



A Trend analysis the millet mission program in Odisha.

¹Manoranjan Suna, ²Niharika Kampa · ³Malati naik ⁴Rashmita Suna ⁵Swaraj Sahu

¹.Ph. D Scholar, PG department of Economics, Berhampur University, Bhanja Bihar, Odisha, India

²PG students GM university Odisha

³. lecturer economics, birmaharajpur college birmaharajpur, sonapur

⁴. lecturer in Economics Indravati Degree Mahavidya, Jaipatna, Kalahandi, Odisha India

⁵. PG form the Rajendra University Bolangir

Abstract

Odisha is one of the most important programs Launch. This program focuses on the small and marginal farmers. The millet mission program plays a significant role in enhancing climate resilience for crop production. The millet mission program had low water requirements and a minimum harvest duration. The main objective of this study To examine the millet mission area coverage, farmer participation and demonstration progress in Odisha from 2017-2025. The study is based on secondary data from the millet mission program in Odisha. The data is taken from the year 2017-18 to 2024-25 for the CAGR Millet Demonstration programme, and the Total farmers in the Odisha District-wise descriptive statistics are used. To calculate the standard deviation, the Coefficient of Variance is used. The variable has been used, such as farming work in the district-wise and Millet Demonstration Progress. The Finding of the study is that participation with form 8.030 from 2017-18 to 2, 63, 990 in 2024-25. The demonstration area also expanded to 144,736,42 hectares. The CAGR values also reflect the increased positive growth in both farmer participation and Procurement.

Key words: Millet, Farmers, Odisha

1.1 Introduction

Historically, millets have been cultivated and consumed by farmers across not only India but also Odisha. However, due to the green revolution, in India, millet cultivation has significantly decreased. The farmer shifted to different crops, such as wheat, due to government subsidies provided through the Green Revolution. This revolution mainly focused on agriculture, on white, rich people, so that millet cultivation decreased across the area.

Odisha is one of the most important programs Launch. This program focuses on the small and marginal farmers. Also provided the farmer with seed for cultivation. These seeds are part of the millet mission, a traditional part of food systems. The Odisha government launched in 2017. Millet Mission Program: The Odisha Millet Mission (OMM) aims to improve farmers' incomes and strengthen the millet sector by promoting sustainable agriculture. Where this program aimed to increase market linkage and farmer income, the income of small and marginal farmers also increased.

The millet mission program plays a significant role in enhancing climate resilience for crop production. The millet mission program had low water requirements and a minimum harvest duration. In recent years, due to climate change, temperatures have increased, and water scarcity has decreased; as a result, the millet program has helped policymakers improve agriculture.

1.2 Statement of the problem

The part of the growth millet mission program faces several problems. The millet farmer has low awareness. And also face several challenges, including inadequate market infrastructure and limited institutional support. Because of this, farmers often prefer the commercial crop for better profits and maximum returns, so the millet mission program is not selected due to these problems, and traditional millet farming practices are declining.

Therefore, this study examines the millet mission program in Odisha, a trend analysis from 2017-18 to 2024-25, and its outcomes across different districts of Odisha. This paper is organized into four parts: the first part is the introduction, the second part is the literature review, the third part is the methodology and data analysis, and the fourth part is the results, discussion, and Conclusion.

2. Review of Literature

Rana and Sahoo (2023) explored the role of women in both post-production and production activity cultivation in Odisha. The study data were collected from secondary and primary sources. For primary data collection, the simple size has been taken from 300 millet-producing farmers. The data have been analyzed using descriptive statistics. The study's finding is that the millet mission program not only provides food and nutrition but also fosters deep cultural roots in the tribal community—the program has led to increased women's decision-making power and empowerment.

Islam and Manaloor (2021) conducted a study on the potential contribution of NRLM to the livelihood security of the rural poor. This study is based on the secondary data collected from the FAO. The study concludes that the millet mission program received government support under the MSP. This has improved development and reduced market dependence.

Peddi et al. (2024) investigated the economic impact of adopting organic soil fertility measures on millet farming outcomes in rainfed regions of rural India. using survey data from 900 millet farmers, the analysis applied. The data has been analysis by using the Regression. The study result indicated that factors such as soil type, use of farmyard manure, crop diversification influenced farmers adoption of OSFM.

Singh and Yadav (2025) explored how the Tejaswini rural women's empowerment programmed is supporting women in Madhya Pradesh in the resurgence of indigenous millet cultivation based on secondary data from IFAD project report, and ethnographic case insight from Mandla and dindori district. The finding suggest that the revial of millets has given tribal women more authority beyond their traditional roles a knowledge keeper, increasing their participation in household decision making, boosting food sovereignty, and improving livelihood outcomes.

