Food Insecurity among the Tribal People in Rayagada District of KBK Region: A Policy Perspective

Prasanta Kumar Das and Priyabrata Sahoo†

This study aims to investigate the extent of malnutrition in two tribal villages located in the Kashipur Block of Rayagada District within the KBK Region of Odisha. Specifically, the objectives are: (i) To assess the food and nutrition status of the tribal population in the study area. (ii) To provide policy recommendations for improving food security among the tribal people residing in the sample villages. The study employs both primary and secondary data, collected through simple and purposive sampling methods. It employs a comprehensive case study approach, utilising interview schedules and personal interviews to understand the nutritional status of the tribal population. The major findings of the study reveal that a significant portion, 75 per cent, of the population in the Bhitarapadamajhi and Tikarpadar villages of Rayagada district are tribal people living in conditions of extreme poverty and hunger. Moreover, over 80 per cent of the population in these villages is under-nourished. The study emphasises the urgent need for initiatives and actions to address undernutrition and its adverse consequences in this region. It underscores the vital role of key policy initiatives such as the Integrated Child Development Services (ICDS) and the Mid-Day Meal Scheme (MDMS) in improving the nutritional status of children and women in the state. In conclusion, the paper advocates for raising awareness about the detrimental impact of malnutrition on the health of the impoverished tribal population. It emphasises the importance of effective child care and feeding practices and addresses the specific issues faced by women in the two remote villages of Rayagada District within the KBK Region of Odisha.

Non-Timber Forest Products and Their Role in Livelihood Economy of the Tribal People in Bastar Plateau of Chhattisgarh

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Non-timber forest products (NTFPs) have played a significant role in the socio-economic and cultural life of forest dwellers and tribal communities in Chhattisgarh and across India. This study was conducted in the Kondagaon district of

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Chhattisgarh to understand the costs and returns associated with NTFPs, investigate the marketing patterns, identify the challenges faced by NTFP collectors, and propose suitable measures to address these challenges. For this study, a random sample of 200 farmers, who also collected NTFPs, was selected from five villages in Kondagaon district. Primary data was collected for the year 2019-20 using pre-tested interview schedules. The key findings of the study revealed the average intensity and contributions of different forest products. The highest contribution came from Tendu leaves (29.07 per cent), followed by Mahua flowers and Sal seeds at 24.20 per cent and 13.84 per cent, respectively. More than half (53.56 percent) of the NTFPs were sold to the Chhattisgarh State Forest Product Federation (CGMFPF), followed by village merchants (34.28 per cent) and direct sales to consumers (12.16 percent). On average, each household processed 485.08 kilograms of NTFPs, with Sal seeds accounting for the largest share at 51.94 per cent, followed by tamarind and Mahua seeds at 26.08 percent and 14.44 percent, respectively. The study identified several constraints faced by NTFP collectors, including deforestation, forest fires, a short window for government purchasing, long distances from home, and competition among collectors. Besides they also faced challenges such as inadequate primary processing units, a lack of technical knowledge about processing, insufficient labor, limited storage facilities, and a shortage of available raw materials. The study's recommendations emphasise the importance of effectively collecting, marketing, and processing NTFPs. This not only provides an alternative source of income for villagers, improving their socio-economic conditions, but also has the potential to promote economic growth and create employment opportunities in the region.

**Mono-culturing of Cropping in Tribal Area - Threat to Agri-Biodiversity: Case Study of Tribal Districts of Madhya Pradesh**

**Poonam Chaturvedi and Sunil B. Nahatkar†**

An analysis was conducted to assess the shift in cropping patterns, specifically towards cereals like the rice-wheat system, by replacing traditional crops grown by tribal communities in Madhya Pradesh. The study is based on 21 years of secondary data (2000-01 to 2020-21) on crop-wise areas collected from the Directorate of Economics and Statistics. Five tribal districts with more than 50 percent tribal population were chosen for the study: Barwani, Dhar, Dindori, Jhabua, and Mandla. The findings of the study revealed significant changes in cropping patterns in these districts: In Barwani, Dhar, and Jhabua districts, wheat and maize emerged as major cereal crops, primarily due to the Gond tribes' preference for these grains. These districts witnessed a notable increase in the area dedicated to wheat and maize.

