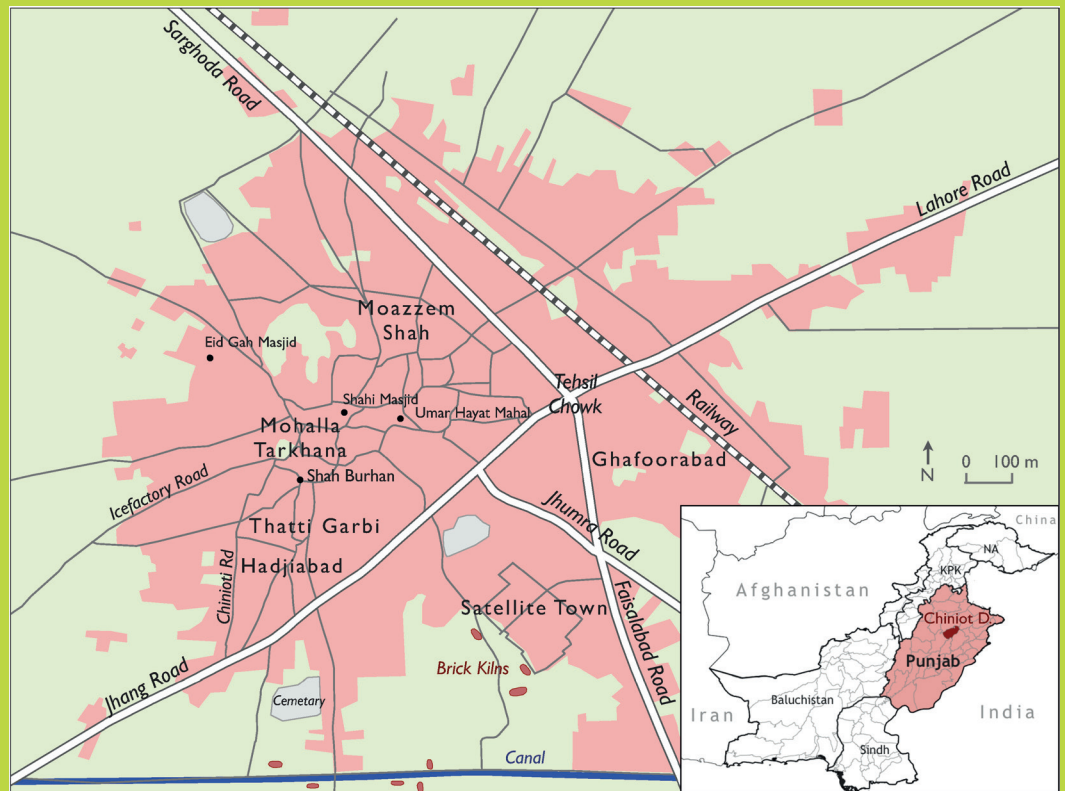


Carpenters of Chiniot, Pakistan



The Social Economy of Woodcraft and Furniture Production

Martin Enzner

Centre for Development Studies (ZELF)
Institute of Geographical Sciences
Freie Universität Berlin

2013



Editor of Berlin Geographical Papers

Prof. Dr. Hermann Kreutzmann

Contact

Centre for Development Studies (ZELF)

Institute of Geographical Sciences

Freie Universität Berlin

Malteserstr. 74-100

D-12249 Berlin

h.kreutzmann@fu-berlin.de

Tel: +49 - 30 - 838 70223

Fax: +49 - 30 - 838 70757

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To the "unknown carpenters" of Chiniot and their ancestors.

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Terms

The following terms have been encountered during field research and the study of literature. Some of them are historic terms that are still used in present times. Apart from the identified languages some terms are also used in other languages, e.g. *karkhana* is not only used in the Punjabi language, but also in the Hindi and Bengali language.

<i>bar</i>	central parts of the <i>doabs</i>
<i>baypari</i>	trader, merchant
<i>burra</i>	sawdust
<i>chabakay</i>	jigsawer
<i>chak</i>	planned village in a Punjabi canal colony
<i>charpoi</i>	term widely-used in South Asia for bed or couch
<i>chaukat</i>	door
<i>doab</i>	tract between two rivers
<i>haveli</i>	term widely-used in South Asia for a private mansion
<i>hithar</i>	riverain lowland of the <i>doab</i>
<i>jali</i>	decorative stone with geometrical pattern
<i>jangli</i>	pastoral community living in the Punjabi <i>doabs</i> in pre-colonial times
<i>jati</i>	birth group, one of two distinct concepts of the caste system
<i>jharoka</i>	type of balcony used in Indian architecture
<i>jajman</i>	patron, landholding castes
<i>jajmani</i>	relationship between service castes and landholding castes
<i>kamin</i>	client of the patron, service provider to higher castes
<i>karkhana</i>	originally a Persian term that is widely-used in South Asia for workshop
<i>kharadi</i>	turner
<i>kikar</i>	<i>Prosopis juliflora</i> (lat.), a tree species used for the furniture industry in the Punjab; its wood is less sturdy and therefore of lower value than the <i>sheesham</i> wood
<i>mohalla</i>	term widely-used in South Asia for neighbourhood
<i>moharram</i>	first month in the Islamic calendar
<i>munarwat(i)</i>	carving (Carver)
<i>pathay</i>	wooden boards sawn by sawmills
<i>pinjra</i>	lattice work
<i>pirha</i>	chairs with coloured lacquer
<i>rairiwala</i>	self-employed worker who carries goods with donkey cart or horse cart
<i>sheesham</i>	<i>Dalbergia Sissoo</i> (lat.), a widely cultivated tree species in South Asia and most important wood resource for the furniture industry in the Punjab
<i>taj</i>	wood carved back and front of a bed

<i>tazia</i>	miniature mausoleum made from varying materials used in ritual processions during <i>moharram</i>
<i>tehsil</i>	administrative division (sub-district) introduced by the British Administration in South Asia
<i>tekedar</i>	contractor
<i>thali</i>	Punjabi word for <i>sheesham</i> , a tree species described above
<i>thokni</i>	wooden mallet, used by the <i>munarwati</i> along with the chisels
<i>ustad</i>	originally a Persian term that is widely-used in South Asia, an honorific title that mean teacher, trainer and/or master
<i>varna</i>	order, class or kind, conceptual scheme with four divisions
<i>zamindar</i>	originally a Persian term that is widely-used in South Asia for landlord or occupier of land
<i>zaildar</i>	politician, responsible for a <i>zail</i> (group of villages = administrative unit)

Abbreviations

CEO	Chief Executive Officer
DCO	District Coordination Office(r)
DPO	District Police Office(r)
DFO	Division Forest Office(r)
DGME	Directorate General Monitoring & Evaluation, Planning & Development Department, Government of the Punjab
DOF	District Office(r) Forestry
GOP	Government of Pakistan
JIAI	Journal of Indian Arts and Industries
PFD	Punjab Forest Department
PG	Punjab Government
PFRI	Punjab Forest Research Institute
PKR	Pakistani Rupees
PSIC	Punjab Small Industry Corporation
SDPI	Sustainable Development Policy Institute
SMEDA	Small and Medium Enterprise Development Authority
TMA	Tehsil Municipal Administration
TMO	Tehsil Municipal Officer
UNDP	United Nations Development Programme
WWF	World Wide Fund for Nature

1 Introduction

“...these works by unknown carpenters are completely satisfactory. [...] The survival of so much executive skill, to say nothing of so much design, under discouraging conditions, is one of several difficult questions relating to Punjab craftsmanship.” (Kipling 1888b: 69).

This statement was made at the end of the 19th century by the English colonial officer John Lockwood Kipling, in the *Journal of Indian Arts* about the work of carpenters in Chiniot. It illustrates several facts relevant to this paper. In the 19th century, a number of apparently skilled woodworkers lived and worked in the small town of Chiniot in Western Punjab, who caught the attention of the colonial administration. Although the town itself was and still is relatively unknown outside of South Asia, some of the buildings its skilled artisans have helped to establish are famous worldwide. It is considered very likely, that Chinioti artisans have participated in building the Taj Mahal in Agra and they certainly participated in building the Golden Temple in Amritsar and the Wazir Khan Mosque in Lahore among others. Although their woodcrafts have been widely admired, these artisans had a low status in the society and were dependent on their clients.

Today, the labour-intensive occupation of carpentry - including woodcarving - still provides an important source of income for millions of livelihoods in low-income-countries. The cases of Indian woodcarvers have recently been covered, e.g. for Saharanpur in Uttar Pradesh, Jodhpur in Rajasthan or Hoshiarpur in Punjab (Chatterjee et al. 2005: 104-119). In the Pakistani part of the Punjab, there are towns and cities, like Bhera, that had a high accumulation of skilled carpenters in the past, but the craftsmanship hasn't "survived" up to this day. Other cities, like Gujrat, have an existing cluster of carpentries, but they don't have such a long history like the one in Chiniot. There is a cluster of carpentries in Lahore, a city with a heritage of architecture and craftsmanship, but carpentry is just one occupation among many others and not the prevalent occupation and source of income in the city.

The combination of the artisanal heritage, the existence of a contemporary large-scaled carpentry and woodcraft cluster and the phenomenon of carpentry being the prevalent occupation in the city, makes Chiniot an interesting case for an historical comparison of the socio-economic conditions of carpenters in society. Additionally, the topic of caste in a Muslim country like Pakistan is deserving of attention.

The basic research questions underlying this paper are:

- Which economic processes influenced the carpenters' lives during the British period?
- How was the socio-economic condition of Chinioti (respectively Punjabi) carpenters constituted in the past, with emphasis on their caste identity during the British

colonial period? What does Kipling mean by the expression “discouraging conditions”?

