

Developing a rural food system assessment framework for India:
An adaptation from Urban Food System Assessments for
Nutrition (UFSAN-FAO) framework



Himanshi Pandey¹, Suneeta Chandorkar¹, Anjali Ganpule²

¹The Maharaja Sayajirao University of Baroda, Gujarat, India; ²Centre for Chronic Disease Control, New Delhi, India

BACKGROUND

- The global shift in food system (FS) from traditional to modern is linked with rise in non-communicable diseases.
- The shift was initially considered an urban phenomenon, but has rapidly extended to rural areas.
- Existing FS assessment frameworks are urban-centric and do not capture the unique characteristics of rural areas.
- We target this gap by adapting the UFSAN¹ framework (designed for urban settings) to rural food system (RFS) context.

METHODS

UFSAN framework adaptation to rural settings was a multi-step process

1. **Literature review:** Reviewed multiple FS frameworks including High Level Panel of Experts (HLPE) framework 2023 and 2017; FS Countdown report, 2023; and other relevant frameworks to add to RFS framework.
2. **Exploratory field visits:** Conducted in the rural and tribal areas of Maharashtra and Gujarat in India to assess the relevance of all components of domains and to identify characteristics of the RFS.
3. **Expert consultations:** Conducted at local, national and international level (n=7) to assess the face validity of the framework and questionnaires. Their inputs informed domain selection and adaptation to RFS.
4. **Adaptation:** Incorporating necessary domains and components from the above three steps to the RFS framework and stakeholder specific questionnaires (consumers, retailers/ wholesalers, and farmers). Further, the questionnaires were translated into regional languages and verified through pilot testing.



RESULTS

Points adapted for RFS framework

- Several domains from other frameworks were incorporated based on their relevance to the rural context (Figure 1). Two drivers (socio-cultural and resilience); and three impacts (social, economic and environmental) were added to the RFS framework.
- We found rural to urban migration for livelihood, agricultural challenges, and distance from highway as relevant factors for RFS.
- Government schemes were crucial across RFS stakeholders: Public Distribution System (PDS) and women empowerment schemes for consumers, business loans for retailers/wholesalers, and subsidized seed schemes for farmers.
- Sources of food vary for rural consumers. For e.g., market, PDS, farm, livestock, in kind donations, and barter system.
- Household holding is more relevant to assess socio-economic status for rural areas than income alone.

Figure 1: Modifications in UFSAN framework for rural areas

FS domains	UFSAN elements	Additional elements
Drivers	Demographic Innovation and technological Political and economic Biophysical and environmental	Socio-cultural Resilience
Determinants	Food supply chain Food environment Consumer behaviour	None added
Outcomes	Diet diversity Food insecurity	Nutrition Health
Impacts	None present	Social Economic Environmental

CONCLUSION

- We adapted the UFSAN framework by modifying selected domains to better reflect rural food system using a multi-step process.
- Key factors relevant to RFS include migration, government schemes, multiple food access pathways and household resources.
- The developed framework can be adapted to assess the food system in other rural regions across India.

References

1. Raza, A., Jaacks, L., and Ganpule-Rao, A. Pandey, H. and Lobo, A.S. 2022. Urban food system assessments for nutrition and healthy diets – Technical guidance note. Rome, FAO.
Available at: <https://doi.org/10.4060/cb8612en>

Acknowledgement: This work was supported by the UGC NET-JRF fellowship. We express our sincere thanks to all the study participants