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Among pulses, there was a shift towards gram in these three districts compared to Arhar. In the case of oilseeds, soybean gained prominence over groundnut in Barwani and Jhabua districts. However, millet crops declined in all three districts, with negative growth rates and shrinking areas devoted to millets. Cotton gained a larger share in Barwani and Jhabua districts among cash crops. Overall, the study indicated a significant shift towards wheat cultivation in Barwani, Dhar, and Jhabua districts. This shift could potentially lead to monocropping risks unless combined with modern agricultural practices such as intercropping or mixed cropping systems and sustainable agricultural practices that promote crop diversity and soil health. In Mandla and Dindori districts, there was an increase in area and positive growth rates for all considered cereal crops, particularly rice. Both arhar and gram showed positive and significant growth in pulses, while oilseed growth varied between the two districts, with sesamum and soybean showing positive growth in Dindori but negative growth in Mandla. It is interesting to note that in the selected tribal-dominant districts, there has been a noticeable shift towards wheat and rice crops, away from millets and oilseeds. To address this trend, the study recommended creating awareness among farmers about the cost-effectiveness and sustainability of millet farming, along with providing subsidies to encourage millet production. Additionally, there is a need to develop primary processing centers for millets and establish price protection mechanisms with assured value chain development. This not only helps protect agri-biodiversity in tribal areas but also generates additional income for farmers, linking them to organic agriculture initiatives and promoting the International Year of Millets.

Socio-Economics and Constraint Analysis: A Micro Level Evidence of Ginger Growers in Adivasi Landscape of Aizawl District, Mizoram

H.S. Lalduhsangi and Hulas Pathak*

Ginger holds significant economic importance for tribal farmers in the Adivasi regions of Mizoram. This paper presents an analysis of the socio-economic conditions and challenges faced by tribal ginger farmers in Aizawl district, Mizoram. The primary data for the agricultural year 2021-22 were collected from 100 tribal farmers belonging to the Mizo tribe using well-designed and pretested survey schedules. Standard methods were employed to analyze the data obtained from these farmers. The findings of the study indicate that the majority of the tribal farmers selected for the study primarily engage in ginger cultivation and consider farming as their main occupation, without any secondary occupation. The literacy rate among these tribal farmers is relatively high at 91.65 percent. On an average, the farmers cultivate an area of 1.52 hectares, with ginger occupying 33.07 percent of the total

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cropped area. The cropping intensity, which measures how efficiently the land is utilized, stands at 160.76 percent overall. The study also highlights some of the major challenges faced by these ginger farmers, including: Rhizome rot and pest infestations, which can harm ginger crops; high labor and seed costs, which impact the profitability of ginger farming and irregularities in the market, which can disrupt income streams for the farmers. The study suggests that the state's economy could experience growth if more emphasis is placed on organic ginger production and the establishment of efficient marketing channels. Furthermore, the construction of processing facilities in the area could add value to ginger products, extend their shelf life, and contribute to increased income for ginger cultivators. This approach could lead to economic development and sustainability in Mizoram's ginger farming sector.

**Access to Farm Land and Incidence of Poverty Among Adivasi Tea Tribes: Evidences from Tea Plantations of Assam**

Yograj Sharma and Pradyut Guha†

The present study aims at examining how far farm land inaccessibility impedes agriculture, livestock activities and poverty among adivasi tea tribes using primary data collected from 612 permanent resident labourer households in major tea growing regions of Assam. The incidence of poverty among labourers has been examined using the poverty line suggested by Rangarajan Committee (2014) considering adult equivalent consumption. There seems to be negligible practice of agricultural, livestock activities and moderately high incidence of poverty in the study area, with the situation worsening among the labourers in proprietorship firms (PROP) tea plantations. The probit regression result confirmed that beside other socio-demographic factors, access to agricultural land, livestock ownership, occupational transition significantly influenced poverty among adivasi tea tribe labourers in the study area. However, the meagre share of agricultural land among labourers in PROP tea plantations relative to public limited company (PLC) translated into greater incidence of poverty in PROP plantations. Hence, there is a need for ensuring uniformity in statutory benefits among labourers within the scope of tea garden management across different ownership structures of plantations through proper coordination between state and union government with the tea board. The working age dependents of tea labourer households should be encouraged to engage in non-farm remunerative activities within or outside tea plantations.