- What are the main characteristics of furniture production and marketing in Chiniot today? What implications does the production system have for the local carpenters and their income perspectives?
- How is the socio-economic condition of Chinioti carpenters constituted today?
- Which defining features of the caste society were subject to change and what does it mean for carpenters?

This paper is an attempt to better understand the lives of the “unknown carpenters” in the past as well as in the present. It is a sociogeographic analysis of Chinioti carpenters embedded in an analysis of the current nature of the local furniture cluster which frames their livelihoods.

2 Perspectives on the caste system

The caste system is probably the most discussed social phenomenon among social scientists dealing with South Asia's society. When we want to understand the social and economic conditions of carpenters in the Punjab in the 19th and 20th century, the topic of caste plays an essential role. Therefore, this chapter merely attempts to roughly outline the origins of caste, its main characteristics, and the imperial use of it, social mobility and differing perspectives on the system.

2.1 Introducing "caste"

The term "caste" is derived from the Portuguese word "casto" meaning pure or chaste. Using this term, the former Portuguese colonial rulers tried to describe a phenomenon of social segregation and structure in the Indian subcontinent they were unfamiliar from their own culture. Therefore "caste" is not an Indian term but an ascription commonly used to describe the two phenomena of *jati* and *varna*. *Jati* refers to one's birth group and can identify people precisely. There are several thousand *jati* in South Asia and new *jati* emerge steadily. The meaning of *varna* corresponds to the meaning of colour. It can be seen as an ideal and symbolic archetype and a more general term. The reference that is cited most often from the Rig Veda describes four *varna* that emerged from the primordial man Purusha: the *Brahman* (priests) emanated from the mouth (colour: white), the *Kshatriya* (warriors) from the shoulders (red), the *Vaishya* (merchants) from the thighs (yellow) and the *Shudra* (servants) from the feet (black). As the structure indicates, the four *varna* are allocated hierarchically. The first three *varna* belong to the group of the twice-born (*dvija*). Another category is made up of the people that do not belong to a caste (*Harijan*). Several terms refer to groups belonging to this category, e.g. *dalit*, *paria*, *adivasi*, 'untouchables', 'scheduled castes' or 'other backward classes' (Böck & Rao 1995: 112-113; Dumont 1980: 21-32; Bayly 1999: 8-27).

According to Luis Dumont, who refers to the French sociologist Célestine Bouglé, the caste system is mainly based on three pillars. Separation (1) makes sure, that caste members marry only among themselves (endogamy) and that direct or indirect (food) contact is avoided (commensality). Another characteristic pillar of the system is the social division of labour (2), which is passed on from generation to generation. Finally, hierarchy (3) ranks groups as relatively superior or inferior to each other (Dumont 1980: 21). In his famous book *Homo Hierarchicus*, the author Luis Dumont adds that these three pillars rest on one fundamental conception: "the opposition of the pure and the impure" (Ibid.: 33). The pure is superior to the impure, both need to be separated from each other and therefore impure occupations must also be separated from the pure occupations (Ibid.:43).

The occupational specialisations led to complex exchange relations between different *jati*. The term *jajmani*-system was first mentioned in Wisner's "The Hindu Jajmani System" (Wisner 1936); although before Wisner the ethnographical and historical works of Ibbetson (1883: 217) and other British ethnographers already described these relationships without specifying their totality.¹ The *jajmani*-system means a village microcosm where every household, respectively individual, fulfils a function within a community comprising of a structure with fixed relationships. It consisted of a patron, the *jajman*, and a client, the *kamin*. The exchange of services and agricultural produce could overlap with monetised exchanges of goods and labour (Bayly 1999: 195; Commander 1983).

Some see the *jajmani* system as an expression of a hinduistic microcosm with ritual reciprocity. The ritual purity for the *jajmans* is maintained at the expense of defilement for *kamins*. The *kamins* "are at once outside the ritual pale yet essential to the functional pale of Hindu society" (Gould 1986: 272). According to Wisner the system was constituted mainly by harmonious relations based on mutual service (Commander 1983: 285; Dumont 1980: 101). In stark contrast to Wisner, theorists like Beidelman characterise the system as exploitative and feudal (Beidelman 1959). These theorists tend to overlook the ritual aspects as well as ignore that solidarity between *jajman* and *kamin* does not prevent conflict. Orenstein therefore prefers to see the system as socially cohesive (Orenstein 1962). Dumont admits the reciprocity, however he points out that Wisner failed to see the hierarchical feature in it. Dumont states that Wisner idealised the system as a more or less symmetrical system and therefore romanticised the concept of equality within the village community (Dumont 1980: 102-103). Instead, the system "assures subsistence to each proportionally to his status" (Ibid.: 32). Furthermore, Susan Bayly suggests that the relationships between patron and client were not as harmonious as it is implicated in Wisner's representation. For example, the 'untouchable' *kamins* were among the first who died according to the 19th century records of the famines (1999: 195).

2.2 The British use of caste

Especially in the decades following the Indian Mutiny-Rebellion of 1857, the British Administration wanted to expand their social knowledge in order to realise more efficient control and surveillance. Vast amounts of statistical and ethnographic data were produced. In 1871 the all-India decennial Census was launched and in 1891 the first all-India census was carried out. The classified caste tables in the Provincial Census Reports revealed that the "colonial ethnographers regarded caste as a giant ladder of precedence" (Bayly 1999: 125) which is defined by the four *varna* and where every *jati* has a fixed rank inferior or superior to one another. One reason behind establishing these matrices of castes and tribes

¹Wisner catalogued the interrelationships and division of labour between the twenty-four caste groups in the village of Karimpur in Uttar Pradesh and suggested their origin in the earliest Hindu theories of social order and labour allocation (Wisner 1936).

was “to tap into the ‘hereditary’ potential of each caste in the service of the imperial economy” (Nadeem Omar Tarar 2011: 202). The theory of so-called “martial” and “non-martial races” had concrete implications for the recruitment of soldiers for the Indian Army (Bayly 1999: 112). Hierarchy lay at the centre of the imperial structure. The detailed study of indigenous social order “justified the hierarchies on which the imperial edifice rested” (Gilmartin 1988: 12). During the colonial period the barrier between pure and impure castes became stronger, referred to by Bayly as “pollution barrier” (1999: 189). This barrier can also be identified in Ibbetson’s ethnography, and indicators of relative impurity can be found in almost every description of castes, e.g. formulations like “widow marriage” (Ibid.: 100), “touch of the plough” (Ibid: 139), “touching dead skin”, “they feed on [...] the jackal” (Ibid.: 274) or even “eating carrion” (Ibid.: 277). The phrasing that is used by colonial officers to describe the different castes reveals the colonial perception and offends the modern era. For example, “the Arora is [...] a cowardly secretive, acquisitive race” or “all Bowries [...] have been from ages past and are still inveterate and irreclaimable robbers”(cited by Bayly 1999: 99-100).² The colonial language indicates the colonial intention to “civilise” the “primitive” inhabitants of British India and therefore justifies the British authority.

To conclude, the Indian caste system was incorporated by the British administration to achieve their imperial objectives. The establishment of the British Census strengthened the caste system and consolidated the pre-existing social stratification of Indian society (Böck & Rao 1995: 123).

2.3 Caste and social mobility in the development discourse

In the development literature the caste phenomenon, its origins and its effects on the social and economic development of South Asian societies is controversially debated. Historians, anthropologists, sociologists, geographers and other social scientists come to contrasting conclusions.

Some of them view the caste system as an integral part of “traditional” India. The traditional society has been portrayed as a static and closed structurally homogenous system (Prakash 1990: 392, Gusfield 1967: 351-362). The polar opposite of “tradition” is “modernity”. Some see caste as “the major threat to Indian modernity”(Dirks 2001: 3). According to Rostow’s modernisation theory, development is a linear process that follows five distinct stages, beginning with a “traditional” society that “takes off” to become a “modern” society (Rostow 1960). The causes for underdevelopment are therefore endogenous and development efforts must be initiated externally. They have to overcome the rigid and “traditional” caste system and strengthen the individual.

² Further examples of colonial language can be found in Chapter 3.3.

In contrast to that, others underlined the flexible and fluid nature of the caste system. They found out that, to a certain degree, there have always been forms of social mobility in India. They claimed that India has never been a monolithic caste-society and that the simple opposition of tradition and modernity is not appropriate to describe the complex social and economic reality (Singer 1971: 160-163; Gusfield 1967: 351-362). The Indian sociologist Srinivas also suggested that the caste system is not as rigid and immutable as many other theorists claimed. His theory of “Sanskritisation” describes the attempts of lower castes to acquire higher caste status with the help of imitating rituals, religious beliefs, symbols and lifestyles of higher castes. This process of Sanskritisation can’t be separated from the process of “Westernisation”. Those groups, who have a high economic status, are more likely imitated than other groups (Srinivas 1962: 42-62). Like Srinivas, Bernard Barber disagreed with Dumont who described hierarchy based on ritual purity as the only principal of caste. He argued that upward and downward mobility was caused by several external factors, like military conquests and good harvests or famines and by internal socio-structural factors like the concentration or dispersion of property due to single or multiple heirs, differential individual achievement, urbanisation and the opening up of new land. Furthermore, caste ranks are not always so obvious and different castes quarrel over who has higher rank (Barber 1968: 29-35).

Finally, there are authors who see both the durability and the dynamism of caste. According to Aparna Rao the caste system shouldn't be observed as a static system that hinders social mobility per se. The system is flexible in itself, but its main concepts and mechanisms are very persistent and continue to exist in a modified shape as class and caste structures have become increasingly interwoven in recent decades. He underlines the regional differences and suggests discussing different, local caste systems. For instance, people standing outside of the system can be assimilated, but only under the premise of hierarchy. If the so-called “out-castes” are assimilated, they have to enter the lowest stage of the system (Böck & Rao 1995). Susan Bayly also argues that there is not one key theme, like power, purity or orientalism to describe all the aspects of the highly complex caste phenomenon. These principals should not be seen as mutually exclusive. She states that historians have oversimplified caste in “traditional”, “colonial” or “modern”. Instead, caste should be seen as “*a multidimensional story of changing and interpenetrating reference points*”(1999: 365). This paper tries to follow this particular perspective on caste as expressed by Bayly and Rao.

