



Occupational Determinants of Migration Behaviour among Lanjia Saora Tribal Youth in Odisha, India

Sutej Raghavendra Kulkarni¹, Ajay Kumar Prusty², Chinmaya Nanda^{3*}, Soumik Ray⁴ and Nibedita Mishra⁵

¹M.Sc. Scholar, ²Associate Professor, ⁵Ph.D. Scholar, Department of Agricultural Extension Education, ⁴Associate Professor, Department of Agricultural Economics & Statistics, MSSoA, Centurion University of Technology & Management, Paralakhemundi-761211, Odisha, India

³Assistant Professor, Department of Fisheries Extension, Economics and Statistics, School of Fisheries, Centurion University of Technology and Management, Paralakhemundi-761211, Odisha, India

*Corresponding author email id: chinmaya.nanda@cutm.ac.in

HIGHLIGHTS

- Financial support for family was the most significant factor affecting migration. Occupational factors are more critical determinants of migration behaviour than socio-economic factors, and a lack of year-round employment is a major push factor for migration.
- A significant proportion of respondents have a high migration intensity, suggesting that migration is a livelihood strategy.
- Positive values of languages known and working experience increased migration behaviour, suggesting the role of skills, experience and adaptability in driving migration.

ARTICLE INFO

Keywords: Labour participation, Rural livelihood, Migration drivers, Migration behaviour index, Tribal migration.

<https://doi.org/10.48165/IJEE.2026.62324>

Citation: Kulkarni, S. R., Prusty, A. K., Nanda, C., Ray, S., & Mishra, N. (2026). Occupational Determinants of Migration Behaviour among Lanjia Saora Tribal Youth in Odisha, India. *Indian Journal of Extension Education*, 62(3), 159-164. <https://doi.org/10.48165/IJEE.2026.62324>

Reviewed by: M.K. Deb Deb (mrinal.mrmd2012@gmail.com); Dr. Debashis Dash (debashis.agext@gmail.com); Dr. Sudhanand Prasad Lal (sudhanand.lal@rpcu.ac.in)

ABSTRACT

Migration has emerged as a major livelihood strategy among tribal communities due to limited local opportunities. In the current study, conducted during 2025-26, a Migration Behaviour Index (MBI) was used to examine the migration behaviour of Lanjia Saora tribal respondents residing in Gajapati and Rayagada districts of Odisha. A multistage sampling and ex post facto research design were used to select 180 sample tribal youth. The analysis of migration was limited to migrant respondents, while the Correlation and Random Forest analyses were performed on the whole sample. Findings indicated that 64.70 per cent of the respondents were involved in temporary rural-urban migration, mainly due to financial needs and unavailability of local opportunities. Occupational variables were more strongly associated with MBI than demographic variables, while employment during the closed season emerged as a major determinant. The Random Forest model performed well in prediction (Test $R^2 = 0.766$). The study indicates that migration is a distress driven livelihood strategy and there is a need to boost rural skills and entrepreneurship development interventions.

INTRODUCTION

One of the Particularly Vulnerable Tribal Groups (PVTGs) is the Lanjia Saora tribe, which is mainly found in the Gajapati and Rayagada districts of Odisha. The tribe has endured livelihood challenges, including subsistence farming, limited access to resources, and socio-economic marginalisation (Nallala et al., 2023). Traditional

occupations and low agricultural productivity do not generate sufficient income to support their livelihoods, leaving their livelihoods very vulnerable and unpredictable. The socio-economic activities of the Lanjia Saora people are gradually changing, particularly in the younger generation (Ghosal et al., 2024). As a dynamic and aspirational group, youth are vital to the future of tribal communities. Youth aspirations Refer to expectations, goals,

and ambitions of youths regarding their livelihoods, education, and general living standards (Sai et al., 2024). These ambitions among tribal youth are increasingly shaped by exposure to external environments, education, and changing socio-economic conditions. Nevertheless, the distance between ambitions and locally accessible opportunities can be challenging, compelling young people to seek alternative ways of living (Pandey et al., 2019; Ghosh et al., 2025b).

