

Economic Challenges and Migration Patterns of Ceramic Artisans in Sri Ganganagar District, Rajasthan

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Abstract

This study investigates the economic challenges and migration patterns affecting ceramic artisans in Suratgarh and Anupgarh in Sri Ganganagar district of Rajasthan. A sample of 85 participants was selected, followed by a semi structured interview with the participants to elucidate the socio-economic dynamics influencing these artisans. The findings reveal that increasing raw material costs and competitive pressures from mass-produced goods significantly impact the artisans' livelihoods, compelling many to migrate in search of better economic opportunities in urban centres such as Jaipur and Bikaner. The study also highlights a distinct migration pattern driven by economic hardship, with artisans relocating primarily to enhance their living standards. Furthermore, the study underscores a gender disparity in the pottery sector, with male dominance prevalent in the regions studied. This investigation contributes to understanding the intricate relationship between economic challenges and migration trends among ceramic artisans, emphasizing the need for targeted policies to stabilize their economic conditions and preserve their cultural heritage.

Keywords - Ceramic Artisans, Migration Patterns, Economic Challenges, Rajasthan, Suratgarh, Anupgarh, Demographic Changes

Introduction

Ceramics is an art form as ancient as the civilization from which it originates, epitomizes the historical depth of the Indian subcontinent. Its origins extend back to the esteemed Indus Valley Civilization, establishing pottery not merely as an artistic endeavour but as a concrete connection to thousands of years of human creativity and cultural development. The genesis of Indian pottery is rooted in the sophisticated Indus Valley Civilization, dating back more than 7000 years. Archaeological findings have uncovered a range of detailed clay artifacts, exemplifying the early potters skilled craftsmanship. These artifacts, varying from practical cooking vessels to elaborate ceremonial urns, provide insights into the everyday and spiritual lives of ancient communities. Over the millennia, Indian pottery has undergone significant evolution, driven by a myriad of cultural interactions and technological progressions. During the Vedic period, enhancements in pottery techniques led to the production of refined terracotta figurines and ritualistic items. Subsequent periods, under the reigns of the Maurya and Gupta empires, saw not only a flourishing of pottery arts but also an expansion of cultural exchange, reaching as far as the Mediterranean. This historical narrative highlights how pottery has been

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both a witness to and a participant in the dynamic cultural exchanges that have shaped Indian history (Kramer, 1997).

Ceramic materials are among the most intricate and widespread materials found in archaeological sites. These materials have been used to construct various structures and objects, including houses, technological installations, everyday utensils, and decorative or ceremonial figurines. The complexity of archaeological ceramic analysis lies not only in the wide array of cultures and purposes that these ceramics serve but also in the variety of raw materials used and the diverse manufacturing techniques employed. This diversity makes the study of ceramics both a challenging and a crucial component of archaeological research (Behura, 1967).

The economic landscape for potters in India is marked by a spectrum of challenges that significantly impact their livelihoods and production capacities. One of the primary issues facing this community is the increasing cost of raw materials, such as clay and fuel, which are essential for pottery-making. This escalation in prices often outpaces the potters' ability to increase the prices of their products, thereby squeezing their profit margins (Shrestha, 2018). Additionally, the advent of cheaper, mass-produced alternatives from larger manufacturers has led to a decline in demand for traditionally crafted pottery, further threatening the economic stability of artisan potters (Sodhi, 2006). Market access also remains a significant hurdle, as many potters lack direct access to larger markets and must rely on middlemen, who take a substantial share of the profits. Furthermore, the limited adoption of modern technology in the production process hinders efficiency and competitiveness. This situation is compounded by a general lack of formal education and training in business practices among potters, which limits their ability to engage effectively with modern markets and adapt to changing consumer preferences (Natrajan, 2005).

Migration is a global phenomenon that involves the movement of individuals or groups from one region to another in search of better economic prospects or improved social conditions. The decision to migrate is usually driven by the desire to enhance one's standard of living or to provide better opportunities for oneself or one's family. The patterns of migration in India have been influenced by various factors, including economic disparities, regional development, and employment opportunities (Rajvanshi, 2016). Migration in India is influenced by various factors such as economic disparities, regional development, and employment opportunities. The patterns of migration have been changing over the years, with a shift from rural-to-rural migration to other forms of migration. The reasons for migration also vary between males and females, with work or employment being the primary reason for males and marriage being the primary reason for females.