3 Socio-economic conditions of carpenters in Punjab (1849-1947)

3.1 Introducing Chiniot

Chiniot lies on the east river bank of the Chenab and belongs to one of the old towns in the Punjab that existed long before the British annexed the Province in 1849. One of the earliest existing references about Chiniot dates back to the 15th century, when the first Mughal Emperor Babur mentioned the country of Bhera, Khushab, Chenab and Chiniot, that was long in the possession of the Turks (PG 1884: 37). The town's most prosperous era was probably during the Mughal Empire in the 17th century. The Chiniot-born physician, Nawab Sadulla Khan Tahim, became Governor of Lahore and a Minister of Emperor Shah Jahan. It was Shah Jahan who also gave him the title 'Wazir Khan'. Wazir Khan was in charge of constructing the Wazir Khan Mosque in Lahore in 1634-35 and most likely for the Shahi Mosque in Chiniot in the 17th century as well (Ibid.: 167-168). After the Mughal Era, the town suffered considerably from Durrani invasions before it became part of the Sikh Empire in 1748 until 1848. It belonged to the British Administration from its annexation in 1849 until partition in 1947. Two historic population censuses under the British Administration recorded for 11,477 inhabitants total in 1868 and 17,513 people in 1921 (PG 1930a: 161).³ Administratively, Chiniot and the surrounding villages were historically classified as a *tehsil* belonging to the Jhang District of the Punjab Province of the Multan Division. However, the *tehsil* boundaries changed several times during history, also partly due to the creation of the new Lyallpur District in 1904.

3.2 The establishment of Canal Colonies in the Punjab

The demographic and economic development of old towns like Chiniot, Jhang and Bhera was strongly influenced by the operations of the British Administration in the 19th and 20th century. In 1929, the British Administration noticed that Chiniot "*has risen rapidly in importance in the last 20 years, more especially since the opening of the Chenab Canal, which irrigates land up to its doors*" (PG 1930a: 160).

While the land strips along the rivers (*hithar*) in Punjab have been inhabited and cultivated for a long time, the central parts between two of the rivers (*bar*) were large areas of wasteland with insufficient rainfall for cultivation. The only people inhabiting the *doabs* were the semi-nomadic *janglis*. In the "wastelands" of the *doabs* the British established one of the world's largest irrigation systems with water from the rivers Indus, Jhelum, Chenab, Ravi and Sutley and thus transforming six million acres of wasteland into the subcontinent's richest farming area that produced large amounts of agricultural surplus.

³Population according the censuses in between: 10,731 (1881), 13,476 (1891), 15,685 (1901) and 14,085 (1911).

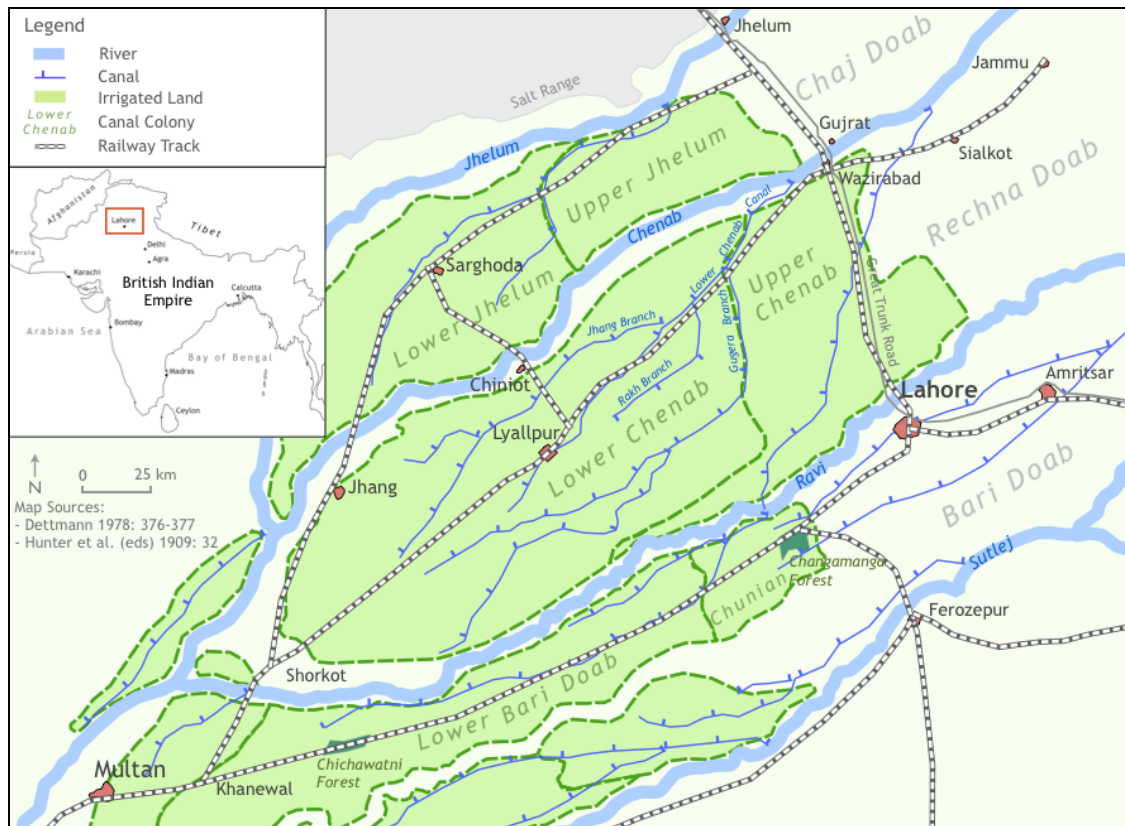
According to Dettmann, there are three main reasons why the British decided to start agricultural colonisation in the Punjab. Firstly, they wanted to relieve population pressure from Districts with higher population in the province by relocating people to the new colonies and offering them agricultural land. Secondly, food surplus production should protect against droughts and famines. Thirdly, new tax sources could be exploited and should increase the state revenue (1978: 384; Talbot 1988: 38-41).

The whole process of constructing irrigation canals and establishing the canal colonies took around fifty years comprising of nine colonisation projects.⁴ After two smaller colonisation projects started in the 1880s, the largest canal colony was established on the Rechna Doab between the rivers Chenab and Ravi. The Lower Chenab Canal Colony was built during the years 1892-1905 in three stages with further extensions in the late 1900s and mid-1930s. The main canal was subdivided into three comprehensive networks along the Rakh, Jhang and Gugera branches, irrigating more than two million acres of land. The mastering of technical problems was an engineering breakthrough making the project a “*turning point in the economic history of the Punjab*”(Malcolm Darling, cited by Dettmann 1978: 388). Wheat, the primary agricultural crop accompanied to a lesser extent with cotton, maize and sugar-cane (PG 1905: 77).⁵

The creation of the Canal Colonies was closely linked to the emergence of the Punjab as the main recruitment centre for the Indian Army in the late 19th century (Talbot 1988: 41-46). Within a few decades the composition of the Indian Army changed rapidly. Whereas in the 1870s the main recruiting areas were still Bengal, Madras and Bombay, in the First World War the Punjab accounted already for almost two-thirds of the Indian Army's total strength. In addition to the “Punjabisation” of the Indian Army, large areas of land were set apart for horse breeding and cattle for the Army. The loyalty of the rural population, from which the Indian Army recruited most of their soldiers, was of high importance for the British in order to defend their Empire. The creation of the Canal Colonies “*gave the Punjab Government an almost inexhaustible supply of patronage*” (Ibid.: 58) to satisfy their local allies. For example, former soldiers were awarded with lucrative grants of land in the colonies (Ibid.: 40).

⁴ The nine colonisation projects and their main periods of construction are: Sidhnai (1885-88), Sohar Para (1886-88), Lower Chenab (1892-96), Chunian (1897-98, 1904-05), Lower Jhelum (1902-05); Triple Canal Project: Lower Bari Doab (1912-22), Upper Chenab (1915-19), Upper Jhelum (1916-21); Nili Bar (1925-33); (Dettmann 1978: 376).

⁵ In some colonies, irrigated forest plantations were planted, the largest were Changamanga in Chunian and Chichawatni in the Lower Bari Colony (see Map 3.1).



Map 3.1: The Punjab and its Canal Colonies in the late 1920s

Draft: own design

By the late 1920s, the canal colonies produced one third of India's wheat. A great bulk of wheat was available for export to other provinces within British India or to Europe. It was transported straight down with the Wazirabad-Khanewal railway, opened in 1900, to Karachi and from there to Bombay or Europe. While the canals increased the productivity of land, the railway realised access to new markets. *"The canals made the Colony possible, but it was the railway which made it a success"* (PG 1905: 118). Several factories were built along this railway line to further process agricultural products. The centrepiece of the colony became the entirely planned city Lyallpur⁶, located 38 km south-east of Chiniot. The town rose quickly in size⁷ and *"became an important market centre, overshadowing older towns like Jhang and Chiniot"* (Ali 1997: 346). However, the Punjab Gazetteer stated in 1907 that Chiniot *"has benefitted by the Chenab Canal and does a large trade in wheat, cotton, and other agricultural produce"* (PG 1907b: 217). A metalled road was built leading from Chiniot to Chiniot Road, which was one station of the

⁶ today Faisalabad

⁷ In 1911, Lyallpur had already 19,578 inhabitants - more than Chiniot. Thirty years after its creation, the whole district had already one million inhabitants.

