 District Millet Executives under 15 District Level Millet Cell's and Way Forwards for deploying Technical Support for DLMC (from September 2024 onwards)
- (c) Completion of Training and Capacity Building of farmers/ officials and Way Forwards for Capacity Building across Assam through ZRS/KVKs;
- (d) Completion of Connecting AMM-MIS Portal to CM Dashboard and Way Forwards to upgrading it to Mission Mgmt. System cum Knowledge Bank
- (e) Completion of the Period of Fund Support from APART and Way Forwards For Sourcing from SOPD (for AMM activities) and Other Sources (for Technical Support Team for SPMU/ DLMC)

Assam Millets Mission: 7-Years (2022-29) Budget (in Cr)



Assam Millets Mission: 3-Years (2022-23 to 2024-25) Budget (in Cr)



C-Posters and IEC Material Developed Under AMM

অসম মিলেট মিছন

অধিক তথ্যৰ বাবে যোগাযোগ কৰকঃ

ৰাজ্যিক প্রকল্প ব্যৱস্থাপনা কেন্দ্ৰ, অসম মিলেট মিছন,
কৃষি সঞ্চালকালয়, খানাপাৰা, গুৱাহাটী-২২
Email: amm.spmu@gmail.com
Toll free no: +91 18001020338

অসম মিলেট মিছন

ক্ষুদ্র মিলেটৰ বাবে বৃহৎ অভিযান

বৰ্তমান ভাৰতত "শ্ৰীঅন্ন" হিচাপে অভিহিত তথা একবিংশ শতিকাৰ সৰ্বোত্তম খাদ্যশস্যবোৰৰ ভিতৰত অন্যতম মিলেট, বছৰদিনৰ আগতে অসমীয়া খাদ্যাভ্যাসৰ অবিচ্ছেদ্য অংশ আছিল।

সময়ৰ লগে লগে মানুহে অন্য শস্যবোৰৰ ওপৰত অধিক গুৰুত্ব দিবলৈ লোৱাত এই সোণালী শস্যবিধৰ সৈন্যখন ব্যৱহাৰ হ্রাস পাই আহিল।

এই মিলেটৰ গুৰুত্ব পুনৰ প্ৰচলন কৰিবৰ বাবে অহা ৭ বছৰৰ বাবে (২০২২-২০২৯) অসম মিলেট মিছনৰ কাৰ্য্যক্ৰম আৰম্ভ কৰা হয়। ২০২২ চনৰ ১৬ নবেম্বৰ তাৰিখে অসমৰ মাননীয় মুখ্যমন্ত্রী ডা° হিমন্ত বিশ্ব শৰ্মায়েৰে প্ৰত্যক্ষ কৰা এই অভিযানৰ লক্ষ্যসমূহ হ'লঃ

মানৱ সেৱাৰ পৰিপূৰ্ণিত অৰিহণা যোগোৱা
কৃষকৰ জাৰ বৃদ্ধি
মিলেট প্ৰচলন উৎপাদন বৃদ্ধি
শস্যৰ মিত্ৰতা বৃদ্ধিত অৰিহণা

মিলেটৰ স্থানীয় উৎপাদন আৰু খাদ্য হিচাপে স্থানীয়ভাৱে গ্ৰহণ বৃদ্ধি কৰাৰ লক্ষ্যৰে এই অভিযান আৰম্ভ কৰা হৈছে।

অসম মিলেট মিছন

আন্তর্জাতিক মিলেট বর্ষ

ভাৰত চৰকাৰৰ প্ৰস্তাৱনা অনুসৰি ২০২৩ বৰ্ষটো আন্তর্জাতিক মিলেট বৰ্ষ (IYOM) হিচাপে ঘোষণা কৰিছে। এই শস্যৰ উপকাৰিতা সম্পৰ্কে প্ৰচাৰ কৰি বিশ্বব্যাপী মিলেটৰ চাহিদা আৰু গ্ৰহণযোগ্যতা বৃদ্ধি কৰাৰ বাবে এই বিশেষ প্ৰচেষ্টা হাতত লোৱা হৈছে। ইয়াৰ প্ৰধান উদ্দেশ্যসমূহৰ ভিতৰত আছে মিলেটৰ উৎপাদন বৃদ্ধি, পৰিপূৰ্ণিত আৰু স্বাস্থ্য সজাগতা, সন্মত প্ৰক্ৰিয়াৰ জৰিয়তে উদ্যোগৰ বিকাশ আৰু দুলা-সংযোজন।