Rajasthan, a state celebrated for its rich cultural heritage and artistic endeavours, is particularly renowned for its diverse and exquisite clay pottery traditions. Among these, Jaipur Blue Pottery stands out with its unique use of non-clay materials such as quartz stone powder, powdered glass, and Fuller's earth, distinctively coloured with cobalt oxide to achieve its characteristic vibrant blue hue. Unlike conventional clay pottery, this form combines artistry with a peculiar material composition, diverging from traditional methods to create objects like bowls, vases, and tiles. Another remarkable technique is Meenakari on pottery, an adaptation of the traditional enamelling craft on metals, which involves fusing colourful designs onto ceramic surfaces. This technique exemplifies the syncretic cultural influences that have shaped

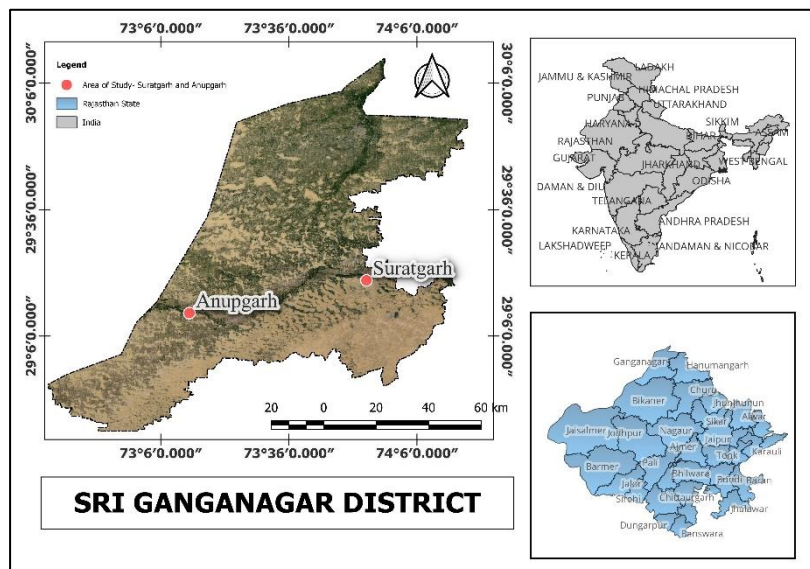
Rajasthani arts. Similarly, Kagzi Pottery from Alwar, noted for its paper-thin quality, reflects an innovative response to the need for lightweight, portable vessels. Molela Pottery offers a distinctive approach, utilizing a coiling technique and white slip decorations, exemplifying the region's mastery in combining form with ornamental art. Lastly, Pokhran Pottery, rooted in the region of the same name, employs freehand and stencil techniques to create designs for both aesthetic appeal and utility.

Materials and methods

Study Area and Population

The study was conducted in Suratgarh and Anupgarh tehsils within Sri Ganganagar district, Rajasthan. Geographically, Sri Ganganagar is positioned between latitudes 28.4 and 30.6, and longitudes 72.2 and 75.3, encompassing an area of approximately 11,154.66 square kilometres. It shares borders with Hanumangarh district to the east, Bikaner District to the south, Bahawalnagar district of Pakistani Punjab to the west, and Fazilka district of Indian Punjab to the north. According to the 2011 census, the urban agglomerate of Sri Ganganagar, including its outgrowths, had a population of 237,780. The district exhibits a gender disparity, with a sex ratio of 869 females for every 1,000 males, and males constituting 53.8% of the population compared to 46.2% females. The literacy rates show a notable gender gap as well; while the overall literacy rate stands at 74.25%, male literacy is higher at 88.03% compared to female literacy, which is 76.23%. Furthermore, children under the age of six constitute 19.6% of the population, highlighting the young demographic profile of the region (Census 2011).

Study Area Map



Source: Author work by using QGIS

Sample Size

The study involved 85 potters from Suratgarh and Anupgarh tehsils through purposive and snowball sampling methods to explore the economic challenges and migration patterns impacting this group. The selected sample size of 85 individuals was deemed appropriate to provide robust qualitative insights into the socioeconomic dynamics affecting the pottery community.

Tools of Data Collection

Data collection was conducted through a semi-structured interview schedule tailored to elicit comprehensive qualitative data. The schedule began with collecting basic personal information, such as age and gender, to contextualize the participants' responses within their demographic profiles. It was followed with extensive questions focused on various demographic and socioeconomic parameters, including caste, marital status, poverty level, education level, family composition, housing conditions, and economic status. This detailed schedule was designed to capture the broad spectrum of factors influencing the potters' lives and livelihoods. The culminating part of the interview specifically addressed the economic conditions relating to the pottery sector, exploring the factors that lead to occupational changes (rising costs of materials, economic stability, access to markets, and so on), the nature of migration patterns, their impact on pottery traditions, and the participants' knowledge of relevant government programs. This methodology ensured a deep understanding of the economic and cultural factors shaping the pottery industry in the study regions.

Data Analysis

The study was carried out based on data collected from 85 participants. All variables were represented using frequency (f) and percentage (%). To assess the socioeconomic status of the potters, the study employed the modified Kuppuswamy Socioeconomic Status (SES) analysis. This scale employs a scoring system which incorporates factors such as education, occupation, and family income to classify individuals into specific socioeconomic categories (Saleem and Jan, 2021).