Wazirabad-Khanewal railway. In 1928, the railway from Chak Jhumra to Chiniot was opened (see Map 3.1).

Huge areas of new canal-irrigated land were disposed to grantees according to certain criteria. The land was almost entirely allocated to 'agricultural castes', like *Jats*, *Arains* and *Rajputs*. The grantees brought their *kamins* with them to the new canal colonies, and as a result reproduced the social organisation and stratification of their older villages to the *chaks* of the canal colonies. The land allocation also had the effect of strengthening the upper stratum of the rural society and weakening the position of the rural poor and landless. By consolidating the position of those who were already dominant in the society and gaining their loyalty, the British Administration nurtured their 'entrenchment' within the society of Punjab (Ali 1988: 51; Ali 1997: 347-348).

The colonisation projects in the Punjab were an "*interventionist imperialism, extensively engaged in demographic and economic change*" (Ali 1988: 10) affecting also the older towns like Chiniot and Jhang. The economy of the Punjab was integrated into the world market due to the British colonisation projects, its communication systems and its policy. By doing so, the British became the major catalyst of the globalisation process affecting the lives of the Punjabi people until today. However, this economic change "*turned out to be deeply rooted in social continuities*" (Ali 1997: 348).

3.3 Ibbetson's perception of "castes and tribes" in the Punjab

The British census officer, and later governor of the Punjab, Sir Denzil Ibbetson, was responsible for the first official colonial ethnography of the Punjab, published in 1883. It depicts the "castes" and "tribes" in a remarkably detailed and comprehensive way (Ibbetson 1883). It would be too simplistic to justify his detailed description of the social stratification of Punjab society as merely based on a static hierarchical concept. Bayly even acknowledges the portrayal of the first signs of a modern and regionally based Indian anthropology, because Ibbetson describes the continual process of shifting and realigning of caste rank. He remarked that Punjab's rural population had much non-caste like features that were not in line with the then colonial perceptions of caste. However, this did not prevent Ibbetson from playing an active role in Britain's imperialistic efforts in the Punjab (Bayly 1999: 139-140). An elective of several social groups are presented below in the hierarchical order described by Ibbetson. At the top he identifies castes that were part of the "*land-owning and agricultural, and the priestly, mercantile and professional castes*" (Ibbetson 1883: 289).

The *Syeds* claimed to be descendants from Ali, the son-in-law of the Prophet Mohamed and were therefore named a "priestly class". Many were landowners on a large scale who mostly didn't cultivate their own land. They enjoyed considerable political importance

during the latter days of the Mughal Empire. At least in the West Punjab, *Syeds* capitalised on their “supposed saintliness”. Apparently many people claimed to be *Syeds* in order to benefit from the high status implied by the clear genealogic reference to Islam, but they didn’t belong to the “true stock” of *Syeds*. Furthermore, there were many different divisions among the *Syeds* (Ibbetson 1883: 222). In addition, the *Syeds* of Chiniot acquired large amounts of landholdings. They had been favoured by the British Government and were consequently able to acquire many political positions (f.e. *zaildar*). The *Syeds* “rendered good service in the Multan campaign” (PG 1930a: 46), when the British fought against the Sikh Empire. For that reason, “they were fully rewarded by the British Government” (Ibid.: 63).

Table 3.1: Hierarchical Categories of selected Punjabi castes as seen by Ibbetson

Caste Name (<i>jati</i>)	Caste Category used by Ibbetson (1883)
Syed	priestly caste
Khatri Khoja	mercantile castes
Rajput Jat Arain	agricultural & landowning castes
Machhi Tarkhan Lohar Kumhar Julahe Mochi	menials ----- leatherworkers & weavers
Changar	vagrants & criminals
Mirasi	gypsies
Musalli, Chuhra	sweepers

Draft: own design based on Ibbetson 1883

The main occupation of the *Khatri* was trade, and as Ibbetson puts it “no village can get on without the *Khatri* who keeps the accounts, does the banking business and buys and sells the grain” (1883: 247). They claimed to be direct representatives of the *Kshatriya* but Ibbetson doubts the validity of this claim. The majority of them were Hindus and apart from trade they held important administrative positions. Still, the majority of them were Hindus (Ibid.). In Chiniot, *Khatri*s showed their wealth by inhabiting houses with intricately carved wooden doors and windows (PG 1930a: 162). Another business group was the *Khoja*. Like the *Khatri*, Ibbetson classifies the *Khoja* as a “mercantile class”. Any Hindu trader converted to Islam was given that title. In the case of the Jhang District, the *Khojas* were said to be converted *Aroras*, who were also a “mercantile class” with slightly lower status than the *Khatri* (Ibbetson 1883: 252). In the late 19th century, the wealthiest traders in the district Jhang are said to have been *Khoja* merchants. In Chiniot they lived in lofty and commodious houses and they had large business dealings with Amritsar, Calcutta, Bombay and Karachi trading items such as hides, leather, bones, cotton and wool (PG 1930a: 69, 128, 167-168). They could benefit during times of famine because they did “an enormous business in the skins of cattle which had died from starvation” (PG 1905: 24). They are characterized by the British as “notorious for enterprise and unscrupulousness” (Ibid.: 24) and “noted for their business aptitude and rapacity” (Ibid.: 56). The Jhang District Gazetteer of 1929 mentions a wealthy *Sheikh* from Chiniot, *Sheikh Umar Hayat*, who had a large building constructed (PG 1930a: 160). It is

very probable, but cannot be taken for granted, that this specific Sheikh and other Sheikhs from Chiniot are the same group as the *Khojas* mentioned in the District Gazetteers.⁸

Among the agricultural castes were the *Rajput*, the *Jat*⁹ and the *Arain*. According to Ibbetson, the Rajputs did not cultivate their land and tended to look down upon all manual labour (1883: 132). He stated that the *Jats* were in many ways very similar to the *Rajputs* but of a lower rank “because he practices widow-marriage” (Ibid.: 103). However, he ranked them slightly higher than the *Arain*. The very numerous *Jats* cultivated the land by themselves and from an economical and administrative point of view, the *Jats* were “the revenue-payer par excellence of the Province” (Ibid.: 100-101). As mentioned above, these agricultural groups were provided the lion’s share of the allotment of newly irrigated land.

Under these above-mentioned groups Ibbetson saw “the lowest strata of Panjab [sic] society”, which is composed of “the vagrant and criminal tribes, the gipsies, the menials, and the artisans” (1883: 289).

The *Machhiare* characterised as the “highest of the menials” performing a considerable variety of jobs. They were especially concerned with water as they were the watermen, fishermen and well-sinkers. Beyond this, *Machhis* were involved in agricultural labour and they worked as cooks, midwives and basket-makers, among others (Ibbetson 1883: 307). The *Tarkhan*¹⁰ were the carpenters and wood-workers in the province (described in detail in the next Section 3.4). *Lohars* worked as blacksmiths - they made the iron implements for agriculture. In some places of the Punjab the *Lohar*’s work was not to be distinguished from the *Tarkhan* - both produced and mended agricultural implements. For example in Hoshiarpur, the *Lohar* and the *Tarkhan* formed only a single caste, the *Lohar-Tarkhan* (Ibid.: 309-312). Some considered the *Lohar* to be impure and Ibbetson discussed the possible reason for that - maybe because they used leathern bellows or because of the dark colour of the iron materials they worked with (Ibid.: 312-313). The *Kumhars*, the potters, made earthen vessels and worked also as petty carriers. Ibbetson classifies them as “far lower than the *Lohar*” (Ibid.: 315-316). Referring to each of the latter four groups, Ibbetson uses each time the term “true village menial” that receives “customary dues”. What he described, according to their economic and social interaction would later become known as the above described *jajmani* system.

The following two castes belonged to the “Leather-workers and Weavers”. The *Julah* were the weavers (Ibid.: 302) and higher than the *Mochi*, who worked in leather and/or produced and mended shoes. The *Mochi* were considered impure because of their occupational duties treating the hides of dead animals (Ibid.: 300-301).

⁸ Source: Email conversation with Georg F. Pfeffer (September 18th, 2012).

⁹ The term *Jat* here should not be confused with *jati* = birth group.

¹⁰ The *Tarkhan* were better known in some provinces as *Barhai* (North-Western Provinces), *Barhi* (Jumna districts) or *Khati* (Eastern Plains).

A similarly lower status was ascribed both to both the “Gypsies”, like the *Nat* and *Qalandar*(Ibid.: 284-290) and to the “Vagrants and Criminals”,like the *Sansi*, *Changars* and *Od* (Ibid.: 271-284). It is hard to determine whether Ibbetson saw the *Mirasi*¹¹above or below these groups, but he sees themcertainly “*exceedingly low*”(Ibid.: 234).*Mirasis* were occupied as genealogists, musicians and minstrels.

Situated at the bottom of the society were the scavengers or sweepers, which were the Hindu *Chuhra* in the east or the Muslim *Musalli* in the western part of the Punjab. They stood “*at the foot of the social ladder*” (Ibbetson 1883: 290)and were seen as “*the lowest of the low*”(Ibid.). Ibbetson supposed they were of aboriginal origin and therefore had darker skin. They swept the houses and streets, cleaned the sewage, distributed manure and dug graves. They were associated with keeping or eating impure animals, like pigs, fowls, jackals, lizards and tortoises as well as with eating the flesh of animals that had died of disease or natural death. However, they played an important role in the agricultural labour of the Punjab. Some sweepers tried to abandon their occupation and status and started to work as leather-workers or weavers and “*by doing so have mounted one or even two steps in the social grades*” (Ibid: 293).

3.4 Caste characteristics of the *Tarkhan*

According to the British Census of 1881, there lived 8,419 *Tarkhan* in the Jhang District making up 2.1 percent of the total district population. Their major tribes were *Dhaman*, *Khokhar*, *Khatti*, *Bhatti* and *Janjoa* (Ibbetson 1883: 313).

