DISSERTATION

THREE ESSAYS ON ARTISANAL PRODUCTION: EXPLORING TOPICS ON GENDER, CASTE AND INSTITUTIONS

Submitted by

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In partial fulfillment of the requirements

For the Degree of Doctor of Philosophy

Colorado State University

Fort Collins, Colorado

Spring 2025

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ABSTRACT

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The development of the handicraft sector in India is a story of tradition, history and resistance. This sector became the bearer of nationalistic movement against colonialism. Social and personal identity linked to artisanal production makes this a unique form of production. Artisanal production is one of the largest employment generation sectors as well as a crucial source of foreign exchange. However, artisans suffer from acute poverty, severe indebtedness and have been forced to leave their crafts. Handicrafts experience contradictory forces where modernisation leads to the demise of traditional crafts on the one hand, and the state and civil society/ non-government organizations (NGO) try to revive the art forms in a bid to patronise culture. In this thesis, we explore dimensions of artisanal production related to gender, caste and institutions.

The first chapter analyses the impact that location and region (rural/urban) of work on the earnings of women self-employed artisans. We use Periodic Labour Force Survey 2017-18 and 2018-19 to run a pooled cross-sectional regression for this purpose. We hypothesize that women workers working outside of their homes would earn more than home-based workers, and that urban workers would earn more than their rural counterparts. However, our results suggest that even though urban premium can be availed by every other category of women workers, women artisans in urban areas do not earn more than rural artisans. The chapter posits that this puzzling finding can be explained by the preservation of the historic division of labour associated with crafts, which has solidified with time because of romanticization and upholding the distinctive role of crafts in the Indian anti-

colonial movement. This persistence relegates women's crafts as leisure work and prevents them from creating the relevant networks and availing the urban premium. We also find that women working away from their homes earn more than home-based workers.

The second chapter looks at the difference in wages between Upper caste and Scheduled Caste self-employed artisans. Artisans and craftspeople have been historically classified as 'criminal tribes' and largely form the Scheduled Caste (SC) and Other Backward Class (OBC). The current study uses pooled cross-sectional data from Periodic Labour Force Survey (PLFS) 2017-18 and 2018-19 to compare the wages of the Upper Caste (UC) and SC self-employed artisans, by making use of a Mincerian type regression model. We check if, controlling for all other potential determinant of wages, there is any significant difference in wages earned by UC and SC artisans. We find that in the urban areas UC artisans earn significantly more than SC artisans. However, in the rural areas there does not appear to be any significant difference. We argue that the overall low wages in the rural areas cause this result. The sample is restricted to a relatively low-paying and low 'skilled' occupation, implying that the difference is largely due to the something specific to SCs. We check for this hypothesis by running an Oaxaca-Blinder decomposition, which finds that, the endowment effect is insignificant whereas the unexplained difference is significant. Previous literature has found the existence of sticky floor (a situation where earning gaps decline with increase in earnings quantiles) while comparing earning of SC and UC workers. To check for the presence of the sticky floor between UC and SC, we run a quantile regression. Our findings suggest that, there does not exist a sticky floor in earnings of the artisans, and that the gap has a slight upward trend as we move from the lower income percentiles to the higher percentiles. The absence of sticky floor among artisans can be explained by the likely difference in experiences of artisans belonging to the higher percentiles of income. They are likely to derive their earnings from orders

from government organisations and other private organisations like NGOs. UC artisans are likely to benefit from their better access to social networks which can enable them to get better market access and higher returns to their products. To inform discussion around policies about SC artisans, we further analyse the lived experiences of artisans from the deprived caste through a primary survey among deprived caste artisans who are involved in making bamboo crafts in the state of West Bengal. Historically, artisans involved in bamboo craft have generally been considered low in status and belonged to a 'polluting' group. This analysis brings out a more complete story about deprivation and neglect that artisans from deprived caste face beyond wage discrimination. We explore the role that state has played in reproduction of a caste-based traditional crafts, and whether the next generation would be following this craft.

The third chapter looks at how institutions and artisans interact which may lead to reproduction and evolution of the crafts. We use primary data to cover elite and quotidian crafts from each of the six districts, covering 480 artisans across 51 villages and towns involved in 26 different types of crafts. We employ a developmental evolutionary economic geography framework which integrates institutional approach to geographical economics, geographical political economy, and evolutionary approach to economic development. These three strands all seek to explain uneven economic development across geographical areas. The skills of the artisans are generally passed down through generations and artisanal production is often found in clusters in towns and villages. We analyse the ways in which economic development is formed by institutional mediation and interactions between artisans and institutions, and how the economic landscape characterised by path dependency evolves incrementally. An important contribution that our results make is that contrary to general expectations, crafts can survive and achieve increase in demand. The institutions that are responsible for this can vary. States and NGOs play an important role in

imparting trainings to artisans leading to evolution of crafts from quotidian to elite crafts and can cater to newer markets. This entails a movement of the artisans from an old path of quotidian craft to a new path of elite crafts. Institutions like presence of workers' cooperatives and spillover of knowledge can also help in the survival of crafts. Crafts, however, should not be romanticised and the survival of the crafts does not necessarily have to be a desirable situation. Some crafts survive because of social norms which relegates female labour as secondary in the household, and thus these crafts survive because of cheap labour. Some crafts also survive when the next generation also gets involved in this craft because there are no other jobs available. The current study contributes by highlighting institutions which can enable artisanal production to survive, reproduce, and evolve. To our knowledge, this is the first study which applies development economic geography framework to a primary data in the Indian context. We talk about how these historically specific paths can be overcome and evolve into new pathways through the interactions between the agents and the institutions.

The current dissertation attempts to connect three related aspects of artisanal production in India. Artisanal production is related to maintaining group memberships and social roles, where crafts have gender and caste roles. Caste and gender-based crafts are associated with exploitation in the larger labour market. Looking at the earnings of women and deprived caste artisans, therefore, become significant in contributing to the discussion of artisanal production in India. Further, an important facet of artisanal production is the survival and reproduction of this form of production. Formal and informal institutions play an important role in this process. The policies throughout the third chapter can be seen to something that required to take into account the particularities of the problems and local contexts and experiences of the artisans. The study also notes that romanticisation of crafts should be done with caution, as the survival of a craft may happen because

of undesirable institutions and exploitation based on gender and caste may persist with such survival.

ACKNOWLEDGEMENTS

To begin, it is only fitting to acknowledge the enormous amount of social privilege that I have been born with, which ensured that I come to a juncture whereby I can submit a PhD dissertation. I would like to thank my parents, and the rest of my family to whom I owe everything in this life.

I am thankful to my supervisor Professor Ramaa Vasudevan for her continuous support and encouragement. I am grateful to Professor Ray Miller, Professor Elissa Braunstein, Professor Alexandra Bernasek, Professor Gamze Cavdar, Rosanna Houlton, Alison Koss, Professor Daniele Tavani, Professor Stephan Weiler, Nicole Miller, and Professor Jude Bayham for their suggestions and support at different junctures of the PhD process. I am indebted to Professor Rajat Acharyya, Professor Ajitava Raychaudhuri, Professor Vivekananda Mukherjee, and Professor Vinoj Abraham for shaping my thought processes in Economics.

I would like to thank Annesha, Srimanjori, Basit, Sagarika, Aritra, Suvam, and Kashif who have helped me in personal and professional capacities. I am grateful to Sanchari, Ambika and Amartya who formed an important support system for me. I am also grateful to my wonderful cohort and the friends that I had the opportunity of spending time with: Kendall, Arifa, Saniya, Brendan, Vinicius, Jeremy, Sid, Soumik, Ashish, Adam, Bhavya, Nina, and Lackson. A shoutout to Tathagata and Agniva who inadvertently became a part of my PhD story.

As a student of social science, I have always thought that it was my job to tell stories about the society. To this end, I had conducted a fieldwork which was made possible by a host of different people. I am indebted to Annesha, Swapnanil, Shirin, Himadrija, Madhurima, Shubho, Amitabh Pal, Ujjwal, Masud da, Pinto da, Farhan, Nasima Yasmin, Shanu, Sagupta, Oishi, Sujoy, Hema, Jayeeta, and Writam for their help with the fieldwork. The survey would not have been possible

without the help of any one of them. I am extremely grateful to the strokes of serendipity which led us to the right place at the right time during the course of the fieldwork. Most definitely, I owe a debt of deepest gratitude to the artisans who took time out of their day to talk to me.

Finally, I am grateful to all the staff – the bus drivers, the cleaners, the people in facilities – whose contribution is only noticed when they are absent from their work.

DEDICATION

To Dida, who wove stories and sweaters equally magically

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Introduction

The handicraft sector is a large employment generating sectors in India and is also an important source of foreign exchange (Jena, 2010). The official figure of the number of artisans involved in handicraft is around 7 million and this sector has earned more than 3.6 billion USD in 2022-23 in foreign exchange (Development Commissioner, Government of India; EPCH 2023). This sector is relevant from a policy point of view because it is a labour-intensive sector, has low capital investment, high value addition and no import content[1]. However, artisans face acute poverty and a decline in their economic status has been recorded (Gupta 2011). In fact, artisans have been categorized as one of the poorest occupational categories in the country by National Commission for Enterprises in the Unorganised Sector (NCEUS. 2009). The artisanal form of production faces vulnerabilities – in the form of high indebtedness and low earnings - especially since the Indian market has opened up to global competition (Cable and Weston 1985; Scrase 2009). The state of poverty that artisans face has often pushed them out of the handicraft sector and into wage labour in factories (Gupta 2011). They are constrained in their incomplete information about markets, and limited opportunities of mobility. Artisanal production is also rife with discrimination and segregation on the basis of gender and caste (Knorringa 1999; C. M. Wilkinson-Weber 1997).

[1] These include gems and jewellery; hand-knitted woollen carpets, rugs; brass-ware, electroplated nickel silverware; cotton rugs; hand-printed textiles and scarves; and woodwares. Formally, the Export Promotion Council for Handicrafts (EPCH) in India defines handicrafts as: "Items or products produced through skills that are manual, with or without mechanical or electrical or other processes, which appeals to the eye, due to the characteristics of being artistic or aesthetic or creative or ethnic or being representative of cultural or religious or social symbols or practices, whether traditional or contemporary. These items or products may or may not have a functional utility and can be used as a decorative item or gift" (EPCH Circular).

The development of the handicraft sector in India is a story of tradition, history and resistance. Artisanal production was an important sector in the pre-colonial period, however with the advent of colonialism their livelihoods were destroyed through competition with machines of the UK and this started a process of decline in the socio-economic status of artisan, especially in the textile sector (Qureshi 1990). The handicraft sector became the bearer of nationalistic sentiment and a symbol of resistance in the anti-colonial movement. The Nationalist movement in India focused on upholding Indian heritage, and the craftsmen were identified as a representative of the nation (Mohsini 2011). Gandhi's focus on *khadi* (a type of hand-spun natural fibre cloth) through the *swadeshi* (indigenous) movement was used as a means for struggle, and self-sustainability became a structure for the economy after independence, and craft sector became an important target for state policies (Venkatesan 2009a).

Handicraft production is highly localized, and is mostly clustered in villages, where work is organized within the household (Weston 1987). The organization of production within the household maps into the traditional division of labour in the household which imposes unpaid care work on women. The norms related to seclusion of women often make home-based work the best route to income for women (Kantor 2003). The restriction of women within keeps them 'invisible' in the traditional discussion of labour force (Samantroy 2019). The labour put in by home-based women artisans is often devalued because it is considered a leisure activity, which women do to supplement household incomes (C. M. Wilkinson-Weber 1997; Majumder 2020). The gendered identity of women being housewives facilitate the process of exploitation (Mies 1981).

The historical and cultural significance of handicrafts in India along with crafts being an important source of employment generation make it important to study the handicraft sector. Women artisans are generally involved in 'feminine' crafts which has low returns and mobility, but can be a way

of income generation and forms social networks for women (Dhamija 1981). Additionally home-based artisans are part of the larger informal labour force who are outside the domain of social protection, having no access to social securities (Samantroy 2019). This makes the study of women artisans important, especially related to their location of work and earnings. Visibility of the worker in the public sphere and the amount of income earned can be instrumental in increasing empowerment of the workers (Kantor 2003). Correspondingly, the region where they are located is also likely to impact their earnings. Rural and urban self-employed women have different and unequal access to markets, raw materials and connectivity. The seasonal and erratic nature of agriculture in India affects the returns to self-employment in the rural areas (Srivastava and Srivastava 2010). It would generally be expected that workers in the urban areas earn more than those in rural areas.

Looking at earnings is especially important for artisans, not only from a perspective of poverty reduction, but also because the low wages discourage artisans to accumulate the skills necessary for the continuation of the craft (Cable and Weston 1985). We have performed pooled cross-section regression analysis using appended data from Periodic Labour Force Surveys (PLFS) 2017-18 and 2018-19 on the earning of women self-employed artisans and women self-employed non-artisans on the potential explanatory variables. Our variables of interest are the categorical variable of location of work, and the binary variable of region (rural/urban). We have extended this analysis on other categories of workers as well.

We find that urban self-employed women non-artisans and men artisans earn significantly more than their rural counterparts. Such an 'urban premium' does not, however, hold for women artisans. This is contrary to general expectations, as higher urban wages have been noted in India and other developing countries (Kundu and Pandey 2020; Islam 2023; Jones, D'Aoust, and Bernard 2017).

The absence of urban premium is specific and unique only among women artisans, and the formation of identity associated with craft production is responsible for this. We posit that the historic division of labour in artisanal sector that has been further solidified because of romantic and patriotic notions associated with crafts prevents women artisans from accessing the benefits of the urban areas. This persistence relegates women's crafts as leisurely work and prevents them from creating the relevant networks and availing the urban premium. The privileged access that men artisans have in terms of skills and mobility causes men self-employed artisans to enjoy the urban premium, which does not hold for their women counterparts. In terms of location, we find that women working away from their homes earn significantly more than home-based self-employed women.

Conceptual Framework

Self-employed workers form a heterogeneous group of workers. They are employed in various types of occupations which cater to the needs of the economy (Bhatt 2006). Self-employed workers are generally clustered in low technology and labour intensive sectors of the economy and have very low bargaining power (Bhatt 2006). The location of work, especially for informal workers, can be a crucial in determining labour market outcomes, insofar as being a constraining factor for workers (Fernandez and Su 2004) The location of work of the workers bears implication on the type of work, the risks and constraints, and association with legality (Carré 2013). Spatial constraints are higher for women, as women's greater household responsibilities forces them to look for jobs within or around household premises (Fernandez and Su 2004). The consequence of the spatial restriction for women also manifests in gendered differences in developing job search networks, which makes women's job prospects more localized than those of men (Hanson and Pratt 1988).

The effect of location of work is probably most pronounced on home-based workers, because they are often subcontracted by large firms and are paid low wages, and have no benefits (Rani and Unni 2009). Home-based workers are unable to benefit from newer market opportunities and these women are generally the most disadvantaged in a production chain (Carr, Chen, and Tate 2000). Neoclassical economics theorizes the efficiency of home-based work, where there is no fixed cost of traveling, and household activities like taking care of the young and the sick can be done along with the process of employment. This flexible nature of home-based work has made women the primary workers employed in this type of work and are employed as piece-rate workers. The Marxist literature sees home-based work as an extension of capitalism (Baud 1987). Mies (1981) states that these workers are 'semi-domesticated': although their social appearances are that of housewives, they are integrated into the market-oriented production system. Women are systematically relegated to home-based work through sociocultural and economic factors which interact at different levels, contributing to symbolic and material deprivation of these women (Raju 2013). The quest for flexible production by expanding global capital combines with the traditional gender norms to perpetuate women's presence in home-based work. Home-based workers cannot negotiate on their own terms, and thus become victims of middlemen who become their primary source of income and work (Bhatt 2006).

Artisanal production was one of the first type of production where home-based work became common: some examples include the traditional crafts of *phulkari* in Punjab and carpet weaving in Himachal Pradesh (Sudarshan and Sinha 2011). Home-based work in the artisanal sector can occur through subcontracting. This makes them analogous to the classical putting-out system where the workers are provided with the raw materials by larger firms or their representatives, thereby subordinating artisanal production to merchant or financial capital (Basole and Basu 2011).

Artisanal production differs from other types of petty commodity production because craft production is associated with social identities. Production of handicrafts both within or outside the households involves division of labour, based on social positions which regulate political position and access to raw materials (Costin 1998). Crafts form a medium which forms, communicates and maintains social identity: the association of a particular craft with a definite social identity has been noted by scholars (Costin 1998). Crafts eventually become social objects which are significant in maintaining group membership and social roles (Costin 2015). Particular crafts were assigned to particular genders, and even when men and women are engaged in the same craft, they use different technologies, have different consumers and are organized in separate modes of production (Murdock and Provost 1973). The context of this division of labour varies through different places. The 'femininity' that is associated with crafts like stitching, embroidery, knitting, weaving, mat making is that they are time consuming, low-income crafts, and have restrictions on mobility (Dhamija 1981). The gendered division of labour can change with change in technology. When a famous embroidery of Lucknow *chikan* became more popular and started becoming mass-produced goods, men shifted from being embroiders to agents or middlemen. Subsequently, the industry was filled with semi-skilled women who work from homes in their villages at low wages (C. M. Wilkinson-Weber 1997). 'Feminine' traits like docility and obedience make women ideal workers for subcontracting. These play a role in perpetuating ideas of domesticity of women, who can work from their home while taking care of their children and cooking at low wage rates (Scrase 2009). In the state of Orissa in India, traditionally men and women worked in household units following the household gendered division of labour (Acharya and Lund 2002). Most of women's labour that is put in crafts often private and done within the household premises, and go

unrecorded. The existence and perpetuation of a gendered division of labour among artisans make it an important topic to look into.

The engagement of women as home-based artisans can also be seen through the lens of social reproduction. Women employed in home-based production manage their 'double burden' from their households. This type of work blurs lines of reproductive and productive spheres, intensifies the process of 'housewifisation' and devalues their labour because of their reproductive unpaid work within the household premise (Mies 1981). Women are subsumed within their homes and social oppression and labour exploitation is perpetuated (Mezzadri 2016). The exploitative nature of working from home would lead us to make a hypothesis that the location of work is a crucial determinant of earnings of self-employed artisans. Specifically, we would expect that women self-employed artisans employed in locations away from their homes would earn significantly more than those who work from their home.

Moreover, the earnings would be expected to be different in rural and urban areas. Non-farm household enterprises employ different types of people in rural and urban areas: while in the rural areas, these enterprises absorb landless educated labour force, in urban areas household enterprises are mostly means set up as means to survive (M. Das 2003). Rural artisans who work in villages do not have access to urban markets, and are not well-informed about urban consumers, and have significantly low bargaining power (C. M. Wilkinson-Weber 1997). The problems faced by rural artisans also include non-coverage under relief programs or rural developmental programs, lack of skill development, lack of specialized markets, weak financial power, non-existence of infrastructural facilities or proper raw materials, lack of access to information, lack of linkages and social security (Solanki 2008). On the other hand, most of the self-employment among women in rural areas come from the agricultural sector, where earnings are erratic and employment can be

seasonal. Economic reforms have created more opportunities of work and employment with higher returns in the urban areas compared to rural areas, and workers in urban areas earn significantly more than their rural counterparts (Kundu and Pandey 2020; Hasan 2022). Empirical results have found that the average rural earning is close to half of the urban earning, and this gap is highest for self-employed worker (Anand and Thampi 2021). The urban premium has also been recorded for other developing countries like Bangladesh, Rwanda, Nigeria, Tanzania, Uganda, China and Brazil (Islam 2023; Bower, Gupta, and Menon 2021; Jones, D'Aoust, and Bernard 2017; Sicular et al. 2007; Almeida, Araújo, and Gonçalves 2022). Therefore, we expect there to be significant differences in earnings between in urban and the rural areas. Additionally, it is also necessary to look at the role of space in rural and urban areas, because norms of women exclusion may be less rigid in urban areas.

Literature Review

The current study aims to make a contribution to the literature of self-employed labour in India. Chandrasekhar and Ghosh (2007) find that in most cases, they are likely to earn less than the minimum wages: and the situation is worse for self-employed women. Srivastava and Srivastava (2010) find that women are largely employed as self-employed or as casual worker in agriculture. Bhatt (1989) discusses that self-employed women have to work for long hours without any assured compensation, most of them are below the poverty line, and lack any facilities like leave, provident funds, skill training, legal aid or credit. Home-based producers and artisans face problems in procuring raw materials. Neetha (2010) finds that self-employment in post-liberalization era is associated with the lack of jobs and employment opportunities.

While these studies have been crucial in understanding the situation of self-employed workers, women artisans are not the focus of their studies. Artisans – especially in the rural areas – have

been clubbed along with agricultural labourers and non-farm workers, a process which generally ignores the problem faced by artisans (Solanki 2008). To this end, the current study makes a contribution looking at women self-employed artisans.

Cable and Weston (1985) find that self-employed artisans may earn more than wage labourers, and issues of seasonality in agriculture, accumulation of skill, and fluctuations demands of goods play a role in determining the wages. Weston (1987) states that women in North India participate in independent craft production where the unit is the family, and the production is for the local market. Women are also engaged in domestic production where the labour is arranged as a putting out system, and while the focus of production has shifted for the export market and has moved out of the household, participation of women has fallen. However, because the economic situation of the country has changed since these studies, it is necessary to look into the current pattern of earnings of artisans. Additionally, although the work does talk about the division of labour within the family, it does not separately talk about the difference in wages between men and women. Lack of proper data may have impeded the process.