Table 1 outlines the modified Kuppuswamy Socioeconomic Status scale, which assigns scores to levels of education ranging from 1 (illiterate) to 7 (professional or honours degrees). Occupation scores, which apply solely to the head of the household, vary from 1 (unemployed) to 10 (legislators, senior officials, and managers) (Saleem and Jan, 2021). The income metric within the Kuppuswamy SES considers the total monthly family income, with specific scores detailed in Table 1.

The socioeconomic status under the Kuppuswamy scale is divided into five categories: Upper (I), Upper Middle (II), Lower Middle (III), Upper Lower (IV), and Lower (V). These categories are determined by a combined score of education, occupation, and income, with total scores ranging from less than 5 to 29 (Saleem and Jan, 2021), as shown in Table 2. This composite scoring helps in accurately classifying the socioeconomic status of the participants.

Table 1: Modified Kuppuswamy Socioeconomic Status Scale, 2021

<i>Education of the head</i>	<i>Score</i>
Profession or Honors	7
Graduate	6
Intermediate or diploma	5
High school certificate	4
Middle school certificate	3
Primary school	2
Illiterate	1
<i>Occupation of the head</i>	<i>Score</i>
Legislators, senior officials and managers	10
Professionals	9
Technicians and associate professionals	8
Clerks	7
Skilled workers and shop and market sales workers	6
Skilled agricultural and fishery workers	5
Craft and related trade workers	4
Plant and machine operators and assemblers	3
Elementary occupation	2
Unemployed	1
<i>Monthly family income in rupees</i>	<i>Score</i>
≥123,322	12
61,663-123,321	10
46129-61,662	6
30,831-46,128	4
18,497-30,830	3
6,175-18,496	2
≤ 6174	1

Source: - Saleem SM, Jan SS. Modified Kuppuswamy socioeconomic scale updated for the year 2021

Table 2: Modified Kuppuswamy socio-economic classes based on total score.

<i>S. No.</i>	<i>Total Score</i>	<i>Socioeconomic class</i>
1.	26–29	Upper (I)
2.	16–25	Upper Middle (II)
3.	11–15	Lower Middle (III)
4.	5–10	Upper Lower (IV)
5.	<5	Lower (V)

Source: - Saleem SM, Jan SS. Modified Kuppuswamy socioeconomic scale updated for the year 2021

The correlation analysis, specifically Pearson correlation, was performed using the Statistical Package for the Social Sciences (SPSS) to explore the linear relationships between key economic and demographic variables affecting artisans' decisions and behaviors. This statistical technique quantifies the strength and direction of relationships between variables such as 'Rising Cost of Materials', 'Income Level', 'Age', 'Economic Stability', 'Migration Decisions', 'Migration Pattern', and 'Access to Markets'. Pearson correlation coefficients, which range from -1 (perfect negative correlation) to +1 (perfect positive correlation), are crucial in identifying whether variables move together in a statistically meaningful way. The significance of these correlations was determined through a two-tailed test which assesses whether the observed correlations are statistically significant (commonly accepted significance levels are $p < 0.05$ or $p < 0.01$). This method allows us to understand not only the existence but also the robustness of relationships between variables

Findings

Socio-demographic profile of the participants

Table 3 shows the socio-demographic status of the participants included in the study. The participants of the study belong to two different districts of Rajasthan, i.e., Suratgarh and Anupgarh. The former includes 48 participants, which accounts for 56.5% of the total participants. On the other hand, the latter has 37 participants, representing 43.5% of the total.

The age distribution of the participants in the study ranges from 21 to 70 years. Upon further categorization, certain age brackets have been made from 21-25 to 66-70 age group. In the 21-25 age group, there are 11 participants, accounting for 12.9% of the total participants. The 26-30 age group comprises 8 participants, representing 9.4% of the total. The age group comprising of 31-35 years includes 16 participants (18.8%), followed by 18 participants (21.2%) in the 36-40 age group, and 13 participants (15.3%) in the 41-45 age group. The number of participants is decreased in the older age groups, with 9 participants (10.6%) in the 46-50 group, 4 participants (4.7%) in the 51-55 group, 2 participants (2.4%) in the 56-60 group, 3 participants (3.5%) in the 61-66 group, and 1 participant (1.2%) in the 66-70 group (*Table 3*).

The socio-demographic analysis of participants in this study reveals a significant gender disparity, with males comprising 90.6% (77 individuals) and females only 9.4% (8 individuals), highlighting a predominant male representation in the ceramic artisan community (*Table 3*). This study consists of 85 individuals, all occupationally engaged in ceramic artisanry and identified as Craft & Related Trade Workers as per the Kuppuswamy scale 2021 (Saleem and Jan, 2021).