Arifah et. all (2023) explored South Sulawesi, Indonesia. The study's objective is to examine livelihood vulnerability among wealthy farmers in the upstream and downstream areas of the Betu River irrigation facility. The data was collected through a random sample; 132 houses were selected from the two regions. The Livelihood Vulnerability Index (LVI) and the IPCC approach are applied. The study finds that downstream farmers are more vulnerable than upstream farmers, and flooding, drought, and pest attacks impact lowland rice productivity.

2.1 Research Gap

The previous study mainly focused on the Sustainable Agriculture Millets Mission and Food Security. However, few studies have focused on the millet Mission program's performance over the years 2017 to 2025, district-wise, in Odisha, in my research. mainly focus on Demonstration and procurement performance, farmer participation in Odisha, and a trend analysis of over-the-year progress from 2017 to 2025.

2.3 Objective

To examine the millet mission area coverage. farmer participation and demonstration progress in Odisha from 2017-2025.

3. Methodology

The study is based on secondary data from the millet mission program in Odisha. The data is taken from the year 2017-18 to 2024-25 for the CAGR Millet Demonstration programme, and the Total farmers in the Odisha District-wise descriptive statistics are used. To calculate the standard deviation, the Coefficient of Variance is used. The variable has been used, such as farming work in the district-wise and Millet Demonstration Progress.

3.1 Data analysis and discussion

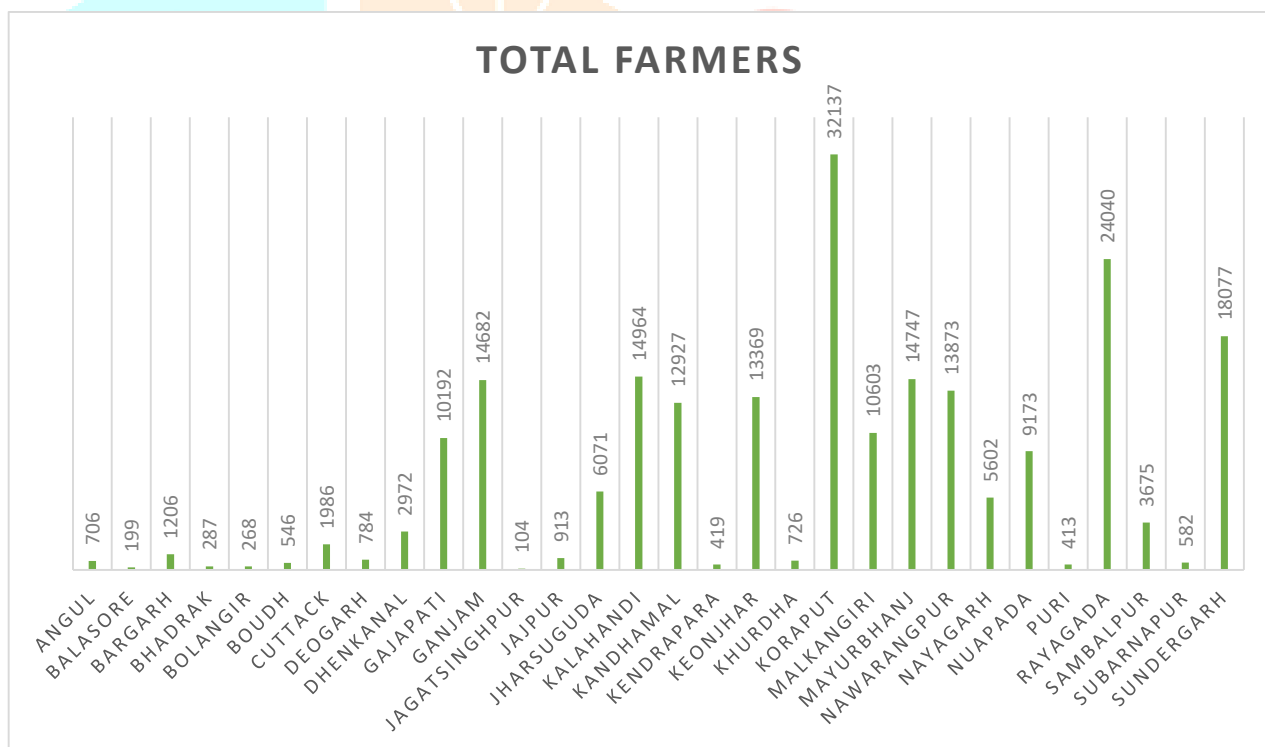
Table-1 Area Coverage millet mission in the Odisha

Districts	Blocks	Gram Panchayat	Villages	Farmers
30	177	2884	14841	243256

Sources: Milliet mission (shreeanna.odisha.gov.in).