Migration has become a major livelihood phenomenon in villages, especially among tribal societies, which have low employment rates and high economic insecurity. In this case, people migrate to find more suitable income, better working conditions and living standards. Migration is therefore a way to diversify livelihoods, manage risk, and respond to economic distress (Pal et al., 2017; Koirala & Bashyal, 2025). In recent years, rural-to-urban and seasonal migration has increased significantly, especially among marginalised groups such as tribal populations. The Lanjia Saora tribe, residing predominantly in the districts of Gajapati and Rayagada in Odisha, is one such vulnerable group in which migration plays a crucial role in sustaining livelihoods (Sabar, 2020). Factors such as lack of local employment, low agricultural productivity, and limited access to resources often act as push factors, while better job opportunities and higher wages act as pull factors.

While a number of studies have examined migration from an economic perspective, migration behaviour is a complex phenomenon and is influenced by demographic, occupational, and social characteristics (Kuzur & Minz, 2021). Hence, it is necessary to analyse migration behaviour using an index to reflect its multidimensional nature. In this regard, the current study attempts to understand the migration behaviour of the Lanjia Saora tribal respondents using a Migration Behaviour Index (MBI) and to identify the major socio-economic determinants of migration behaviour.

METHODOLOGY

The study examined the migration patterns of the Lanjia Saora tribal respondents in Odisha in 2025-2026 and adopted the *ex-post-facto* design and a multistage sampling technique. The Gajapati and Rayagada districts were chosen as they have large Lanjia Saora populations. A block was selected in each district, Gumma (Gajapati) and Gunupur (Rayagada), and three villages were selected in each block, making a total of six villages. From each village, 30 respondents were randomly selected. The structured interview schedule was pre-tested and used to collect primary data, including demographic features, household factors, occupational features, and migration variables (Bhattamishra, 2020).

Migration behaviour (MBI) was considered the dependent variable, whereas age, marital status, languages known, occupational engagement, working days per month, employment during the closed season, sanitation facility, fuel used for cooking, nature of employment, and work experience were considered independent variables. To ensure occupational homogeneity, the 27 students were excluded from the migration indicators. Mean score rankings of migration reasons were analysed only for respondents with migration experience, as non-migrants lacked appropriate data. The migration behaviour was measured using a composite Migration Behaviour Index (MBI), derived by summing variables including

migration status, nature and reasons of migration, decision-making processes, migration networks, remittance behaviour, and visit frequency. Employment during closed season, operationally defined as engagement in any income-generating activity during the lean agricultural season, typically May–June and November–December in southern Odisha. The reliability of the Migration Behaviour Index (MBI) was assessed using Cronbach's Alpha ($\alpha = 0.938$), indicating good internal consistency among the indicators. The index was calculated as the average of all selected variables (Gaikwad et al., 2020).

$$MBI = \frac{\sum_{i=1}^n X_i}{n}$$

where, X_i denoted the score of the i^{th} migration-related variable and n represented the total number of variables included in the index (Boroza et al., 2024).

Pearson's correlation analysis was conducted, and the correlation matrix was created in RStudio. The MBI was predicted using a Random Forest regression model in Python. The 'Random' in Random Forest arises from two sources: (1) bootstrap aggregation (bagging), wherein each tree is trained on a random sample with replacement of the training data; and (2) feature randomisation, wherein a random subset of predictor variables is evaluated at each node split, reducing variance and improving generalisation, the full sample of 180 respondents was used to ensure robustness and generalizability.