The social stratification of Punjabi society in the 19th century, as described in the previous subsection, makes apparent that the *Tarkhan*’s position in the society was of low status. Ibbetson placed them on the second position of the village menials directly under the *Machhi*. The *Tarkhan* was considered distinctly lower than the agricultural castes, but still higher than other menials like the weavers or leatherworkers, who were seen as ‘impure’.

Despite of the *Tarkhans*’ low status, they were an important part of the rural *jajmani* economy with its social division of labour. The following citation aptly depicts the hierarchical reciprocity of *Tarkhan* and the agricultural social groups in the rural society in the end of the 19th century: “*Village servants they are, and occasionally have to endure rough treatment and hardships, but they are a far too valuable element in the village community for the lambardar or proprietors to oppress them in any extraordinary*

¹¹ To be precise, the *Mirasi* was classified among the “Minor Professional Castes” in the category “Religious, Professional and Other Castes” that comprised of a heterogeneous collection of castes that are left after separating the “Landowning and Agricultural Castes” from the “Vagrant, Artisan and Menial Castes” (Ibbetson 1883: 230-235). In fact, the highest-ranked *Syed* belonged to this category too (Ibid.: 214-223). The *Qazi* belonged also to this category, they were the Muslim lawyers and the *Ulama* tribe, a priestly caste (Ibid.: 224). In Chiniot most of the *Qazis* lived in the the Mohalla Qazian, owned land in and around the town and “the *zaildari* is with the *Qazis*” (Punjab Government 1930a: 161).

manner” (PG 1884: 91). Some saw the carpenter as “*the most important menial*” because “*the carpenter’s presence is often urgently needed*”. Therefore a farmer had “*to keep on good terms with his carpenter*” (PG 1930b: 193).

The *Tarkhan’s* duties were the production and maintenance of wooden agricultural implements, such as ploughs, pitchforks and the handles of sickles and spades. These and household furniture they maintained without financial payment. Carpenters also fulfilled customary obligations at times during life-cycle ceremonies. They made toys when a child was born and they shaped the wood required for wedding ceremonies. For both they received a small compensation. For their service at funerals they were not rewarded. However, the production of carts, Persian wheels and sugar-presses were not part of their customary service duties. They were also paid for the construction of roofs and doorways in the Colony. Their patrons supplied the *Tarkhan* with the wood (Ibbetson 1883: 313; Sharma 1997: 498; PG 1905: 102). The main production units were families and sometimes small collectives of families (Roy 2000: 27).

Notions of separation between *Tarkhan* and other castes are found in Ibbotson’s ethnography as well: “*Till quite lately Jats and the like would smoke with him though latterly they have begun to discontinue the custom*” (Ibbetson 1883: 313). This observation illustrates the barrier of commensality. Another account is the discussion about the *Tarkhan’s* similarity and difference to the *Lohar*. On the one hand, in most parts of the Punjab, these two castes intermarried. But on the other hand, Ibbetson points out their difference when he says that their rank differs and that the *Lohar* is slightly impurer (Ibid.: 309-312).

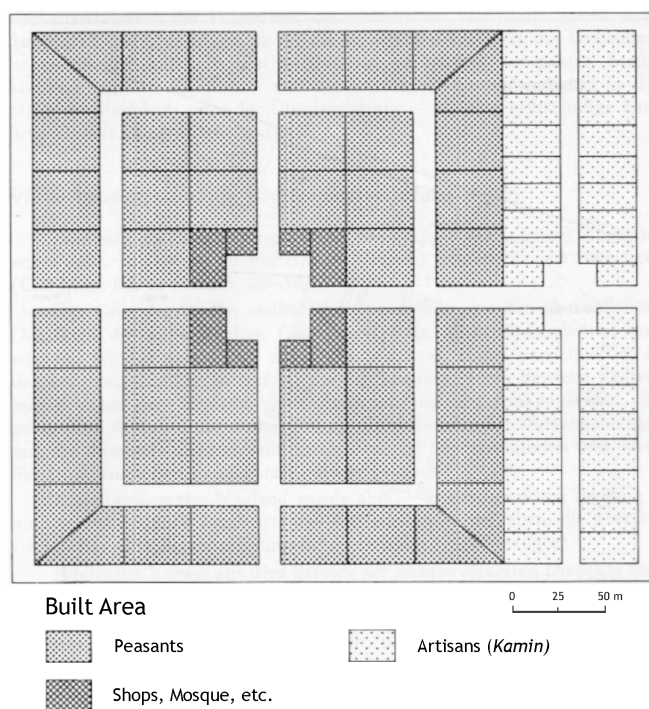


Figure 3.1: Separation of artisans in a village plan in Lower Bari Doab Canal Colony

Draft: modified after Dettmann 1980: Appendix

Furthermore, the *Tarkhans’* living quarters within villages, towns and cities were separated from the other social groups. In the planned villages of the Lower Chenab Colony, the *Tarkhan* were assembled with the other service groups in a separated neighbourhood at the edge of the village (see Figure 3.1). In doing this, the Imperial Administration was attempting to replicate the social structure of the traditional villages as perceived by the

British within the colonies by allocating distinct places to certain social groups (Dettmann 1980: 395). In Chiniot, carpenters lived inside the Mohalla Tarkhana, which was the edge of the town in those days.

3.5 Wood workers in the Punjab

Woodcarving was carried out in every district and it was in the towns and cities of the Punjab where the skills of woodcarvers accumulated. Carpenters in the workshops (*karkhanas*) of the urban areas generally produced more refined products than those in the rural areas -urban work was of a more artistic character. They worked on architectural features with ornate decorations on prestigious buildings for wealthier customers, like doors (*chaukats*), doorways, pillars, balconies (*jharokas*) and the typical Punjabi lattice work (*pinjra*). Originally, these urban skilled crafts were especially to be found in cities of the Mughal heartland, such as Lahore, Agra, Delhi and Multan. Later they were dispersed to other places all over India as a result of political decentralisation in the 18th century (Roy 2000: 28). A “provincial reputation” was ascribed to the work of carpenters in Amritsar, Batala, Bhera, Chiniot, Hissar and Hoshiarpur (O’Dwyer 1890: 35).

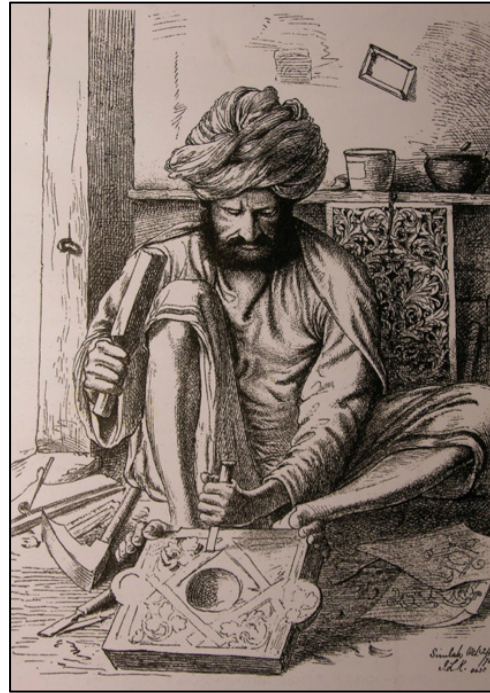


Figure 3.2: A Punjabi Woodcarver

Source: Kipling1888a: 43

3.5.1 Chinioti artisans

The carving skills of Chinioti artisans caught the attention of the British: “*Chiniot [...] has long had a reputation for its carpentry and wood-carving. [...] The design of this really admirably work, though ornate and tending, like many other branches of modern Indian art, to excessive minuteness, is still remarkably pure and good. The carving is sharp and clear*” (PG 1884: 129). Giving an overview of Punjabi wood manufacture, O’Dwyer concluded about Chiniot: “*The work done at Chiniot is perhaps the most refined as well as the most artistic carving executed in the Punjab*” (1890: 35). Their work could be seen not only at architectural features of several *havelis* of *Khatri* and *Khoja* traders, but also at the *tazias* made in the 1920s, which are still used for the *moharram* processions (Abbas 2007). The Umar Hayat Mahal built by Sheikh Umar Hayat was celebrated as an “*architectural wonder*” comprising of massive wooden decorations (PG 1930a: 160). The following box deals with the present use of the works former artisans left behind.

Box 3.1: The decay of architectural heritage and the antique trade

Today, there are very few antique wooden features left in the old cities of the Punjab. The decay of several hundred years of architectural heritage is due in part to a lack of preservation efforts by public authorities and by the antique trade.

Apart from the Lahore Museum, where some fine examples of woodcraft from Bhera, Chiniot, Jhang and Multan are shown, there are still no appropriate efforts by public authorities to preserve at least some of the last witnesses of a once glorious period of architecture and craftsmanship in the Punjab. During the time of the field survey, the heavily decaying Umar Hayat Mahal in the Old City of Chiniot was in the process of being “restored” by the District Coordination Office - unfortunately without applying appropriate restoration techniques and in a way that strongly changed the original style of the building.

The antique wood trade in Punjab flourishes and attracts many traders, smugglers and Westerners. An important trading hub of antique woodwork in Pakistan is Peshawar, where also wood-crafted items from other regions, e.g. Swat, are resold. Traders from Peshawar regularly visit the old city of Chiniot to buy historic wooden structures from its inhabitants. Finally, most of the items end up in Western countries, sometimes incorporated into new furniture.