In the context of women artisans, Majumder (2020) studies the case of jewellery making in rural West Bengal and analyses the role that gender discourses on work play on women artisans who are seen as housewives and whose labour is devalued. The informal networks that women build help them navigate the demands of work and households (Majumder 2020). Wilkinson-Weber (1997) studies the embroiders in the *chikan* industry of Lucknow, and theorizes how home-based women weavers are exploited using gender norms which facilitate the accumulation process. Mies (1981) explores the exploitation faced by women lace makers in Narsapur, where their identity as 'housewives' have facilitated men of the area who have turned into capitalist manufacturers. Acharya and Lund (2002) study the case of craftswomen and gendered division of labour in Orissa.

Crafts have always been place-based and the production of craft was a home-based activity, and the expansion of crafts have been done in a gender-specific way, where men have bigger market share and better training (Acharya and Lund 2002). The study also explores how women artisans have broken the traditional barriers of norms, and have become skilled producers.

These studies have improved our understanding of the situation of artisans with in-depth analysis of artisans in specific places. The current study looks to contribute further in this literature at of artisans an all-India level using a nationally representative labour survey. Our study does not restrict itself only to women artisans but takes into account non-artisan women self-employed workers as a benchmark for comparison.

Data

The current study uses data appended from PLFS 2017-18 and 2018-19 published by the National Statistical Office of India. Earnings of self-employed is measured as the earnings in the last thirty days. We use the data on hours worked to find a corresponding figure for hourly earnings so that the time spent in work does not impact our results. We identify artisans as those workers who are classified under National Classification of Occupation (NCO) codes 732 (Potters, glass makers and related), 733 (handicraft workers in wood, textile, leather and related), 742 (wood treaters, cabinet makers and related), and 743 (textile, garment and related)[2]. We also use data from Reserve Bank of India on state finances. The variable on per capita loan is calculated by dividing the loans given out by scheduled commercial banks (in crores) by the population of the state (in thousand).

For the purposes of the entire analysis, we consider own-account worker and employers, leaving out unpaid household workers, because we are concerned with variation of earnings.

[2] NCO 743 does not include workers involved in machine-based garment production.

Descriptive statistics: Placing women self-employed artisans in the Indian labour market

This section aims to place the women self-employed artisans in the labour force by using some basic statistics. This will help to give a national context of these workers.

Table 1: Distribution of women and men artisans and non-artisans across locations of work

Location	Men Artisan	Men non-artisan	Women Artisan	women non-artisan	Total Artisan	total non-artisan	Total Women	Total Men
Home	37.80%	13.45%	78.24%	45.81%	56.24%	18%	52.77%	14.68%
	976	6513	1697	3631	2673	10144	5328	7,489
Around Home	14.94%	9.74%	13.65%	24.74%	14.35%	11.85%	22.36%	10%
	386	4715	296	1961	682	6676	2257	5,101
Own workshop	30.22%	37.11%	5.21%	14.78%	18.81%	33.97%	12.73%	36.76%
	781	17973	113	1172	894	19145	1,285	18,754
Someone else's home	1.50%	1.13%	1.48%	1.06%	1.49%	1.12%	1.15%	1.15%
	39	549	32	84	71	633	116	588
Someone else's workshop	4.91%	5.95%	0.60%	2.85%	2.95%	5.51%	2.37%	5.89%
	127	2879	13	226	140	3105	239	3,006
Others	10.64%	32.62%	0.83%	10.76%	6.16%	29.55%	8.63%	31.51%
	275	15798	18	853	293	16651	871	16,073
Total	2,584	48,427	2,169	7,927	4753	56,354	10,096	51,011

The relevance of location of workplace can be understood from Table 1. This is even more pertinent for the case of women self-employed artisans. The gendered difference is also clear from the table as most men non-artisans work from their own workshop. With more than half of self-employed artisans working from home, the location of work is a crucial feature of artisanal production.

Table 2: Distribution of women and men artisans and non-artisans across region

Sector	Women non-artisan	Women Artisan	Men non-artisans	Men artisans
Rural	4,086	967	20,487	1252
	51.55%	44.58%	42.30%	48.45%
Urban	3841	1,202	27,940	1332
	48.45%	55.42%	57.70%	51.55%

Table 2 shows us the distribution is almost even between rural and urban areas. Table 3 presents the hourly earnings data across urban and rural locations.

Table 3: Hourly earnings of self-employed men and women artisan and non-artisans across rural and urban areas (in Rs.)

Hourly earnings of self-employed workers (Rs.)				
Sector	Women Artisan	women non-artisan	Men artisans	Men non-artisans
Rural	7.91	7.73	11.9	14.44
Urban	8.34	12.45	13.37	20.23
Total	8.15	10.02	12.66	17.78

Difference in earnings between men and women in the Indian labour market has been documented by many scholars (Deshpande, Goel, and Khanna 2018). This differential is noted among self-employed artisans and non-artisans as well. The difference in average earnings is prevalent in rural areas as well as in the urban areas. Among women self-employed workers in the rural areas, non-artisans earn lower than artisans because most of the former are employed in the low-productive and low-wage agricultural sector (Srivastava and Srivastava 2010).

Table 4: Hourly earnings of women and men artisans and non-artisans across locations of work (in Rs.)

Location	Women Artisan	women non-artisan	Men artisans	Men non-artisan
Home	7.90	8.25	11.75	16.46
Around Home	8.61	8.82	12.99	15.34
Own workshop	10.37	15.97	13.44	20.61
Someone else's home	7.51	10.51	12.61	17.07
Someone else's workshop	12.72	14.12	12.27	18.24
Others	8.58	11.01	13.42	15.78

In our analysis, we have classified the locations as: 1. Home, 2. Around home, 3. Own workshop, 4. Someone else's home, 5. Someone else's workshop, and 6. Others. Following the definition put forward by Women in Informal Employment: Globalizing and Organizing (WIEGO), we identify home-based workers as workers whose physical location of work is their home (Raveendran, Sudarshan, and Vanek 2013). The category of 'around home' includes structure attached to own home, open area adjacent to home, and detached area by own home: this refers to the concept of 'parochial space' (M. Bose 2005). The parochial space can be the immediate area around the household which does not fall in the dichotomy of private and public space. Often women are 'allowed' to work in the parochial space, along with the private space from within their households. 'Others' as a category include workers who work in street with fixed location, construction site, and those who do not have a fixed location. The difference in earnings between men and women artisans and non-artisans are prevalent through all the locations of work as seen in Table 4. Self-employed women artisans earn consistently lower than their men counterparts. For women workers, the lowest paying location of work is at home. Across locations, women artisans earn consistently lower on average across all the locations than their non-artisan counterparts. The average earning is the lowest for both these groups of workers when their location of work is at

home. While looking between the sectors, however, women self-employed artisans earn more than non-artisans in the rural areas, while in the urban areas, non-artisans earn much more.

Method

We have used data from PLFS 2017-18 and 2018-19 at the individual level to increase the accuracy of our results. To analyse the effect that location and sector has on earnings, we perform OLS regressions of the log of earnings on the potential determinants. Our variable of interest is the coefficient associated with location, and the one associated with rural/urban.

We use a Mincerian type equation and run the following regression for both artisans and non-artisans.

$$\log earnings_i = \beta_0 + \beta_1 region_i + \beta_2 location_i + \gamma X_i + u_i$$

X_i includes all the other control variables: social relation[3]; household size; age; square of age; years of educations; year; vocational training; states; actual revenue expenditure on tourism; and per capita amount of loans that have been given out by scheduled commercial banks. The last two are state level policy variables.

We base our controls from literature on labour market in India. Social relations are controlled for, because earnings are determined by the location of the worker in the hierarchy of religion and caste (Deshpande, Goel, and Khanna 2018). Household size also impacts earnings of women workers, because they are generally responsible for household duties and domestic chores. Skill and

[3] Social relation includes the controls for caste and religion. The categories for social relation are based on social and religious hierarchy. The categories are: Upper Caste Hindu (UCH), Other backward caste (OBC), scheduled caste (SC), Muslim forward caste, Scheduled Tribes (ST), Christian forward castes.

experience of the worker is controlled through the variables of age, years of education and vocational training[4] (Kantor 2005). We also control for region by including a state variable. State-based variables are likely to impact the earning, because loans from scheduled banks can help the workers secure more working capital and expand their business, and tourism provides a separate high-income market for self-employed workers. The market for tourism is especially relevant for artisans (Scrase 2009). We have run a test to check for omitted variable, and our specifications qualify the test. We also run separate OLS regressions for women artisans, non-artisans, and men artisans to build a more nuanced story.

Results

The first two columns of Table 5 show us the results of the pooled cross-section regression on selected control variables. In this table, we have focused on the location, sector, and state-level policies. The whole table with all the control variables is not provided here for the lack of space.

Our variables of interest are the coefficient associated with region and with location. As for location, our base category is 'home.' Both artisan and non-artisan workers working anywhere outside their homes earn significantly more than those working in their homes. This is consistent with our expectation. Home-based workers are subject to higher exploitation because gender-based norms are used to extract higher profits from these workers. The low mobility, norms associated with domesticity of women, and lack of access to markets contribute to the low income of home-based workers. Home-based work is associated with higher incidences of poverty and child labour (Sudarshan and Sinha 2011). Home based artisans face problems, especially with respect to dealing with middlemen in arrangements of subcontracting where gender norms are used to exploit them

[4] Vocational training includes three types: no vocational training, informal vocational training through hereditary learning process, or formal vocational training.

(Mies 1981; C. M. Wilkinson-Weber 1997). Capitalism takes advantage of cultural and social norms to convert women into cheap labour force and women's ability to work from home explains the low earnings and irregularity of home-based workers (Boeri 2023). This type of production system creates profit from a flexible labour force whereby unpaid social reproduction activities are done by women (Boeri 2023). The restrictions on mobility that women have prevent their market access and their ability to benefit from opportunities related to building of skills (Kantor 2005).

While the results about location of work is consistent with our expectations, the results related to region of work show us a puzzle. The results from the first column of Table 5 tell us that urban women non-artisans earn 19.8% more than those in the rural areas. This urban premium comes with increase in opportunities in urban areas in terms of access to customers, better network and more connectivity. However, this urban premium does not hold for women artisans. The result can probably be explained by the fact that most of self-employment among women in the rural areas come from family firms and enterprises low-productive and seasonal agricultural sector (Srivastava and Srivastava 2010; Lahoti and Swaminathan 2016). Further in the rural areas, restrictions on women based on caste are more generally observed (Raju 2013). This can contribute to the lower earnings of rural self-employed women. The lack of connectivity and market access by rural self-employed women play a role in this difference of earnings between urban and rural sectors. In the rural areas, excess supply of labour situate self-employed women in a vulnerable position which explains their lower earnings (Datta 2003). In fact, the recent trends suggest that the low returns to self-employment in rural areas has seen people moving out to casual farm and non-farm employments (Jatav and Sen 2013).

Much of the explanation about the lack of urban premium among women artisans, therefore, hinges on women being employed in agricultural sector in rural areas. This, however, does not give us

much insight to the situation of women artisans. To explore their story in more detail, we drop all the observations from the agricultural sector and run the regression again for women self-employed non-artisans. The results of these are in the third column of Table 5. We can now compare column (2) and column (3). Women non-agricultural non-artisan workers earn 18.2% more in the urban areas than in the rural areas. While women non-artisans are able to take advantage of the urban areas and avail the urban premium, women artisans are not benefitting from these urban areas. A t-test to compare the coefficients show that they are significantly different from each other. Therefore, agricultural employment is not the entire explanation, as the urban premium also shows up for non-agricultural women as well.

Table 5: Regression results regressing log of earnings on different variables for different category of workers

	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	Women non-artisans	Women artisans	Women non-artisans non-agriculture	Men artisans	Women artisans in non-GI states	Women artisans in GI states
Urban	0.198***	0.0436	0.182***	0.108***	0.0781**	-0.0154
	(0.0178)	(0.0300)	(0.0204)	(0.0215)	(0.0371)	(0.0504)
Household size	-0.00960**	-0.0138	-0.0171***	0.00540	-0.0133	-0.00742
	(0.00450)	(0.00855)	(0.00520)	(0.00519)	(0.0107)	(0.0141)
Around home	0.0643***	0.130***	0.172***	0.0922***	0.0839*	0.187**
	(0.0224)	(0.0442)	(0.0299)	(0.0324)	(0.0493)	(0.0912)
Own workshop	0.387***	0.281***	0.415***	0.136***	0.243***	0.318***
	(0.0257)	(0.0639)	(0.0277)	(0.0255)	(0.0825)	(0.0997)
Someone else's home	0.255***	0.0511	0.239***	0.0596	-0.0335	0.129
	(0.0797)	(0.119)	(0.0841)	(0.0827)	(0.148)	(0.198)
Someone else's workshop	0.226***	0.461**	0.233***	0.0903*	0.484*	0.449*
	(0.0505)	(0.187)	(0.0518)	(0.0487)	(0.280)	(0.256)
Others	0.307***	0.131	0.392***	0.124***	0.113	0.0896
	(0.0289)	(0.185)	(0.0313)	(0.0366)	(0.195)	(0.476)
No. of years of education	0.0396***	0.0140***	0.0458***	0.00646**	0.00718	0.0215***
	(0.00195)	(0.00386)	(0.00219)	(0.00279)	(0.00461)	(0.00682)

Age	0.0468***	0.0223**	0.0439***	0.0312***	0.00401	0.0416***
	(0.00584)	(0.00958)	(0.00648)	(0.00750)	(0.0121)	(0.0160)
Age squared	-0.000466***	-0.000220*	-0.000414***	-0.000304***	2.98e-05	-0.000495**
	(7.34e-05)	(0.000131)	(8.27e-05)	(9.42e-05)	(0.000163)	(0.000224)
Revenue expenditure on tourism	0.319**	-0.311	0.0871	-0.337	0.535	-0.824
	(0.150)	(0.410)	(0.174)	(0.237)	(0.553)	(0.672)
Per capita loan	0.137***	0.334***	0.230***	0.240***	0.00436	0.620**
	(0.0502)	(0.115)	(0.0548)	(0.0708)	(0.138)	(0.244)
Constant	0.541***	1.349***	0.517***	1.258***	1.458***	1.107***
	(0.142)	(0.229)	(0.159)	(0.193)	(0.383)	(0.415)
Vocational training controls	Yes	Yes	Yes	Yes	Yes	Yes
State Controls	Yes	Yes	Yes	Yes	Yes	Yes
Social relation controls	Yes	Yes	Yes	Yes	Yes	Yes
Year Controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	7,094	2,094	5,325	2,296	1,286	808
R-squared	0.308	0.172	0.366	0.198	0.161	0.222

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

We check whether the lack of urban premium is something specific to all artisans. However, we note that men artisans can access the urban premium. The results can be seen comparing column (2) and (4) in table 5. The coefficient corresponding to urban becomes relevant for self-employed men artisans. Solanki (2008) highlights the problems that rural artisans face in terms of infrastructure, lack of market access, low infrastructure and lack of access to raw materials. Urban men self-employed artisans make use of networks and opportunities to get away from these problems associated with rural artisans. However, our results suggest that urban women artisans cannot overcome them and thus do not earn more than rural women artisans. Men artisans get opportunities to perform much better in urban setting than in rural settings.

The uniqueness of artisanal production comes from its association with history and culture, and the social identity that it creates in the process. We argue that these unique features of artisanal production are the reasons behind women artisans not receiving the urban premium. There has existed strong gendered division of labour in artisanal production in India (Roy 2005). Further, the skill associated with craft production has also come down historically through apprenticeship which is highly gendered. Apprenticeship outside family generally did not include women, and they were also excluded from crafts related to metals (Roy 2005). The access to skills that are important for craft production is generally passed down from father to son or from a male teacher to a male apprentice, and the women are generally not included in this process (Dhamija 1981; Acharya and Lund 2002). Artisans and handicrafts have been romanticized and idealized, and held up as a mark of resistance against colonialism. The discourse on nationalism was largely an urban male discourse and actions associated with them often made women invisible thus reinforcing the hierarchy associated with gender (Rai 2022). There has been a convergence of nationalism and crafts, creating a romanticized notion in the consciousness of the country of the Indian artisan as a symbol of real and authentic India (Mohsini 2011). The idealized and romanticized context of craft was seen as a contrast to the distresses that were consequences of colonization and modernization, and these crafts were sought to be preserved and promoted (Venkatesan 2009b). Venkatesan (2009b) argues that crafts were deliberately brought to the centre of social space and were recreated as valued objects of attention by the powerful elites.

This romanticization and the idea that artisanal production represents ‘true’ Indianness has led to the solidification of gendered division of labour among artisans. This notion that crafts should be preserved in their pristine form, in turn, impedes the women artisans to benefit from urban areas. The exploitation association with this division of labour also has persisted over time. Artisanal

division of labour comes from the prevailing domestic division of labour and women artisan's work is generally considered a leisurely activity and thus is not compensated adequately. Women artisans' historic exclusion from the gendered space where skill and knowledge are passed down can also translate into lack of social networks that would help them from accessing markets more efficiently. The pattern that emerges almost universally is that men artisans were more likely to produce socially, economically, and ritually more valuable goods (Costin 2015).

For example, women weaving *phulkari* embroidery in their leisure time in a patriarchal family set up is part of Punjabi culture and folklore and has been idealized and fossilized in 'tradition' (Maskiell 1999). In colonial Bengal, on the other hand, embroidery related to *knatha* was a symbol of pure and rural identity in the face of British modernity (Ghosh 2020). The associated skill of embroidery was understood to be a feminine skill and was related to domesticity of women which was celebrated because it was projected to be patriotic (Ghosh 2020). Thus, women have historically low skill formation and restricted mobility all of which has historically stayed intact. Upholding these crafts as means for anti-colonialism have solidified the division of labour that was already existing in these types of production. In a study among artisans in West Bengal, Soni-Sinha (2011) and Majumder (2020) find that the work women do in the process of jewellery making is often considered to be their leisure work. While men were formally trained, women received training only from people in their family (Majumder, 2020). The lack of urban premium among women artisan is similar to what Acharya and Lund (2002) find in the state of Orissa. When traditional crafts – and the associated gendered division of labour - expand through urban areas, they do so in typically gendered manner. Men artisans have higher mobility and more access to information, and can work for government institutions, NGOs or private business owners. Women artisans do not have similar access to markets, and are restricted to family-based production or

local workshops. Further, they are more likely to be exploited by middlemen. The unique problem that women artisans face is also because craft production is also unique because it is associated with the formation of social identities along with it (Costin 1998). The valorisation that Indian crafts have received and the association that crafts have with culture and tradition has kept the gendered division of labour and the associated identities intact with generations.

Therefore, while urban areas provide better opportunity for women non-artisan for earning higher earnings, the same cannot be said for women artisans. The problems that women artisans face in terms of low infrastructure and lack of market access in rural areas continue in urban areas as well.

To strengthen our results, we consider the craft which has been historically considered feminine and is a strongly related to the gendered division of labour: embroidering. The famous embroideries in India are historically feminine. Crafts like *phulkari, knatha stitch,* Kutch embroideries, Chamba *rumal* were made by women for them being used within their families or for the purposes of gifting in auspicious occasions (Maskiell, 1999; Frater, 2016; Rai, 2016). The gendered division of labour for embroidery has been so relevant that activist Kamaladevi Chattopadhyaya (1975) focuses on the feminine attributes important for embroidery and refers to it as a domestic craft which is pursued by women as leisurely occupation with 'devotion and earnestness.'

While the gendered division of labour exists in all types of production process, the ideological component of craft production makes this especially relevant (Wilkinson-Weber, 2004). The historic gendered division of labour has been entrenched as their 'traditionality' and 'authenticity' have been preserved and advertised for the promotion of the country's culture. For example, Kasuti Embroidery is described as "The true essence of this craft lies in the state's culture, traditions, customs and history, making it all the more special" by a fashion e-commerce website which also

traces its origin of how "skills, training and traditions" are passed from mothers to daughters at a young age. Similarly, the celebration of *chikan* is seen when it is advertised that wearing *chikan* is wearing tradition and history (C. Wilkinson-Weber 2004). Kutch embroidery is advertised as 'timeless treasures of Kutch' to tourists (Hardy 2012). The continuation of the historical gendered division of labour in today's world can be noticed especially among embroidery artisans.

This leads us to test our claims using the craft of embroidery. Some of the embroideries in India has received recognition by the Government of India as they have received the Geographical Indicator (GI) tag. We have considered states which have a GI tag in embroidery and have compared them with those which do not have one. We run separate regressions on the log of earnings of women artisans for states with a GI for embroidery and for those which do not. Our results suggest that for states which do not have the GI tag that, women artisans enjoy the urban premium.[5]

Column (5) and (6) show us that the urban premium exists for those women artisans who belong to states without a GI tag in embroidery. Women artisans belonging to states with a GI tag in embroidery do not enjoy the urban premium. These results strengthen our claim that the historical and cultural specificity associated with the gendered division of labour associated with craft production. This division of labour is most prominent among embroidery artisans and thus states which have celebrated their embroidery pattern through a GI tag have women artisans who do not have the urban premium. Women artisans from states which have popular embroideries and are promoted in a manner that highlights the gendered production are unable to earn the urban

[5] These states and their embroideries are Karnataka (*Kasuti* Embroidery, *Sandur Lambani),* Bihar (*Sujni* Embroidery), Gujarat (Kutch Embroidery, Zari), Tamil Nadu (*Toda* Embroidery), Odisha (*Kapadaganda),* West Bengal (*Nakshi Kantha),* Punjab, Rajasthan and Haryana (*Phulkari),* Uttar Pradesh (*Chikan),* Kashmir (*Sozani),* Himachal Pradesh (*Chamba Rumal).*

premium. The same result also holds when only women artisans from NCO 743 (textile, garment and related) are considered (results not shown).