RESULTS

Migration emerged as a major livelihood strategy among the respondents, with nearly two-thirds (64.70%) engaged in migration, indicating limited local employment opportunities. The migration pattern is entirely temporary and rural-to-urban, which suggests that people are not leaving their villages permanently but are moving temporarily in search of work. Most migrants (88.88%) travel alone rather than with their families. At the same time, migration decisions are largely influenced by family discussions (87.80%). Social connections play an important role in facilitating migration, with friends being the most common support network at 38 per cent, followed by Neighbours at 6.50 per cent, Relations and Agencies at 6 per cent, and 4.30 per cent. A large proportion of migrants (85.80%) are engaged in non-agricultural work in their migrated area, and the other (14.14%) are engaged in agriculture-related work. Additionally, migration contributes significantly to household income, as most migrants likely (62.20%) send money back home regularly. The majority of about (66.12%) remit between Rs. 6000–10000 per month, typically on a monthly basis, highlighting the importance of migration as a financial support system for their families.

Reasons for migration among respondents

The comparison of migration reasons by frequency distribution and mean score ranking showed that financial support for family was the most significant factor affecting migration, with the highest mean score (4.83) and a significant percentage of respondents strongly agreeing. The second factor that made the greatest contribution to migration was perceived career development

suitability in the native area (Mean = 4.65), where respondents faced structural and developmental constraints in their place of origin. Parental pressure was the third most common (Mean = 4.04), indicating moderate social pressure on migration decisions. The availability of better jobs, on the other hand, had the lowest mean rating (3.72), with a high percentage of respondents rating it neutral, indicating uncertainty about its importance as a major motivating factor for migration (Table 1).

Table 1. Distribution of Respondents Based on Migration Indicators

Variable	Category	Percentage
Migration Status (n=153)	Yes	64.70
	No	35.29
Migration Participation (n=99)	With Family	11.11
	Alone	88.88
Decision Making (n=99)	Consulting with Family	87.80
	By Own Self	12.12
Migration Network (n=99)	Friends	38.00
	Neighbours	6.50
	Relations	6.00
	Agents/Agency	4.30
Nature of Work in the Migrated Area (n=99)	Non-agriculture	85.80
	Agriculture	14.14
Sending Money Home (n=99)	Yes	62.20
	No	37.37
Amount Sent per Month in Rs. (n=62)	Rs. 6000–10000	66.12
	Rs. 1000–5000	33.87

A total of 180 respondents were involved in the study: 99 (64.70%) migrants, 54 (35.29%) non-migrants, and 27 Student respondents. Among migrant respondents, 62 (62.6%) reported sending money to their families, while the remaining 37 (37.4%) did not practice money sending. It was also found that all migrant respondents were temporary migrants, having migrated from rural to urban areas. Among respondents who send remittances (n = 62), all (100%) reported sending money once a month, suggesting that migrant households remit monthly (Table 1).

All 180 respondents (including 27 students) were included in the MBI computation as the index reflects the overall migration context. Students were excluded only from migration-indicator analyses (Table 1) and mean score rankings.

MBI (Migration Behaviour Index)

The Migration Behaviour Index (MBI) distribution of respondents showed that the largest proportion (45%) is in the Low migration category, with 33.8% in the High migration and 21.1% in the Moderate migration categories (Table 2). The mean

Table 2. Distribution of respondents based on Migration Behaviour Index

Category	Percentage
Low	45.00
Moderate	21.11
High	33.88
Total	100.00

score of the MBI (2.46) suggests that the respondents have a moderate level of migration behaviour. However, the number of respondents in the Low category is high, suggesting that migration is a common livelihood strategy in the study region. The variation in MBI scores (1.43-3.68) and the standard deviation (0.88) suggest that there is a considerable difference in migration behaviour. This variation in behaviour suggests that some respondents may be only slightly involved in the migration process, while a large percentage are actively engaged in migration activities. Within the study area, migration behaviour is not uniform; a significant proportion of respondents have a high migration intensity, suggesting that migration is a livelihood strategy.