The above figure is indicated that area coverage the millet mission in the Odisha. Where the all the 30 districts have been coverage millet mission. And including with 177 blocks in Odisha, also 2884-gram panchayat is receiving the benefit through these schemes. In additions to 14841 villages in including the 243256 farmers has been receiving the benefit. The overall data shows that farmer doing the millet mission for their livelihoods.

Figure-1 Total farmer working in the Millet mission program in the Odisha district wise



Sources: Milliet mission (shreeanna.odisha.gov.in).

The above chart shows the Total number of farmers working in the Millet mission program in the Odisha district-wise. In the Koraput is the total 32, 237 farmers are working, Kalahandi 14,964, Mayurbhanj 14,747, Kandhamal is 12,927, Nayagarh 13,873, Keonjhar 13,369, Malkangiri 10 603, Gajapati 10 192, Puri 9173, Sundergarh 18077, Jharsuguda 6701, Nuapada 5602, Sambalpur 3675, Dhenkanal 2972, Bargarh 1206, Jajpur 913, Deogarh 784, Khurda 726, Angul 706, Subarnapur 582, Boudh 546, Jharsuguda 6071, Kendrapara 419, Rayagada 413 Bhadrak 287, Bolangir 268, Balesor 199, Jagatsinghpur 104. The chart indicates that in the Koraput District, most farmers are working in Odisha, whereas in Jagatsinghpur, fewer farmers are working. This shows that the millet mission programme launched in 2017 has been a significant achievement. This

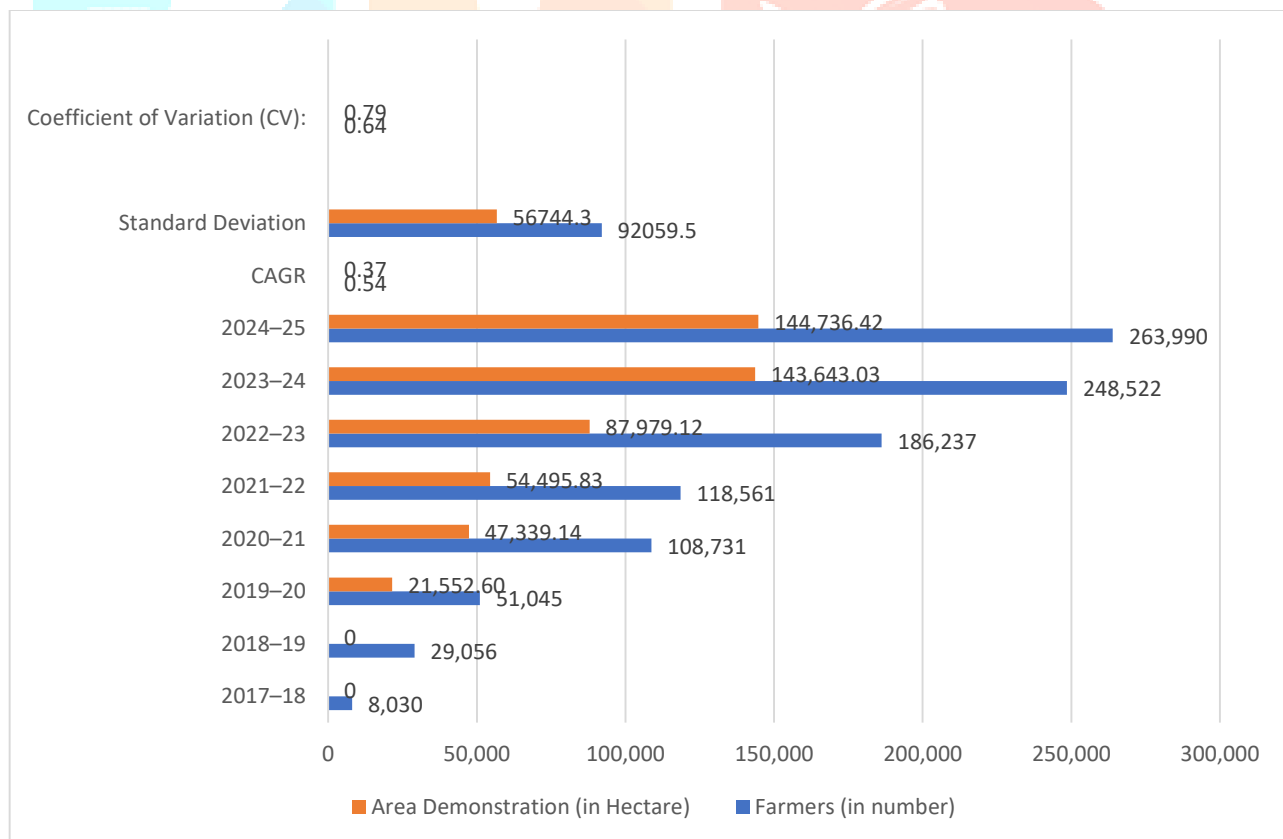
mission helps farmers do millet work and provides incentives to the government, which also purchases crops after cultivation because all farmers have been gaining not only financial benefits but also achieving livelihood stability through the millet mission, and significantly increased millet cultivation, livelihoods, and sustainability in the village, farmers in Odisha (Sahoo, 2025).