Family structure among participants is predominantly joint, with 78.8% (67 individuals) living in joint families, compared to 21.2% (18 individuals) in nuclear families, reflecting traditional family arrangements in this community. Marital status varies, with 67.1% (57 individuals) currently married, underscoring the high prevalence of marriage. The remaining participants are either never married (28.2% or 24 individuals), separated (2.4% or 2 individuals), or widowed (2.4% or 2 individuals) (*Table 3*).

The education levels among participants show a broad range yet reflect limited higher education. Of the total, 18.8% (16 individuals) are illiterate, and only 8.2% (7 individuals) have attained graduate status, indicating low levels of formal education attainment in this group (Table 3). This distribution emphasizes the need for educational interventions within the community.

Religious homogeneity is also noted, with 100% (85 participants) identifying as Hindu, suggesting a lack of religious diversity within this population. This uniformity could influence community practices and cohesion (Table 3).

Table 3: Socio-demographic profile of the participants (n= 85)

Variables		Frequency	Percentage
Location	Suratgarh	48	56.5
	Anupgarh	37	43.5
Age group (Year)	21-25	11	12.9
	26-30	8	9.4
	31-35	16	18.8
	36-40	18	21.2
	41-45	13	15.3
	46-50	9	10.6
	51-55	4	4.7
	56-60	2	2.4
	61-66	3	3.5
	66-70	1	1.2
Gender	Male	77	90.6
	Female	8	9.4
Type of family	Nuclear	18	21.2
	Joint	67	78.8
Marital Status	Currently married	57	67.1
	Never married	24	28.2
	Separated	2	2.4
	Widowed	2	2.4
Education	Illiterate	16	18.8
	Primary School Certificate	17	20
	Middle School Certificate	11	12.9
	High School Certificate	13	15.3
	Intermediate or Diploma	21	24.7
	Graduate	7	8.2
	Professional degree	-	-
Income	≤ 6174	7	8.2
	6175-18,496	45	52.9
	18,497-30,830	21	24.7
	30,831-46,128	10	11.8
	21,663-123,321	2	2.4
	≥123,322	-	-

Source- Authors' calculation.

Income distribution shows that the majority (52.9% or 45 individuals) earn between 6175-18,496 monthly. While a smaller proportion falls into higher income brackets, with 24.7% (21 individuals) earning between 18,497-30,830, and 11.8% (10 individuals) earning between 30,831-46,128. This indicates varied economic conditions within the artisan community (*Table 3*).

Socio-economic classification based on income and other factors categorizes most participants (68.2% or 58 individuals) in the Upper Lower (IV) class, while 29.4% (26 individuals) belong to the Lower Middle (III) class, and only 2.4% (2 individuals) are classified as Upper Middle (II). This suggests that most participants are from lower socio-economic backgrounds, emphasizing the economic challenges faced by this community.

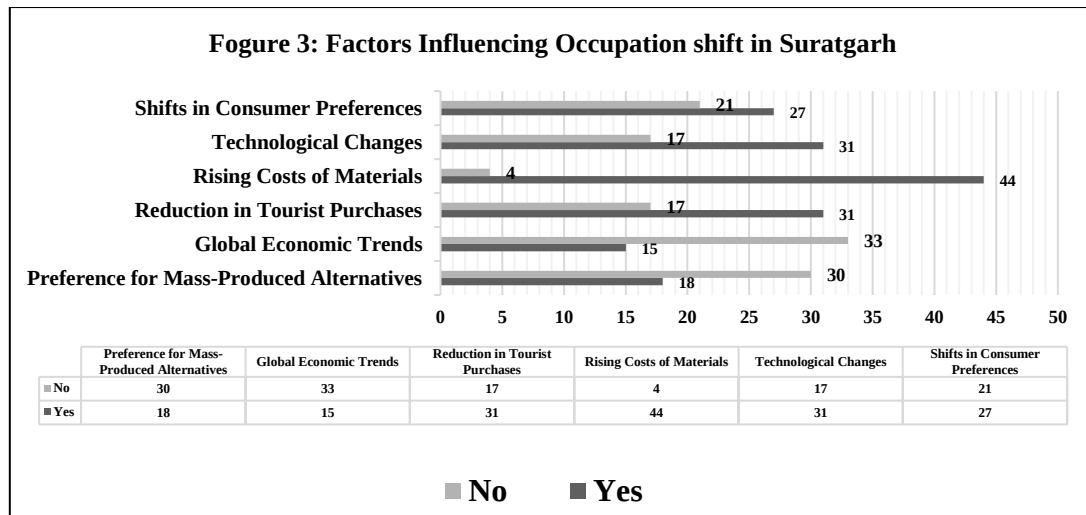
Table 4: Socio-economic classification of the participants

S.no.	Level	SES score	Frequency	Percentage
1	Upper (I)	26–29	-	-
2	Upper Middle (II)	16–25	2	2.4
3	Lower Middle (III)	11–15	25	29.4
4	Upper Lower (IV)	5–10	58	68.2
5	Lower (V)	<5	-	-
	Total		85	100