Heterogeneity Analysis

We look at a more nuanced analysis of the urban premium that shows up. Women artisans of social categories SC, OBC, UCH and Muslim categories do not receive the urban premium. The number of women artisans belonging to the ST category is too low to make any meaningful interpretation. Therefore, the existence of urban premium or the lack thereof is not specific to a particular caste. The results are, therefore, not driven by only a particular caste receiving urban premium. This goes on to strengthen our claim that the specificity of women artisanal production drives our result.

We also check if women artisans from a particular location of work receive the urban premium. We find that none of the women artisans from any of the categories of location of workplace receive the premium.

To analyse earnings among different levels of education, we have created three broad categories of education: up to primary education; primary to higher secondary education; and above higher secondary education. The urban premium does not show up in any of the categories for women artisans.

Finally, we check in the urban premium differs across marital status for these three categories of workers. Restricting ourselves only between those who are currently married and those who are never married, we find that neither of the categories show the premium among women artisans.

These results in table A1 in appendix show that it is not a particular category of women artisan who receive the urban premium or drive the overall result on lack of urban premium. Therefore,

the lack of urban premium is unique to all women artisans. This strengthens our argument that the historical and cultural specificity of this type of production is in fact responsible for our result.

Robustness Check

Our results will hold only if we can confirm that the lack of urban premium is exclusive to women artisans. We check if the lack of urban premium holds for all women self-employed workers in the manufacturing sector. We perform the same pooled cross-section analysis but using only earnings of women non-artisans from the manufacturing sector. We still see that the urban premium holds for them. This rules out the possibility of sectoral differences playing a role in causing the urban premium.

Next, we check if the absence of urban premium is something specific to all women workers belonging to the NCO-700 (Crafts and Related Trades) level. We still note that non-artisans of this level earn an urban premium.

The urban premium also shows up for men non-artisans (not belonging to the agriculture sector). All these results show that while all categories of workers can avail the urban premium, it is only self-employed women artisans who are not able to avail this premium. The lack of urban premium is not specific to all artisans, to all self-employed manufacturing women workers, or to all women workers in the NCO-700 category. This strengthens our claim about the historical specificity only among women artisans which drive these results. Table A2 in the appendix describes these results.

Further, we also perform a propensity score matching to confirm the urban premium in our results. Among women non-artisans, we have divided the two groups of urban and rural, controlling for all other variables and compare the earnings. We try to control for all other differences except that one group (treatment) is in Urban and the other (control) is in rural. This gives us a result similar

to the pooled regression. Table 6 gives us the result for propensity score matching result for women non-artisans. Earnings in the urban areas are significantly high for them. Similarly, table 7 does the same for men artisans. The results still hold. Table 8 does the same exercise for women artisans, and finds that there is no difference.

Table 6: Comparison of earnings of urban (treatment) and rural (control) among women non-artisans

	earning	Coefficient	AI robust std. err.	z	P>z	[95% conf.	interval]
ATE							
	sector (Urban vs Rural)	2.784466	0.2947095	9.45	0	2.206846	3.362086

Table 7: Comparison of earnings of urban (treatment) and rural (control) among men artisans

	earning	AI robust Coefficient	std. err.	z	P>z	[95% conf.	interval]
ATE							
	sector (Urban vs Rural)	0.7790373	0.3853539	2.02	0.043	0.023758	1.534317

Table 8: Comparison of earnings of urban (treatment) and rural (control) among women artisans

	earning	Coefficient	AI robust std. err.	z	P>z	[95% conf.	interval]
ATE							
	sector (Urban vs Rural)	-0.2926593	0.3997682	-0.73	0.464	-1.07619	0.490872

The corresponding kernel density plots for the matched and raw samples are provided in the appendix in A1, A2 and A3. The density plots for the matched sample are nearly indistinguishable in all the three cases. This implies that the matching on the estimated propensity score balances the covariates. Using a different technique, therefore, we have confirmed our results.

Conclusion

Artisanal sector in India is a sector which has cultural and traditional significance and is a unique form of production because this type of work is related to identity of the workers. We check if the earnings of self-employed women artisans are impacted by their location and sector of work. Urban areas generally open up avenues to better infrastructure, social networks, and better access of markets. The results suggest that while women non-artisans and men artisans employed in the urban areas earn significantly more than their rural counterparts, this urban premium does not hold for women artisans.

The study argues that the unique nature of handicraft production is responsible for this difference. Romanticization and valorisation of crafts in India through culture, tradition, and resistance to colonialism have solidified the gendered division of labour in crafts. Promotion of these crafts preserve the strong division of labour and impedes women artisans to avail the urban premium. Women's work in crafts is also seen as leisure-work in a patriarchal family which is not adequately compensated (Soni-Sinha 2011). When these traditional crafts move to the urban areas, the gendered difference associated with them show up as women artisans not being able to avail the urban premium. The results also state that women workers who work away from their homes get higher compensation, because home-based workers are subject to higher exploitation. The historic specificity and the romanticization that we refer too among crafts of women artisans is most relevant in the case of embroidery. We divide states according to whether or not they have a GI tag

in their most popular embroidery, and compare the earnings of women artisans in these two types of states. Women artisans in states without a GI tag in embroidery enjoy the urban premium, but those in the other type of states do not. This confirms our results that the promotion of 'feminine' crafts upholds the gendered division of labour much more strongly and prevents women artisans from accessing the urban premium.

Policies which are aimed at the improvement of the conditions of artisans should be particularly targeted towards women artisans. These policies can be loans and subsidies which are specifically given to women artisans. The study also notes that promotion of traditional 'feminine' crafts to attract consumers to Indian heritage can further prevents women artisans from availing the urban premium. Limited access to formal credit and markets impedes women's economic outcomes (Kantor 2005). Policies, therefore, should enable easier access of women artisans to capital, infrastructure and market access instead of only advertising and promoting traditional crafts.

Chapter 2- Crafting Identities: A Study of Scheduled Caste Artisans in India

Introduction

The caste system divides the Hindu society into different social groups based on their traditional occupations. The historical legacy casts a shadow on access to employment, land and resources in the contemporary period. This historic division has left a long-lasting impact on the current labour market in India, whereby Scheduled Caste (SC) and Scheduled Tribe (ST) workers are generally excluded from good quality and high-paying jobs in the labour market.

Majority of the SC/ST workers are employed in low skilled and lower-paying jobs (Madheswaran and Attewell 2007). SCs own two and a half times less wealth than their population in the country. The discrimination that SCs face in market and non-market institutions lead to their low income and poverty. The unequal access to economic, social and political rights and concentration of financial assets and land in the hands of UCs have created and perpetuated graded inequality in the Hindu society (Thorat and Madheswaran 2018). The exclusion that the deprived caste face in the Indian labour market is rooted in historical discrimination based on caste (Thorat and Dubey 2012). The mobility of the deprived caste is limited only in terms of moving from their traditional occupations to low-wage, insecure and informal sector jobs (Jodhka 2016).

While there is extensive literature looking at the impact that caste can have in the labour market outcomes, there is a dearth of research looking exclusively at how the same can unfold among artisans. This motivates our current study. Artisanal production is unique because this type of production forms and maintains identities of the artisans (Costin 1998). Artisans also face vulnerabilities in terms of indebtedness and low earnings and limited opportunities in the market

(Gupta 2011). This type of production is also important because it involves the element of skill which is passed through generations. However, artisans also face discrimination and segregation based on gender and caste (C. M. Wilkinson-Weber 1997). The concept of caste is especially relevant among artisans because they have been historically classified as undignified and lowly (Deshpande 2023). Scholars have looked at the interaction of caste in the artisanal production through fieldworks in India (Ganguly-Scrase 2004; Knorringa 1999; C. M. Wilkinson-Weber 1997). We attempt to fill the gap in the literature to talk about the dimension of caste in artisanal production among self-employed artisans by using a nationally representative Periodic Labour Force Survey (PLFS) for the years 2017-18 and 2018-19. Further, we also look closely into the living condition of the deprived caste artisans involved in bamboo craft and basket making in some districts of West Bengal.

Specifically, our research questions are: does there exist wage difference between Upper Caste (UC) and Scheduled Caste (SC) artisans, and how much of the wage gap is attributable to endowment effect and the unexplained effect? Does this gap exist across all the income groups of artisans? Further, we use primary survey to look at the lived experiences of deprived caste bamboo artisans in Bengal to elucidate issues of deprivation and neglect by the government.

We regress wages of self-employed artisans and find that in the urban areas UC artisans earn significantly more than SC artisans. However, in the rural areas there does not appear to be any significant difference. We argue that the overall low wages in the rural areas cause this result. Our results also suggest that the overall difference in wages between UC and SC artisans are prevalent even in states which have a high amount of their budget dedicated to SC/ST welfare. Oaxaca-Blinder decomposition tells us that almost all of the wage gap comes from the ‘unexplained’ part and not from the endowment effect. A sticky floor in the labour market occurs when earning gaps

declines with increase in earnings quantiles, and previous literature has found the existence of sticky floor while comparing earning of SC and UC workers (Arulampalam et al., 2007; Deshpande and Sharma, 2016). To check for the presence of the 'sticky floor' that is generally found in wage gap between UC and SC, we run a quantile regression and find that the wage gap between SC and UC artisans exists among the 25th, the 50th and the 75th percentile of workers. Our findings suggest that in contrast to the findings in the literature about the existence of a sticky floor in the wage gap in the aggregate labour market, there does not exist a 'sticky floor' in wages of the artisans. In fact, we find that the wage gap has a slight upward trend as we move from the lower income percentiles to the higher percentiles.

To inform discussion around policies about SC artisans, we further analyse the lived experiences of artisans from the deprived caste through a primary survey. This will help us look at nuanced aspects which may not be measurable through secondary data, and bring out a more complete story about deprivation and neglect that artisans from deprived caste face. We focus our qualitative analysis on artisans belonging to the deprived caste who are involved in making bamboo crafts in the state of West Bengal. The skill of this craft has been passed on from one generation to the next and the labour process of this craft has not undergone any change through generations. We find that these artisans have generally not received adequate attention from the State. Fall in demand of bamboo products and inadequate training have caused problems in terms of reproduction of this type of artisanal production.

Literature Review

Scholars have explored the impact that caste-based identities can have in labour market outcomes in India. The current study aims to contribute to this strand of literature. Deshpande (2001) creates a Caste Development/Deprivation Index using data about occupation, education, landholding,

assets and livestock, and looks at the index across states. The study finds that most of the SCs and STs are concentrated in primary occupations and low-level secondary occupation, and occupy the lowest rungs of the economic ladder (Deshpande 2001). Caste identities and institutional factors in India shape self-worth, especially among self-employed workers where lower-ranked social groups perceive lower amounts as being more remunerative (Goel and Deshpande 2016).

Studies have decomposed wage gap to find how much of the gap is attributable to the endowment and how much to the 'discrimination' effect. Madheswaran and Attewell (2007) decompose the wage gap among castes using the Oaxaca-Blinder decomposition and find that the endowment effect is larger than the 'discrimination' effect and has decreased from 1983 to 2000. This implies that discrimination that happens in pre-market access to education, health and nutrition is more relevant in explaining wage gaps. Neither the endowment nor the discrimination effect has changed between 1993-94 and 1999-2000 in the private sector; however, the public sector has accommodated much more SC/ST workers. Duraisamy and Duraisamy (2017) studies the wage gap among social groups during the period 1983 to 2011-12 and find that the wage gap has remained almost constant for STs and SCs since the reform period after 1990s. They find that the 'discrimination' component or the unexplained gap has increased from the period 1983 to 2012, and upper caste groups have been the primary beneficiary from the economic liberalisation Similarly, the decomposition of Thorat and Madheswaran (2018) shows that the underpayment to SCs or the cost of being an SC in the labour market is very high, and education was responsible for over 50 percent of the wage gap between SCs and UCs in both the private and public sector. Low human capital endowment of SCs, poor access to higher education, poor nutrition, and lower social capital have contributed to high and persistent wage differentials between SCs and UCs (Thorat and Madheswaran 2018).

The current study aims to contribute specifically to the impact that caste plays among self-employed artisans. Jodhka (2010) analyses the self-employment (across all categories of workers) among SCs in North-West India. In his survey, 63 percent of the respondents stated that they have experienced caste-based discrimination in their personal lives, and 57 percent of the respondents stated that perceptions about their caste negatively affected their business. SC entrepreneurs experienced difficulties in receiving credit or bank loans to set up their employment, absence of social network and other members of the kin. Perceptions about Dalit entrepreneurs impede them in the urban areas (Jodhka 2010).

Iyer, Khanna and Varshney (2013) when looking into the dynamics of caste in the entrepreneurship landscape of India find that SCs and STs were largely under-represented in the owning of private enterprises in both the rural and urban areas. Similar results are found by Rakshit and Basole (2024), who find that the share of the marginalised groups in ownership of enterprises is less than their percentage in the workforce. Further, they are also over-represented in subsistence-based household enterprises and under-represented in market-oriented commercial enterprises (Rakshit and Basole 2024).

Deshpande and Sharma (2013) analyse the data of micro, small and medium enterprises to look at the involvement of workers from marginalised groups. They find that SCs and STs are under-represented in owning enterprises and SC manufacturers were generally concentrated in stigmatised jobs which are traditionally associated with SCs (Deshpande and Sharma 2013). The study also finds that share of female-owned enterprises is higher among SC and ST owned enterprises than among those owned by UCs.

Barman (2020) explores the aspect of casteism that is faced by people in West Bengal in rural and urban areas. SC sub castes like those belonging to the profession of washermen, shoemakers, and

scavengers have moved to the urban areas. The study highlights how the colloquial names for the sub-castes are in themselves motivated towards dehumanizing them (Barman 2020). In a survey among people in Bengal, the author finds that more than one-third of the respondents have experienced oral casteism. The study finds that although "hard" casteism has declined in the rural area, "soft" casteism still characterises both the rural and urban areas of the state. In the urban areas, SCs also find themselves to be the victims of upper castes perception of SCs being beneficiaries of the reservation system (Barman, 2020).

The current study attempts to contribute to the literature on caste and self-employment. While the existing literature talks about the labour market of India as a whole while analysing the wage gap, the current study explores the caste wage gap specifically for the case of self-employed artisans. Caste in India has been historically based on division of labour and those castes and communities who are associated with traditional crafts or hereditary occupations are often considered to be undignified and lowly (Deshpande 2023). Artisans from lower castes were historically associate with crafts done with leather, coarse weaving, and pottery (Roy 1994; Sen 2015). The way we have defined artisans using the National Classification Occupation Codes can warrant that the wage gap between UC and SC artisan would not be as high as the rest of the labour market and as much as has been found out by other scholars. All the artisans generally belong to the 'low-skilled' and low paid category of the occupational hierarchy. Similarly, the decomposition of the wage gap is expected to yield different results that they do in the previous studies. This warrants an exercise to compare the wages between UCs and SCs only among artisans.

We fill the gap in the literature by engaging in two different exercises. Firstly, we use secondary date from nationally representative Periodic Labour Force Survey (PLFS) to find segregation among UC and SC artisans, the wage difference between SC and UC artisans, and the explanation

of the wage gap between these two groups. Secondly, we use primary data from a fieldwork which looks specifically into the living conditions, role of state and the prospect of reproduction of artisanal production of bamboo crafts in the Indian state of Bengal which is largely dominated by artisans of the deprived caste. This informs contexts in which the exclusion and neglect of deprived caste artisans go beyond wage discrimination, and extends to landlessness, lack of skill and training, lack of access to markets, and lack of remuneration in traditional caste-based crafts.

Data

The current study uses data appended from PLFS 2017-18 and 2018-19 published by the National Statistical Office of India. Earnings of self-employed is measured as the earnings in the last thirty days. We have normalised the earnings by their working hours to find the hourly wages, so that differences in wages are not impacted by the working hours. We identify artisans as those workers who are classified under National Classification of Occupation codes 732 (Potters, glass makers and related), 733 (handicraft workers in wood, textile, leather and related), 742 (wood treaters, cabinet makers and related), and 743 (textile, garment and related). We also use data from Reserve Bank of India on state finances to find the share of revenue expenditure on tourism. The variable on per capita loan is calculated by dividing the loans given out by scheduled commercial banks (in crores) by the population of the state (in thousand).

It is noteworthy here that the differences in wages and occupational segregation are not expected to be as high as they exist in the larger labour market. This is because by design our sample is restricted only among four categories of NCOs. The sample does not include the high paying jobs of legislatures, professors, lawyers and medical professionals which are typically the exclusive domain of UCs. The one-digit NCO categorisation is done from 2-9 based on a decreasing order of ‘skill’: 2 being the most ‘skilled’ (and well-paid) job and 9 being the lowest. In that scale, our

entire sample is a subset of the category 7. This implies they are considered typically low-skilled and low paid. It has to be, therefore, stressed that the differences in wages that we may see in the study exist among a relatively low 'skilled' and low paid category of occupation.

For the purposes of this exercise, we are considering only the two types of self-employed workers who earn: own-account worker and employers. We leave out unpaid household workers from this analysis, because we are concerned with variation of earnings.

Descriptive Statistics

Table 1 shows us the number of artisans employed in different categories. Most of the artisans in our sample are own account workers.

Table 9: Number of artisans belonging to different categories

	No. of workers employed		
Pooled: 2017-18 and 2018-19	SC	UC	Total
Own account workers	663	689	1352
Employers	8	15	23
Rural	367	270	637
Urban	304	434	738
Male	366	319	685
Female	305	385	690
Total	671	704	1375

Table 2 shows the mean hourly wages across different categories of artisans and the third column notes the wage difference. We have performed a t-test to compare the mean hourly wages between UCH and SC artisans across different categories. The wage difference is negative and significant for all categories, except for that among employers and rural artisans. In the rural areas, there is no

significant difference in wages between UCH and SC artisans. There also exists a significant difference in mean wages between SC and UCH artisans in the overall labour market.

Table 10: Mean Hourly wages of artisans belonging to different categories

	Mean hourly wages		
Pooled: 2017-18 and 2018-19	SC	UC	Difference
Own account workers	9.47	10.97	-1.5058***
Employers	14.79	18.53	-3.7419
Rural	9.68	10.04	-0.36436
Urban	9.35	11.81	-2.45977***
Male	11.17	13.9	-2.7239***
Female	7.56	8.84	-1.2848***
Total	9.53	11.13	-1.60344***

Next, we plot the kernel density of log of hourly wages to visually depict the differences in hourly wages between UCH and SC artisans. The density plot for UCH peaks to the right of that for SC, showing the significant difference in hourly wages for the two groups. The kernel density plots for male and female artisans between these two groups are also presented below. The gap between these two groups is present among both female and male artisans. As has been stated before, the gap between SC and UCH is not representative of the entire labour market, because we have limited our sample only among one-digit NCO classification 7. It is noteworthy that the gap still exists among workers of relatively low pay and low skill.

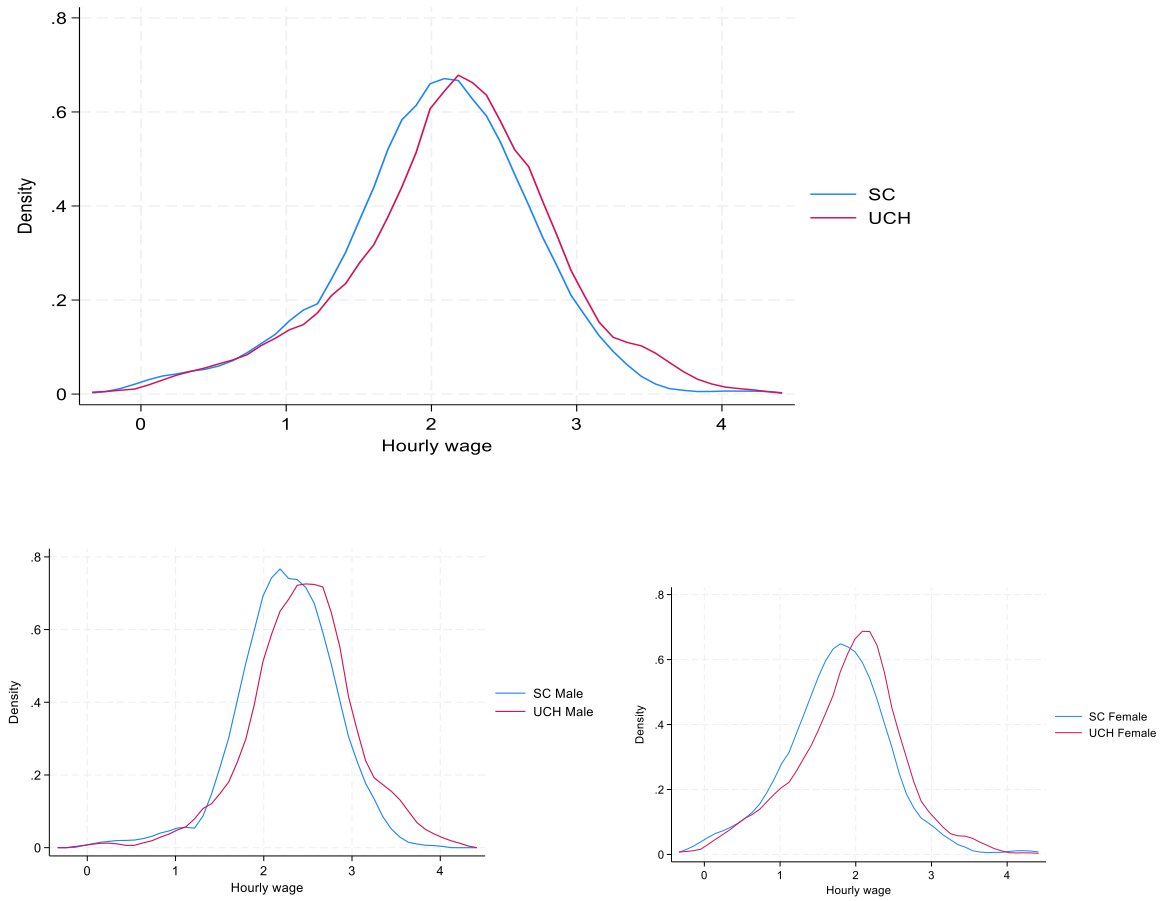

Figure 1: Kernel density plotting the hourly wages between SC and UC artisans, SC and UC men artisans and SC and UCH women artisans

Scholars have found evidence of segregation between SC and UCH workers. The historic division of labour that existed among castes have left its traces in today's labour market as well (M. B. Das and Dutta 2007). Following Mansoor and Abraham (2021), we look at a dissimilarity index between UCH and SC artisans. We use the Duncan Index (DI) for the purpose of our analysis (Duncan and Duncan 1955).