A correlation analysis was conducted to understand the association between a set of socio-economic and occupational variables (independent variables) with the Migration Behaviour Index (MBI) (dependent variable). The results showed that occupational factors such as involvement in occupation (r = 0.54), work experience (r = 0.54), type of work (r = 0.43) and days worked per month (r = 0.45) have moderate positive correlations with MBI, suggesting that those who are more involved in their work and have more work experience have higher levels of migration behaviour. Socio-economic variables such as languages known (r = 0.45) and sanitation facilities (r = 0.39) also displayed moderate positive correlations with MBI, while age (r = 0.27) and fuel used for cooking (r = 0.29) had weaker positive correlations. On the other hand, working in the closed season displayed a moderate negative association with the MBI (r = -0.37), highlighting that working in the closed season is likely to reduce migration. In all, the findings suggest that occupational factors are more critical determinants of migration behaviour than socio-economic factors, and a lack of year-round employment is a major push factor for migration.

Random forest analysis

The data were split into training (80%) and testing (20%) sets using a fixed random state. The Random Forest model used 100 decision trees (n_estimators = 100), with no maximum depth restriction, minimum samples per leaf = 1, and maximum features = “sqrt” at each split.

Table 3. Model Performance Metrics for Training and Testing Data

Dataset	R ²	MAE	MSE	RMSE
Training	0.9442	0.1319	0.0431	0.2077
Testing	0.766	0.2193	0.1657	0.4071

To determine the model’s accuracy and generalisation capability, it was evaluated on both the training and test data. On the training dataset, the model showed a good fit (R² = 0.9442), and low error values (MAE = 0.1319, MSE = 0.0431, RMSE = 0.2077), suggesting good predictive power. The testing results show a high level of model fit (R² = 0.766), indicating good model fit, though slightly worse than on the training data. The larger error values (MAE = 0.2193, MSE = 0.1657, RMSE = 0.4071) suggest a slight loss in accuracy. This difference between training and test results indicates some overfitting; nevertheless, the model shows reasonable generalisation and is well-suited for predicting migration.

