

2024

Millets and Sustainable Practices Survey in Tapi and Dang Districts, Gujarat



Consumer Education and Research Centre
MoEF&CC's Environmental Information system, Resource Partner on
'Environment Literacy-Eco labelling & Eco-friendly products'



Dr. Kartik Andharia (PO) and Mr. Karan Thakkar (IO) conducted a survey in Tapi and Dang districts of Gujarat from March 20 to 22, 2024. The aim was to assess millet related activities and farming, as well as sustainable practices in this region.

The itinerary included visits to various locations like the Padamdungari campsite, Unai Range Forest Office, Waghai Botanical Garden, Bamboo Haat, and the Hill Millet Research Station.

The first day involved interacting with farmer in Valod taluka, meeting the Range Forest Officer Ms. Ruchi Dave of Unai range, documenting the sale of wild fruits in the Unai market, and collecting millet-based recipes from a restaurant managed by local women at the Padamdungari campsite.

The second day focused on exploring the region and interacting with the people. The team visited stalls run by local women's groups (Sakhi Mandals) selling local produce on their way to Waghai, also explored Bamboo Haat, a new initiative by the Gujarat Forest Department showcasing and selling bamboo products made by local tribes of Dand, specifically Kotwadiya Tribe which specializes in bamboo products manufacturing. The team visited the library at Waghai Botanical Garden and interviewed farmers from nearby villages. We also met with Dr. Harshal Patil, Scientist at the Hill Millet Research Station and concluded the trip with a visit to the Dang Darbar Fair.

KEY FINDINGS

The survey revealed some interesting sustainable practices. The Vyara Forests department's glass water bottling plant at Padamdungari is a commendable step towards reducing plastic waste. Additionally, a farmer named Mr. Jayantibhai Konkani from Pipalvada village practices organic farming, demonstrating a sustainable approach to agriculture.

Regarding millet cultivation, the survey found that farmers in Shikeri village primarily cultivate sugarcane, mangoes, okra, cluster beans, and rice. Finger millet (Ragi/Nagli) is the dominant millet variety, mainly cultivated during the monsoon season in Dang District.



The rising popularity of millets has led to the emergence of women-led groups (Sakhi Mandals) near Waghai and Ahwa who process and sell millet-based products, indicating a growing market for these nutritious grains.

However, a major concern identified in the survey was the heavy reliance on chemical insecticides for okra cultivation near Waghai and Ahwa, contradicting Dang's claim of being a 100% organic farming district. Interestingly, the survey also documented the use of organic pesticides called Bhasmastra and Neemastra, prepared using household ingredients, by some organic farmers.

<i>Bhasmastra</i>	<i>Neemastra</i>
Ingredients <ul style="list-style-type: none"> • 20 liters of <i>Gaumutra</i> • 2 Kg Neem leaves • 500 Gm Green chilli • 500 Gm Garlic 	Ingredients <ul style="list-style-type: none"> • 20 liters of <i>Gaumutra</i> • 2 Kg Neem leaves
Recipe <ul style="list-style-type: none"> • Boil the ingredients in a vessel till it becomes half • Cool it down and strain it • Add 5 liters of strained liquid in 100 liter water • Spray this solution as a pesticide 	Recipe <ul style="list-style-type: none"> • Boil the ingredients in a vessel till it becomes half • Cool it down and strain it • Add 5 liters of strained liquid in 100 liter water • Spray this solution as a pesticide

Finally, the survey documented the various millet varieties grown in Gujarat, including Ragi (Nagli), Vari (Gajro), Cheno, Banti (Samo), Kodri, and Juvar, along with their specific sub-varieties.

Millet	Variety
Ragi (Nagli) / Finger Millet	Gujarat Nagli 1, 2, 3, 4, 5
	Gujarat Navsari Nagli 7, 8
	Gujarat Navsari Nagli 9 (Gira / CFMV 2)



	C.F.M.V. 3 (Ek Vijay)
Vari (Gajro) / Little Millet	Gujarat Vari 1, 2 Gujarat Navsari Vari 3 Gujarat Navsari Vari 4 (Ambika)
Cheno / Proso Millet	TNAU 202
Banti (Samo) / Barnyard Millet	Gujarat Banti 1
Kodri / Kodo Millet	Gujarat Kodra 1, 2 Gujarat Anand Kodra 3, 4 Central Kodo Millet Variety 2 (CKMV 2) Central Kodo Millet Variety 3 (CKMV 3)
Juvar / Sorghum	Gujarat Navsari Juvar 1 Fule Revati Gujarat Juvar 101 (Madhu Moti) Gujarat Juvar 44 Gujarat Juvar 102 (Surti Goti)



GALLERY



Drinking water
glass bottles at
padamdungri
ETC.



Visit to Hill
Millet research
station



Interviewing a Dangi Farmer to get insights about agriculture in Dang



Interaction with a local millet based value added products shop owner



Dangi Thali with several items made with Finger Millet



Road side stall of local wild and cultivated fruits at Unai market