অধিক তথ্যৰ বাবে যোগাযোগ কৰকঃ

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ক্ষুদ্র মিলেটৰ বাবে বৃহৎ অভিযান

ফিংগাৰ মিলেট

বৰ্তমান ভাৰতত "শ্ৰীঅন্ন" হিচাপে অভিহিত তথা একবিংশ শতিকাৰ সৰ্বোত্তম খাদ্যশস্যবোৰৰ ভিতৰত অন্যতম মিলেট, বছৰদিনৰ আগতে অসমীয়া খাদ্যাভ্যাসৰ অবিচ্ছেদ্য অংশ আছিল। সময়ৰ লগে লগে মানুহে অন্য শস্যবোৰৰ ওপৰত অধিক গুৰুত্ব দিবলৈ লোৱাত এই সোণালী শস্যবিধৰ সৈন্যখন ব্যৱহাৰ হ্রাস পাই আহিল। এই মিলেটৰ গুৰুত্ব পুনৰ প্ৰচলন কৰিবৰ বাবে অহা ৭ বছৰৰ বাবে (২০২২-২০২৯) অসম মিলেট মিছনৰ কাৰ্য্যক্ৰম আৰম্ভ কৰা হয়। মিলেটৰ স্থানীয় উৎপাদন আৰু খাদ্য হিচাপে স্থানীয়ভাৱে গ্ৰহণ বৃদ্ধি কৰাৰ লক্ষ্যৰে এই অভিযান আৰম্ভ কৰা হৈছে।

অসম মিলেট মিছন

মি কোনো সহায়ৰ বাবে যোগাযোগ কৰকঃ
জিলা কৃষি বিষয়াৰ কাৰ্যালয়

অধিক তথ্যৰ বাবে যোগাযোগ কৰকঃ

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অসম মিলেট মিছন

অসমত মিলেটৰ বাবে কৃষক

অসম মিলেট মিছনে প্ৰগতিশীল কৃষকসকলক মিলেটৰ পথ প্ৰদৰ্শক হ'বলৈ আহ্বান জনাইছে।

এজন প্ৰগতিশীল কৃষক হিচাপে আপুনি এক পৰিবৰ্তন আনিব পাৰে। মিলেট, মি এতিয়া ভাৰতত "শ্ৰীঅন্ন" হিচাপে অভিহিত, সেই সৰ্বোত্তম শস্যবিধৰ খেতি কৰোৱাই আপোনাৰ সৰ্বশ্ৰেষ্ঠ কৃষকসকলক লক্ষ্যবিত্ত কৰাওঁক।



THANK YOU

AMM – KEY ACTIVITIES

A-Market & Nutrition Supportive Production: Tech Demo 20900 Ha; Millets with Pulses 2230 Ha

**B- 900 PH Demo; 300 Machines; Storage 20 (500-100 MT); 800 Small Bins
AND Development of Nutri-Millet Products & Recipes**

C-Market Linkages: 30 FPCs, 30 CSCs; 30 BSMs; 170 Product Exhibitions

D-Ensuring Better Nutrition: 280 Mobile outlets; PDS & 2800 Awareness Creation; 2800 School Awareness; 2800 MT PM Poshan; 1000 Nutri-Camps in Poshan Abhiyan; 1000 MT in AWCs

E- Operations/ Training/ Capacity Building: SPMU: 6-7 Professionals; DLMC -15 MEE/ 15 MME; 500 Expo Visits & 3000 Persons trained in Scientific PoP, PH Mgmt & Product Making

AMM-ICRISAT: KEY ACTIVITIES

D1: Introduction of suitable, high-potential germplasm of finger millet, foxtail millet and proso millet to Assam through Assam Agricultural University (AAU)