Table-2 Millet Demonstration Progress (2017–2025)

Year	Farmers (in number)	Area Demonstration (in Hectare)
2017–18	8,030	0
2018–19	29,056	0
2019–20	51,045	21,552.60
2020–21	1,08,731	47,339.14
2021–22	1,18,561	54,495.83
2022–23	1,86,237	87,979.12
2023–24	2,48,522	1,43,643.03
2024–25	2,63,990	1,44,736.42
CAGR	0.54	0.37
Standard Deviation	92059.5	56744.3
Coefficient of Variation (CV):	0.64	0.79

Sources: Millet mission (shreeanna.odisha.gov.in).

Figure: 2 Millet Demonstration Progress (2017–2025)



Sources: Millet mission (shreeanna.odisha.gov.in).

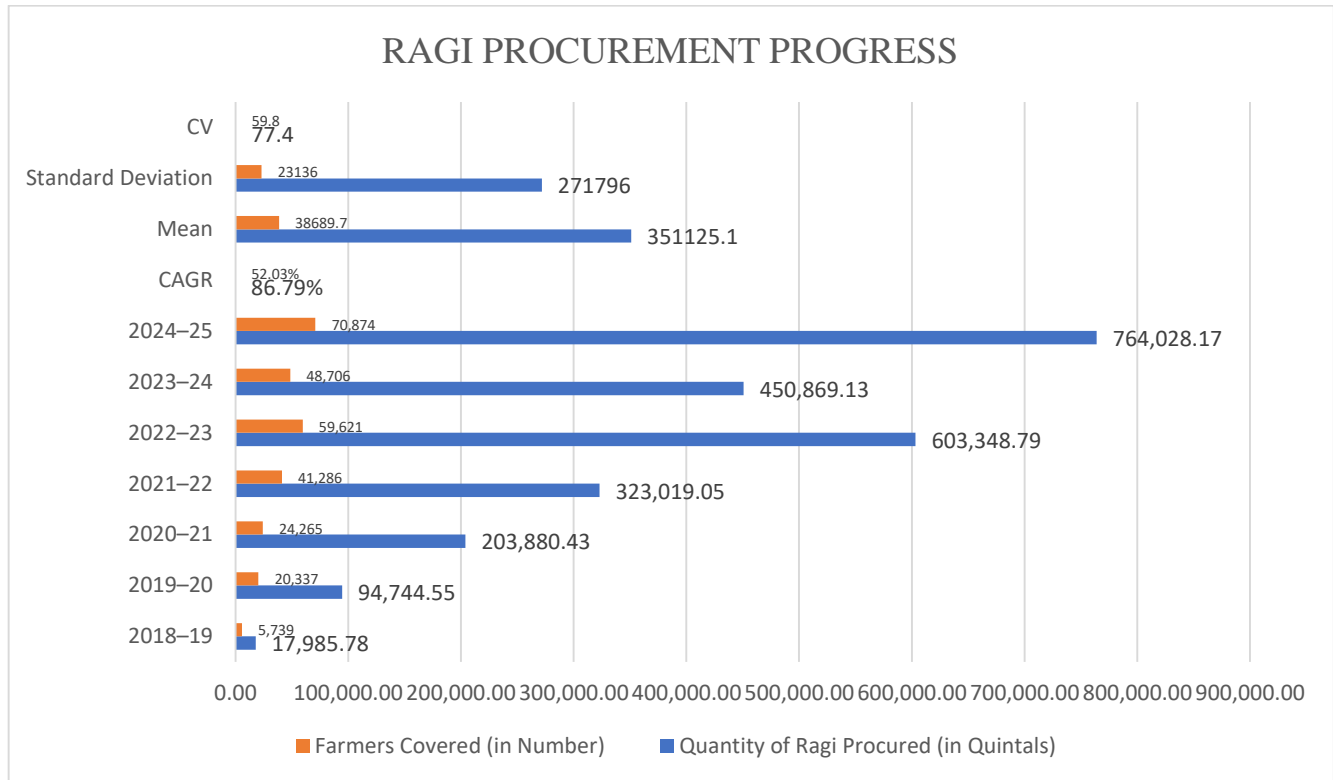
The figure and chart above show the progress of the millet mission demonstration in Odisha from 2017-18 to 2024-25. Where blue colour indicates the number of Farmers participating in the program, and yellow colour represents the program's Area demonstration. In the starting year 2017-18, the number of farmers participating was 8.030, and the Area of demonstration was zero. In the 2018-19, the number of farmers increased from