The biggest of four antique traders in Chiniot speaks openly about his kind of work and his dilemma: *“I was born in Chiniot and learnt the antique trade from my father. During the last decades I have seen and sold the most beautiful wood-carved doors, frames, jharokas and old furniture. I estimate already 90 percent of historic wooden architectural structures have left Chiniot. If the trade will continue in the same pace, nothing will be left in 10 or latest 20 years. It hurts my heart to see how my customers buy our rich heritage for just a few rupees. I feel guilty because I sell the soul of my own city. But what should I do? If I quit my job another one will do the trade in my place and I will be a poor man.”*

The antique wood trade benefits from the fact that many of the old *Khatri* and *Khoja* houses are inhabited by low-income households today. They are more likely attracted by a good bargain with a trader instead of idealistically preserving the cultural heritage of the buildings they don't identify with. In order to preserve these historic structures, incentives by the public authorities for the inhabitants of these households are needed.

3.5.2 The emergence of furniture in South Asia

The cultural contact between skilled crafts and the British yielded not only new styles in architecture, but also new styles of interior decoration and furnishing for urban consumers. While ‘knick-knacks’ and smaller articles suitable for exportation were subjected directly to the foreign influence, the architectural wood-carving *“has managed to maintain its purity in spite of decline”*(Maffey 1903: 11). In fact, furniture was absent in Indian homes before the British. But at the end of the 19th century, almost all the new palaces of the princely states were equipped with furniture and décor imported from Europe. Not only the Maharajas, but also Indian elites and English-educated government servants used Western furnishings and fine arts as markers of distinction in the reception rooms of their upper-class homes. They were most often manufactured in workshops near the railway

(Birdwood 1880: 273-275; PG 1907a: 82; Roy 2000: 140; McGowan 2009: 125-126). In the Mayo School of Art Kipling and his students developed new types of furniture with hybrid design that combined European with Indian characteristics (Naazish Ata-Ullah 1998). Some colonial officers travelled to key centres of Indian craft production, offered design advice to the artisans and invented new product lines. O'Dwyer reported that in every district station and cantonment, "*furniture after the European pattern*" (O'Dwyer 1890: 37) was made. For example, the manufacture and trade of Gujrati¹² furniture was started by a British, a former Deputy Commissioner, and more than half of its produce was exported to other districts (Ibid.).

However, furniture and woodcraft played a minor role in the overall economic strategy of the Punjab within the British Indian Empire. Only few colonial officers, travellers and art enthusiasts dealt with Indian woodcraft and its related questions of production systems, markets, apprenticeship, artisan castes and carpenters' livelihoods (Maffey 1903: 32).

3.5.3 Apprenticeship

The transfer of artisanal skills, especially among Muslims, was realised through a master-apprenticeship system. The 'master artisans', also called *ustads*, were the key figures in this system. It enabled them to control the graduation of their apprentices into masters and thereby into potential competitors. While in medieval Europe the authority of masters was exercised by near-formal institutions like guilds, there seemed to be an "ideology of competence" in its place in South Asia. The *ustad* was "*a powerful term in the north Indian urban craft milieu*" (Roy 2000: 143).

The British Rule tried to influence also the apprenticeship system. A key role in this process in the Punjab had the British illustrator and art teacher John Lockwood Kipling, a South Kensington graduate influenced by the Arts and Crafts Movement. He was appointed the first Principal of the "Mayo School of Arts"¹³ in Lahore in 1875, became the curator of the Lahore Museum, organized several exhibitions and founded the "Journal of Indian Arts and Industries" (JIAI). According to him the object of the Mayo School of Arts in Lahore was "*to revive crafts now half forgotten*" and to "*attract the communities of hereditary artisan castes, the traditional bastions of artisanal industries of Punjab*" (Kipling, cited by Nadeem Omar Tarar 2011: 211). Compulsory subjects in the first three grades were woodcarving, lithography, and copper etching. Afterwards the students were assigned to their hereditary trade by their teachers and they were not allowed to choose subjects beyond their caste lines. Kipling's best scholar was Bai Ram Singh, a *Tarkhan*, who later designed, for example, the Lahore Museum, the "Mayo School of Arts" and the Punjab

¹²Gujrat is today one of the biggest cluster of furniture manufacturing in Pakistan.

¹³The former "Mayo School of Arts" is today the National College of Arts (NCA).

University, and became the third Principal of the school (Nadeem Omar Tarar 2011: 212-213, Naazish Ata-Ullah 1998: 76).

3.5.4 Migration of Chinioti artisans

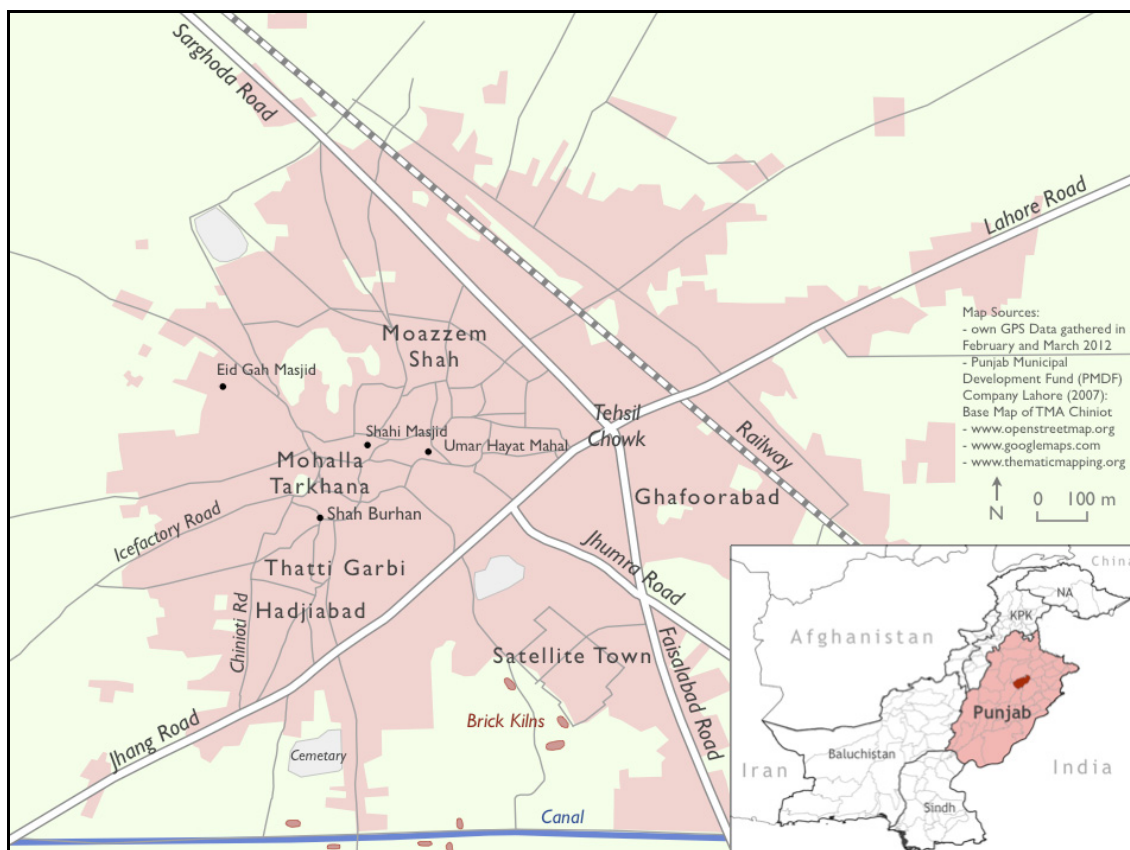
The skills of Chinioti woodcarvers and other craftsmen played a role beyond the *karkhanas* of Chiniot's Mohalla Tarkhana long before the British annexed the Punjab Province. Not only was the architect of the Sikh Golden Temple in Amritsar from Chiniot, but also "*some of the most talented workmen*" (Kipling 1888b: 69). Chinioti artisans helped building the Wazir Khan Mosque in Lahore and most likely participated in the construction of the Taj Mahal in Agra (PG 1884: 168; PG1907b: 217;PG 1930a: 129).

The migration of Chinioti artisans continued during British rule. Kipling notes that "*clever designers*" from Chiniot "*find employment in other towns of the Province*" (Kipling 1888b: 69). Additionally, Maffey reports repeatedly about artisans from the Punjab who perform their work in the Southern Districts, Lucknow Division and Faizabad Division without further specifying the names of their places of origin (Maffey 1903: 15, 22, 23 and 28).

4 Study area and methods

4.1 Introduction of the study area

The Pakistani Census in 1981 recorded 105,559 inhabitants of Chiniot City and in 1998 a total of 172,522 people (GOP 2000: 58). This figure has probably risen to about 200,000 inhabitants at present. The administrative status as a *tehsil* changed in 2009, when Chiniot became an own district comprising of three *tehsils*, namely Chiniot, Lalian and Bhawana. The *tehsil* Chiniot currently consists of eight union councils.



Map 4.1: Selected streets and mohallas of Chiniot

Draft: own design

The empirical study was carried out with an emphasis on the areas in Hadjiabad, Mohalla Tarkhana and Moazzem Shah (see Map 4.1). Spatial accumulations of relevant actors are shown in the Maps 5.1 and 5.2 below.

4.2 Empirical approach

The below discussed interviews listed under Subsection 4.2.1 and 4.2.2 were carried out with the help of an interpreter, who is an English-teacher. The interviews listed under Section 4.2.3 and the transect walks (Section 4.2.4) were carried out alone. All interviews were conducted in February and March 2012.

4.2.1 Semi-structured household interviews

First of all, 50 semi-structured household interviews with carpenters were carried out in Chiniot. The household interviews, which lasted approximately between 30 to 60 minutes, constitute the most important source for the findings presented in Chapter 6. Questions about household structure, income, apprenticeship and social groups among others were asked. An emphasis was placed upon carpenters specialised as carvers and upon those who work near Chinioti Road. 26 of the interviewees worked as carvers, eleven as fitters, six as turners, four as polishers and three as jigsawyers. 20 of these carpenters work on Chinioti Road (16 in Mohalla Hadjiabad, four in Mohalla Thatti Garbi), seven in Moazzem Shah, four in Mohalla Tarkhana and the rest distributed in 13 different *mohallas*.

