

ACHIEVEMENTS

- Contribution in release of five (5) red seeded, one (1) brown seeded and two (2) white seeded finger millet [Nagli /Ragi] varieties.
- Release of three (3) Little millet (Vari), three (3) Kodo millet (kodra) and one Barnyard millet varieties.
- This centre has given sixteen (16) recommendations on production technology of small millets crops.

Research Activities

A. Crop improvement

- Development of new varieties in small millets as well as tuber and vegetable crops.
- Generation of breeding material in small millets as well as tuber and vegetable crops.
- Dissemination of the newly developed technology on the farmer's field through demonstrations.
- Seed production programme of different varieties of rice, finger millet, little millet as well as tuber and vegetable crops is undergoing with a view to multiply the seeds of released varieties and distribution to the needful farmers.

B. Resource Management

- Study the feasibility of suitable inter-cropping system in nagli (ragi) crop.
- Study the feasibility of bio-fertilizer in hill millet crops.
- Study the feasibility and suitability of different vegetable crops.
- Study the nutrient management in hill millet crops.

C. Crop protection

- Screening of paddy and nagli (ragi) genotypes for Blast disease.

Year wise numbers of experiments conducted at Hill Millet Research Station, NAU, Waghai.

Crop	Year wise numbers of experiments conducted						
	2017-18	2016-17	2015-16	2014-15	2013-14	2012-13	2011-12
Finger Millet	19	18	22	22	24	21	26
Little Millet	8	7	5	5	7	06	05
Kodo millet, Barnyard millet	2	2	--	--	--	--	03
Paddy	19	19	20	19	20	26	34
Tubers & Veg.	11	10	7	05	05	05	04
Sesbenia	1	1	--	--	--	--	--
Pulses (Gram, Tur, Cowpea, Indian bean)	5	4	--	--	--	--	03
Sorghum	3	2	03	03	02	01	01
Ground nut / Niger	5	4	02	03	02	01	01
Maize	1	--	--	01	01	--	--
Total	74	67	61	60	63	63	80

Results of Front Line Demonstrations (FLDs)

Front Line Demonstrations were conducted since from the year 2012-13 in Valsad and The Dangs district of Gujarat on farmer's field.

Technology demonstrated under FLDs	Improved variety (Var. GN-5, GNN-6, GNN-7 / GV-2, GNV-3) <i>v/s</i> Local variety; with improved package of practices under Organic condition only, <i>v/s</i> local Farmer's practice.
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Table-1: Year- wise average grain yield (kg ha⁻¹) of finger millet under FLDs

Demonstrations	Year / Grain yield (kg/ ha ⁻¹)					
	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Improved Practices	1921	1866	1419	1330	1871	2775
Farmers Practices	1210	1439	1001	968	939	1611
% increase over FP	37.0	22.9	29.5	27.2	49.8	41.9

Table-2: Year- wise average grain yield (kg ha⁻¹) of little millet under FLDs

Demonstrations	Year / Grain yield (kg/ ha ⁻¹)					
	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Improved Practices	1782	1593	931	942	1871	2069
Farmers Practices	1129	1005	674	665	896	1031
% increase over FP	36.6	36.9	27.6	29.4	52.1	50.1

Seed Production at Hill Millet Research Station, NAU, Waghai.

Seeds of finger millet, little millet and other crops were produced at HMRS, Waghai during the year 2013-14 to 2017-18 and distributed to the farmers. This centre has approximately produced following quantity of seeds combinly under breeder, certified, foundation and truthful seed stages.

Sr. No.	Crop	Variety	2013-14 (kg)	2014-15 (kg)	2015-16 (kg)	2016-17 (kg)	2017-18 (kg)
1.	Nagli	GN-4	1420	965	941	610	730
		GN-5	642	355	423	305	615
		GNN-6	--	360	603	410	1210
		GNN-7	--	--	--	95	195
2.	Vari	GV-2	410	250	260	276	385
		GNV-3	--	--	--	85	255
3.	Paddy	GR-7	9170	9560	10360	7700	12530
		IR-28	5130	4270	7210	9870	6720
		NAUR-1	4550	3780	3850	3680	1750
		GNR-3	2660	6090	4550	1250	3025
		GNR-6	--	--	--	--	2870
4.	Green Gram	Meha	2950	2200	2750	2330	3950
		CO-4	700	88	270	1700	2250
5.	Castor	VP-1 (Modi.)	582	--	750	729	--
		GCH-7	--	--	--	--	--
		GNCH-1	--	--	--	--	1048
6.	Sunhemp	Local Selection	--	--	2850	3500	1850
7.	Niger	GN-1	--	--	--	34	51
		GNN-2	--	--	--	60	55
8.	Indian bean	NPS-1	--	--	550	320	--
		Kadava Wal-2	--	--	--	--	700
9.	Gram	GG-2/ GG-5	--	--	--	320	1700
		PKV-K-2	--	440	--	1050	--
10.	Sorghum	CSV-21-F	--	--	--	--	340