8,030 to 29056, but in this case, the Area of demonstration is also zero. In the year 2019- 20, the first-time Area of demonstration increased from 0 to 21,552.60 (hectares), and the number of farmers also increased from 29056 to 51,045. The figure and table show that, after 2019-20, both the number of farmers and the Area of demonstration have been included in the millet mission program. For example, in 2020-21, the total number of farmers was 1,08,731, and the Area of demonstration was 47,339.14. (Hector's), In the 2021-22, the total number of farmers is 1,18,561 and 54,495.83(Hectares). In the year 2022 -23, the total number of farmers is 1,86,237, and the Area of demonstration is 87,979.12 (Hectares). 2023-24 is the number of farmers is 2, 48, 522, and the Area of demonstration is 1, 43 64303 (Hectares). And the 2024- 25 number of farmers is 2,63,990, and the Area of demonstration is 1,44,736.42. where the figure and table indicate that both the number of participating farmers and the Area of demonstration hectares have been increasing continuously. The total CAGR is from -18 to 2024-25; farmer in 0.54; and the Area of demonstration starts from 2019-20 to 2024 25. CAGR is 0.37.

Table-3 RAGI PROCUREMENT PROGRESS

Year	Quantity of Ragi Procured (in Quintals)	Farmers Covered (in Number)
2018-19	17,985.78	5,739
2019-20	94,744.55	20,337
2020-21	2,03,880.43	24,265
2021-22	3,23,019.05	41,286
2022-23	6,03,348.79	59,621
2023-24	4,50,869.13	48,706
2024-25	7,64,028.17	70,874
CAGR	86.79%	52.03%
Mean	351125.1	38689.7
Standard Deviation	271796.0	23136.0
CV	77.4	59.8

Sources: Millet mission (shreeanna.odisha.gov.in).

Figure-3 Ragi procurement progress

Sources: Millet mission (shreeanna.odisha.gov.in).

The above figure 2 and table in indicated the Ragi procurement progress in the Odish form the year 2018-2019 to 2024-25, form the year 2018-19 quantity of ragi procured in the quintals was 17.985.78 and with the farmer covered in the 5,739. covered in Odisha. Where in the 2019-20 the quantity of ragi procured has been increased the form the 17.985.78 to 94.744.55 due the increased the farmer form the 5, 739 to 20,337. Because of this increased quantity of ragi procured in the Odisha form the year 2019-2020. The 2021-22 with the famer also increased the 41,286 the ragi procured with 4,50,869.13. in the year 2022-23 with the no of farmer is the 59,621 and the ragi procured is the 6,03,348.79. But in the year 2023-24 with the 48,706 and the with the ragi procured is the 4,50, 869.13. Form the year 2024-25 the no of farmer is the 70.874 with the ragi procured the has also increased in the 7,64,028.17. Form the year 2018-19 to 2023-24 the compound Annual growth rate (CAGR) with the farmer is the record 52.03% with the compound Annual growth rate (CAGR) with the quantity of ragi procured 86.79%. this show that the quantity of ragi are increased the greater than the farmer records this help possible the millet mission program in the support by the Odisha govt.