- Identification of suitable cultivars of 3 millets to popularize in Assam, Elite breeding lines for hastening product development
- Conducting Crop Cafeteria for enabling selection of new millet varieties by Farmers
- Seed production support to farmers and strengthening seed chain with partners
- Farmers identification for millet production
- Strengthening millet breeding program of AAU to meet the future needs
- Training of farmers/partners on quality seed production and supply

D2: Trainings, exposure visits and participation in global events focusing on key millet crops of Assam

Trainings on:

- Scientific Package of Practices (PoP), seed production,
- Post Harvest Management & value addition
- Millets and millet-based products marketing
- Institutional dietary assessment
- Nutrient profiling and testing the products
- Recipe preparation, nutrition, health and hygiene for Anganwadi workers and mothers

D3: Developing an Export-Oriented Millet Industry in Assam (Export of millets and millet-based products)

- Assessment of domestic millet production in Assam & other potential (competing) regions for export planning
- Market analysis
- Development of export strategy and focus
- Product selection, sampling and testing for export markets
- Millets export manual (Assam focused)
- Distribution chain set up
- Product promotion and participation in trade fairs

D4: New Recipe development

- Need Assessment
- Optimizing the ingredient ratio
- Optimizing the processing parameters
- Nutritional profiling and validating the finalized food products
- Shelf-life studies
- Microbiological analysis
- Acceptability/field testing
- Technology transfer
- Millet awareness programmes
- Nutritional intervention pilot

Assam Millets Mission: OPIU-AGRI Expenditure

S. No	OPIU-AGRI AMM Expenditures as on 31.03.2024	Total Contract Amount (Rs)	Payment Already Made(Rs)	Balance Payment to be made (Rs)
A	Launch of AMM			
A1	Millet Mission Launch			
	A-Sub-Total	36642159	36642159	0
B	AMM Activity (2022-24)			
B1	AMM - Millet Demonstration (TD+MK+Sp+CS)	22557667	9688087	12869580
B2	Millet Training (S-POP, Farmers/ FPOs State and National)	2462442	1612442	850000
B3	Millet Machine Procurement*	19654000	0	19654000
	B-Sub-Total	44674109	11300529	33373580
C	AMM-OP Ex & Salaries			
C1	Assam Millets Mission - Operating Expenses	14211314	5711314	8500000
C2	Assam Millet Mission - Salary (Signed Contracts)	8152838	3731661	4421177
	C-Sub-Total	22364152	9442975	12921177
D	AMM Committed Activities (2024-25)			
D1	Committed Activities (2024-25)	61200000	0	61200000
	D-Sub-Total	61200000	0	61200000
	Grand Total OPIU-AGRI	16,48,80,420	5,73,85,663	10,74,94,757

*Rs 1,96,54,000 out of Rs 4,04,58,687 for OPIU-AGRI Machine Procurement

Assam Millets Mission: OPIU-AAU Expenditure

OPIU AAU- Excel File

Assam Millets Mission: PCU-ARIAS Expenditure

S. No	Contracted Institution/ Organisation	Total Contract Value Including Tax (Rs)	Payment already made Including Tax (Rs)	Balance payment to be made Including Tax (Rs)
1	Grant Thornton LLP Bharat	2,65,50,000.00	82,30,500.00	1,83,19,500.00
2	ICRISAT	7,48,50,429.06	54,94,704.00	6,93,55,725.06
3	Birangana Mahila Producer Company Limited (BMPC Ltd.)	1,00,332.24	0.00	1,00,332.24
	Total	10,15,00,761.30	1,37,25,204.00	8,77,75,557.30

Assam Millets Mission: Up-Coming Activities

April to July (3-4 Months)

1. Review of GT & ICRISAT along with OPIU's & 2 Deptt. (Chairmanship of SPD Sir)	April
2. District Level Review of AMM Activities (Chairmanship of SPD Sir)	April
3. Millet Procurement Procedures – Corpus Fund (ASAMB) & Online System (AFCSCL)	April, May
4. Cluster Based Approach – AMM activities integration with FPOs (Notification)	April, May
5. MIS data - on CM Dashboard (Communication from SPD Sir to DLMC)	April, May
6. Millet Feeding Program – DoEE; DoSW Approved Beneficiary List; TSI (MoA)	May, June
7. Briefing APC Madam on AMM (Overview and Transition Procedures)	May
8. Consolidation, Drafting & Finalization of AMM Operational Guidelines	June
9. As a part of Transition of AMM from APART to Deptt. - Scheduling next GB meeting (Ratification of Operational Guidelines, funding sources etc.)	July