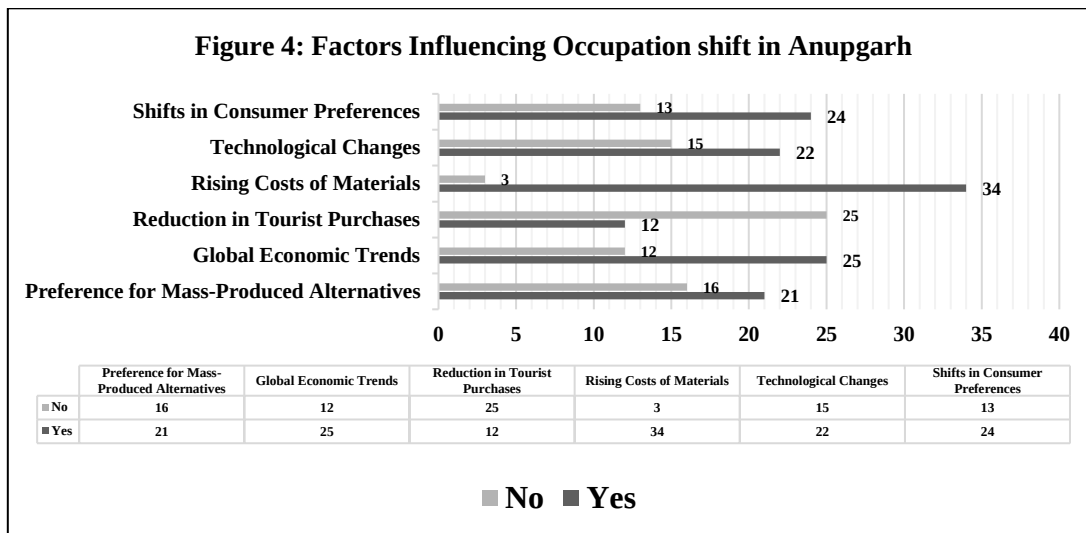
Source- Authors' calculation

Factors Influencing Occupation Shift

Economic factors influencing occupational shifts were examined by considering both push and pull elements that affect migration patterns. The analysis involved collecting data from participants through a semi structured interview schedule that presented multiple options regarding changes in income. The push factors identified include a decrease in income related to pottery, intensified market competition, the impacts of globalization on the market and rise in cost of material. Conversely, the pull factors that were considered encompassed the allure of better employment opportunities, the potential for higher wages, and improved living standards. This comprehensive inquiry aimed to understand the economic motivations behind the occupational transitions observed among individuals, particularly those moving away from traditional pottery to other forms of employment as shown in Figure 3 and Figure 4.



Source: Authors' calculations



Source: Authors' calculations

To assess the economic factors leading to changes in income, this study considers various push and pull factors, specifically focusing on income-related aspects that compel individuals to migrate from their origin populations. For instance, in Suratgarh and Anupgarh districts, the rising cost of raw materials is a significant push factor. The cost for 120kg of clay in these regions ranges from INR 4,000 to 5,000, compared to lower costs in cities like Jaipur and Bikaner, making the latter more attractive for potters.

Global economic trends also play a crucial role in shaping the pottery industry. The advent of mass production and globalization has heightened competition, compelling many traditional artisans to either innovate or focus on niche markets. Despite global trends, 68% of potters in Suratgarh remain sceptical about the influence of these trends (*Figure 3*), whereas in Anupgarh, 32.4% acknowledge their impact (*Figure 4*). Economic downturns generally lead to reduced consumer spending on non-essential items such as artisan pottery, significantly affecting small-scale producers.

Tourism in Rajasthan, noted for its unique attractions and locally made products, also influences the pottery market. Suratgarh and Anupgarh, being popular tourist destinations, experience fluctuations in pottery sales tied to tourism trends. Approximately 64.6% of potters in Suratgarh report a decline in tourist purchases (*Figure 3*), while only 32.4% in Anupgarh believe the same (*Figure 4*).

Technological advancements have further influenced the pottery industry. Initially, most potters in the study locations used hand-operated pottery wheels, but technological improvements in urban centres like Jaipur and Bikaner have enhanced production capabilities. Notably, Jaipur is renowned for its blue pottery, and Bikaner is celebrated for its distinctive pottery styles, which contribute to their thriving local industries. These factors collectively delineate the complex economic influences driving migration and income changes among potters in these regions.