If we assume N^1 and N^2 number of people of UCH and SC respectively in a total population of N, and we wish to find out occupation segregation between these two groups across T occupations. Let n_j^1 and n_j^2 be the number of people employed in industries j = {1,2, 3,…,T}. Then,

$$\mathrm{DI} = \frac{1}{2}\sum_{j=1}^{T}\left|\frac{n_j^1}{N^1} - \frac{n_j^2}{N^2}\right|$$

DI is the dissimilarity index in different industries between UC and SC artisans. The value ranges from 0 to 1. The value of DI being 0 implies that there is no segregation and that the occupational distribution of both the groups is exactly the same. DI assumes the value 1 when there is complete segregation, where one group is employed in those occupations which is not populated at all by the other group (Duncan and Duncan 1955; Mansoor and Abraham 2021).

We find the DI between SC and UCH artisans distributed across different categories of industries using the three-digit National Industrial Classification-2004. We find the DI among artisans in the rural and urban areas. The DI for all artisans is 0.19395, for rural artisans in 0.258398, and that for urban artisans is 0.17654. The interpretation of 0.1939 means that more than 19% of SC (UC) artisans should shift to UC (SC) dominated industries to get rid of segregation. The level of segregation is higher in the rural artisans and lower among the urban artisans. Traditional division of labour based on caste is stronger in the rural areas, contributing to the higher DI.

Method

The wages of artisans are calculated from the pooled cross-sectional data from PLFS 2017-18 and 2018-19 as their earnings in the last thirty days. We perform an OLS regression of the log of wages on the potential determinants.

We use a Mincerian type equation and run the following regression:

$$\log earnings_i = \beta_0 + \beta_1 UCHi + \gamma X_i + u_i$$

Our and the coefficient of interest is β_1a which is associated with UCH_i. The UCH dummy assumes the value 1 for an upper caste Hindu artisan and 0 for an SC artisan. The estimated value of the coefficient would show us the difference in wages between UCH and SC. X_i includes all the other control variables: urban dummy; household size; age; square of age; years of educations; year; vocational training; states; actual revenue expenditure on tourism; and per capita amount of loans that have been given out by scheduled commercial banks. The last two are state level policy variables.

We base our controls from literature on wage determination in labour market in India (Deshpande and Sharma 2016). Household size impacts earnings of female workers, because they are generally responsible for household duties and domestic chores. Skill and experience of the worker is controlled through the variables of age, years of education and vocational training[6]. We also control for location by including a state variable. State-based variables are likely to impact the earning, because loans from scheduled banks can help the workers secure more working capital and expand their business, and tourism provides a separate high-income market for self-employed workers. The market for tourism is especially relevant for artisans (Scrase 2009).

Further, we also run separate OLS regressions for rural and urban areas to see if the wages are significantly different between wages of UCH and SC artisans. Next, we rank the states according to the proportion of revenue expenditure devoted to the welfare of deprived caste in the total revenue expenditure of the state. The states which have higher than median proportion are classified as high SC/ST welfare states and those with lower ones are classified as low SC/ST welfare states. The regressions are run separately for these two types of states to see if there is

[6] Vocational training includes three types: no vocational training, informal vocational training through hereditary learning process, or formal vocational training.

across types of states. We do this to note if there exists any heterogeneity among the earnings gap between SC and UCH artisans in these two types of states.

Results

The following table gives us the result of our OLS regression for our entire sample and the different sub-samples: rural, urban, low SC/ST welfare states and high SC/ST welfare states. Our interest is in the coefficient associated with UCH, where the base category is 0 (SC). Column 1 gives us the difference in wages between all UCH and SC artisans. UC artisans earn 11% more wages than SC artisans.

Comparing the coefficients in column 2 and column 3, we note that while there is no significant difference in wages between SC and UC artisans in rural areas, but UC artisans earn significantly more in the urban areas. The overall problems of artisans in the rural areas can cause artisans of both the groups to be employed as low waged workers. Lack of infrastructure, low social capital, and lack of market access contributes to the overall low wages of rural artisans (Solanki 2008).

Table 11: Regression results comparing SC and UC wages among all, rural, urban, low SC/ST welfare states, and high SC/ST welfare states

	Overall	Rural	Urban	Low SC/ST welfare	High SC/ST welfare states
	(1)	(2)	(3)	(4)	(5)
VARIABLES	log wages	log wages	log wages	log wages	log wages
Upper Caste Hindu	0.110***	0.0511	0.123**	0.130**	0.103**
	(0.0360)	(0.0567)	(0.0483)	(0.0517)	(0.0519)
Urban	0.106***			0.00766	0.200***
	(0.0344)			(0.0479)	(0.0510)
Female	-0.538***	-0.513***	-0.566***	-0.538***	-0.533***
	(0.0413)	(0.0666)	(0.0539)	(0.0581)	(0.0598)
year	0.0589	-0.0840	0.122	0.0810	0.194
	(0.0591)	(0.0999)	(0.0789)	(0.108)	(0.137)
Household size	0.0104	-0.00122	0.0182	0.000168	0.0163
	(0.00911)	(0.0135)	(0.0128)	(0.0129)	(0.0131)
Years of education	0.0159***	0.0105	0.0189***	0.0168**	0.0160**
	(0.00461)	(0.00745)	(0.00609)	(0.00663)	(0.0065)
Age	0.0320***	0.0420**	0.0192	0.0368**	0.0195
	(0.0114)	(0.0166)	(0.0166)	(0.0152)	(0.0174)
Age^2	-0.00034**	-0.0005**	-0.000129	-0.00042**	-0.00016
	(0.000148)	(0.00022)	(0.000211)	(0.0002)	(0.0002)
Informal vocational training	-0.00974	0.105	-0.0981	-0.117	0.0975
	(0.0677)	(0.108)	(0.0880)	(0.0892)	(0.104)
No vocational training	-0.0532	0.0900	-0.146*	-0.132	0.0245
	(0.0665)	(0.106)	(0.0860)	(0.0902)	(0.0993)
Share of state revenue expenditure on tourism	-0.260	-0.838	0.320	0.313	-0.351
	(0.383)	(0.557)	(0.585)	(1.039)	(0.965)
Per capita loan	0.199*	0.250	0.266*	0.532**	-0.107
	(0.107)	(0.185)	(0.143)	(0.221)	(0.198)
Constant	1.402***	1.472***	1.575***	1.266***	1.260***
	(0.270)	(0.397)	(0.392)	(0.435)	(0.456)
Location of work controls	Yes	Yes	Yes	Yes	Yes
State controls	Yes	Yes	Yes	Yes	Yes
Observations	1,266	602	664	628	638
R-squared	0.324	0.301	0.407	0.359	0.308

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Comparing the coefficients of the dummy between column 4 and column 5, the wages of UC artisans are positively and significantly higher than the SC counterparts in both type of states. Percentage of revenue expenditure on SC/ST welfare does not impact any difference between wages of SC and UC artisans. The coefficient is similarly positive and significant in both these types of states. Another noteworthy result in the comparison between columns 4 and 5 is that the artisans in the high SC/ST welfare states earn urban premium, that is artisans in the urban areas earn more than those in the rural areas in these states.

Decomposition of the income difference

The gap that exists among UC and SC artisans can arise because of differences in endowment like education and vocational training. As mentioned earlier, our sample is restricted only among a relatively low-paid and low-skilled occupation. This means that differences in level of skill would not explain the differences in wages of self-employed artisans of these two groups. We hypothesize that there are reasons associated with caste which causes this difference, because there should not exist major differences in endowments among workers of the same one-digit NCO category. There, however, may exist pre-market discrimination in access to education and training (Thorat and Madheswaran 2018).

To test this hypothesis, we run an Oaxaca-Blinder decomposition in order to look into the extent to which the explanatory variables impact the wage differences (Jann 2008; Oaxaca 1973). The wage difference is decomposed into a coefficient effect (unexplained effect) and an endowment effect (explained effect). The coefficient effect shows how much of the mean differences can be attributable to the different returns on the same endowments. The endowment effect is the explained difference which measures how much of the difference between mean of wages of the two groups is due to the difference in endowments.

Table 12: Results from Oaxaca-Blinder decomposition of earning gap

Oaxaca-Blinder Decomposition of log income	
SC coefficients	2.025***
	(0.0265)
UCH coefficients	2.159***
	(0.0271)
difference	-0.133***
	(0.0379)
Explained	-0.0113
	(0.0244)
Unexplained	-0.149***
	(0.0367)

Our hypothesis is confirmed in the table above. The endowment effect is insignificant whereas the unexplained difference is significant. Differences in returns to endowments explains all the difference between the wages of UC and SC artisans.

Quantile Regression

Quantile regressions can be a useful alternative to OLS regressions, as it allows the relaxation of assumptions related to linearity. Quantile regressions weigh the distance between the regression line and observed variables differentially and minimises the weighted distances, and thus the method is advantageous because it allows the comparison of variables outside of the mean (Cook and Manning 2013).

Following this, we run a quantile regression with the same specifications of the OLS regressions. We test the differences in the 25^{th}, 50^{th} and 75^{th} percentiles. This compares the values at the lower tail, the median values, and the values at the higher tail in the distribution. Figure 2a, 2b and 2c plot the log wage gap in each percentile running from lowest income to highest income along with

the average log wage gap in the overall sample, among rural artisans, and among urban artisans respectively. The figures do not find evidence of a sticky floor in any of the cases.

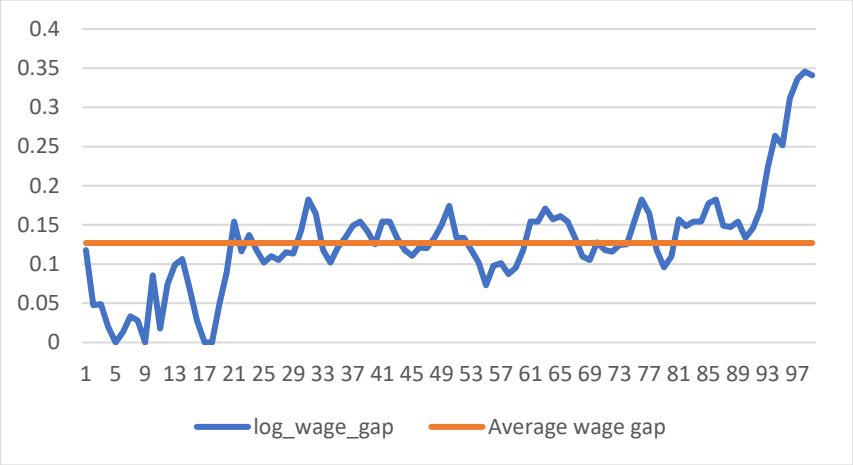

Figure 2: Earning gap between UC and SC artisans across income percentiles

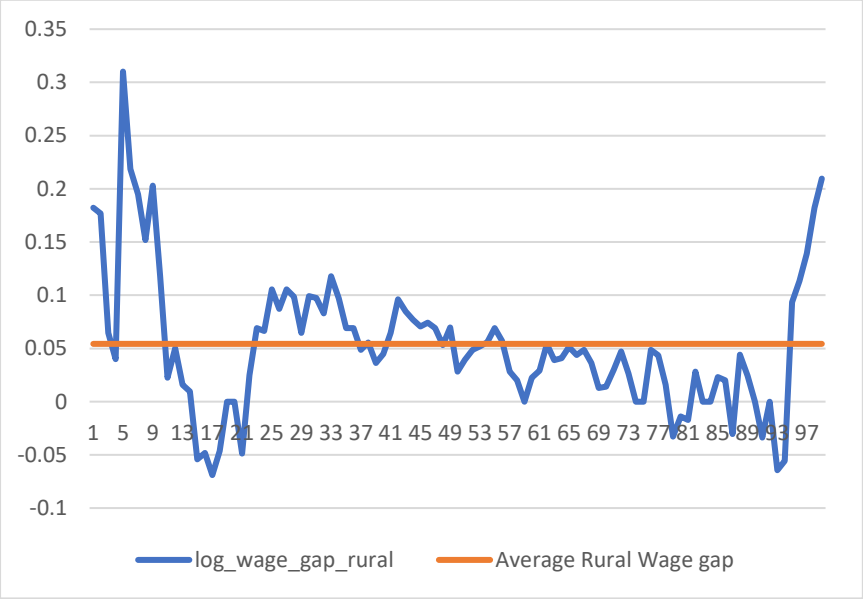

Figure 3: Earning gap between UC and SC artisans across income percentiles among rural artisans

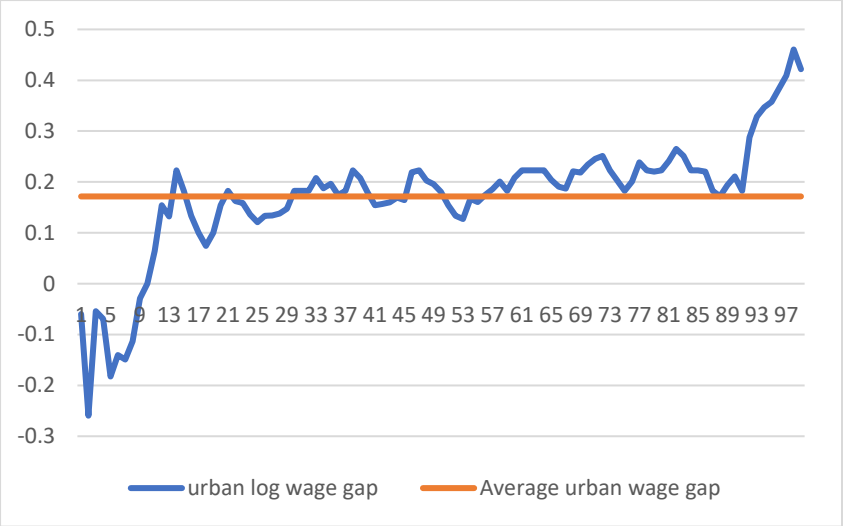

Figure 4: Earning gap between UC and SC artisans across income percentiles among urban artisans

The log wage gap measures the difference in log wage of UC artisans and log wage of SC artisans in each percentile. The red line is the average gap in log wages of the overall sample. Figure 2 shows us that the gap is low among the poorest income percentile and highest among the richest income percentile. Among rural artisans, we do not find any significant trend. The figure for urban artisans resembles the overall trend, where the wage differences are low, and sometimes even negative, at the lowest percentiles while the wage gap increases as we move along the wage percentiles. This is contrary to the findings in literature which have found a 'sticky floor' situation where the caste wage gaps are highest among the poorest (Deshpande and Sharma 2016).

Table 13: Quantile regression results comparing SC and UC in different quantiles

	Q25	Q50	Q75
	(1)	(2)	(3)
VARIABLES	log wage	log wage	log wage
Upper Caste Hindu	0.0807*	0.0873**	0.0902***
	(0.0460)	(0.0415)	(0.0348)
Urban	0.0723*	0.114***	0.130***
	(0.0439)	(0.0396)	(0.0332)
year	0.00794	0.0826	0.106*
	(0.0756)	(0.0681)	(0.0572)
Female	-0.642***	-0.579***	-0.422***
	(0.0528)	(0.0476)	(0.0399)
Household size	0.0212*	0.00775	-0.00462
	(0.0116)	(0.0105)	(0.00881)
Years of Education	0.0172***	0.0156***	0.0100**
	(0.00589)	(0.00531)	(0.00446)
Age	0.0243*	0.0332**	0.0238**
	(0.0146)	(0.0132)	(0.0111)
Age^2	-0.000261	-0.00036**	-0.00025*
	(0.000189)	(0.000170)	(0.000143)
Informal vocational training	-0.0485	-0.0236	-0.0255
	(0.0865)	(0.0780)	(0.0655)
No vocational training	-0.101	-0.0786	-0.101
	(0.0849)	(0.0766)	(0.0643)
Share of state revenue expenditure on tourism	0.0223	-0.0818	0.113
	(0.490)	(0.442)	(0.371)
Per capita loan	0.366***	0.103	0.284***
	(0.136)	(0.123)	(0.103)
Constant	1.287***	1.536***	1.857***
	(0.346)	(0.312)	(0.261)
Location of work controls	Yes	Yes	Yes
State controls	Yes	Yes	Yes
Observations	1,266	1,266	1,266

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

We do not find the 'sticky floor' in wage differences between UC and SC workers that scholars have previously found (Deshpande and Sharma 2016; Khanna 2012). In fact, we find an upward trend in the wage gap as we move upwards in the income bracket. This is especially the case in the

urban areas. The overall low social infrastructure and lack of market access in the rural areas are responsible for the overall low wages among all artisans. It may also be the case that the economically better off UCH artisans in the rural areas have used their social and cultural capital to move to the urban areas. UCH artisans can use the generationally accumulated social and cultural capital and to achieve mobility in the urban areas. The earning gap between SC and UC artisans exists among the 25^{th}, 50^{th} and 75^{th} percentile of income.

The absence of sticky floor can also be explained by the likely difference in experiences of artisans belonging to the higher percentiles of income. They are likely to derive their earnings from orders from government organisations and other private organisations like NGOs. UC artisans are likely to benefit from their better access to social networks which can enable them to get better market access and higher returns to their products. The growth of businesses of self-employed workers belonging to higher income groups can depend on network effects which can help connect the self-employed workers to employees, suppliers and customers, and SC enterprise owners are disadvantaged by their smaller network (Iyer et al., 2013). Growing businesses would require access to credits from formal institutions and SC entrepreneurs have been recorded to face obstacles in receiving credits from formal institutions, and the impediments are attributed not only to creditworthiness but also to discrimination (Raj and Sasidharan, 2018). The lack of networks and loans are especially relevant for artisans as that prevents them from getting orders from the state and NGOs, and cater to the tourist market, which plays a vital role in the remuneration of artisans. Artisans who have a higher income would also require to would also require to sell their products to rich upper-class tourists. Tapping into this market would require social network and education. The SC artisans may face disadvantages on this front, which expands the gape in earnings between SC and UCH artisans. While government organisations and NGOs can buy crafts

from artisans and provide them with more remuneration, it has been noted the this has benefitted entrepreneurs and businessmen rather than artisans from deprived categories (Mohsini, 2011). Businessmen with higher social capital can muscle out artisans without adequate social networks to avail the government benefits and orders.

The lack of a sticky floor and the differential treatment between SC and UC artisans from higher income category gets can also explain the significant earnings difference among urban artisans and not among rural artisans. Artisans in urban areas in the overall sample earn more than those in the rural areas. While we note that there is higher segregation by the type of craft by caste among rural areas, the caste-based earning differences are not significant in these places. Self-employed workers from the deprived castes experience discrimination in the urban labour market because they are sometimes not acceptable to the larger business community, and they face significant difficulty in receiving supplies on credit (Jodhka, 2010). Lack of social network especially among the business community, and difficulty in getting loans from banks has also impeded them in the urban setting (Jodhka, 2010). Enterprises that are owned by SC self-employed workers are more likely than UC workers to be employed by family members and are likely to belong to the unorganised sector, and this difference is more pronounced in the urban areas (Iyer et al. 2013). Further the significant difference in earnings in urban areas can be attributed to the fact that the gap in average firm size between firms owned by SCs/STs and those by other castes is higher in urban areas than in rural areas (Iyer et al. 2013).

A Case of Bamboo Artisans in West Bengal

The previous section finds that SC artisans earn significantly less than UC artisans at the national level. But the lived experience of deprivation of SC artisans goes beyond wage discrimination. To look into this and inform context specific policies, we present a case study of bamboo artisans in

West Bengal. The study uses qualitative data from fieldwork. Qualitative surveys can be an important source of information as they can offer insights which cannot be explored by secondary data (Basole and Ramnarain 2016). We followed a semi-structured interview to gather data from bamboo artisans, which enables us to understand the lived condition of these workers (Starr 2014). Historically, artisans involved in bamboo craft have generally been considered low in status (Jha 1978). They belonged to a group which was considered 'polluting' to the extent that the upper castes were not allowed to drink water served by them (N. K. Bose 1958).

We have conducted a survey among seventy-seven bamboo artisans across five districts in West Bengal. The fieldwork has been conducted in the districts of Bankura, Birbhum, West Midnapore, Purulia and Nadia. Although the sample is not representative, it does give us a glimpse of the situation of artisans belonging to deprived social groups. In our fieldwork, we found that this craft was almost exclusively performed by Scheduled Caste (SC) and Scheduled Tribes (ST) artisans. Specifically, this part of the chapter will try to address what has been the role of state in advancing the cause of well-being of these artisans belonging primarily to more marginalised social groups.

