

STATISTICAL IMPACT ON AGRICULTURAL PRACTICES AMONG TRIBAL WOMEN IN CHHATTISGARH

GAUTAM PRASAD BHASKAR

Assistant Professor, Agronomy, CARS, Kanker (IGKV, Raipur)

ABSTRACT

This review critically examines the role and dynamics of tribal women in agricultural practices in Chhattisgarh as of the year 2010-11. Tribal women have historically played a central role in sustaining traditional agrarian livelihoods through labor-intensive, community-centered farming systems. The review synthesizes empirical studies, governmental and NGO reports, and ethnographic accounts to explore women's forms of participation—from subsistence cropping, seed preservation, and agroforestry to collection of non-timber forest produce (NTFP). It addresses the socio-economic constraints, gendered labor division, access to resources (land, credit, technology), and institutional frameworks shaping their agricultural roles. Methodological frameworks span participatory rural appraisal (PRA), qualitative interviews, and secondary data analysis. Findings reveal that while tribal women are indispensable to household food security and biodiversity maintenance, they face systemic marginalization through limited tenure security, lack of access to extension services, and low recognition in policy. Opportunities are identified in gender-sensitive institutional reforms, capacity building, co-management of resources, and promotion of agroecological innovations. The paper concludes with recommendations to strengthen tribal women's agency and agricultural resilience in Chhattisgarh's tribal zones.

KEYWORDS: Agroforestry, Chhattisgarh's Tribal, Extension Services, NTFP and PRA

INTRODUCTION

Chhattisgarh—formed in November 2000—possesses a high proportion of tribal populations (over 32%), many living in remote, forest-fringe areas. Tribal women, especially in communities like Gond, Baiga, Oraon, and others, contribute substantially to agricultural production and natural resource management, often combining farming with forest-based livelihoods. In 2010-11, agriculture formed the primary occupation for tribal households, with women heavily involved in labor activities, seed selection, weeding, harvesting, processing, and supporting agroforestry and NTFP collection. Despite their substantial contributions, tribal women have often remained invisible in formal agricultural extension, credit systems, and policy dialogues.

Objectives and Scope

This review aims to:

- Map the range of agricultural practices managed or contributed to by tribal women around 2010-11.
- Investigate socio-cultural, economic, and institutional factors shaping their engagement.
- Review empirical studies conducted up to or around 2010-11, to understand their methodologies and findings.
- Analyze the constraints they faced and opportunities for support.
- Propose future directions and recommendations for enhancing their agro-agency.

REVIEW AND LITERATURE

1. Tribal Women's Role in Traditional Agriculture

Several ethnographic and agrarian studies highlight tribal women as core participants in subsistence farming. They engage actively in paddy transplanting, weeding, and harvesting, often using family labor systems. Studies (e.g., Reddy & Mishra, 2006) emphasize how women also preserve traditional seed varieties and manage small kitchen gardens, ensuring intra-household nutritional security.

2. Agroforestry and NTFP Collection

Tribal women often collect forest produce such as mahua flowers, tendu leaves, mandia (finger millets), and learning honey. These activities supplement diets and provide cash income. Research from NGOs like PRADAN (late 2000s) spotlights women's role in the collection, processing, and sale of NTFP.

3. Gender and Division of Labor

Gendered division of labor remains pronounced. Men often clear land and handle marketing, while women assume repetitive labor tasks. Women's burdens are compounded by household responsibilities and caregiving. Women perform the bulk of unremunerated labor—unrecognized in official data.

4. Access to Resources and Institutional Support

Studies (e.g., Singh et al., 2008) highlight that tribal women typically lack land ownership—their farms are often nominally owned by male relatives. This constrains access to institutional credit, subsidies, and extension services. Women's involvement in farmer collectives was limited, though nascent SHGs (self-help groups) started to offer alternative access channels.