Government of Assam
Department of Agriculture



Assam Millets Mission

March 2024

Assam Millets Mission

LOCAL PRODUCTION AND LOCAL CONSUMPTION

To bring back millets, the Assam Millets Mission has been initiated from year 2022 – 2029 for a period of 7 years. The Mission was officially launched by the Hon'ble Chief Minister of Assam, Dr. Himanta Biswa Sarma on 16th November 2022 with the objective of:

- **Raise Nutrition Quotient**
- **Increase Farmers Income**
- **Increase Productivity**
- **Contribute to Crop Diversification**

Focus Crop: Finger Millet (maruadhan), Foxtail Millet (kaundhan) and Proso Millet (cheena bajra).

Departments: Department of Agriculture in collaboration with Department of Elementary Education and Department of Social Welfare

Beneficiaries: Primarily benefiting the Farmers, FPO/ FPCs, Entrepreneurs and SHGs through production, post harvesting and marketing side activities and; through inclusion of millets in state nutrition programs increasing the nutrition quotient of expecting and lactating women, and young children

Assam Millets Mission: Target in 7 Years

Pre-mission Area: 5000 Ha

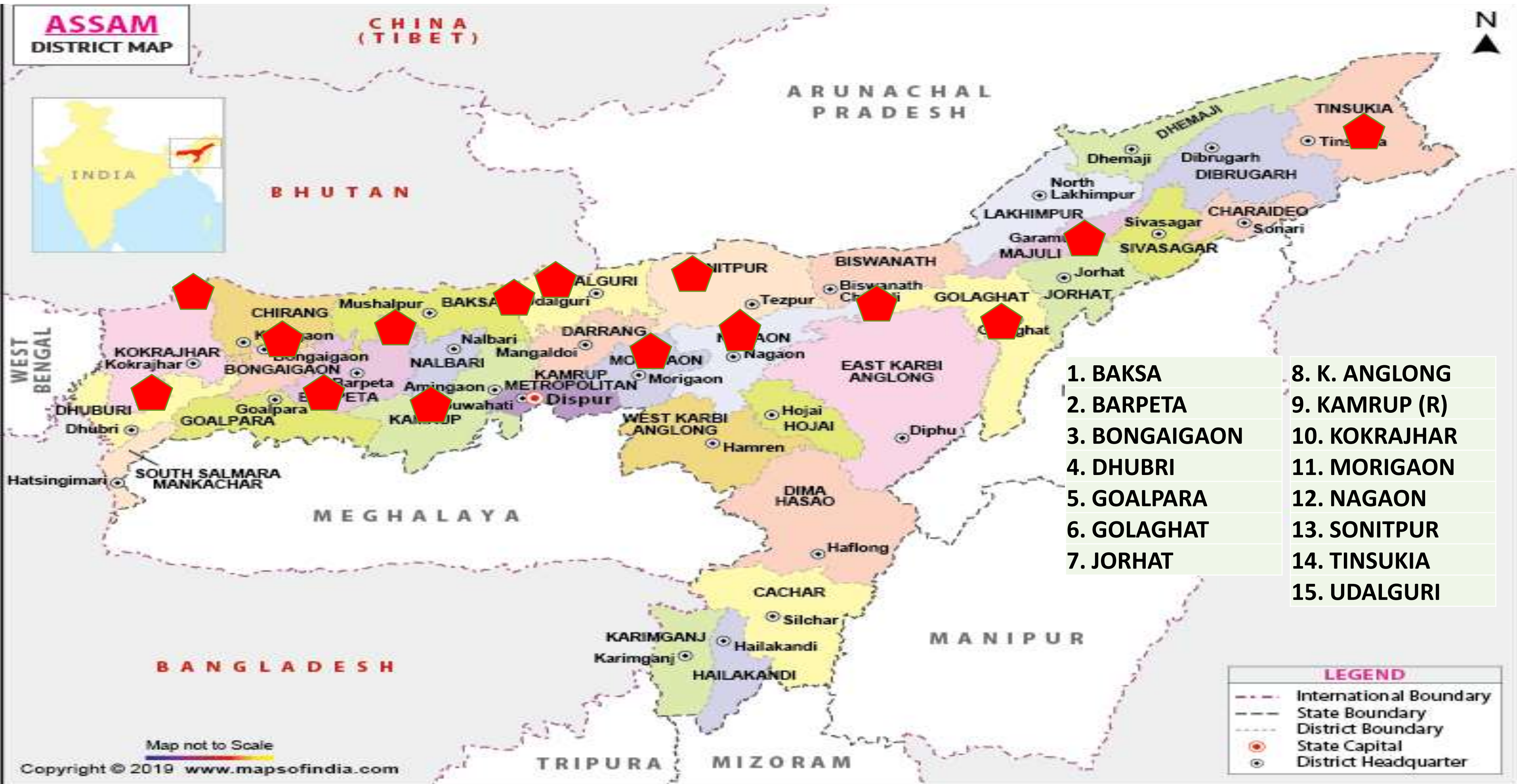
Targeted Area: 25000 Ha

Pre-mission Yield: 600 kg/Ha

Targeted Yield: 1200 Kg/Ha

Component	Activity	Target	Component	Activity	Target
A. Market & Nutrition Supportive Production	Tech Demo	20900 Ha	D. Ensuring better Nutrition in Assam	Product Exhibitions	170 no.s
	Minikit	31500 Kg		Mobile Outlets	280 no.s
	Crop demo with Pulses	2230 Ha		Rural Awareness Creation	2800 no.s