Figure 1. Correlation between MBI and selected variables

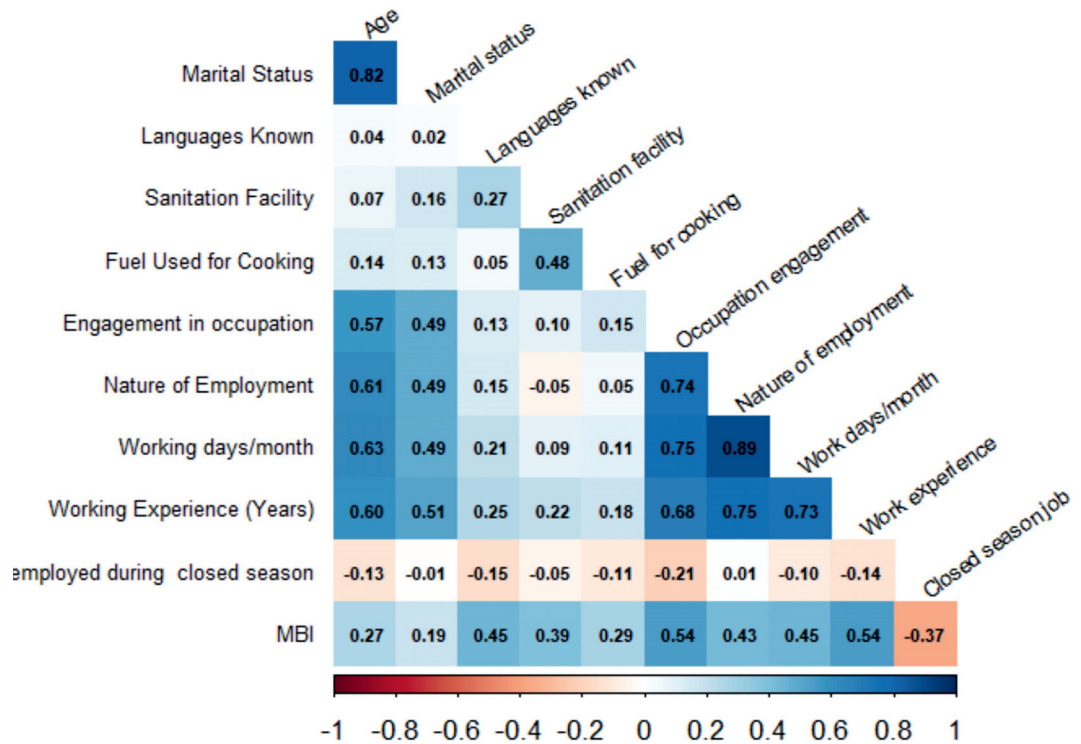
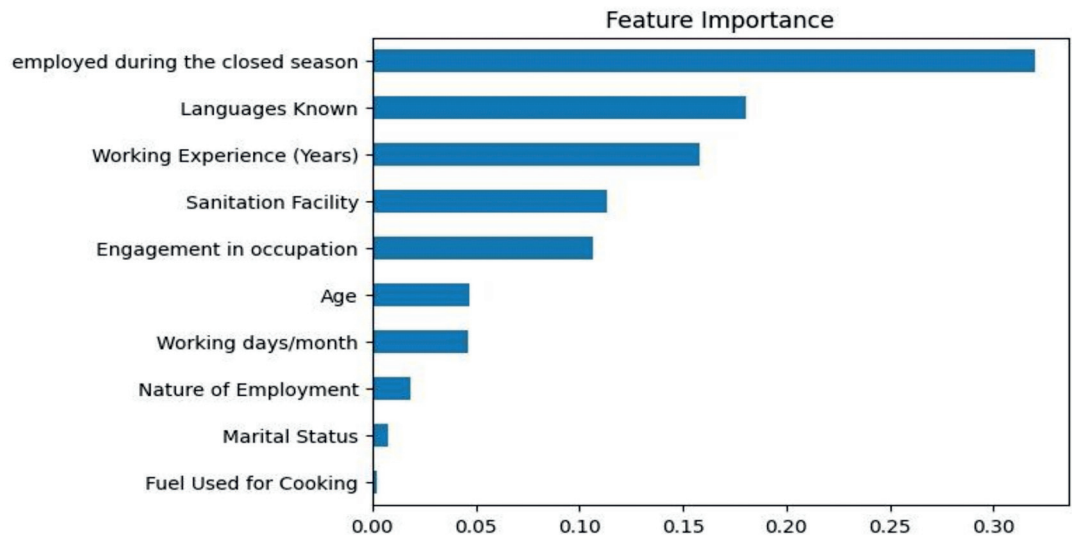


Figure 2. Feature Importance of Predictor Variables Influencing Migration Behaviour Index (MBI)



The feature importance analysis revealed employment during the closed season as the top predictor for MBI, followed by languages known and years of employment. This finding highlights the significance of stable employment and individual capacity in influencing migration. Furthermore, sanitation, participation in occupation, and toilet facilities were found to have a mid-level influence, while the fuel used for cooking, marital status, and type of employment have a low impact on the model's results.

Additional insights from the SHAP (SHapley Additive exPlanations) analysis showed which variables positively or negatively influence migration behaviour. It was found that being unemployed in the closed season has a significant positive impact on MBI, supporting its status as a push factor for migration. Also,

positive values of languages known and working experience increased migration behaviour, suggesting the role of skills, experience and adaptability in driving migration. Conversely, variables with lower SHAP values had little influence on the model. Overall, the results highlight that the lack of seasonal employment, and human capital characteristics, are critical factors driving migration behaviour among respondents.

DISCUSSION

The study confirms that migration is the most common livelihood strategy among the Lanjia Saora tribal respondents, with 64.70 per cent involved in it. This reflects structural factors, including the lack of local jobs, low agricultural productivity, and