Table 6 gives us a broad picture of our sample of bamboo artisans. Although the craft is performed by both men and women, most of our respondents are women. While men perform this craft as well, most of them also have subsidiary occupations to sustain themselves.

Table 14: Description of sample of bamboo artisans

Social Group	Frequency
OBC	8
SC	44
ST	25
Sex	
Women	49
Men	28

District	
Bankura	12
Birbhum	30
Nadia	17
Purulia	15
W Midnapore	3
Total	77

An artisan in Purulia mentions:

> "This is the only work that I do. I have four people in my family. My husband also does this work, and sometimes also does odd jobs here and there for other people."

Another artisan in Bishnupur, Bankura states:

> "We can't go around houses to work. This is the only job that we know. My husband sometimes plays the *dhaak* (instrument) to supplement the income but it is erratic and happens only during the pujas."

Caste and crafts

Most of the artisans we surveyed mentioned that bamboo craft is their traditional craft. In our sample, we have seventeen artisans who belong to the Mahali tribe. Bamboo craft and basket making are the traditional occupations of Mahali artisans. Almost all of the artisans that we have surveyed mentioned that they have either learned it from their previous generation or from their in-laws once they got married.

Table 15: Source of skill among the sample of bamboo artisans

Source of Skill	Frequency
From informal network	21
From previous generation	55
State or NGO training	1
Total	77

The artisans who learned the craft through informal network are all female artisans who learned the craft after they moved to the houses of their husbands. They learned the craft from their in-laws or their neighbours. Only one of the respondents from Sendra village in Bankura district mentioned that she learned the craft through a training organised by the panchayat.

Tradition often acts an as impediment because most of the artisans have continued with their craft for generations as a result of which they have not had the opportunity of learning to make new products. The problem of landlessness has also showed up among the testimonies of the artisans. Landlessness among SC workers in rural West Bengal has also been highlighted by Roy (2012). An artisan from Sendra, Bankura states:

> "We don't have any land, and I have never worked on the field. I do not know of any other work."

An artisan from Bolpur, Birbhum states:

> "We do not have land, or any other business. But we know no other work, and this will provide us food for as long as possible."

Another artisan from Deeghidanga, Birbhum mentions:

> "I have been working at this for over forty years. This is the only work I know. I learned this from my parents. This is our generational profession."

Another artisan from Sarberia, Purulia highlights how lack of training prevented them from learning how to make new products:

> "We make the same stuff over and over again. We do not know how to make anything else. I have not received any training."

The limitation was also visible among artisans in Krishnanagar, Nadia who stated that they knew only how to make sieves:

> "I cannot make anything new; I have been making sieves for the last twenty years. I don't make baskets. Nobody in our family knew how to make baskets and therefore I have never learned how to make them."

Caste and employment, therefore, has been so strong historically that most the artisans have not learned any other skill. The lack of training that the artisans have and the lack of access to land have caused the craft to stagnate where artisans themselves claim that they would not be able to move out of this craft into some other profession.

General condition of living and returns to the craft

Most of the artisans live in separate areas of the villages. The areas of these villages have typically been identified by the caste of the artisans living there, like Dompara, Kalindipara or Mahalipara. The localities are generally separate from the main areas and are in the interiors of the villages. Their general conditions of living can be understood by the two following tables.

Table 16: Condition of living of the sample of bamboo artisans

Predominant material of the house	Frequency
Bricks and cement	17
Mud	43
Unburnt Bricks	17
Transport owned by the household	
Bicycle	49
Bicycle and Scooter/Motorcycle	3
Doesn't own any transport	25
Total	77

Almost 55 percent of our respondents live in houses made of mud. The situation in terms of condition of living was probably the direst among the artisans in the village of Sarberia in Purulia. An artisan of the Kalindipara locality of Sarberia mentions:

> "This dilapidated and broken house is all we have. Imagine staying here! Just look at the entire Kalindipara: about 70-80 of us are stuffed in this small area. How do you imagine we live? We don't have electricity because we could not afford to pay the bills,"

More than 60 percent of households in our sample only own a bicycle. Both of these give an indication of the condition of living of these artisans. The average earnings vary among artisans. An artisan in Bhagabatipur, Birbhum who lives alone tells us.

> "How much we earn in a month depends on how much I can make in a month. I earn about 700-1000 in a month. I work alone so I cannot make a lot of products. But other people can make more if they have help from their family members."

Another artisan from Sarberia, Purulia mentions the earnings that they can potentially get from this craft:

> "We buy the bamboos at the rate of 100-150. We sell the products ourselves in the markets or in the *haats*. We don't have wholesalers here. On days where we can sell properly, we can earn up to 300-400 rupees in a day."

An artisan from Sendra states the inadequate return to their craft:

> "If we work on this basket for more than an hour and sell it for 15 rupees, do you think we can put food on our tables? We buy the raw materials. There is hardly any profit and sometimes we even sell it at a loss."

The testimonies of the bamboo artisans put to light the low returns to the bamboo craft. Traditional livelihoods of SC artisans are therefore not remunerative enough. Along with landlessness, this caste-based profession has been a problem insofar as the material condition of living of these artisans is concerned.

Labour process

The raw materials are purchased by the artisans. The bamboos are then cut to sizes which are suitable for weaving. The location of work is home. Artisans are engaged in this production in their homes itself. A probable effect of this craft being a traditional craft is that the labour process has not changed over generations. In fact, most of the artisans also stated that the type of products that they have been making also has not changed. The same preliminary tools have been used through generations. There is also some observed gendered division of labour. A bamboo artisan in Sendra village of Bankura mentions.

> "There has been no change in the production process: it's the same process using the same tools and the same raw materials."

The type of products they made vary according to their places of residence. Most of the artisans we talked to generally make baskets, lids and sieves. These are commonly used items in villages, especially by farmers and vegetable sellers. These products qualify as quotidian crafts or those products which are made for their use value among consumers. The artisans in Bolpur, Birbhum make stools out of bamboo (called *mora)* and sometimes also make decorative items. The artisans in Deeghidanga, Birbhum have evolved their craft from quotidian ones to elite ones. These artisans have received training from NGOs which have caused them to learn making new products. The elite crafts are the ones which are generally bought by tourists, especially those who come to the nearby tourist area of Bolpur. They make smaller sieves for decorative purposes and also earrings and necklaces. An artisan in Deeghidanga mentions:

> "The production process has remained the same: the raw material, the tools used. But designs have evolved. Now we make earrings and lockets. My parents never made these. Some tourists from Kolkata buy these things."

Thus, most of the artisans in our sample mention that they have not learned making new products out of bamboo. This has prevented them from expanding into the tourist market. However, artisans from Bolpur and Deeghidanga have learned making new products and have been able to sell their products to tourists.

Market

Some artisans make this product and then go around villages to sell their products. Others have access to markets through their middleman. The middlemen buy the products from the artisan at a wholesale rate and then sell them in the market. The relationship with middleman can also drive down the wages of artisans. An artisan from Bhagabatipur mentions:

"The demand has fallen and our incomes too. Everything has become more and more expensive but we cannot earn money. We don't get paid for our labour. We sell the products to middlemen. If we ask for more money, he will procure it from some other artisans who would sell at a lower price."

Most of the products that is made by these artisans like baskets and sieves are brought by local people especially farmers. However, the demand for this product has largely fallen. An artisan from Bishnupur, Bankura states:

"The demand has fallen. We do not get enough orders. We have received the house from the govt. There is not enough demand. The increase in plastic goods has cut into our demand."

This fall in demand has caused some artisans to leave their crafts. An artisan in Sendra mentions:

"Previously there were about 180 Kalindi families involved in this craft. It has fallen significantly now. Everything that we can make can be replaces with plastic or fibre products. Then who will take our products? Even the farmers use the plastic products. I have never had the opportunity to learn anything new regarding this craft,"

Table 17: Market and employment conditions of the sample of bamboo artisans

Primary Consumer	Freq.
Local people	64
Both local and tourists	9
Tourists	4
Has demand increased?	
No	71
Yes	6
Any other source of Income	

Agriculture	16
Casual Labour	36
Other source	6
No other source of income	19
Total	77

Employment through this process is not always sufficient for the households. 58 out of 77 artisans in our sample mentioned that they have alternate source of income. An artisan in Sendra lets us know about how bamboo craft is not enough for the survival of a household:

> "The demand isn't so much that I can sell at a wholesale rate. My husband also works odd jobs here and there as daily labour. How else will we survive?"

Another artisan in Bolpur states:

> "Only bamboo craft will not survive our family. We have to work in other people's lands as well. We do not own land."

Institutions

In this section we look at the response that institutions have had on bamboo artisans of Bengal. The artisans can receive help from NGOs and state through training and artisan card. The artisan card that the state government entitles artisans access to fairs, loans at low interest, and pensions.

Table 18: Institutional support received by sample of bamboo artisans

Have you received training?	Freq.
No	54
Yes	23
NGO support	
No	58
Yes	19
Artisan Card	

No	65
Yes	12
Total	77

The overall picture of the role regarding the role of state is a dismal one. This points at the exclusion of deprived caste artisans from the benefits by the state. This craft has largely been ignored by the government. Some artisans are not even aware of their right as artisans, as they have never heard of artisan card. We note from Table 9 that 65 artisans in our sample have mentioned that they do not have the artisan card. An artisan from Bishnupur highlights the neglect that she has faced from the representatives of the state:

> "We have never applied for the artisan card and we don't know how to apply because nobody has mentioned this to us. We have gone to the BDO (Block Development Officer) office but they don't let us get any of this. The poor have a lot of pain. Nobody listens to us."

An artisan from Kochuighata in Birbhum district mentions:

> "The demand has generally fallen. The bamboos do not dry up during the monsoon season because of which we cannot keep producing. It's also difficult to go around villages when it is raining. Who will go to the villages getting wet in this rain? But does the govt care about this? We don't go to markets. We have not received any help from the govt, except the food from ration and the *lokkhi'r bhandar* (cash transfer to women)."

The general sentiment is echoed by artisans who mention that they have generally been ignored by the government. The failure of state to address the problems of these artisans have also been highlighted by an artisan from Sendra in Bankura district:

> "The state has made no effort to look after us. I do not have the artisan card, but I have the certificate for the training. They promised us the card, but I have not yet received it. We were promised loans as well, but have not received any."

An artisan in Deeghidanga mentions:

> "I have been making this in this process for as long as I have been working. I have not attended any training. I have no artisan card. Who will get it done for me? I don't know how to do this. The govt only makes promises and does not follow them. We have electricity, and get water from the tube well. The demand has generally fallen. Only bamboo craft will not survive our family. We have to work in other people's lands as well. We do not own land. (…) We got no help from the govt, only the ration (monthly food grains) to stay alive."

Support from institutions like the state and NGOs can come through training. The training has been successful in Deeghidanga and Bolpur in the sense that the artisans have learned to make and sell new products. But problem with training comes from the fact that once the training is done, the artisans cannot fully use the skills they learn into making new crafts. An artisan from Dakshinpara, Nadia states:

> "I have (…) done a training through the panchayat. I have learned to make decorative items in the training like flower vase, pen stand etc. I got money from the training. That is the only benefit from the training. Although I did learn new things, I cannot pursue them because who will buy the fancy products. We have to stick to our traditional crafts and traditional items because that is what the middlemen expect from us,"

Another artisan in Dakshinpara echoes the same sentiment:

> "The training has been helpful in making me learn new things. But I don't make these things too often because we don't know where to sell them. Once in a while we do get orders from puja pandals and stalls and then we make these fancier products. But normally we do not make them. Will the middleman take these if we suddenly start making fancier items? They require the normal products."

The overall picture, however, points at a constant neglect of deprived caste artisans from the state. The policies of the state have not been received by most bamboo artisans. Few artisans have received the training, but quite a few of them have not been able to translate their training into newer kinds of crafts.

Reproduction of Bamboo Craft

Some artisans have stated that they do not want their children to follow this craft. In some cases, the newer generation has not taken up the craft. They would choose to be employed in other forms of casual employment than continue with their generational craft.

The future of this entire craft in general in Krishnanagar seems doubtful as an artisan points out:

> "Previously, this whole locality used to make sieves but now we are only a handful who are left with this. The demand has fallen and that has led to this. We do get higher price now that there are only a few artisans but the overall demand situation is not good. The new generation does not want to work in this. If anyone learns a new skill they generally move out of this craft. People now work in gas cylinder shops or drive *totos* or work somewhere else. That gives them more income than this."

The low returns to labour and the uncertain future of this craft are apparent in the sentiment of an artisan in Sendra:

> “I don’t want my son to do this job because there is absolutely no prospect for any type of improvement in standard of living.”

The poor condition of bamboo artisans in Bengal has led the subsequent generation to opt out of their traditional craft and employ themselves in casual labour and odd jobs. The bamboo artisanal production, therefore, depicts a situation whereby neglect by the government has caused breakdown of traditional production. An artisan in Krishnanagar states:

> “We are poor illiterate people; we have survived for so long with this. If nobody tells us about this, how are we supposed to know? My son works in local shops and also does odd jobs here and there. He did not want to come to this craft. This is way too much hard work and not enough money especially because of the fall in demand in the recent years,”

The problem related to the reproduction of this type of production is summarised by an artisan in Sendra:

> “If we work on this basket for more than an hour and sell it for 15 rupees, do you think we can put food on our tables? We buy the raw materials. There is hardly any profit and sometimes we even sell it at a loss. The govt has never lent any support to us. The local people buy our products mostly from the markets. Sometimes we do get orders from families especially during the harvest time. We are still surviving by the grace of god but this probably will not continue for long.”

We note a breaking down of the traditional caste-based occupation of bamboo making among artisans of the SC category. Jodhka (2010) mentions a similar situation where many SC workers have moved away from their traditional caste occupations because of them being redundant. In our study, this does not necessarily imply a positive situation whereby they are experiencing higher

mobility outside their traditional occupation. Bamboo artisans are moving out of their traditional occupation not because of increase in their education status and receiving formal jobs elsewhere, but because of the non-remunerative nature of their current craft. Beyond wage discrimination, the overall neglect of the artisans associated with marginalised castes has posed challenge to survival.

Conclusion

The current study contributes to the literature of caste and self-employment in India specifically for the case of artisans. In our preliminary analysis, we find that UC artisans earn significantly more than the SC counterparts. This gap exists only in the urban areas, and in states with high level of SC/ST welfare as well. Our results support that caste is an important factor in the urban economy, as it impedes the progress of SC entrepreneurs (Jodhka, 2010). Quantile regression further finds out that the sticky floor phenomenon that is found in wage gaps between self-employed UC and SC workers in the entire labour market does not exist for self-employed artisans. The growth of business requires social network and access to receiving formal credit, and SC self-employed artisans suffer in both of these aspects (Iyer et al., 2013; Raj and Sasidharan, 2018)

Further, we contribute to the literature by looking at the role that government has played in the production process of a type of craft that is almost the exclusive domain of SC artisans. We explore the case of bamboo artisans in Bengal. The lived experiences of the artisans are explored in our study. These artisans live in houses and localities of poor conditions in segregated areas of towns and villages. Their traditional profession has impeded any mobility in their profession. In most cases, the labour process has not undergone any change: the raw materials, skills, type of goods made, tools used, and access to market have remained the same through generations. The traditional correspondence between caste and occupation has been seen to be breaking down in our case study. Most of the artisans mention that craft has suffered because of the general fall in

demand in the market and the neglect that it has faced from the government. Consequently, the traditional craft has been breaking down because newer artisans have not been entering this craft. They are choosing to take up casual informal labour rather than taking up their generational craft. In addition to wage discrimination, SC artisans face marginalization and neglect by the government, exacerbating material and social deprivation.

The quantitative part of our work finds evidence for differences in earnings between SC and UCH artisans. The qualitative part of the study explores lived experiences of artisans from deprived caste and looks at the role that government policies and institutions have played. An important policy perspective would be to consider local contexts and experiences of the artisans. Trainings would be useful in upgrading the skills of the artisans and would enable their crafts to evolve and cater to the tourist market. We found in our case study that while most artisans in our sample did not have an artisan card, some of them were not aware of their rights. Informing the artisans about their rights in terms of access to artisan card would be beneficial in improving the material condition of lives of these artisans. Our study shows that having policies and benefits in place would not necessarily percolate to the most deprived artisans, unless conscious effort is made to inform the artisans to this end.

Chapter 3- Who leaves and who stays? Reproduction of Artisanal Production Through the Interaction Between Institutions and Artisans in Bengal

Introduction

According to Marx and Engels (1848), artisans belonged to the lowest strata of the middle class who would gradually join the ranks of proletariat because they would not be able to compete with industrial manufacturing. Indeed, some studies have found that the artisans have left their traditional craft-based occupations and have joined the labour force as informal workers (Scrase 2003). The economic and social development of artisanal labour is generally found to be one of general decline which is a result of difficulties in accessing urban markets, and loss in price competitiveness in comparison with manufactured goods (Gupta 2011). However, this may not be the case for all types of crafts. Crafts can be classified as elite crafts which are consumed by rich and urban consumers for their decorative value, and quotidian crafts which are consumed especially by local people for their use value (Scrase 2003). Scrase (2003) finds that quotidian crafts are generally under threat because they can be substituted by cheaper mass-produced alternatives. The employment generating potential of the handicraft sector makes the reproduction and survival of artisanal production an important topic of study from the perspective of policy making (Kumaj Jena 2010).

To this end, the current study looks at the role that institutions can play in the reproduction and survival of artisanal production. Specifically, the research question is how do institutions and artisans interact which may lead to reproduction and evolution of the crafts. We limit ourselves to artisans from six districts of West Bengal. The sample is not representative and thus the study does not claim to make generalisable for all artisans across the state or the country.

We employ a developmental evolutionary economic geography framework which integrates institutional approach to geographical economics, geographical political economy, and evolutionary approach to economic development (Martin and Sunley 2017). These three strands all seek to explain uneven economic development across geographical areas. The skills of the artisans are generally passed down through generations and artisanal production is often found in clusters in towns and villages. This historical and geographically specific pathways in which the artisans are placed implies that path dependence is at work in the occupation of artisanal production. We analyse the ways in which economic development is formed by institutional mediation and interactions between artisans and institutions, and how the economic landscape characterised by path dependency evolves incrementally (Martin 2017).

An important contribution that our results make is that contrary to general expectations, crafts can survive and achieve increase in demand. The institutions that are responsible for this can vary. States and NGOs play an important role in imparting trainings to artisans leading to evolution of crafts through which the crafts evolve from being quotidian to elite crafts and can cater to newer markets. This entails a movement of the artisans from an old path of quotidian craft to a new path of elite crafts. It would, however, be incomplete to state that only elite crafts would survive. Institutions presence of workers' cooperatives and spillover of knowledge can also help in the survival of crafts. Crafts, however, should not be romanticised and the survival of the crafts does not necessarily have to be a desirable situation. Some crafts survive because of social norms which relegates female labour as secondary in the household, and thus these crafts survive because of cheap labour that can be extracted from female artisans. Some crafts also survive when the next generation also gets involved in this craft because there are no other jobs available. From the responses of our respondents in our sample, we also note how institutions can fail. Artisans talk

about how they did not receive adequate support from the state, and how cooperatives may have failed because of corruption. Thus, the other aspect of our results notes how the lack or failure of institutions has caused or are on the verge of causing demise of some crafts.

The study contributes to the literature of artisanal production. There are scholarly works which talks about the shortcomings of institutions that the artisans face (K. Das 2015; Gupta 2011; Solanki 2008; Bhattacharya and Sen 2018). The current study contributes by highlighting institutions which can enable artisanal production to survive. We also contribute applying a developmental evolutionary economic geography framework to the unique context of artisans. To our knowledge, this is the first study which applies this theory to a primary data in the Indian context. The current study talks about how these historically specific paths can be overcome and evolve into new pathways through the interactions between the agents and the institutions. The results also suggest that it should not be a foregone conclusion that quotidian crafts are necessarily always on the brink of extinction. While some quotidian crafts failed to evolve and are indeed becoming extinct, some others are surviving especially through the interplay of different institutions.

Theoretical Framework

The theoretical framework that the current study attempts to apply to the specific case studies of artisans in Bengal borrows from institutionalist, evolutionary and political economy approaches to economic geography. We attempt to discuss the interaction between artisans and historically evolving institutions, and highlight how these interactions can reproduce and, in some cases, shape the structure and relations of artisanal production.

The institutional approach to economic geography attempts to address why geographically uneven economic development is caused and mediated by institutions. Institutions are systems of social

rules that are embedded and established which shape social interactions and the institutional environment is the system of informal convention, customs, norms and routines, as well as the formal and legal rules and regulations which influence socioeconomic behaviour (Hodgson 2006; Martin 2017). Institutions can influence capacities and behaviours of agents, and can also change aspirations of people through the mechanism of habit and influencing habits of thought and action. Socially established conventions can align expectations of individuals which can enable them to make choices (David 1994). Certain types of institutional regimes can play roles in facilitating the emergence and reproduction of technology (Martin 2017). Stability of institutions is required for the economic system to operate and reproduce itself, as they can balance between competition and cooperation and may also hinder development by holding back innovation through rigidities and dysfunctionalities (Martin and Sunley 2017).

The institutional approach also stresses on evolution of the economic landscape. Institutions are path dependent, evolve incrementally, and are carriers of local history as they influence path dependence on the process of economic development (Martin 2017). Systems are characterised by path dependence when their evolution is dependence on the system's own history. Historical precedents can eventually become durable in social arrangements and these are important to form institutional clusters (David 1994). Path dependence as a process emerges locally and is place dependent to a large extent (Martin and Sunley 2006). Path dependence can have the implication of 'lock-in' whereby a regional economy is stuck in a particular trajectory which is inefficient. However, Martin (2006) argues that evolution of a region can involve phases of negative lock-in as well as positive lock-in. Lock-ins can also be avoided by indigenous creation of new paths, diversity of local industries, transplantation of new mechanism from elsewhere, diversification into related industries and upgrading of existing industries (Martin and Sunley 2006). A focus on

path dependence in economic geography looks at local socio-cultural embeddedness of economic activities.