Table 5: Correlation analysis on Variables

Correlations									
		Rising Cost of materials	Migration Decisions	Income Level	Migration pattern	Access to Markets	Migration Decisions	Age	Economic Stability
Rising Cost of materials	Pearson Correlation	1	.768**	0.006	0.006	0.098	-0.006	.768**	0.155
	Sig. (2-tailed)		0.000	0.959	0.959	0.371	0.959	0.000	0.156
Migration Decisions	Pearson Correlation	.768**	1	.216*	.216*	-0.086	0.202	1.000*	-.514**
	Sig. (2-tailed)	0.000		0.047	0.047	0.437	0.064	0.000	0.000
Income Level	Pearson Correlation	0.006	.216*	1	0.153	0.010	-.247*	.216*	-.326**
	Sig. (2-tailed)	0.959	0.047		0.163	0.930	0.023	0.047	0.002
Migration pattern	Pearson Correlation	0.006	.216*	0.153	1	0.010	.600**	.216*	-.326**
	Sig. (2-tailed)	0.959	0.047	0.163		0.930	0.000	0.047	0.002
Access to Markets	Pearson Correlation	0.098	-0.086	0.010	0.010	1	-.394**	-0.086	.263*
	Sig. (2-tailed)	0.371	0.437	0.930	0.930		0.000	0.437	0.015
Migration Decisions	Pearson Correlation	-0.006	0.202	-.247*	.600**	-.394**	1	0.202	-.319**
	Sig. (2-tailed)	0.959	0.064	0.023	0.000	0.000		0.064	0.003
Age	Pearson Correlation	.768**	1.000**	.216*	.216*	-0.086	0.202	1	-.514**
	Sig. (2-tailed)	0.000	0.000	0.047	0.047	0.437	0.064		0.000
Economic Stability	Pearson Correlation	0.155	-.514**	-.326**	-.326**	.263*	-.319**	-.514**	1
	Sig. (2-tailed)	0.156	0.000	0.002	0.002	0.015	0.003	0.000	

Note: **Correlation is significant at the 0.01 level (2-tailed). *Correlation is significant at the 0.05 level (2-tailed).

Economic challenges emerge as a significant driver of migration. The findings reveal a strong positive correlation between the rising cost of materials and migration decisions ($r = 0.768$, $p < 0.001$), indicating that as material costs escalate, the propensity for individuals to migrate increases significantly (*Table 5*). This response to economic pressures highlights the necessity for policy interventions that could mitigate these costs to potentially reduce forced migration among this community.

The income levels of the potters were recorded and questions about whether better income opportunities influenced their decisions to migrate were asked. Although the correlation between income levels and migration decisions was positive ($r = 0.216$, $p < 0.05$) (*Table 5*), it suggests only a slight tendency for higher-income earners to migrate, possibly in pursuit of optimizing life circumstances or accessing superior socio-economic environments. This aspect of the findings underscores a complex economic landscape where both economic pressures and opportunities contribute to migration decisions.

The analysis further explored whether age plays a significant role in influencing migration decisions among potters. The results showed a moderate correlation between age and migration patterns ($r = 0.216$, $p < 0.05$) (*Table 5*). This indicates that while age does factor into migration decisions, its impact is not as pronounced as economic factors. Different age groups might have varying motivations for migration, reflecting diverse life-stage needs and opportunities.

Access to market was also included to understand the selling locations of their pottery. Contrary to expectations, the analysis revealed a negative correlation between access to markets and migration decisions ($r = -0.394$, $p < 0.001$) (*Table 5*). Most potters reported selling their products in local or nearby markets rather than traveling to urban centres. This suggests that enhanced local market access might reduce the need for migration by providing sufficient economic opportunities within proximity.

These detailed findings illustrate a nuanced interplay of economic, demographic, and market access factors in shaping the migration decisions of potters in Suratgarh and Anupgarh. The insights obtained underscore the importance of targeted economic and development policies that cater to the specific needs and circumstances of ceramic artisans in these regions, aiming to stabilize their economic conditions and thus reduce the compulsion to migrate.

Discussion

Although several studies have examined the economic and migration patterns of potters in India, this study uniquely focuses on the contemporary economic challenges and migration patterns of potters in Suratgarh and Anupgarh, located in the Sri Ganganagar District of Rajasthan. This study delves into the intricacies of how these factors influence the preservation of India's rich pottery heritage. By specifically analysing the current socioeconomic landscape, the study aims to uncover the unique struggles and adaptations of potters in the selected regions, providing a comprehensive understanding of their economic realities and migratory behaviours. This focus not only highlights the challenges faced by these artisans but also emphasizes the critical need for strategies to support and sustain traditional pottery practices amidst modern economic pressures and shifting demographic patterns.

In this study, we investigated the migration patterns of potters from Suratgarh and Anupgarh, uncovering a primary motivation for relocation to urban centres like Jaipur and Bikaner due to better economic opportunities. These findings align with historical trends observed in the Atlantic pottery industry, as discussed by Thistlethwaite (1958), where industrial migration played a crucial role in skill dissemination and industrial development. The economic drivers of migration seen in our study suggest a continuing trend of occupational mobility that has significant implications for regional economic planning and cultural preservation. While our findings are robust, they are limited by the geographical scope of our sample, and future

research should explore these patterns in other regions to determine if similar motivations apply universally. This study enhances our understanding of the socio-economic factors influencing artisan migration and offers a foundation for further investigation into the effects of urbanization on traditional crafts.