5. Impact of Government Schemes in 2010

By 2010-11, government schemes like National Rural Employment Guarantee Act (NREGA) had begun evolving (NREGA launched in 2005). Reports note that tribal women accessed wage labor through MGNREGA for tasks like soil and water conservation, though delays in payments and information asymmetries persisted. Schemes like Indira Kranti Patha, and Tribal Sub-Plan financing were in nascent stages.

6. Methodological Observations

Research methodologies vary. Ethnographic case studies and qualitative interviews (e.g., with 20–50 women across villages) provided deep insights, while larger-scope surveys (e.g., government data) lacked gender-specific disaggregation. Participatory Rural Appraisal (PRA) allowed community mapping of cropping calendars and gendered output contributions. However, there were gaps in longitudinal tracking and quantitative precision.

MATERIALS AND METHODS

Since this is a review article, the 'Materials and Methods' section outlines the approach used in synthesizing the literature.

1. Literature Identification

Peer-reviewed journal articles (e.g., Indian Journal of Agricultural Economics, Economic and Political Weekly) from 2000 to 2009. Government reports (Chhattisgarh State Statistical Bureau, Ministry of Agriculture, Tribal Welfare Ministry). NGO/CSO documents (PRADAN field reports, local NGOs). Ethnographic monographs.

2. Inclusion Criteria

Studies focused on tribal areas within Chhattisgarh. Empirical work covering tribal women's roles in agriculture. Data or fieldwork around the year 2010.

3. Analytic Framework

Thematic synthesis using key themes: labor contribution, resource access, institutional linkages, gendered constraints.

Policy/gaps analysis: what supports existed in or before 2010.

4. Validation and Triangulation

Cross-referencing government data with field reports. Comparing community narratives with statistical findings.

5. Limitations

Scarcity of disaggregated data specific to tribal women. Possible biases in NGO reports—often qualitative and context-specific, lacking representativeness.

RESULTS AND DISCUSSION

1. Agricultural Roles and Contributions

Subsistence Farming: Tribal women were primary laborers in paddy-based farming systems. They executed transplanting, weeding, harvesting, threshing, and post-harvest processing. In some communities, women even crafted simple tools for farming.

Seed Saving and Cropping Diversity: Women preserved locally adapted seed varieties (e.g., red and black paddy, millets), through community-level seed exchange and informal seed banks.

Kitchen Gardens: Most households maintained small, multipurpose gardens—raising leafy vegetables, pulses, turmeric, and medicinal plants—primarily tended by women.

2. Forest-Linked Agro-Subsystems

Women's NTFP activities formed critical livelihood components. For instance, Mahua flowers were collected, sun-dried, and fermented to produce local rural liquors—though not always legal, the income was vital. Women also sorted and bundled tendu leaves used in bidi making, sometimes through corporate-linked procurement committees (TRIFED).

3. Constraints and Systemic Marginalization

Land Tenure: Without land rights, tribal women had limited incentive to invest in long-term soil improvement or orchard planting.

Credit and Inputs: Women lacked collateral or formal accounts, limiting access to institutional credit. Subsidy schemes (e.g., rural seeds/fertilizer schemes) were often channeled through male heads.

Extension Services: Field visits by Krishi Vikas Kendras (KVKs) were sparse in tribal zones; women seldom attended such trainings due to domestic responsibilities and cultural restrictions.

Recognition Gap: Official agricultural statistics and planning frameworks rarely counted women's contributions; households were treated as monolithic units.

4. Emerging Support Mechanisms

Self-Help Groups (SHGs): Late-2000s impetus by NGOs and banks to organize women into SHGs provided a platform for micro-credit, savings, and livelihood diversification—though agricultural orientation was limited.

MGNREGA Gains: Tribal women increasingly used public works under MGNREGA (like field bunding, water harvesting), earning cash and building infrastructure favorable to agriculture. Nonetheless, awareness levels and convergence with agriculture remained weak.

Local-Level Innovations: A few NGO-supported watershed projects piloted co-management involving women, experimenting with women's committees managing common lands.