Cumbers, MacKinnon, and McMaster (2003) mention that power and politics have been neglected in the institutionalist approach in explaining the process of uneven development. Evolutionary geographical political economy (GPE) approach views capitalism as a social, economic and political order, and geographies as emerging from coevolution of social, cultural, political relations and processes (Pike et al. 2016). Regions are produced and reproduced through interactions among social groups and institutions within the larger scheme of accumulation. Cumbers et al (2013) situate their focus on unequal power relation in the explanation of evolution of innovation and economic activities. They focus on how spaces are produced through conflicts in social relations. GPE analyses capitalism as one way of organising the production of surplus, transforming nature into commodities, distribution of surplus, and improving technical progress (Sheppard 2011). Further, geography is produced along with economic activities, and this shapes the ongoing trajectories and are not exogenous to the economy.

GPE along with evolutionary ideas can be useful in providing temporal and spatial sensitivity, and explain dependencies, endowments and histories of historic and geographic paths that form the ongoing path of capitalist development (Pike et al. 2016). The evolutionary approach treats organisational routine as a means to use relevant information to guide action (Nelson and Winter 2002). Evolutionary analysis has been useful in looking at the analysis of economic changes driven through innovation. The ability to evolve and adapt is a key factor in firm's economic development (Amin 2017). It is important for firms to identify new opportunities and adapt and commercialise them when the impetus of change comes from outside the industry (Nelson and Winter 2002).

Martin and Sunley (2017) propose a developmental evolutionary economic geography framework which integrates institutional approach to geographical economics, GPE, and evolutionary approach to economic development. These three strands all seek to explain uneven economic development across geographical areas. Martin and Sunley (2017) mention that these three strands should be looked as complementary perspectives as they overlap and can help inform one another. These can help in contextualisation in geographical locations, and the formation and reformation of institutional arrangements and can help in the evolution and development of specific locations.

The current study borrows from the aforementioned scholarship and attempts to apply the related strands of institutional economic geography, GPE, and evolutionary economic geography to the context of artisans in Bengal. The skill that is such a necessary aspect of artisanal production is generally passed down through generations. Often this is also done through an informal family-centric teacher-apprentice relationship (K. Das 2017). With generations of artisanal production is related with the development of cultural and social identities (Bhatt, 2006). The production of crafts can act as modes of expression, and artisans often attach cultural significance to the process of artisanal production (Mohsini 2011). Artisanal production in India is also often practiced in geographical clusters. Cluster specific artisanal production has also given rise to historically and geographically specific institutions like Geographical Indicators (GI). The historical and geographical specificity of this type of production makes our theoretical framework appropriate in analysing artisanal production. This will enable us to look at specific social, cultural, and historical context of development of institutions. We can also look at interactions between artisans and institutions and their co-evolution. In the development of this type of production, there are clusters who have survived and evolved and have successfully catered to the increase in demand, while there are regions where the craft is on the brink of extinction. This makes artisanal production an

appropriate subject of comparing and studying this uneven development through the developmental evolutionary economic geography framework.

Data and Method

The context of Bengal in the Indian context can be a useful case study. Much like the rest of India, handicrafts in Bengal also progressed through nationalistic spirit. Social reformer Gurusaday Dutt wanted to promote 'folk art and culture' for people to embrace their 'Bengaliness' in the face of British colonial education system (Hauser 2002). According to Economic Census 2013-14, in India West Bengal has the highest percentage of handicraft/handloom establishment at 17.6%, and has the second highest employment in the handicraft sector at 17.75%. Currently, the Department of Micro Small Medium Enterprises and Textiles, Government of West Bengal is responsible for 'patronising the wonderful craft heritage of West Bengal, not only to sustain it but to develop it further, keeping pace with new demand pattern, new designs.' The state thus plays an active role in maintaining the cultural aspects of crafts of Bengal in terms of patronage and developing designs and patterns to suit the sensibilities of the elite. With this motivation, we conducted a field survey among artisans in selected districts of West Bengal state of India to collect data and context which are not adequately covered through secondary data.

Qualitative survey has been advocated as an important part of heterodox economics, as they are less structured and hierarchical, and can offer important insights of economic reality which secondary data may obscure (Basole and Ramnarain 2016). This is especially the case for the informal economy of developing countries on which data is not adequately available, and knowledge about informal workers have been hugely benefitted by field surveys by scholars (Harriss-White 2003). Basole and Ramnarain (2016) further argue that surveys are important to

form economic intuition and providing information about a larger social context in which economic decisions are embedded.

We employ the technique of personal interviews in our field research, where we aim to follow a semi-structured interview process (Starr 2014). The process of semi-structured interview can be useful to bring out the lived experiences of the artisans. We follow the recommendation of 'good questions' as characterized by Flick (2014): the questions are specific, clear, and answerable. We ask some specific quantitative questions as well as some more open-ended qualitative questions, which can be relatively more descriptive in nature. Open-ended questions can generate more information than closed-ended ones (Starr 2014). A combination of both of these types of questions will give us information that we require to analyse and understand the labour process of artisans and the changes that has been brought about in the same. The unit of analysis is the individual and the questions seek to be explorative.

We initially divide the artisans among the districts they belong to, and then we randomly select six districts. We use information from the state government website on micro, small and medium enterprises to cluster artisans into districts. Within each of these districts we follow non-probabilistic purposive sampling process. We carry out the survey following a snowball method, using a questionnaire to guide our interviews with the artisans. We divide crafts into elite and quotidian following the typology of Scrase (2003), where the former is consumed by urban elite upper class, where quotidian crafts have local demands. We cover elite and quotidian crafts from each of the six districts, and compare and contrast the evolution of crafts involved in each of them. We cover 480 artisans across 51 villages and towns involved in 26 different types of crafts. Starr (2014) states that although field researches do not yield as many sample size as econometric

analysis would typically require, the insights and information that in-depth interviews can give is useful in contributing to the knowledge.[7]

Our study is based on data collected on fieldwork among artisans across six districts in the state of West Bengal in India. We perform a non-probabilistic sampling and therefore the sample is not representative. Table 19 presents the descriptive profile of the sample of artisans. Most of our sample is based in the rural areas. Several artisan castes in Bengal largely belong to the OBC category, and we see this in our sample as well where over 50 percent of our sample belongs to the OBC category. About 80 percent of our sample is self-employed.

Table 19: Descriptive profile of the sample of artisans

District	Freq.	Percent
Bankura	91	18.96
Birbhum	82	17.08
Murshidabad	79	16.46
Nadia	77	16.04
Purulia	76	15.83
West Midnapore	75	15.62
Region	Freq.	Percent
Rural	321	66.88
Urban	159	33.12
Gender	Freq.	Percent
Female	190	39.58
Male	290	60.42
Type of work	Freq.	Percent
Self employed	381	79.38
Waged Worker	99	20.62
Total	480	100

[7] All the names of the artisans have been changed to protect confidentiality.

Contextualising the sample in the framework

Artisanal clusters are geographically specific areas which generally have some historical passing down of skills through generations. Thus, they are historically and geographically specific. Craft production is linked to the development of identity of artisans and the historically entrenched path can be identified by Table 20.

Table 20: Description of the labour process of artisans

Source Of Skill	Freq.	Percent
Informal network	144	30
Previous generation	289	60.21
Learned by themselves	8	1.67
Formal training by state or NGO	39	8.12
Who owns the tools of production?	Freq.	Percent
Rented	1	0.21
Themselves	435	90.62
Someone else	44	9.17
Total	480	100

We note that in our sample, most of the artisans have learned the craft from their previous generation. This points at a situation where historically knowledge and skills were passed down through generations. The artisans who mentioned that they learned the skill from informal network are mostly women, who picked up the craft after moving into the artisanal cluster through marriage. The historical and geographical specificities of these crafts cause artisans to interact with institutions which are historical and local in nature. This makes our theoretical framework on institutions appropriate to analyse the interactions of the artisans with the institutions.

We have categorised the crafts in our sample according to the typology provided by Scrase (2003) as elite crafts which are consumed by tourists, and quotidian crafts which are consumed by local

people. From table 21, we note that we have almost equal number, at around 40 percent of the sample, of elite (targeting tourists) and quotidian (targeting local people) craft producing artisans in our sample. About 19 percent of our sample produce crafts which are consumed by both local people and tourists.

Table 21: Primary consumers of the crafts and the demand situation

Primary Consumer	Freq.	Percent
Local people	194	40.42
Both Local people and Tourists	90	18.75
Tourists	196	40.83
Has demand increased?	**Freq.**	**Percent**
No	156	32.5
Yes	324	67.5
Total	480	100

Our primary question of interest comes from the answer to the question "Has the demand for the craft increased in the last few year (ignoring the pandemic)?" When the artisan answers this question in a yes, they describe how the demand has increased and we get an idea of how this craft has made use of institutions to survive and thrive. When artisans answer this question in negative, they describe why there has been a fall in demand. Table 22 tells us that about 67.5 percent of the sample has reported an increase in their demand. There are clusters who have mentioned that they have not been doing well in terms of having a market for their crafts and are on the brink of extinction. On the other hand, there are some clusters who have been doing well insofar as market demand is concerned. This exhibits a case of uneven development sometimes within the same district with similar artisans. This calls for the theoretical framework which analyses geographical uneven development. This makes our theoretical framework relevant for the current study.

The categories of elite and quotidian are, however, not permanent. There are crafts, like the pottery products of Panchmura, which have evolved from being a quotidian craft into an elite one, and our study claims that institutions have played a role in this evolution. This makes a case for looking at these clusters from an evolutionary perspective.

Table 22: Relationship between consumer type and increase in market demand

	Has demand increased?		
Primary Consumer	No	Yes	Total
Local people	131	63	194
	68.04	31.96	100
Both local people and tourists	16	74	90
	17.78	82.2	100
Tourists	8	188	196
	4.08	95.92	100
Total	156	324	480
	32.5	67.5	100

Table 22 maps the relationship between the type of craft produced and whether they survive. Though elite crafts display relatively greater growth in demand, and a smaller share of quotidian crafts displayed an increase in demand. This makes the case for looking at different institutions which have helped in the reproduction and survival of the artisanal production, or the lack of these institutions which may have pushed certain crafts to the brink of extinction.

Institutions that can reproduce artisanal production

Worker Cooperative

Worker cooperatives form a way through which artisans can interact with the state or the NGOs enabling evolution of the craft. The institution of workers' cooperative corresponds to the process

of indigenous creation in geographic regions to escape lock-ins in their old paths and creation of new paths (Martin and Sunley 2006). The movement of artisans from the old path to a new path through evolution in this situation can happen through layering and/or through conversion. Gradual changes through addition of new rules and procedures to already existing structures are called layering, and reorientation of institutions through addition of new layers or modifying rules in response to external development or learning process is the process of conversion (Martin 2010). This institutional arrangement organises the transformation of raw material into products, production of crafts, organising markets for the products, improving technical progress by organisation of training.

The importance of cooperatives can be understood from the case study of the village of Panchmura in Bankura. The cooperative has been set up by the potters themselves, for the purposes of supplying raw materials to the artisans and enabling access to markets. Previously, the potters were mostly involved in making quotidian crafts especially for religious ceremonies among the local people. The cooperative among potters has worked with the NGO Bangla Natak to set up yearly fairs in the areas. This has been successful in spreading the word about the crafts in the area as well as attract tourists in these areas. Potters have received training and access to different markets through these cooperatives. This has eventually evolved their craft into an elite one whereby their primary consumers are now tourists who come during fairs or place orders through online medium and buy them for decorative purposes. The role that institutions have played can be understood to have created a new path leading to evolution of the crafts from quotidian to elite ones. The artisans have also gone to different places across the country to sell their products in fairs. The Bankura horse has now become a face of Bengal handicrafts and Pachauri has received a Geographical Indicators (GI) tag for this product.

The case of Panchmura can be compared with other potters in the same district. While crafts from Panchmura have received international fame, potters in other parts of Bankura like Sendra, Rajogram and Biborda have not been able to evolve their crafts into elite ones. There has not been similar technical progress in these places. Artisans in Panchmura have received electric wheels for pottery, but such technical innovations in production have not been noted among other potters. The lack of this institutional intervention has played an important role in the lack of evolution among potters in other areas. This has also limited the scope of interaction between artisans and the state and NGOs. They have not received similar access to the tourist markets, and have not evolved into producing the fancier items. The geographic proximity and the similar type of crafts produced make this comparison a relevant one. The testimonies of artisans from other parts of Bankura confirm that they have not received the same treatment from the government or NGOs which have not caused their craft to evolve like that in Panchmura.

Lakshmi Kumbhokar, an artisan from Sendra, mentions:

> "We would like to receive electric wheel. That would make our work easier. The artisans in Panchmura get a lot of help, but we from Sendra don't get any help. The absence of cooperative among artisans is probably a problem. Also, a lot of people do not know about Sendra, as much as they do about Panchmura. So, it is not promoted and we are generally ignored."

Ashutosh Kumbhokar from Sendra echoes the sentiment which brings out the differences among potters in Sendra and in Panchmura:

> "People are more aware of the work in Panchmura. The NGOs have promoted their work more, and tourists visit them. They have their cooperative, which is very helpful in their

craft. We don't have a cooperative. We never had a cooperative. There are not enough people here to make a cooperative."

Amit Kumbhokar from Bankura town mentions:

> "Govt does not care about Rajogram, they always favour Panchmura. The artisans there have better connection in the DIC office, through their cooperative. But look at the potters here. We hardly earn enough money for the households. If we receive the benefits like Panchmura, we can also make the fancier items. We don't get opportunities to make contacts with the govt, or the govt outlets. NGOs also don't come here. But Panchmura has everything. They do fancier work. We make only the puja products."

Indrajeet Kumbhokar from Rajogram also mentions:

> "The artisans in Panchmura have received a lot of help and attention. They have better contacts with the DIC office primarily because they have a well-functioning cooperative."

Sambaran Kumbhokar from Biborda also highlights the difference between potters in Biborda and those in Panchmura:

> "We don't have a cooperative. The people in Panchmura have a cooperative. They have received the wheel and much govt support. We have not received anything."

Similar progress was seen among scroll painters in Naya village of West Midnapore district. Previously, artisans roamed around villages with their scroll paintings and narrated stories which were painted on the scrolls. According to their own testimonies, this did not yield enough income. The cooperative that these artisans have set up interacted with the state government and NGOs. The cooperatives organized training through NGOs and state agencies which have helped the

artisans develop new styles and improve on their work in a manner which would appeal to tourists. The cooperative, NGO and state agencies have also been successful in setting up new markets of tourists. Eventually these scroll paintings became popular, and became a staple for tourists looking to purchase crafts of Bengal. The cooperative has also been instrumental in the crafts receiving the GI tag, and has set up a muesuem which displays different types of scroll painting by the local artisans. It can receive orders from state and other agencies and can distribute these orders among the artisans in the village. The artisans, therefore, were successful in situating themselves in a new path which had higher yields. The interaction between the state, the NGO and the cooperative is, therefore, crucial for survival of crafts. Scroll paintings evolved from being a quotidian craft to an elite craft. The artisans also moved from being on a path which was low paying and more labour intensive to higher returns and less labour intensive. Mohan Chitrakar states the importance of cooperatives in the context of scroll paintings in Naya:

> "The cooperative has been useful in giving trainings, setting up the fairs along with Bangla natak. If there is a big order, that comes through the cooperative and the orders are spread among all the artisans in the village."

Moinul Chitrakar also mentions:

> "We can get the big orders through the cooperative, such that everyone in the village receives the orders."

A similar story can also be seen in the village of Chorida in Purulia district. The mask-makers in Chorida initially made masks for dancers who belonged to the local tribes of Purulia. The setting up of cooperatives facilitated an interaction with NGOs and the state which popularized the masks of Chorida. The cooperative also set up a museum of the masks of Purulia which has attracted

tourists. The training in terms of improvement of quality of raw material and new designs has helped the artisans evolve their crafts from quotidian ones to elite crafts which are sought out by tourists.

Cooperatives have, therefore, been instrumental in facilitating the evolution of crafts from quotidian crafts to elite ones. This has also enabled artisans to move from a low-income path to a high-income path. However, among potters in Kanthalia village of Murshidabad, workers' cooperative has been important in increasing the demand for quotidian products. This is an interesting situation where a quotidian craft has experienced an increase in demand without government support or an NGO intervention. The crafts did not evolve and still caters to the same market. This craft has survived because of the presence of the cooperative which has ensured a streamlined distribution system and consistent access to markets. This is a case of a quotidian craft surviving even without an intervention by the government or an NGO, and this makes a cause for the promotion of workers' cooperatives as a way for crafts to survive.

The importance of cooperatives can also be understood from the testimonies of artisans who mentioned that their craft has suffered because of the lack of cooperatives. Conch shell artisans in Bankura town mentioned that since their cooperative dissolved, they did not have enough access to raw materials and their ability to produce or to attract new customers also suffered. They also did not have enough access to government help or training of the new generations. As a result, new artisans are not taking up the craft. Artisans have mentioned that this craft from this town may soon go extinct.

Unmesh Layek, a conch-shell artisan from Bankura, highlights the importance of cooperatives that they had among the artisans in that area:

> "We had a cooperative. The state used to provide the raw material to our society, but we don't have society anymore. I am not sure why the cooperative got disbanded eventually. I have seen in my father's era how raw materials would come here easily. We had 100-150 sacks of raw material in our homes. We then cleaned them and cut them to make them usable. Now these are not easy to get. Now we buy the cleaned and cut raw material."

Lakshmi Ratan Layek states how important cooperatives could have been in the survival of the conch shell craft:

> "If we had a cooperative, we could have survived and done much better especially in terms of training and procuring the raw materials."

These cooperatives are often shaped by norms like trust, reciprocity, cooperation, routines, and conventions for the regional development. The actions and behaviours are situation in inter-personal networks. Due to the functioning of these institutions, systems of socially ingrained rules persist and impact the behaviour of the artisans. The path creation among artisans and evolution of the clusters of Panchmura, Chorida and Naya through cooperatives has happened through both layering and conversion. The process of layering has taken place as cooperatives have added new procedures and networks through spreading technical knowledge, access to markets, provision of raw materials among artisans who already had the skills to make the crafts. The interaction of cooperatives and state and NGOs have also happened through conversion whereby the market for artisans has reoriented through external development brought about by the demand from state.

State and NGO

Martin (2017) mentions that the state is an instrumental agent for institutional changes, and state-led institutions can influence the reforms through legal and regulatory policies. The state can create

a new path for artisans in terms of imparting skills, creating new markets and providing the artisans with raw materials. The Directorate of Micro, Small and Medium Enterprises of the Government of West Bengal also provides Artisan Cards to artisans which would enable them to participate in district level fairs, receive reimbursement of travel allowance and dearness allowances and carrying costs, receive credit and loans, and receive old age pensions. This kind of promotion by the state should ideally enable artisans to move away from their old path and participate in making products which could cater to the larger tourist market. From Table 23, we note that 191 artisans in our sample of 480 have the artisan card. Among these 191 artisans, about 80 percent of the artisans have witnessed an increase in demand. Most artisans in our sample do not have an artisan card, and not all artisans who have an artisan card have seen an increase in demand. We discuss these cases in detail below.

Table 23: Relationship between state and NGO and the artisans in our sample

	Do you have an artisan card?		
Has demand increased?	No	Yes	Total
No	119	36	156
	41.18	19.37	32.5
Yes	170	155	324
	58.82	80.63	67.5
Total	289	191	480
	100	100	100
	Received orders from Govt outlets?		
Has demand increased?	No	Yes	Total
No	155	0	155
	39.39	0	32.5
Yes	241	84	325
	60.61	100	67.5
Total	396	84	480
	100	100	100
	Have you received training from state or NGO?		

Has demand increased?	No	Yes	Total
No	135	20	156
	40.66	13.51	32.5
Yes	197	128	324
	59.34	86.49	67.5
Total	332	148	480
	100	100	100

The state can provide assistance to artisans is by selling their products through government outlets like *Biswa Bangla, Manjusha* and *Bangasree. Biswa Bangla* was established in 2014 under the regime of the current government. It has showrooms in different parts of the country and has an aim of selling 'traditional' crafts to urban and rich consumers. Table 23 shows us that all the artisans who received orders from government outlets have reported an increase in market demand. Orders from these outlets, therefore, can very effectively enable survival of crafts. However, the above table also shows that these orders are not received by most artisans. More than 82 percent of our sample have reported that they have not received any order from the government outlets.

Support from state and NGO can come in the form of trainings. Table 23 highlights the importance of these trainings as about 86 percent of artisans who received training reported an increase in demand. However, only about 30.8 percent of all the artisans mention that they have received training.

The government has had an important role to play in the creation of a new path for artisans. In the aforementioned cases of Naya, Chorida and Panchmura, the state's role has been instrumental in the creation of new markets through the provision of fairs and exhibitions, imparting training, and buying goods from the artisans for the government outlets and showrooms. Besides these, the case

of *sabai* artisans of Mrigichami and Rajogram in Purulia district is relevant in this case where state and NGOs have been important.