This study defines a carpenter as a skilled worker who generates his income through an important contribution to the final appearance of the product. This includes manual wood workers (carvers), mechanised wood workers (fitters, turners, jigsawyers) and the polishers and upholsterers. The term does not include the daily labourers in the sawmills.

A household is defined as a group of individuals living under the same roof with a shared household economy. A “nuclear family” is defined as a married couple with children. The “head of household” refers to the male head of the dominating nuclear family.

4.2.2 Interviews with relevant actors in the cluster

Interviews with 15 workshop owners, eight sawmill owners, five showroom owners and one wood-trader from Kacha Kho (Khanewal District) were carried out. These interviews typically lasted between 15 and 45 minutes. They have been particularly important in understanding the production sequence described in Chapter 4. Further interviews with indirect actors were conducted, namely with *onerairiwala* (donkey cart driver), *onesawdusttrader*, *oneantiquedealer* and *onescrapdealer*.

4.2.3 Expert interviews

Further interviews were carried out with experts from different fields. Within Chiniot, the following experts were interviewed: The teacher and founder of the private English school PACE, the Tehsil Municipal Officer (TMO) of the Tehsil Municipal Administration (TMA), the

District Coordination Officer (DCO), the Social Welfare Officer of the District Office and a self-employed architect.

Outside Chiniot, the following people were consulted: an employee of the Lahore Museum, the Director of the Punjab Forest Research Institute (PFRI) in Faisalabad, the Director of Marketing of the Punjab Forest Department (PFD) in Lahore, three employees of the World Wide Fund (WWF) in Lahore and one in Changamanga, the CEO of the 500-employee company WORKMAN Furniture in Lahore, an employee of the Small and Medium Enterprise Authority (SMEDA) in Lahore and two employees of the Punjab Small Industries Corporation (PSIC) in Lahore.

4.2.4 Observations and mappings

Observations and mappings were carried out in almost all neighborhoods of Chiniot in irregular intervals during the course of the two and a half months with the help of a GPS device. The data for the Maps 5.1 and 5.2 was gathered in the period of time between March 24th and 28th.

Mere observations were conducted during a one-day trip to Changamanga, a one-hour transect walk through Lahore's furniture industry near the Shezan Factory and a half-day excursion to a timber auction in Faisalabad.

5 Analysing furniture production in Chiniot

5.1 Introducing the product and its market

The vast majority of woodwork produced presently in Chiniot is furniture.¹⁴ Contrary to the past, wooden architectural features are no longer produced. The city has a good reputation throughout the country as the centre for high-quality wooden furniture. Many customers desire furniture “made in Chiniot” with its typical woodcarvings. One can say that the name of the city functions like a brand - but instead of one company owning the brand it is thousands of different small scale actors who contribute to and benefit from the label “Chinioti Furniture”. The main product produced in Chiniot is wooden bedroom furniture comprising of a double bed, two bedside tables and one dressing table. Very often, the back of a bed, the *taj*, is equipped with richly carved features like floral or geometrical patterns (see Figure 5.1). The second most produced type of furniture are sofa sets for the living room composed of two one-seat sofas, one three-seat sofa and one coffee table. Minor products include chairs, household and religious accessories, children toys, low chairs (*peehra*) and *charpois* among others.



Figure 5.1: Chinioti bedroom furniture (front view)

Source: Madina Furniture House (no date given)

The customers are mainly well-to-do Pakistanis that buy the products primarily for weddings. Therefore products are mainly bought in the winter - the wedding season. Before her marriage, the bride visits a showroom with her father and possibly other relatives and friends. While the bride decides about the design for her future bedroom furniture, her father bargains with the showroom owner. Customers buy Chinioti furniture either in Chiniot or in showrooms in Lahore, Islamabad, Karachi and other Pakistani cities.

¹⁴ There are only a few workshops in the north-west of the city that manufacture the wooden bodies for the typical Pakistani trucks.

Although there are no existing figures concerning the sales of Chinioti Furniture, the perception of workshop owners, showroom owners and carpenters is that the demand is rising and therefore the furniture production in Chiniot will increase in the future.

5.2 Introducing the furniture production system

The Chinioti furniture production system consists of a large network of specialised actors linked by a vast number of varying business relations and material flows. The different actors are mostly small-scale informal family businesses that tend to spatially concentrate according to their specialised business nature.

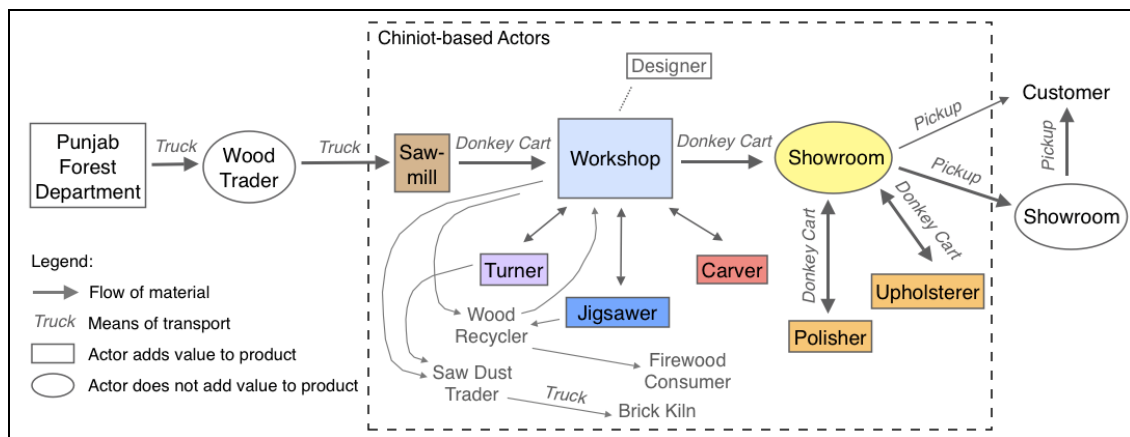


Figure 5.2: Model of the Chinioti furniture production sequence

Draft: own design

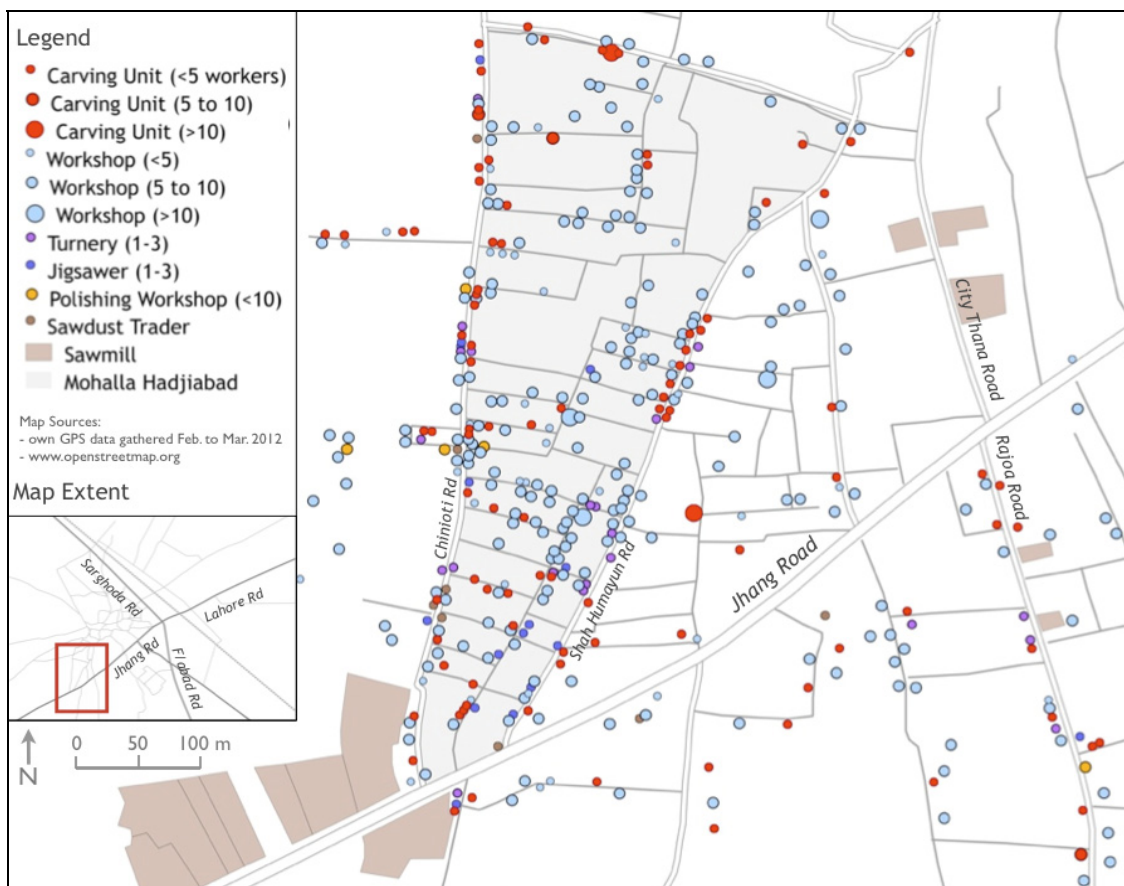
Figure 5.2 shows a model of the production sequence of Chinioti furniture “from the tree to the customer”. It shows all typical major actors of the furniture production sequence and their function within the system. Section 5.4 will introduce each actor and explain their role within the system.