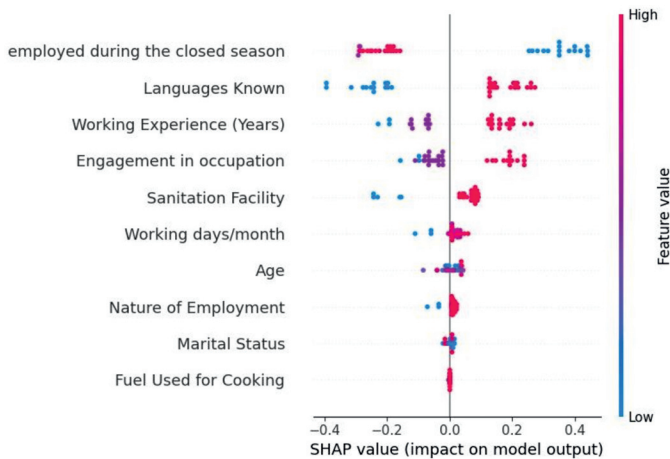


Figure 3. SHAP Summary Plot Showing the Contribution of Predictor Variables to Migration Behaviour Index (MBI)

socio-economic marginalisation, which are widespread in the tribal areas of Odisha and central India (Mohanty, 2024). In recent decades (25 years), rural-urban migration has accelerated due to industrialisation and service-sector growth, and the declining profitability of farming. Consequently, Tribal youth are abandoning traditional livelihoods in favour of other opportunities (Ngadi et al., 2023). Push and pull factors play an important role in migration, with employment-related factors being significant (Roy et al., 2022). The prevalence of temporary rural-urban migration indicates it is primarily seasonal, temporary and motivated by a lack of employment security.

The research also suggests migration is more compelled rather than voluntary economic activity. Economic responsibilities to family and a lack of employment opportunities in the rural region are prominent factors (Haq et al., 2025). Unsteady income, lack of employment, and frequent crop failures are major push factors, while better economic opportunities, higher wages and better living conditions are pull factors (Maurya et al., 2022). Factors such as occupation, work experience, and economic incentives positively affect migration, suggesting that migration is more likely when farmers are more adaptable (Sai et al., 2024). The high participation in non-farm sectors indicates a transition, as tribal labour enters urban informal sectors. The prevalence of individual migration suggests labour market conditions favour flexible forms of work (Kujur & Minz, 2021).

Migration also functions as an important source of household income, with regular remittances supporting rural livelihoods despite modest earnings. Variability in the Migration Behaviour Index (MBI) suggests heterogeneity in migration patterns, driven by differences in access to resources, opportunities, and social networks. Socio-economic and psychological factors such as age, education, non-farm skills, income expectations, risk orientation, self-reliance, and self-confidence are positively associated with migration behaviour (Anamica & Sujeetha, 2017; Mourya et al., 2022). These findings reinforce the role of declining agricultural profitability and limited rural employment in driving migration (Gaikwad et al., 2020).

Occupational factors exert a stronger influence on migration behaviour than demographic characteristics. Extent of occupational engagement, work experience, and working days per month show positive relationships with migration (Bernzen et al., 2019), whereas the availability of off-season employment shows a negative relationship, suggesting seasonal unemployment as a key push factor (Selod & Shilpi, 2021). The Random Forest and SHAP analyses further confirm that employment insecurity is the most influential predictor, along with human capital attributes such as language proficiency and work experience (Ghosh et al., 2025a). Structural and human capital factors play complex roles in driving migration within the Lanjia Saora tribal community (Sandesh et al., 2020). Government strategies should prioritise improving rural livelihoods through skill training, agricultural productivity and extension. Youth participation in agriculture through enterprise development has successfully enhanced livelihoods, social inclusion, and access to information (Mohanty et al., 2025).

CONCLUSION

The study identified migration as the primary livelihood strategy among Lanjia Saora tribal respondents in southern Odisha, driven by limited local job opportunities, poor agricultural output and seasonal livelihood insecurity. Migration is temporary, urban-oriented and compulsory rather than voluntary. Occupational factors, such as work engagement, experience and employment availability, influence migration behaviour more than demographic factors. Migration promotes household income through frequent but unstable remittances. The findings highlight the need to enhance rural employment, skill development and agricultural productivity, as well as to diversify livelihoods. Addressing seasonal unemployment and underdeveloped human capital can reduce distress-motivated migration and stabilise livelihoods in tribal areas. The results suggest scaling up MGNREGA employment during lean agricultural periods; improving skill training under DDU-GKY and PM Kaushal Vikas Yojana for tribal youth; enhancing farm-based entrepreneurship through schemes like ARYA; and strengthening agricultural extension services to boost income and productivity.