B. Post-harvest Management	PH Demo	900 no.s	School Awareness Creation	2800 no.s	
	PH Machineries	300 no.s	Supply of millets to PM POSHAN	1000 MT	
	Storage bins	800 no.s	Supply millets to AWCs	1000 MT	
C. Market Linkages	Millet FPC Formation	30 no.s	E. Training & Capacity Building	Nutri-camp of millets	1000 no.s
	Buyer Seller Meet	100 no.s		Exposure Visit	500 persons
				Training of Trainers (PoP, PH Mgt., Product Making)	3000 persons

ASSAM MILLET MISSION DISTRICTS



Production Details

Recommended Variety:
Finger Millet: INR 1008, TANU-9, Local Variety, Gossaigaon Marua Dhan (Curling type)
Foxtail Millet: Gossaigaon local (yellow seeded)



Year	Crop	Variety	Area	Avg. Yield
2022-23	Finger	VL Mandua 376 & 379	619.7 Ha	450 kg/ha
2022-23	Foxtail	SIA-3156, SIA-3085	1046.8 Ha	660 kg/ha
2023-24	Finger	ML 365	691.7 Ha	Harvesting ongoing
2023-24	Foxtail	SIA 3156	1780 Ha	Sowing completed



Seed Production

Crop	FPC name	Districts	Area	Production (kg)
Finger Millet (ML 365)	Sonaipuriya Farmer Producer Company	Morigaon	5 ha	200
	Itakhuli Organic Producer Company Ltd.	Tinsukia	10 ha	1000
	Shyamal Farmer Producer Company	Sonitpur	15 ha	1200
	Xorupathar Sadhani Mohila FPC	Golaghat	10 ha	200
	Noi -Poria FPC	Dhubri	14 ha	28000
	Total		54 Ha	30600
	Average Yield			566 kg/Ha
Foxtail Millet (SIA 3156)	Majuli Riverbank FPC Ltd.	Majuli, Jorhat	10 Ha	Crop Harvested
	Jengraimukh Agri FPC Ltd.	Majuli, Jorhat	10 Ha	
	Jinari FPO Cooperative Society Ltd	Goalpara	15 Ha	
	Shyamal FPC	Sonitpur	10 Ha	
	Noi-Poria FPC	Dhubri	20 Ha	
	Hatidura FPC Ltd.	Kokrajhar	15 Ha	
	Total		80 Ha	