5. Implications for Policy and Gender Inclusion

Recognizing women's centrality can reorient agricultural extension: gender-sensitive training, participatory seed systems, and inclusive credit. Entry points like SHGs can be leveraged for agriculture-focused microenterprises (e.g., value addition of NTFP, vegetable processing). Forestry and agriculture borderlands offer scope for agroforestry systems (e.g., integrating fruit trees into farm plots), but land tenure and input access must be addressed.

CONCLUSION AND FUTURE SUGGESTIONS

Conclusion

By the year 2010, tribal women in Chhattisgarh were critical actors in agricultural production, seed diversity, and resource collection, yet faced structural constraints limiting their empowerment and productivity. Despite contributions, their roles were largely invisible within policy frameworks and institutional mechanisms. Emerging avenues—MGNREGA, SHGs, and local watershed programs—offered partial support but lacked integration with tribal women's farmers' realities.

Future Suggestions

To enhance tribal women's agricultural agency and resilience:

1. Land Tenure Reform

Prioritize recognition of women's land rights—either individual or collective—within tribal communities. Strengthen the implementation of Forest Rights Act (2006) provisions allowing community/individual land claims.

2. Gender-Responsive Extension

Establish women-only training modules through KVKs/ Krishi Vigyan Kendras. Use local literatures and expressive forms (demonstrations, folk media) for training.

3. Access to Input and Credit

Partner SHGs with micro-financial institutions to provide agri-credit suited to small plots, NTFP value chains, and kitchen gardens. Offer seed kits (traditional varieties) specifically for tribal women groups.

4. Seed Sovereignty and Agroecology

Support community seed banks and participatory varietal selection processes. Promote bio-intensive and agro-ecological practices suitable to tribal agro-systems, such as intercropping and organic nutrient cycles.

5. Institutional Inclusion

Ensure representation of tribal women in village-level planning bodies, gram sabhas, panchayats, and watershed committees.

6. Data Disaggregation and Monitoring

Mandate gender- and tribe-disaggregated data in agricultural censuses and surveys (e.g. NSSO, NFHS, Agricultural Census). Encourage community-based monitoring to capture qualitative outcomes.

7. Integration of NTFP and Agriculture

Support livelihood diversification through eco-enterprises (e.g., processed forest foods, herbal products), offered via SHGs or cooperatives. Ensure fair-trade linkages, avoiding exploitation by middlemen.

8. Cross-Sectoral Convergence

Align agricultural, forestry, tribal welfare, and rural development schemes to provide holistic support (e.g., combining irrigation, input supply, and market access).

In sum, the path forward entails institutional recognition, resource access, capacity building, and policy convergence grounded in feminist and tribal justice principles.

REFERENCES

1. Reddy, S., & Mishra, B. (2006). "Agricultural labor contributions of tribal women in Eastern India." *Indian Journal of Agricultural Economics*, 61(3), 320–333.
2. Singh, R., Patel, D., & Verma, S. (2008). "Access to resources among tribal women farmers in Chhattisgarh." *Economic and Political Weekly*, 43(45), 54–60.
3. PRADAN (2009). Field Report on NTFP Livelihoods in Bastar District. PRADAN.
4. Ministry of Rural Development (GoI). (2008). "Review of MGNREGA implementation in tribal areas." Government of India.
5. Chhattisgarh State Statistical Bureau. (2009). Statistical Abstract, Tribal Districts. Government of Chhattisgarh.
6. Forest Rights Act, 2006. Government of India.
7. NFHS-3. (2005–06). National Family Health Survey (Tribal Districts). Ministry of Health and Family Welfare, GoI.
8. Agarwal, B. (2000). "Conceptualising environmental collective action: why gender matters." *Cambridge Journal of Economics*, 24(3), 283–310.
9. Rao, N. (2007). "Women's Self-Help Groups and agricultural livelihoods in central India." *Journal of Rural Development*, 26(1), 1–18.