DECLARATIONS

Ethics approval and informed consent: Throughout the study, the respondents were asked for their informed consent.

Conflict of interest: The research was carried out without any financial or commercial ties that might be seen as a potential conflict of interest, according to the authors. The authors affirm that they carefully examined, amended and edited the content as necessary when preparing this work. The final content of this publication is entirely the authors' responsibility.

Publisher's note: All claims expressed in this article are solely of the authors and don't necessarily represent those of their affiliated organizations. Any product/ process or technology that may be evaluated in this article, or a claim that may be made by its manufacturer, is not guaranteed or endorsed by the publisher. The Indian Journal of Extension Education remains neutral with regard to jurisdictional claims.

REFERENCES

- Anamica, M., & Sujeetha, T. N. (2017). Migration behaviour index – A measure to quantify the migration behaviour of rural youth. *International Journal of Current Microbiology and Applied Sciences*, 6(11), 3044–3057. <https://doi.org/10.20546/ijcmas.2017.611.357>
- Bernzen, A., Jenkins, J. C., & Braun, B. (2019). Climate change-induced migration in coastal Bangladesh? A critical assessment of migration drivers in rural households under economic and environmental stress. *Geosciences*, 9(1), Article 51. <https://doi.org/10.3390/geosciences9010051>
- Bhattamishra, R. (2020). Distress migration and employment in indigenous Odisha, India: Evidence from migrant-sending households. *World Development*, 136, Article 105047. <https://doi.org/10.1016/j.worlddev.2020.105047>
- Borozan, D., Bojanic, I. B., & Leko Simic, M. (2024). Exploring return intentions from the young migrant's point of view. *Ekonomski vjesnik: Review of Contemporary Entrepreneurship, Business, and Economic Issues*, 37(1), 93–107. <https://doi.org/10.51680/ev.37.1.7>
- Gaikwad, A. B., Bhamare, M. G., & Ban, S. H. (2020). Migration behaviour of tribal youth. *Gujarat Journal of Extension Education*, 31(1), 190–196.
- Ghosal, J., Bal, M., Das, A., Panda, B., Ranjit, M., Behera, M. R., Kar, S., Satpathy, S. K., Dutta, A., & Pati, S. (2024). To leave no one behind: Assessing utilization of maternal newborn and child health services by all the 13 particularly vulnerable tribal groups (PVTGs) of Odisha, India. *Health Research Policy and Systems*, 22(1), Article 12. <https://doi.org/10.1186/s12961-023-011101-7>
- Ghosh, S., Kumar, A., Prusty, A. K., Naik, A., & Padhy, C. (2025a). Modelling livelihood security of tribal farmers in South Odisha using machine learning. *Indian Journal of Extension Education*, 61(4), 141–147. <https://doi.org/10.48165/IJEE.2025.61423>
- Ghosh, S., Sarkar, A., Chakraborty, S., Mondal, K., & Malitha, A. B. (2025b). Agricultural extension approaches and rural youth engagement in West Bengal: A comprehensive review. *NG Agricultural Sciences*, 1(4), 33–49. <https://doi.org/10.66132/ngas010404>
- Haq, F., Shutkin, T. Y., Afreen, M., & Mark, B. G. (2025). Cryo-social dynamics: The interplay of glacial dynamics and socioeconomic conditions in the Shigar Valley, Karakoram, Pakistan. *GeoJournal*, 90(1), Article 37. <https://doi.org/10.1007/s10708-025-11289-6>
- Koirala, S., & Bashyal, S. (2025). The land left behind: A systematic review of transnational migration-induced change and its implication for rural sustainability in Nepal. *Humanities and Social Sciences Communications*, 12(1), Article 38. <https://doi.org/10.1057/s41599-024-04180-1>