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Livelihood Transformation of Tribals through SHG and Water Hyacinth Product Entrepreneurship: A Case in West Bengal

Dipanwita Chakraborty

In West Bengal, tribal communities constitute approximately 3 per cent of the state’s total population, primarily residing in rural areas. Notable tribal groups in West Bengal include Bauls, Bhuiya, Santhal, Oraon, Paharia, Munas, Lepchas, Bhutiyas, Chero, Khariya, Garo, Magh, Mahli, Mru, Munda, Lohara, and Mal Pahariya. Despite their cultural richness, the Scheduled Tribes in Bengal face high levels of poverty, and efforts to reduce poverty among them have progressed slowly. Self-Help Groups (SHGs) have emerged as a pivotal means for empowering rural communities, particularly women, and aiding them in transitioning from subsistence living to sustainable livelihoods. Against this backdrop, a primary survey was conducted in the agricultural year 2022 in Birbhum, a prominent tribal region in West Bengal. This initiative aimed to introduce water hyacinth-based artifact entrepreneurship as an experimental project, with the goal of transforming the livelihoods of tribal communities. Thirty-four SHGs, primarily consisting of women from Scheduled Tribes, were trained by NABARD to recycle the abundant water hyacinth found in local water bodies. They were taught to develop natural fiber-based handicrafts as an innovative means of improving the livelihoods of these economically disadvantaged women. On average, each of the 34 SHGs consisted of 12 members. For the primary data collection, 3 members were randomly selected from each of the 34 SHGs, resulting in a total sample size of 102 women (3 members from each of the sampled SHGs, selected randomly). A smaller control group was also selected for comparative analysis, including women who were not part of SHGs but engaged in household industries within the study area and those working as farm laborers for wages. The findings revealed that the surveyed women, who were part of SHGs in the Birbhum area, produced a range of natural fiber-based merchandise, including purses, table mats, ladies’ handbags, official folders, laundry baskets, laptop bags, tiffin bags, bottle carriers, and more. Encouragingly, these women experienced a significant 14 per cent increase in household income compared to the control group involved in household sector activities and a notable 19 percent increase compared to female counterparts working as farm laborers, all thanks to their involvement in water hyacinth fiber handicrafts. The income generated from natural fiber handicrafts constituted a substantial 56 percent of the total household income during the study's reference period, indicating the positive impact of this initiative on the economic well-being of these women entrepreneurs.

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Producer Organisations and Gender-based Tribal Development: Review of Evidence on Performance and Impact of Producer Companies

Sukhpal Singh†

Tribal livelihoods face numerous challenges in the context of modern development, despite the existence of specialised schemes at both the Union and state levels to support these communities. Gender issues, although unique in tribal regions, continue to persist, contributing to deprivation among tribal women. In this context, the formation of women producers' organisations can serve as a pathway to their economic and social empowerment. These organisations help reduce transaction costs, provide access to input and output markets, enhance bargaining power for their members, and foster the creation of social capital. This paper aims to document and analyze the performance of tribal women's member Producer Companies (PCs) in India. It critically reviews the performance of PCs in three distinct sub-sectors: farm produce (with five case studies), livestock (with two case studies), and non-timber forest produce (with six case studies, albeit briefly). The objective is to assess how these organizations have fared in terms of physical and financial performance and evaluate their impact on members regarding input and output market benefits. The findings suggest that all-women tribal PCs exhibit significant potential, indicating that the governance and management practices employed by these organisations could be identified and replicated in other mixed-member PCs. However, there are limitations to the expansion of all-women tribal PCs, primarily due to factors such as male control over assets and various socio-cultural constraints, including community ownership of resources or the absence of land titles in forest areas. To address these challenges and promote gender-awareness and gender-sensitive orientations within PCs, it is essential to improve the gender balance among members in mixed-member tribal PCs. This could be achieved by offering joint shareholding to couples rather than limiting it to only male members or allowing two different family members to hold joint membership. Such incentivisation of joint membership can lead to a more gender-inclusive and gender-sensitive functioning of PCs, potentially generating a more significant and desired impact on tribal livelihoods and development.