Female artisans in the two villages of Mrigichami and Rajogram were traditionally involved in rope making. *Sabai* grass (*Eulalipsis binata*) was used by the British empire for making paper (Furlong 1944). The artisans, had been involved in this traditional craft of rope making out of *Sabai* grass. Asmita Tantubai, an artisan in Mrigichami recalls her rope making occupation:

> "We used to make ropes previously. The grass needs to be dried in the sun and requires two people to roll the grass into ropes. Rope making is difficult. It necessarily requires us to work in the sun. The rope making did not compensate us enough for all the hard labour it requires."

Thus, the path that these women are situated in has been historically created through the traditional form of livelihood. The ropes were generally found consumer among the local people as they were sold and bought in the weekly local markets. The old path was, therefore, characterised by an occupation with hard work by the workers without adequate compensation and insufficient market access.

Respondents in Mrigichami and Rajogram mention that in 2016, a training was conducted by the West Bengal Khadi Board. The NGO Banglanatak then collaborated with them and has since taken up the cause of training these NGOs. Designers and trainers from Banglanatak have also taken up the responsibility of teaching the artisans new designs and methods of making decorative products like planters, coasters, flower vases, etc. The NGO has also arranged for the artisans to travel to fairs and exhibitions in different parts of the country. It would be incorrect to perceive the artisans as only passive beneficiaries of help and training by the state and NGOs. They receive the training,

and spillovers of this knowledge are dispersed through social networks within villages. The importance of social networks in the process of forming new paths can be understood where artisans chalk out the ways in which they receive the training and orders. The initial training was given to the artisans through their Self-Help Groups (SHGs). They have formed an informal cooperative which organises meetings once they get orders. The groups then give out the orders to the artisans in the village. Jonaki Tantubai from Mrigichami mentions:

> "We receive orders from *Biswa Bangla* and *Manjusha*. The orders are placed to Rupali *di* (the leader among artisans in Mrigichami). And then the orders are shared among all of us. We have a meeting among us and then we decide who should do which part of the orders. If we cannot attend the meetings, then Rupali *di* sends us the photos through WhatsApp."

A similar process happens in neighbouring village Rajogram as well. The knowledge and training are also passed over to newer artisans when more experienced artisans teach the skills to other female artisans in the village. The social network formed through SHGs, neighbourhoods and friendships among female *sabai* artisans is relevant for transfer of skills and orders, and bringing in newer artisans in this new path. Their old path of making ropes was not as remunerative. The new path has improved the material conditions of the artisans, and is also characterised by less hard work. The presence of artisan card has also played an important role in this case, as it enabled the artisans to avail fairs across the state, get access to loans and training. Juhi Tantubai mentions the material improvement with their shift into the new path:

> "We used to make ropes previously. (...) But that was not a profitable business. Rope making requires more people. I can do this weaving alone whenever I am free. I don't have to depend on anyone else. We did not make much money with the rope as well. Our incomes have increased ever since we have shifted to weaving products out of *sabai* grass. If we

made ropes out of 1 kilo of *sabai* grass, we would earn about 25-30 rupees shared between two people. If we make these products out of 1 kilo of *sabai* grass, we can earn about 600-1000 rupees. I don't make the ropes anymore."

The training that Banglanatak provided the artisans has also enabled them to learn new skills. New avenues have opened up for the artisans to sell their product. Jonaki Tantubai mentions:

"The training has been very helpful. We have benefited a lot from it. Our financial status has improved. Now we have orders from Kerala, Nagaland, Bombay and different other places in India and even from abroad. I have the artisan card. The state provides us with fairs. (…) We go to fairs and we can make contacts and get new orders. We have visiting cards which we can give them and then we get orders through WhatsApp. We have access to fairs and exhibitions. The trainers from Banglanatak come here often to show us the designs which we are supposed to make so that they can go out for exhibitions and fairs."

Banglanatak has not only played an important role in imparting skills to these artisans. They have also been instrumental in creating a market for the products these artisans make. Banglanatak contacts one of the artisans in each village in Rajogram and Mrigichami. They are given these orders and the orders are further shared among the artisans in each of these villages. Artisans also receive orders from government outlets *Biswa Bangla* and *Manjusha* as well from different government offices. Once the artisans know what the market demands, they can modify their designs accordingly using their discretion. They have also made use of Facebook and WhatsApp to get orders and designs from their customers. Shobana Tantubai mentions:

> "I made the trays using my own imagination, and that design was picked up by the NGO and we got a lot of orders for that tray. I made a whole set of trays and I made some money on that."

Jonaki Tantubai mentions the role that social media has played in this aspect:

> "The designs are given to me, according to what they want. They send photos on WhatsApp and we make the craft accordingly. I also have a Facebook page and we often get orders from there. I get these orders from them personally. If I get too many orders, I ask my friends if they can help me out."

The new path for the *sabaai* artisans, therefore, entails higher material benefit and less labour-intensive jobs. The intervention of the state and NGO in the functioning of artisans can happen through the cases of conversion and recombination. Recombination involves actors recombining and redefining social, political and economic structures to produce a new structure (Martin, 2010). New learning processes were introduced where artisans learned to weave new products out of the *sabaai* grass. New structures and rules were introduced through the sale of these elite products through fairs and exhibitions and the government showrooms. Thus, economic structures were redefined to produce a new structure which enabled the artisans to move from their old path to a new path.

A similar situation was seen among bamboo artisans in Deeghidanga in Birbhum. These artisans received training from an NGO where they learned how to make elite crafts for the tourists. Previously they were involved in the production of sieves and baskets which were sold to the local people of the area. The training enabled them to start making necklaces, smaller sieves and other products which were particularly made for tourists which were sold in Bolpur, a nearby popular

tourist hub. Training received by NGO or the state is, therefore, effective in contributing to the evolution of crafts from quotidian to elite crafts. Utpal Tudu highlights how the training by the NGO Moram has helped them to make new products which can appeal to the tastes of the tourists:

> "I have done the training by Moram NGO. It has helped my craft to evolve into these new things. They taught us to make things which would appeal to the tourists. I have benefitted from the training. Now we make earrings and lockets. My parents never made these. Some tourists from Kolkata buy these things. They send me pictures or sample and we make the products accordingly. The small sieves are bought by shopkeepers and clay or shola idols are made on it, and are then sold to tourists. The vegetable container and lids were in high demand previously during my parents' time. This demand has diminished significantly. Now, the earrings, lockets and idols in small sieves are in more demand. The designs have changed according to this demand."

On the other hand, 18.85 percent of those who have an artisan card reported that the demand for their product has not increased. These artisans mention that the card did not serve the purpose that was expected. They were not called for fairs or were offered loans. Some artisans have mentioned that despite receiving the artisan card, they have not received the benefits that should come with the card. This has impeded technological progress in their craft. Sombhu Kumbhokar, a potter from Manpur, states:

> "I have an artisan card. But I have never been offered a loan. The govt has never helped us for this. The card has not really helped us. It is stored in a box and that is all. I still use the same manual wheel that my father used to use."

However, the state has not worked in a universal manner. We find from Table 5 that 289 respondents out of 480 said that they (or anybody in their family) did not have the artisan card. Some artisans have not even heard of the artisan card. Gayatri Pandit, a bamboo artisan from Krishnanagar in Nadia district mentions:

> "We don't have artisan card. None of us do. We have never heard of it and we are not aware of this. We have not received any help from the state."

Similar sentiment was echoed by Koilash Pal, a brassmetal artisan:

> "I don't have the artisan card. I have not received any help from the govt. I did not know about the artisan card. I also do not have the time right now to go through bureaucratic process ses. There was no work during the pandemic. I could not leave my house back then. We did not receive any help from the govt then except for the free ration food."

Some artisans have mentioned that they had been promised the artisan card but have not received it. Kalu Dom, a bamboo artisan from Sendra in Bankura district states:

> "I do not have the artisan card. I did go for training where I have worked for 12 days and have received the certificate. They (the panchayat) had promised us artisan card, but we have not yet received it."

Nobomi Barik, a copper jewellery artisan from Ghatal in West Midnapore district, states that they have always been ignored by the government, excpect for getting the monthly compensation that all women in West Bengal are entitled to (*lakshmir bhandar)*:

> "We have received no help from the govt. They don't even know we exist. I get the *lakshmir bhandar*. That is all the help that the govt gives us. Nobody has told us anything about the artisan card. How are we supposed to know?"

Therefore, despite the promotions and promises of the state government especially with regards to the artisan card and the access to fairs, most of the artisans in our sample do not have an artisan card and quite a few among them have not even heard of it.

Some artisans have received training from the state and NGOs. However, just providing the training to artisans is not enough. Potters in Supur village of Birbhum district and Kanthalia village of Murshidabad district stated that they have received training in ceramics which would enable them to evolve into elite crafts. Sanjeeb Pal, a potter from Kanthalia village, has done the training offered by the state and promoted by their cooperative. But he mentions the problems associated with pursuing the training:

> "I learned making cups and plates of ceramic. I don't have the electric kiln, which is why I am unable to make the ceramic products. I have done the training through our cooperative. I have not been able to implement the things that I learned in the training. the ceramic products require different type of heating. The kiln we use now uses coal, that is not enough for ceramic."

Sunanda Kalindi, a bamboo artisan from Sendra, also has a similar problem:

> "I have undertaken the training that took place here. But we cannot make these at home. If we want to make those kinds of things, then we will run into trouble within the family. We do not have enough money to make those fancy products. If I make two baskets instead of

these artsy products, I can at least sell them. The artsy products take a very long time to be made. We also need to go out and sell them to tourists. How do we do that?"

Therefore, the institutional support put forward by the state and NGO has its own limitations. Even when artisans receive their training, they may not be able to pursue those training to influence their production process. This is a situation where new path is not created even when the artisans have the learning and knowledge to evolve their craft. This forces the artisans to stay locked in their old path.

Gender and Social Norms

Institutional environment includes system of informal conventions, cooperation, customs and norms (Martin 2017). Social norms related to female labour play an important role in the survival of craft. The notion of female labour being secondary labour in the household is important in devaluing their labour. The artisans themselves perceive their job to be something they work at during their leisure. These norms ensure the continuation of female of *Kantha* stitch and jute products. Maria Mies (2014) and Wilkinson-Weber (1999) observe this trend among female artisans in other sectors as well. The process of housewifisation where the worker's identity as housewife is used to devalue their labour is at work here as well (Mies 2014). Table 24 notes that while 51.38 percent of men artisans have artisan card, the number for women artisan in 22.11 percent. This points at the lack of recognition that women artisans have from the state. Table 25 shows that about 86 percent of female artisans have alternate source of income pointing at the fact that their income as artisans is not the primary source of income for their households. The corresponding figure for men artisans is about 37 percent.

Table 24: Percentage of men and women artisans who have artisan cards

	Sex of the artisan		
Do you have an artisan card?	Women	Men	Total
No	148	141	289
	77.89	48.62	60.21
Yes	42	149	191
	22.11	51.38	39.79
Total	190	290	480
	100	100	100

Table 25: Percentage of men and women artisans who have other sources of income

	Sex of respondent		
Other source of income	Women	Men	Total
Agriculture	40	25	65
	21.05	8.62	13.54
Casual Informal labour	92	32	124
	48.42	11.03	25.83
Other Source of income	31	50	81
	16.32	17.24	16.88
No	27	183	210
	14.21	63.1	43.75
Total	190	290	480
	100	100	100

Women's labour being the secondary source of income is evident from the testimonies of the artisans. Jahanara Begum, a *knatha* stitch artisan in Mahidapur village of Birbhum district states:

> "The pay is less, but it's better than nothing. This type of job is suited for us women. We can work on this during the afternoons when there is less work in the house. We can contribute to the household expenses."

Our respondents mention that they have chosen to get involved in craft as this formed a better alternative than sitting 'idle' at home. Ria Saha, a *knatha* stitch worker from Makaltore village in Murshidabad, received an information about an artisan Bahiya Begum who has artisans working under her. She mentions:

> "After marriage, I felt like I should not sit idle and it would be better if I contributed to the household expenditure. So (…) I looked around and found out that Bahiya *di* had this entire villages where women work for her."

Along with other women artisans in the neighbouring villages, Ria received the training at a big urban centre in Salar in Murshidabad. This has shaped the entire economic landscape of the area, where many women artisans in the villages adjoining Salar are engaged in this craft. Another artisan mentions the difficulties of managing housework along with economic work. Najneen Begum, a *knatha* stitch worker from Selenda village in Murshidabad, states:

> "Imagine if we have a child in our household, how much time should we devote to the child? Do you think it is possible for us to give a lot of time to this work? Then there is also cooking and cleaning for the entire household. Even if my husband had been working, this wage rate is not enough. My only aim is to contribute to the household income. But this wage rate is not enough for that. This is not enough for even pocket money let along household savings. We barely get 1000 rupees a month if I manage to work a lot through the entire month."

Ajanta Tantubai, a *sabaai* worker from Rajogram village in Purulia, mentions:

> "All of us women have to take care of the household, so it is not possible to work during the day. So, we need to stretch it at night. Then we also have to wake up early because we have to send the children to school."

The existence of this institution points at the fact that the survival of craft does not, by itself, need to be a desirable outcome. This makes a case against romanticizing and idealizing craft production. Traditions, local institutions, norms and local economic network play an important role in economic development of a geographical area (Amin 2017). Historical experiences can form structures which influence the actions of economic agents (David 1994). The socially established convention and historical experiences that have relegated women's labour as secondary in the household have made the institution durable, and influence the economic choices that the women artisans make. Economic actions, inter-personal relations, mutuality, and trust influence these artisan clusters. These artisan clusters are formed through the information that is passed on among women of the villages, and generally learn the craft from their mothers-in-law after they move into these villages. Rajia Begum, a *knatha* stitch artisan from Saota village in Birbhum district, mentions:

> "I have been involved in this craft since my marriage. I moved here from a different village. I learned the craft from my mother-in-law."

Therefore, these women are introduced to the craft in a localized path-dependent manner. The institution of social norms which influence the local economies causes these crafts to survive in a localized manner.

Social Networks and Spillover of skill

The development of innovation at a local level is dependent on localised learning and spillovers of knowledge. Economic activities are embedded through local social and cultural contexts (Martin and Sunley 2006). The skill required for craft production can disperse through social network and this can play an important role in survival of crafts. When a craft becomes popular through government support and catering to tourists, other artisans can gain from this as well. We see this among some potters in Panchmura. While the Bankura horse of Panchmura has received national and international fame through state support and GI, there are other artisans in Panchmura as well who benefit from this interest that tourists have had in this place in the last few years. These artisans have not learned the skill of making the Bankura horse in a nuanced manner that is demanded by the tourists, and stick to making quotidian crafts mostly. They have benefitted in terms of increased demand for their products because of the popularity of Panchmura as a pottery hub. The interpersonal relationships that artisans have among them has formed because of geographical proximity. This has shaped the economic landscape of the area.

Social networks are formed among residents of the same village. When artisans learn a skill about making an elite product, they teach their friends and other people in their cluster which would eventually lead to evolution of the craft. Artisans in Mrigichami learned the craft of making decorative products out of *sabaai* grass from NGOs. They have further taught their friends and other artisans in the village who have also picked up the skill. This has in turn lead to an evolution of their craft from a quotidian one to an elite one. Artisans are, therefore, not passive recipient of training and benefits. They interact with the institutions and with one another and disperse the skill to other artisans. Maya Tantubai from Mrigichami village describes how she decided to pick up the craft of *sabaai* products:

> "I saw the others in the village and noted that they were working well and their products were selling well. That is why I decided to learn this craft. I learned it from a didi in the village who was the first to pick up the craft."

A case of spillover of knowledge can also be seen in the case of a *dokra* artisan in Pattrasayer in Bankura. The products made of *dokra* in nearby Bikna village of Pattrasayer has a GI tag and has become extremely popular among handicrafts in Bengal. An artisan in Pattrasayer picked up the skill of making products out of *dokra* from artisans in Bikna. Subsequently, he started a business in Pattrasayer of making products out of *dokra* and making a cluster of artisans there. Currently the business is run by his son Tito Karmakar. The economic landscape of this area has therefore undergone a change following a spillover of knowledge which has happened because of geographical proximity with Bikna village and the informal networks formed with the artisans of Bikna. The spillover of knowledge from has helped in the process of innovation in new locality of Pattrasayer, and this has helped in situating it on a new path. He recalls the start of *dokra* business in Pattrasayer:

> "My father had learned the casting process from Bikna. Then he hired 2-3 people from Bikna and started the business here. this happened about 22 years ago. The workers that work here are from here and nearby villages."

Informal networks and access to resources can help in the formation of knowledge, and regional level characteristics and institutional arrangements can impact the economic decision making of agents (Amin 2017). Transmission of knowledge are dependent on geographical proximity and social interactions which can cause spatial clustering (Cumbers, MacKinnon, and McMaster 2003). The cases discussed describe the role that local institution and local economic networks can play in the economic development of a geographical areas in a path-dependent manner.

Availability of other jobs

The role of social networks is also important to procure and dispense information about jobs available in the economy. This can play a role in the survival of the craft. This is not an ideal situation as many artisans mentioned that their next generation will have to take up the craft because there are no other jobs available. Thus, the survival of the craft is dependent, in this case, the inability of the economy to create new jobs. Raju Hembrem, a bamboo artisan, from Deeghidanga village in Birbhum states:

> "I want my children to study a lot and take up some other job. But I know jobs are not available, and we do not have adequate contacts. Jobs are difficult to get. This govt cannot provide us jobs."

Pinaki Pal, a conch-shell artisan from Murshidabad, states his ambivalence about his son joining the craft:

> "My next generation will work on this because this is our generational craft. I want my son to take over this craft and take forward our craft. Anyway, there is not much other jobs available around us. Where will he go?"

Sarat Kumbhokar, a clay artisan from Manpur village in Purulia mentions:

> "My son had to take up this work because no other good job was available. He also works in a shop nearby. He used to work outside in a hotel. That hotel shut down and he had to come back to this craft."

On the other hand, there are situations where next generation of artisans have decided not to take up their generational craft because they have access to more lucrative jobs elsewhere. Social networks play an important role in dispensing information about these jobs. The craft of pottery in

Jot Ghanashyam village in West Midnapore is on the verge of going extinct. Children of potters have decided to go to Maharashtra to work in the jewellery industry, as a result there are hardly any potters from the new generation who have taken up the craft. They get this information from their friends and their social circle who have already moved to this industry. This job is more lucrative than the job of a potter and the children are able to send money to their homes. Satyajit Pal mentions:

> "My son does not work on this. He has gone to Maharashtra to work on gold jewellery."

When the children of artisans receive education and are able to get a better job in the market, they may choose to leave their craft and pursue that occupation. Bharat Pal from Kanthalia village in Murshidabad mentions:

> "My son knows this craft, but has not joined here. He does not want to work so hard for this. This is our generational craft, but I would have wanted my son to take it up as well. But he is educated and has a college degree, he does not want to work with clay. But he does know the craft."

Jiten Pal from Manpur village in Purulia mentions:

> "My sons work in the Amul company. They are educated, why will they work in this?"

The overall situation of the economy can determine whether a craft will survive. The monetary compensation that an artisan receives for their craft is also instrumental to this end. The next generation pursuing a craft and the craft surviving need not be a desirable outcome by itself. It can be the result of either their current craft doing well economically, or the lack of other more lucrative jobs.

Policy Perspectives and Conclusion

The objective of the chapter is to note the ways in which artisans interact with institutions which can enable the evolution and survival of the crafts. Qualitative data from fieldwork enables us to look at nuanced manners through which these interactions and evolutions of the craft take place. These nuances and details are not available to us through secondary data. We use a developmental evolutionary economic geography framework to look at the interaction between artisans and institutions which can lead to the survival and evolution of crafts. This framework helps in the contextualisation of geographic areas and institutional arrangements. Comparison between geographic areas also help us to underline the different institutions which can create and develop the economic landscape of clusters. It is not sufficient to understand all quotidian crafts as dying or on the verge of extinction. It also would not be complete to state that state support is necessary for the survival of crafts. In the study we have underlines some institutions which can eventually lead to evolution of crafts and survival of the same. The institutions do not work in isolation from each other. In further analysis, we also aim to talk about how these different types of institutions interact with each other forming new paths in which the artisans are placed.

We highlight institutions like state and NGO support, artisans' cooperatives, social norms, availability of other jobs and spillover of knowledge or skill which can cause the survival of the craft. Workers' cooperative played an important role in the creation of new paths and evolution of crafts from elite to quotidian among artisans in Panchmura, Naya and Chorida. Comparison between geographically close clusters within the same district like Panchmura and Bankura highlights the importance that cooperatives can have in layering and conversion which can lead to the creation of new paths in the process. Cooperatives can also act as a medium for the artisans to negotiate with the states and NGOs. State and NGO support in the form of provision of artisan

card, orders from government outlets, and trainings have been helpful for artisans in Rajogram and Mrigichami to move to a new path. It is also crucial to note that most of the artisans in our sample did not receive any help from the state. However, the clusters which did get the support were able to move to a new path through conversion and recombination which was more remunerative. An example of an undesirable institution which has been historically formed and has solidified into informal institutions is gendered social norms which devalue women's labour. The cheap labour that can be extracted from them has helped in the survival of *knatha* stitch and jute stitching craft. Artisans also are not passive recipients of support and help. They can actively interact with institutions and create new paths for themselves or other artisans in their social circle. Social networks play an important role in spreading of skills of new crafts and information about new markets and consumers. There are also examples of institutional failures, where artisans could not make their artisan card like the bamboo artisans in Sendra, or artisans who had the artisan card but still could not avail the benefits like among like the potters of Manpur, or workers' cooperatives failing due to different reasons like among the conch shell artisans in Bankura.