- Kujur, R., & Minz, S. K. (2021). Proliferation of tribal migrants and repercussion: Case study from the tribal areas of Sundargarh District, Odisha (India). *Current Research Journal of Social Sciences and Humanities*, 4(1), 27–44. <http://dx.doi.org/10.12944/CRJSSH.4.1.04>
- Maurya, A. S., Bhavesh, M., A., & Malik, J. S. (2022). Migration behaviour of rural youth in Haryana. *Indian Journal of Extension Education*, 58(3), 93–98. <https://epubs.icar.org.in/index.php/IJEE/article/view/125104>
- Mohanty, P. R., Sahoo, M., & Ghosh, S. (2025). Empowered by enterprise: Evaluating livelihood status improvement through attracting and retaining youth in agriculture (ARYA). *Indian Journal of Extension Education*, 61(2), 56–61. <https://doi.org/10.48165/IJEE.2025.61211>
- Mohanty, S. S. (2024). Distress labour migration from Western Odisha – An overview. *International Journal for Multidisciplinary Research*, 6(1), Article 14139. <https://doi.org/10.36948/ijfmr.2024.v06i01.14139>
- Nallala, S., Ghosh, U., Desaraju, S., Kadam, S. M., Kadarpetta, R. R., & Van Belle, S. (2023). Why are they “unreached”? Macro and meso determinants of health care access in hard to reach areas of Odisha, India. *International Journal for Equity in Health*, 22(1), Article 2. <https://doi.org/10.1186/s12939-022-01817-y>
- Ngadi, N., Zaelany, A. A., Latifa, A., Harfina, D., Asiati, D., Setiawan, B., Ibnu, F., Triyono, T., & Rajagukguk, Z. (2023). Challenge of agriculture development in Indonesia: Rural youth mobility and aging workers in agriculture sector. *Sustainability*, 15(2), Article 922. <https://doi.org/10.3390/su15020922>
- Pal, P. K., Bhutia, P. T., Das, L., Lepcha, N., & Nain, M. S. (2017). Livelihood diversity in family farming in selected hill areas of West Bengal, India. *Journal of Journal of Community Mobilization and Sustainable Development*, 12(2), 172–178.
- Pandey, D. K., De, H. K., Kumar, P., & Dubey, S. K. (2019). Agrarian change and well-being status of Mara tribe in Mizoram. *Indian Journal of Agricultural Sciences*, 89(11), 1828–1831. <https://doi.org/10.56093/ijas.v89i11.95302>
- Roy, D., Acharya, S. K., Haque, M., Banerjee, A., Sarkar, A. K., & Mandal, T. K. (2022). Migration attributes in adaptation and its correlates during pandemic: The socio-ecological interpretation. *Indian Journal of Extension Education*, 59(1), 75–80. <https://epubs.icar.org.in/index.php/IJEE/article/view/131868>
- Sabar, J. (2018). Socio demographic profile of respondents in Gajapati district: A study. *Journal of Management Research and Analysis*, 5(1), 29–33. <https://doi.org/10.18231/2394-2770.2018.0006>
- Sandesh, V. V. M., Kumar, A. A., & Smitha, K. P. (2020). Impact of Migration on the Livelihoods of Tribes People. *International Journal of Current Microbiology and Applied Sciences*, 9(11), 37203730. <https://doi.org/10.20546/ijcmas.2020.911.446>
- Sai, M., Prusty, A. K., Padhy, C., & Reddy, I. C. (2024). Migration behavior of rural youth from agriculture in North Coastal Andhra Pradesh. *Indian Journal of Extension Education*, 60(4), 30–34. <https://doi.org/10.48165/IJEE.2024.60406>
- Selod, H., & Shilpi, F. (2021). Rural-urban migration in developing countries: Lessons from the literature. *Regional Science and Urban Economics*, 91, Article 103713. <https://doi.org/10.1016/j.regsciurbeco.2021.103713>