The educational attainment distribution among the participants, spanning from illiteracy to graduation, closely aligns with findings reported by Bhadouriya et al. in 2021. Both studies observed a similar prevalence of middle and high school certificates among respondents. Nevertheless, the proportion of participants who pursued higher education up to the graduation level remains notably low. Contrasting sharply with these parallels, the attainment of primary education in this study diverges significantly; only three respondents reported this level of education compared to Bhadouriya et al., where it was the most common educational milestone among 20 respondents. This discrepancy highlights potential variations in educational opportunities or cultural emphasis on early schooling between the two study populations.

The research also reveals a predominantly male participation in pottery-making within Suratgarh and Anupgarh. This observation contrasts markedly with findings from Geeta Jayaram Sodhi's 2021 study, which documented substantial female involvement in pottery across rural regions of Rajasthan and Gujarat. This variation underscores the complexity of gender roles within the pottery industry, indicating that gender dynamics can differ significantly across different locales, despite being within similar geographic areas. The discrepancy points to the diverse socio-cultural landscapes that influence occupational roles in traditional crafts across India.

Conclusion

This research provides a comprehensive study of the socio-economic challenges and migration patterns affecting ceramic artisans in Suratgarh and Anupgarh within Sri Ganganagar district, Rajasthan. Our study reveals several critical insights into the factors influencing the livelihoods and migration decisions of this traditional craft community. The economic pressures play a pivotal role in shaping the artisans' lives. The rising costs of essential raw materials such as clay and fuel, coupled with the increasing prevalence of cheaper, mass-produced alternatives, have significantly undermined the economic viability of traditional pottery. These factors not only diminish the profitability of artisan pottery but also restrict the artisans' ability to compete in broader markets. As a result, many artisans are compelled to abandon their traditional crafts and seek alternative employment opportunities in urban areas, where the economic prospects are perceived to be better.

Migration emerges as a dominant response to these economic hardships. Our findings indicate that a substantial number of artisans from Suratgarh and Anupgarh have migrated to urban centres like Jaipur and Bikaner. This migration is primarily motivated by the pursuit of improved economic opportunities, highlighting a clear link between economic stress and the mobility of the pottery community. Significant gender disparities were observed, with male artisans predominantly engaging in pottery-making, which suggests a gender-specific impact on economic opportunities and migration trends. It is crucial to develop targeted policies and initiatives to support these artisans. Enhancing access to affordable raw materials, improving market access, and providing education and training in business practices are essential steps to

sustain the economic viability of traditional pottery. Furthermore, considering the cultural significance of pottery, preserving this craft should not only be seen as an economic issue but also as a matter of cultural heritage.

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References

- Arthur, J. W. (2002). Pottery use-alteration as an indicator of socioeconomic status: An ethnoarchaeological study of the Gamo of Ethiopia. *Journal of Archaeological Method and Theory*, 9, 331-355.
- Bhadouriya, A. S., Ara, A., & Jahanara. (2021). A study on socio-economic condition of Kumhar's (pottery makers) of Jasra district Prayagraj, U.P. *International Journal of Emerging Technologies and Innovative Research*, 8(3), 8-16.
- Bhagat, R. B. (2016). Changing pattern of internal migration in India. In *Contemporary demographic transformations in China, India, and Indonesia* (pp. 239-254).
- Carson, M. T., Hung, H. C., Summerhayes, G., & Bellwood, P. (2013). The pottery trail from Southeast Asia to remote Oceania. *The Journal of Island and Coastal Archaeology*, 8(1), 17-36.
- Çevik, Z. (2008). Periodisation criteria for Iron Age chronology in Eastern Anatolia and neighbouring regions. *Ancient Near Eastern Studies*, 45(0), 1-20. <https://doi.org/10.2143/anes.45.0.2033161>
- Debnath, M., & Ray, S. (2019). Population moves on Rajasthan: Regional analysis. *Journal of Geography and Regional Planning*, 12(3), 43-51.
- Emery, J. A. (2004). What do tin-enamelled ceramics tell us? Explorations of socio-economic status through the archaeological record in eighteenth-century Louisiana: 1700-1790. Louisiana State University and Agricultural & Mechanical College.
- Fredriksen, P. D., Kristoffersen, E. S., & Zimmermann, U. (2014). Innovation and collapse: bucket-shaped pottery and metalwork in the terminal migration period. *Norwegian Archaeological Review*, 47(2), 119-140.
- Gomart, L., Weiner, A., Gabriele, M., Durrenmath, G., Sorin, S., Angeli, L., ... & Binder, D. (2017). Spiralled patchwork in pottery manufacture and the introduction of farming to Southern Europe. *Antiquity*, 91(360), 1501-1514.
- Gosselain, O. P. (2015). Roads, markets, migrants. The historical trajectory of a male Hausa pottery tradition in southern Niger, 277-296.