4.Result Discussion

The fund that the millet mission pregame has significantly increased in Odisha from the year 2017-18 to 2024-25. This program also covered all 30 districts, the 117 blocks under the 2884 gram panchayat (GP), and all GPs come under the 14,841 villages covered by the thorough millet mission program, and also benefited more than 24 lakh farmers across the district. The millet mission program increased throughout the mission and improved farmers' livelihood opportunities.

Where the trend analysis indicated that the Millet mission pregame continued to increase both the number of participating farmers and the area under millet demonstration. With the participation with form 8.030 from 2017-18 to 2, 63, 990 in 2024-25. The demonstration area also expanded to 144,736,42 hectares. The CAGR values also reflect the increased positive growth in both farmer participation and Procurement. These are all the indicators of growth. And this program also promotes agriculture and livelihood security in Odisha.

4.1 Conclusion

The study concludes that the program successfully increased both farmer participation, ragi procurement, and area covered. This program has played a vital role in advancing the millet mission for farmers by providing subsidies and purchasing millet.

4.2 References

- Centre for Sustainable Agricultural Mechanization (CSAM). (2024). *Role of mechanization towards a sustainable revival of millet cultivation* (CSAM Policy Brief). United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP).
- Choudhary, S., Boruah, A., Ram, N., Gulaiya, S., Choudhary, C. S., & Verma, L. K. (2023). Millet's role in sustainable agriculture: a comprehensive review. *International Journal of Plant & Soil Science*, 35(22), 556-568.
- Gautam, U. S., Paliwal, D. K., & Naberia, S. (2007). Improvement in livelihood security for small and marginal farmers through front line demonstrations on oilseed and pulse crops in central India. *Indian Research Journal of Extension Education*, 7(1), 1-5.
- Islam, M. S., & Nathan, H. S. K. (2026). Elements of Effective Public Policy: Evidence From Odisha Millets Mission, India. *Review of Policy Research*, 43(2), e70035.
- Islam, S., & Manaloor, V. (2021). Millets for food and nutrition security in India: determinants and policy implications. *Journal of Nutrition and Food security*.
- Jadhav, N., & Londhe, D. J. (2023). Policy support for the promotion of millets: Current status and its impact. *Journal of Drug Research in Ayurvedic Sciences*, 8(Suppl 1), S148-S151.
- Mallik, S. (2024). Food Security and Sustainable Agriculture Through Odisha Millets Mission. *Productivity*, 65(3), 289-296.
- Mishra, A., & Debata, B. (2021). Livelihood security among rural poor: Evaluating the impact of Rural Livelihood Mission in Odisha, India. *Cogent economics & finance*, 9(1), 1978705.
- Nithya, D. J., King, E. O., Swaminathan, M., & Yuvaraj, P. (2025). Strengthening the millet economy: lessons from a South Indian case study: Nithya et al. *Food Security*, 17(2), 477-492.

- Peddi, D., Suresh Reddy, B., & Revathi, E. (2025). Adoption of organic soil fertility measures and their impact on farm outcomes: a case study of millet cultivators in India. *Journal of the Asia Pacific Economy*, 30(4), 1486-1505.
- Sahoo, J. P., & Mahapatra, M. (2023). International year of millets-2023: Revitalisation of millets towards a sustainable nutritional security. *Technology in Agronomy*, 3(1).
- Singh, S., & Yadav, P. (2026). Reviving customary millets and empowering women in Madhya Pradesh: the Tejaswini scheme's contribution. *Social Identities*, 32(2), 157-173.
- Singh, S., & Yadav, P. (2026). Reviving customary millets and empowering women in Madhya Pradesh: the Tejaswini scheme's contribution. *Social Identities*, 32(2), 157-173.
- Sreeni, K. R. (2023). Millet village Attappady, Kerala: Choice for healthy food consumption, food security, livelihood, income and employment. *J Food Sci Nutr*, 9(151), 2.
- Sreeni, K. R. (2023). Millet village Attappady, Kerala: Choice for healthy food consumption, food security, livelihood, income and employment. *J Food Sci Nutr*, 9(151), 2.
- Swain, S. R., Rudraraju, V., & Nayak, S. (2024). Empowering women through millet entrepreneurship: Cultivating success and sustainability. *International Journal of Research-Granthaalayah*, 12(5), 43-59.
- Venkata Rao, N., Rao, K. P. C., Gupta, S. K., Mazvimavi, K., Kumara Charyulu, D., Nagaraj, N., ... & Singh, S. P. (2018). Impact of ICRISAT Pearl Millet Hybrid Parents Research Consortium (PMHPRC) on the Livelihoods of Farmers in India, Research Report No 75.