

2.5 Millets and Sustainable Agriculture: Study conducted by Vertiver and IORA Ecological Solutions to support research under the TIGR2ESS programme

In India, arid and semi-arid regions account for more than 60% of the cultivated area under millets, providing around 40% of the food produced. These regions are characterized by long dry seasons and inadequate and unpredictable rainfall. In the past few decades, recurrent droughts and frequent dry spells have led to further land degradation and desertification. In arid and semi-arid conditions millets provide a viable and sustainable solution.

Millets once made up more than 40% of cultivated grains in India. Since the Green Revolution in the 1960s millet production has declined by 35%, due to the emergence of rice and wheat as preferred substitutes.

TIGR²ESS commissioned a socio-economic survey in five states (Andhra Pradesh (AP), Tamil Nadu (TN), Odisha, Rajasthan and Karnataka) to identify the challenges of millet farming, to mainstream research and policy actions. Farmer behaviour, practices and needs regarding millets were surveyed.

| English | Hindi | Telugu | Kannada | Tamil | Oriya |
|--------------------|---|---------------------------|----------------|------------|----------------------------|
| Pearl Millet | Bajra | Sajjalu | Sajje | Kambu | Bajra |
| Finger Millet | Nachani, Mundua, Mandika, Marwah | Ragula, Ragi, Chodi | Ragi | Kezhvargu | Mandia |
| Foxtail Millet | Kangni, Kakum, Rala | Korra | Navane | Thinnai | Kanghu, Kangam, Kora |
| Kodo Millet | Koden, Kodra | Arikelu, Arika | Harka | Varagu | Kodua |
| Little Millet | Kutki, Shavan | Sama, Samalu | Saame, Save | Saamai | Suan |
| Barnyard Millet | Jhangora, Sanwa | Udalu, Kodisama | Oodalu | Kuthravali | Khira |
| Sorghum | Jowar | Jonna | Jola | Chola | Juara |

Regional names of different millets across survey States

Key findings:

- Income from millets as ratio of total farming related income ranged from 10-50%, highest in Karnataka (52%)
- Key needs included access to agri-inputs, postharvest processing facilities and technical guidance
- Farmers in all states, except in AP, were unaware of MSP for millets
- Most farmers in AP, TN and Odisha preferred traditional seeds for millet cultivation, in contrast to Karnataka and Rajasthan
- Most farmers noted changes in cropping patterns, decline in rainfall, increased pests and diseases over last couple of decades.

This survey was conducted by Vertiver and IORA Ecological Solutions, New Delhi— organisations with expertise in forestry, biodiversity, sustainable agriculture and climate change



Enhancing millet production could hold the key to greater food and farmer security in India. Policies to change perceptions of millets, improve extension support for cropping systems and post-harvesting processing are some of the major challenges to be addressed.

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