- Hegmon, M., Nelson, M. C., & Ennes, M. J. (2000). Corrugated pottery, technological style, and population movement in the Mimbres region of the American Southwest. *Journal of Anthropological Research*, 56(2), 217-240.
- Ingale, M. H., Roy, A., Chaudhari, T., Chavan, P., & Tayade, M. (2023). Trends in internal migration pattern in India and future challenges. *Migration Letters*, 20(7), 374-379.
- Jagriti. (2021, April). "KVIC empowers 1000 potter families of 11 districts in Rajasthan under Kumhar Sashaktikaran Yojana." *Jagriti*, 65(5), 15-17.
- Kramer, C. (1997) Pottery in Rajasthan: Ethnoarchaeology in Two Indian Cities. *Smithsonian Institution Press*, Washington, DC.
- Krishnan, S. (1989). Traditional potters: Entitlements and enablements of artisans. Indus Publishing.
- Lis, B., Kiriati, E., Batziou, A., & Rückl, Š. (2020). Dealing with the crisis: Mobility of Aeginetan-tradition potters around 1200 BC. *Annual of the British School at Athens*, 115, 269-327.
- MacDonald, B. R. (1981). The emigration of potters from Athens in the late fifth century BC and its effect on the Attic pottery industry. *American Journal of Archaeology*, 86(2), 159-168.
- Mahapatro, S. R. (2012, June). The changing pattern of internal migration in India. In *European Population Conference, Stockholm, Sweden*.
- Majumdar, P. S., & Majumdar, I. (1978). Rural migrants in an urban setting: A study of two shanty colonies in the capital city of India. Transaction Publishers.
- Mazumdar, I., Neetha, N., & Agnihotri, I. (2013). Migration and gender in India. *Economic and Political Weekly*, 54-64.
- Meena, C., Babu, M. Suresh & Bhatnagar, N. (2005). Potter's wheel development – A necessity for rural growth. *Journal of Rural Technology*, 2(2), 46-50.
- Mobilities and Pottery Production Archaeological and Anthropological Perspectives. (n.d.).
- Natrajan, B. (2005). Caste, Class, and Community in India: An Ethnographic Approach. *Ethnology*, 44(3), 227–241. <https://doi.org/10.2307/3774057>
- Office of the Registrar General & Census Commissioner, India. (2011). *Census of India 2011: Rajasthan, Series 09, Part XII-A, District Census Handbook, Ganganagar*. Ministry of Home Affairs, Government of India. <https://censusindia.gov.in/nada/index.php/catalog/1026>
- Phillips, L., & Schofield, P. (2007). Pottery, pride, and prejudice: Assessing resident images for city branding. *Tourism Analysis*, 12(5-6), 397-407.
- Rajvanshi, A. K. (2016). Roadmap for rural India. *Current Science*, 111(1), 39–43. <http://www.jstor.org/stable/24910006>

- Rao, T. Y., & Lal, B. S. (2010). Rural artisans-indigenous technology: An empirical study on village potters in Warangal. *Indian Journal of Development Research and Social Action*, 5(1), 309-317.
- Saleem S M, & Jan S S. (2021). Modified Kuppaswamy socioeconomic scale updated for the year 2021. *Indian J Forensic Community Med*, 8(1):1-3.
- Shrestha, P. (2018, June 12). Challenges and Scopes of Pottery Industry. *Pravaha*, 24(1), 147–158. <https://doi.org/10.3126/pravaha.v24i1.20234>
- Singh, J., Dutta, T., Rawat, A., & Singh, N. (2020). The changing role of agriculture in income and employment and trends in agricultural worker productivity in Indian states. *Indian Journal of Economics and Development*, 16(SS), 183-189.
- Singh, J. P. (1984). Distance patterns of rural to urban migration in India. *Genus*, 119-129.
- Sirika, B. (2008). Socio-economic status of handicraft women among Macca Oromo of West Wallaga, Southwest Ethiopia. *Ethiopian Journal of Education and Sciences*, 4(1).
- Sodhi, G. J. (2006). Traditional Potters and Technological Change in a North Indian Town. *Sociological Bulletin*, 55(3), 367–382. <http://www.jstor.org/stable/23620752>
- Thistlethwaite, F. (1958, December). The Atlantic migration of the pottery industry. *The Economic History Review*, 11(2), 264–278. <https://doi.org/10.1111/j.1468-0289.1958.tb01640.x>
- VanderVeen, J. M. (2007, January). People, pots, and prosperity: The ceramic value index and an assumption of economic class. In *Proceedings of the Indiana Academy of Science* (Vol. 116, No. 2, pp. 117-125).