Socio-Economic Perspective in the Adivasis Land: The Case of Chakhao (Black Scented Rice) farmers in Manipur

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This paper delves into the origins, indigenous socio-cultural impacts, and practices associated with Chakhao cultivation in the Adivasis land of Manipur. The

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study, which involved 140 Chakhao farmers, was conducted in the Imphal East and West regions of Manipur. Chakhao is believed to have its roots dating back to 38-18 B.C. during the reign of King Poreiton, who was the first generation of Meitei and is credited with the domestication of Chakhao in his land of Poi. In the study area, the majority of the farmers, accounting for 87.14 per cent (122 individuals), fell into the category of marginal farmers. Agriculture emerged as the primary occupation for most farmers in the study area, making up 86.43 percent of the total. Furthermore, it was observed that Chakhao Poreiton, a variety of Chakhao, possesses medium-sized grains that are notably plump and boasts the highest number of grains and tillers. Consequently, it emerged as the preferred choice among farmers in the study area, with 70 per cent of them cultivating this variety. Chakhao holds a special significance in the lives of the Manipuri people and is used to prepare unique delicacies during religious and cultural ceremonies. Owing to its popularity along with the immense nutritional benefit, the agro based industries of the State have started its focus on the value chain of Chakhao producing various value added products.

Displacement and Rehabilitation of Vaitarana Project Affected Tribal Community in Maharashtra

Shivaji Sangle and Shivani Sangle†

An attempt has been made to study displacement and rehabilitation of project affected tribal community residing in hilly region through redistribution of piece of land and providing innovative water distribution technique for food security and agricultural sustainability. In order to uplift the livelihood of tribal farmers in the vicinity of the catchment area of the Upper Vaitarana Project, Government of Maharashtra has provided financial assistance in the year 2007 for installation of innovative Vavi Harsha Adivasi Upasa Sinchan Yoajana (Vavi Harsha Tribal Lift Irrigation Scheme), District Nasik, Maharashtra State, India. This small scale innovative pipeline water distribution technique brought stability in the life of tribal community in this area. It is amusing fact that within very short period, illiterate tribal farmers themselves have developed their capability to produce export quality vegetables and earn good monetary returns. This scheme has got recognition at governmental level and tribal people in the nearby areas. Government has built such five more schemes. Farmers are also coming forward for replicating several such schemes in nearby areas. All these schemes have brought agricultural sustainability and food security in the project affected tribal farming community of this region.

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A Comparative Study of Tribal and Non-Tribal Farmers in Koraput District of Odisha

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The present study is structured around the following objectives: (i) To analyse and compare the socio-economic profiles of tribal and non-tribal farmers in Koraput district of Odisha. (ii) To explore and identify key factors influencing the expenditure patterns of tribal farmers and (iii) To examine the underlying reasons contributing to the lower living standards experienced by tribal farmers. The district is home to 24 different tribes, with a notable presence of the Kandha, Paraja, Gadaba, Bonda, Bhumia, and Dhuria tribes. For this study, the Dasmanpur block within the district was chosen as the research area. Data collection involved conducting individual interviews with farmers and administering a structured questionnaire. A purposive sampling method was employed and a total sample of 100 farmers was selected from four villages of Dasmanpur block. The findings of the study reveal significant disparities between tribal and non-tribal farmers. A substantial 58% of tribal farmers live in kachcha houses, while only 12% of non-tribal farmers reside in similar housing conditions. This indicates a higher prevalence of basic, less permanent dwellings among tribal farmers. The majority (48 per cent) of tribal farmers have educational qualifications below the 10th standard, whereas a contrasting 56 per cent of non-tribal farmers possess education levels equivalent to or beyond the 12th standard. This highlights a significant gap in educational attainment between the two groups. The study underscores that tribal farmers face resource limitations, are disproportionately underprivileged, and exhibit lower levels of literacy. These challenges are compounded by a lack of familiarity with advanced agricultural practices among tribal farmers in comparison to their non-tribal counterparts.

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