The study calls for policies that take into account local contexts and experiences of artisans and their interactions with different types of institutions which can be useful in the survival and reproduction of craft. We highlighted institutional arrangements which can create new paths among artisans through layering, conversion and recombination. Policies should be sensitive to local cultures and histories, and should take into account path dependencies (Amin 2017). The current study adopts policy recommendations from Amin (2017). Policies which support formation of clusters of inter-related artisans can develop the skill and capability base of the region and can encourage formation of local relations and capacity building through information exchange. Our fieldwork makes a case for policies which can strengthen networks of associations among artisans.

Networks of association are also important for artisans to adapt, learn and innovate. Adaptability is a key feature for 'successful' clusters which can enable them to avoid lock-ins and move from an old path to a new path (Nelson and Winter 2002; Martin and Sunley 2006). These can be useful in applying the spillovers of knowledge and creating new geographies of economics development as we saw in the case of *dokra* artisan in Pattrasayer, and *knatha* stitch artisans in villages of Murshidabad. Another measure that can induce artisans to learn and innovate can be through trainings by government and NGOs. However, we also note that merely providing training would not be enough, as trained artisans are constrained by lack of capital and access to markets. Hirst (1994) suggests that policy action should also involve relevant and decentralised autonomous organisation as economic governance extends beyond the reach of state and market. Our study also makes a case for decentralised institutions like workers' cooperatives can be useful in creating a medium for interaction between artisans and the state or NGOs. This can help in the evolution of crafts from quotidian to elite ones, which in turn can transform the economic landscape of the locality in terms of production techniques, access to markets, interaction with the state, and entry of new artisans in this type of production. Policies should therefore encourage negotiation and bargaining power of artisans which is possible through institutions like workers' cooperative.

Our study also contends that the survival of crafts does not have to be a desirable outcome necessarily. Idealising and romanticising crafts should be undertaken with caution, because there are unfavourable institutions and scenarios at play which can lead to the survival and reproduction of crafts. Policies should instead be aimed at making them viable sources of livelihood though training, provision of capital and raw materials, and institutional support that takes into account the agencies of the artisans.

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APPENDIX FOR CHAPTER 1

Table A1: Heterogeneity tests regressing the log of earnings of women artisans of different categories

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
VARIABLES	SC	OBC	Muslim	UCH	Home-based	Working around home	Up to Primary education	Primary to HS	Above HS	Unmarried	Married
Urban	0.0194	0.0226	-0.0144	0.110	0.0447	0.0897	0.0258	0.00816	0.0839	0.0647	0.0477
	(0.0873)	(0.0437)	(0.0885)	(0.0724)	(0.0347)	(0.0790)	(0.0726)	(0.0381)	(0.0766)	(0.0627)	(0.0381)
Household Size	-0.0284	-0.000173	-0.0193	-0.00471	-0.0167*	0.00651	-0.0130	-0.0150	-0.0140	-0.0133	-0.00802
	(0.0271)	(0.0124)	(0.0216)	(0.0226)	(0.00983)	(0.0243)	(0.0217)	(0.0108)	(0.0202)	(0.0158)	(0.0117)
Around home	0.167	0.0889	0.106	0.0717			0.258**	0.126**	-0.0111	0.188**	0.0913
	(0.164)	(0.0623)	(0.159)	(0.102)			(0.103)	(0.0579)	(0.101)	(0.0931)	(0.0576)
Own workshop	0.0207	0.245***	0.200	0.377***			0.192	0.290***	0.270	0.262*	0.292***
	(0.189)	(0.0933)	(0.214)	(0.145)			(0.172)	(0.0748)	(0.205)	(0.144)	(0.0796)
Someone else's home	-0.183	-0.118	0.182	0.187			0.326	-0.0138	0.00503	-0.148	0.0577
	(0.294)	(0.175)	(0.508)	(0.311)			(0.408)	(0.142)	(0.273)	(0.215)	(0.154)
Someone else's workshop	0.254	0.743***		-0.333			-0.232	0.660***	0.432	0.348	0.825***
	(0.691)	(0.282)		(0.319)			(0.473)	(0.225)	(0.496)	(0.390)	(0.294)
Other	0.930	0.0924	-0.107	0.283			-0.239	-0.0332	0.422	0.374	0.0544
	(0.699)	(0.259)	(0.431)	(0.611)			(0.482)	(0.268)	(0.330)	(0.725)	(0.225)
No. of years of education	-0.0244**	-0.000558	0.0335***	0.0408***	0.0144***	0.00961	-0.00391	0.0246*	0.00815	0.00707	0.0154***
	(0.0113)	(0.00584)	(0.0103)	(0.00916)	(0.00443)	(0.00989)	(0.0264)	(0.0133)	(0.00583)	(0.00846)	(0.00488)
Age	0.00940	0.0302**	0.0406	0.0154	0.0177	0.0192	0.0279	0.0172	0.0322	0.0145	0.0337**
	(0.0278)	(0.0140)	(0.0256)	(0.0253)	(0.0110)	(0.0252)	(0.0215)	(0.0126)	(0.0244)	(0.0242)	(0.0163)
Age squared	-4.81e-05	-0.000347*	-0.000555	-0.000143	-0.000157	-0.000190	-0.000269	-0.000121	-0.000426	-0.000114	-0.000360*
	(0.000394)	(0.000190)	(0.000365)	(0.000329)	(0.000150)	(0.000342)	(0.000287)	(0.000177)	(0.000320)	(0.000379)	(0.000210)

Revenue expenditure on tourism	-2.295*	-0.287	-0.437	-0.966	-0.395	-1.479	-0.813	0.227	-1.321	-0.949	0.197
	(1.256)	(0.640)	(2.548)	(1.546)	(0.512)	(3.501)	(1.596)	(0.556)	(0.887)	(1.281)	(0.531)
Per capita loan	0.449	0.290	0.00343	0.344	0.391***	-0.394	0.833***	0.360**	0.162	1.406***	0.165
	(0.331)	(0.189)	(0.457)	(0.266)	(0.135)	(0.540)	(0.296)	(0.147)	(0.317)	(0.364)	(0.144)
Constant	2.109***	0.975***	1.376*	1.291**	1.391***	1.706*	1.442**	1.097***	1.749***	1.780***	0.805**
	(0.648)	(0.340)	(0.741)	(0.628)	(0.267)	(0.885)	(0.627)	(0.326)	(0.587)	(0.534)	(0.366)
Vocational training controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
State Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Social relation controls					Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	301	917	321	365	1,646	281	423	1,264	407	488	1,373
R-squared	0.199	0.180	0.271	0.337	0.179	0.212	0.271	0.173	0.295	0.239	0.174

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table A2: Robustness tests regressing the log of earnings

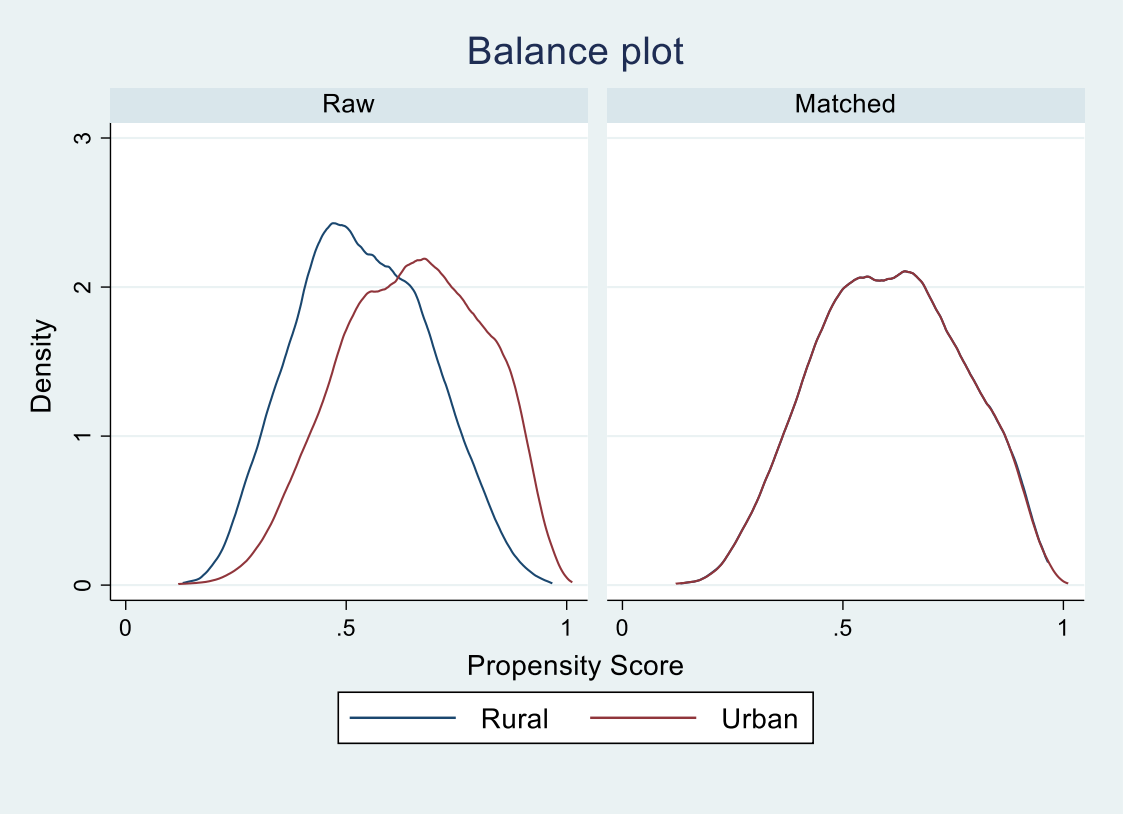
	(1)	(2)	(3)
VARIABLES	Women non-artisans in manufacturing sector	Women non-artisans from NCO-700	Non-artisan men
Urban	0.107***	0.0810**	0.153***
	(0.0298)	(0.0391)	(0.00570)
Household size	-0.0128*	-0.0120	0.00729***
	(0.00770)	(0.0107)	(0.00131)
Around home	0.339***	0.334***	-0.0125
	(0.0525)	(0.0983)	(0.0121)
Own workshop	0.538***	0.809***	0.100***
	(0.0680)	(0.157)	(0.00873)
Someone else's home	0.470**	1.167***	0.126***
	(0.196)	(0.328)	(0.0261)
Someone else's workshop	0.250**	-0.158	0.0749***
	(0.117)	(0.180)	(0.0130)
Other	0.258***	0.718***	0.0517***
	(0.0839)	(0.128)	(0.00889)
No. of years of education	0.0220***	0.0227***	0.0335***
	(0.00377)	(0.00497)	(0.000669)
Age	0.0209**	0.0353***	0.0443***
	(0.00919)	(0.0117)	(0.00203)
Age squared	-0.000232*	-0.000358**	-0.000433***
	(0.000121)	(0.000157)	(2.56e-05)
Revenue expenditure on tourism	-3.988***	-1.343*	0.186***
	(0.811)	(0.735)	(0.0478)

Per capita loan	0.583***	0.210**	0.413***
	(0.110)	(0.102)	(0.0150)
Vocational training controls	Yes	Yes	Yes
State Controls	Yes	Yes	Yes
Social relation controls	Yes	Yes	Yes
Year controls	Yes	Yes	Yes
Constant	1.936***	1.912***	1.047***
	(0.299)	(0.414)	(0.0488)
Observations	1,967	921	41,154
R-squared	0.382	0.251	0.225

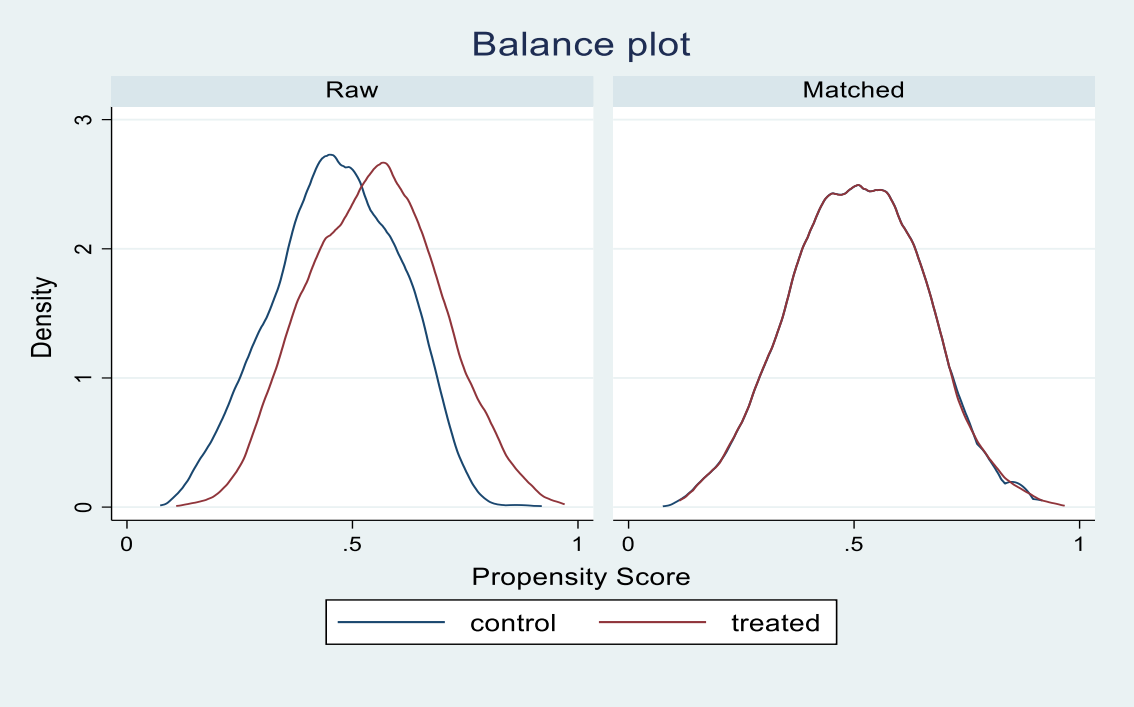
Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

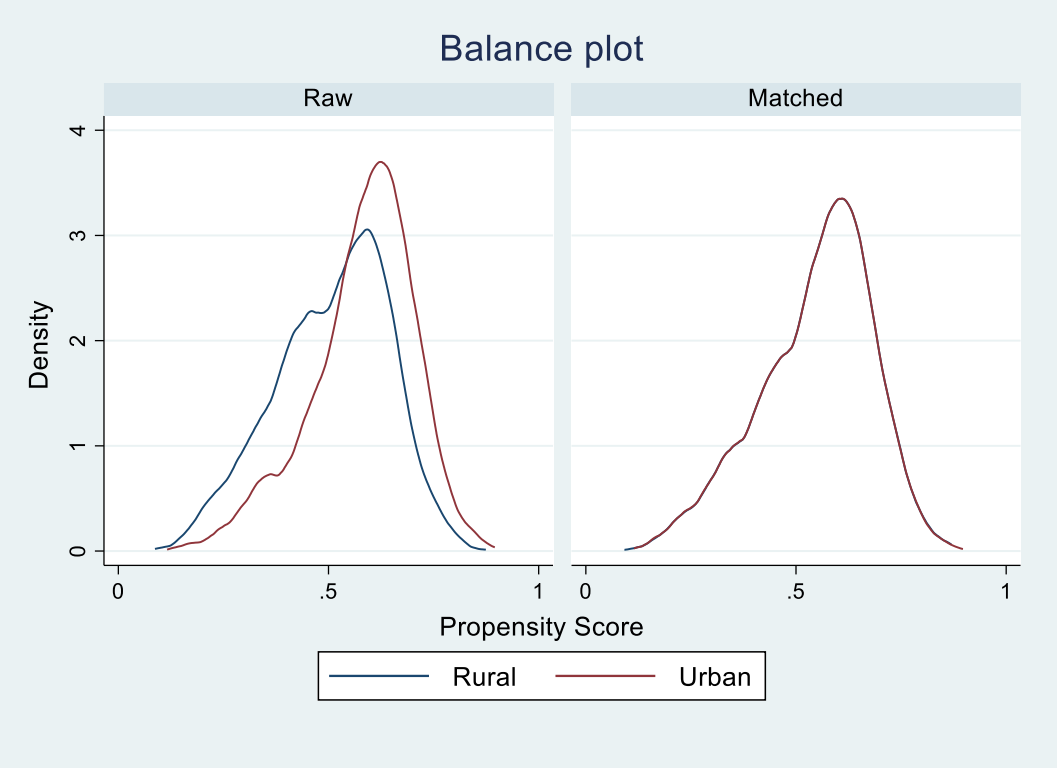
A3: Kernel density plot after PSM for women non-artisans



A4: Kernel density plot after PSM for men artisans



A5: Kernel density plot after PSM for women artisans



APPENDIX FOR CHAPTER 3

Questionnaire that was used for the purpose of field survey among artisans

Interview no.:

Date of interview:

Time of interview:

1. **Village/town questions:**

- Town/village name
- District
- Distance from Calcutta?
- Nearest big city
- Is public transport available to the nearest big city?
    - Yes, by bus
    - Yes, by train
    - Yes, other: please specify
    - No
- How many hours of electricity is available in the town/village?
- Is pucca road available in the town/village?
    - Yes
    - No
- How far is the nearest station?
- How far is the nearest bank?
- How many families in the village/locality are involved in craft production?

2. **Household questions:**

- Number of members in the household
- Number of children in the household
- Number of non-earning adults in the household
- Do you own the house?
    - Yes
    - No
- How do the members of the household participate in the production process?
- Is there any other source of income in the household?

- Does the family own any land?
- With what material is the house predominantly made? (Select all that apply)
    - Mud
    - Unburnt bricks
    - Bricks and cement
    - Plastic
    - Wood
    - Stone
    - Asbestos
    - Others: please specify
- What cooking fuel do you use? (Select all that apply)
    - Coal
    - Cowdung
    - LPG
    - Firewood
    - Others: Please specify
- Does the family own any means of transportation? (Select all that apply)
    - Bicycle
    - Scooter/Motorcycle
    - Car
    - Truck
    - Other: please specify
    - No

3. Individual questions

- Name of Respondent
- Sex
- Type of work
    - Self-employed
    - Waged worker

4. Technology of production

- What type of craft?
- What is the process of production?
- Since when have they been working?
- How have they learnt the craft?
    - From previous generation
    - From training or workshop organised by state or NGO
    - From teachers

    - Other: Please Specify
- How much of the process is handmade?
    - Completely handmade
    - Mostly handmade with basic tools
    - Mostly mechanised
- Who owns the machine/tools?
    - Artisans themselves
    - Rented from someone
    - Works on someone else's tools
- Where does the raw material come from?
    - Bought from supplier
    - Procured from middlemen
    - Procured themselves from somewhere else
    - Others: Please specify
- Location of work
    - Own home
    - Own workshop
    - Someone else's workshop
    - Other: Please specify
- Who decides the designs of the product?
- How has the designs changed with time?
- Who are their final customers?
    - Local people
    - Indians from urban areas
    - Tourists
    - Others: Please specify
    - Don't know
- Who do they sell their products to? (Please select all that apply)
    - Wholesale to middlemen
    - Wholesale to shops/showrooms
    - Direct retail to customers
    - Fairs
    - Others: Please specify

- Where is the finished product sold?
    - Locally
    - Nearest cities
    - Don't know

5. Income, cost and market

- What are the inputs required in the production process?
- What is the input cost?

- At what price do you sell the product?
- At what price is the finished product sold?
- How much is the profit?
- How many hours do you work in a day?
- Where do you take loans from?
    - Self-help group
    - Govt banks
    - Commercial banks
    - *Mahajans* (informal loans from middlemen)
    - Others: please specify
- Where does the demand of the product come from? (Select all that apply)
    - Tourists and/or urban customers
    - Local demand
    - State provided demand
    - Others: Please specify
- Over time, has there been any change in the source and type of demand?
- Over time, has there been changes in the production process? How?
- Is there any alternate source of income in the household?
    - Yes, through agriculture
    - Yes, through other casual informal labour
    - Yes, through other source: please specify
    - No
- Did you avail benefits from NREGA in the last year?
    - Yes
    - No
- If yes, how many days did you work through NREGA?
- When is the peak season of sale?
- Which is the lean season of sale?
- Is there demand from tourists?
- Has demand from tourists increased over time?
    - Yes
    - No
    - Don’t know
- How has tourist demand affected the income?
- Is the product exported?
    - Yes
    - No
    - Don’t know

6. Role of State/Institutions

- Does the artisan have artisan card issued by West Bengal govt?
    - Yes
    - No
- If yes, did the artisan card help you in any way? (Select all that apply)
    - State organised fairs
    - District level fairs
    - Reimbursement of TA, DA and carrying costs
    - Fair at national level
    - Subsidies
    - Pensions
    - Ease with loans
    - Any other: please specify
    - The card did not help in any way
- Could you continue production and selling during the pandemic?
    - Yes, no change in production and sale
    - Yes, but fall in production and sale
    - No
- How did the state help during the pandemic?
- Has the artisan ever participated in any training or workshop organised by the state or NGO?
- Will the next generation learn the craft and pursue it professionally?
- Is there a GI tag for this product?
    - Yes
    - No
    - Don't know
- If yes, has there been a change in income since implementation of GI?
- Is the artisan part of any collective?
    - Self-Help group
    - Union
    - Informal cooperative
    - Other: please specify
    - No
- Does the state offer any support in terms of demanding the product? (Select all that apply)
    - Yes, through fairs
    - Yes, through state agents of *Biswa Bangla*
    - Yes, through other agencies
    - Yes, through exposure to NGOs
    - Yes, by other mean: please specify
    - Support was offered previously, but not anymore
    - No support has ever been offered
- Do NGOs offer any support?

    - Yes
    - No
    - Don’t know
- Is the product customised by customers or agents of states or NGOs?
- How are the designs of the product influences by the state or NGOs?