5.3 Scale and spatial accumulations of production

The scale of the furniture industry in Chiniot is subject to contrasting estimations. Some say there are 33,000 so-called “furniture manufacturing units” (PSIC 2010). Others estimate it to consist of between 500 and 600 “small units” and 3,000 to 4,000 “micro units” employing more than 30,000 carpenters comprising of 12,000 carvers (SMEDA 2006: 28). The figure mentioned by Arif Hasan, of more than 100 workshops employing 2,000 skilled artisans, is indisputably far too low (Hasan 2010: 46-47). However, no official figures and estimations exist concerning the magnitude of showrooms.

This paper distinguishes a workshop from a small production unit, whereby the former is defined as having the capability to assemble all the different components to produce

furniture in a raw (or unpolished) shape. In contrast, a small production unit produces only certain parts of furniture and sells these parts to a workshop. The neighbourhood with the highest density of workshops and small production units is most likely Mohalla Hadjiabad, located between Chinioti Road and Shah Humayun Road on an area of merely 8.3 hectare(see Map 5.1). There are 140 workshops (23 small-sized, 115 middle-sized, 2 big-sized), 44 carving-units (42 small-sized, 1 middle-sized, 1 big-sized), 10 jigsaws, 9 turneries and 1 polisher.¹⁵Therefore it is very probable, that there are more than 1,000 carpenters working in Mohalla Hadjiabad alone, which means a density of at least 120 carpenters per hectare. The prevalence of 6 sawdust traders is also an indicator of the high volume of furniture production. Furthermore, the biggest sawmills of the approximately 40 sawmills in Chiniot are located close to Hadjiabad on Jhang Road (Map 5.1). Further sawmills are to be found along City Thana Road and a street called Icefactory Road.

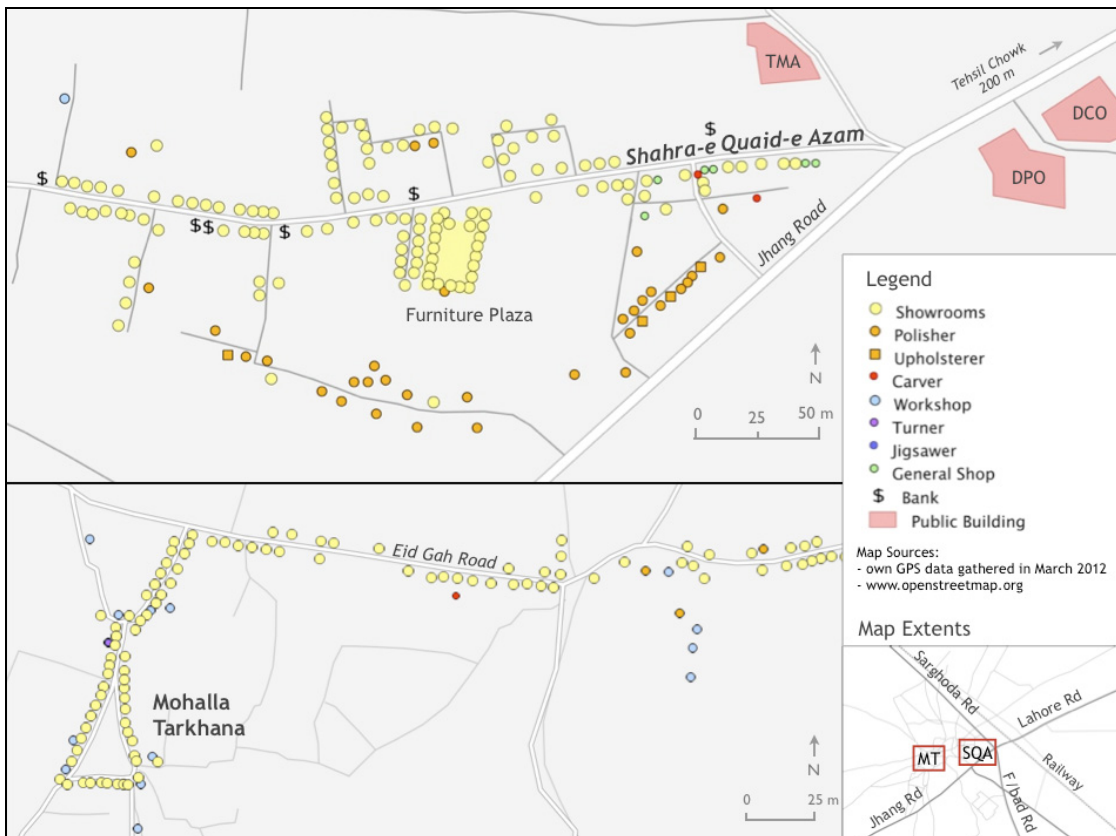


Map 5.1: Small-scale furniture manufacturing in Mohalla Hadjiabad

Draft: own design

¹⁵ There are different views about where the borders between different *mohallas* are exactly located. This thesis defines Mohalla Hadjiabad within the grey area of Map 5.1 and therefore does not include the workshops and production units on the western side of Chinioti Road and the eastern side of Shah Humayun Road to the counting of carpentries in Mohalla Hadjiabad.

Around 330 showrooms are located in Mohalla Tarkhana and on Shara-e Quaid-e Azam (Map 5.2). The vast majority of showrooms in Chiniot accumulate on Shara-e Quaid-e Azam and in Mohalla Tarkhana. Both places have one parking lot for pickups that transport furniture loads to customers. Shara-e Quaid-e Azam has more showrooms than Mohalla Tarkhana. The former is more accessible for private customers because the street is directly connected to Jhang Road and Tehsil Chowk. The showrooms on this street also tend to be larger than in Mohalla Tarkhana and the biggest showrooms have polished furniture on display for their customers. Furthermore, the Furniture Plaza, housing over 20 showrooms, is located in the centre of the street. The importance of Shara-e Quaid-e Azam for the furniture business and for the city of Chiniot is emphasised by the presence of six banks and the headquarters of three public district authorities.



Map 5.2: Furniture showrooms at Shara-e Quaid-e Azam and in Mohalla Tarkhana

Draft: own design

The great bulk of polishing workshops are located south of the showrooms on Shara-e Quaid-e Azam (Map 5.2).

The spatial proximity of sawmills, workshops and small production units on the one hand and of polishers and showrooms on the other indicates the close economic

interdependence of these actors within the production system, which is elaborated in the following section.

5.4 Analysing the production sequence

5.4.1 The Punjab Forest Department and its timber auctions

The first actor in the sequence is the Punjab Forest Department (PFD), which owns most of the wood resources used in Chinioti Furniture. The vast majority of wood used comes from one tree species and is known as *sheesham*, which is a convenient material for woodcarving due to its hard consistency (see Box 5.1 below). Another wood resource is *kikar*, which is less sturdy and therefore cheaper. The respective Division Forest Office (DFO) sells the wood for sale in auctions, which are announced through newspaper ads beforehand. In bigger cities of the Punjab, auctions are held twice a month. Interested merchants can attend the auction and bid on certain standing tree lots or cut log of wood. Different categories of wood quality and diameter define the minimum price per square foot of wood offered by the government to the bidder. Eight interviewed sawmill owners in Chiniot referred to the following cities as the origins of their wood: Bhakkar (7 mentionings), Multan (6), Mianwali (5), Layia (3), Dera Ghazi Khan (3), Faisalabad (3), Sarghoda (2), Bahawalpur (2), Lahore (1), Rahim Yar Khan (1), Larkana (1), Kacha Kho (1), Banu (1) and Kohat (1).

5.4.2 Timber traders

Wood traders (*baypari*) are the link between the DFO and the sawmill owners in Chiniot. Timber traders based in other cities visit the sawmill owners at irregular intervals to negotiate regarding orders of wood. The traders organise and pay for the transportation by truck of the wood from the DFO wood storage locations to the sawmills. In cases where standing trees are purchased the traders also bear responsible for the timber logging.

Box 5.1: *Sheesham* trees in the Punjab

Sheesham (*Dalbergia Sissoo*, local: thali) is the most important wood resource for the furniture industry in the Punjab and after teak (*tectona grandis*) the second most widely cultivated tree in South Asia. Sometimes it is translated “Rosewood”, which is an inaccurate term because there are around 125 different *Dalbergia* species (Cunningham et al. 2005: 204-205). The *sheesham* trees were mainly planted by the British along canals and on irrigated plantations as part of their agricultural projects (see Map 3.1). After partition, most of Punjab’s wood resources were assigned to the PFD.

Many of the sawmill owners in Chiniot complain about the rising prices of *sheesham* wood. Although other consumer prices are rising as well, the management and reforestation of wood resources by the PFD seems to be insufficient considering the time for tree growth and the demand. Changamanga, the former biggest plantation of *sheesham* trees in the Punjab,

has been almost completely depleted. There, and in other places, the low quality and fast growing eucalyptus trees have been planted after the *sheesham* trees are logged. The WWF has criticized the PFD for declaring healthy trees as so-called “dead wind fallen trees”, supposedly in order to justify and accelerate tree logging (WWF 2010). Newspaper articles refer to corrupt practices of the Division Forest Officers in the region: some listed in the quarterly published “Pakistan Forest Digest” of the Sustainable Development Policy Institute in Islamabad. Also, it cannot be ruled out that wood traders are benefitting from illegal timber logging in Khyber Pakhtunkhwa (see for example SDPI 2011).

5.4.3 Sawmills

Sawmills are equipped with at least one sawing machine and a handful of employees. Here, logs are sawn into long boards (*pathay*), which are distributed to the workshops by donkey and horse cart drivers (*rairiwala*). All transportation fees from the sawmill to the workshop are covered by the sawmill owner. The number of workers per sawmill does not exceed ten - they are paid per day wages. The wood is seasoned at DFO storage locations, at the sawmill or within the workshops.¹⁶

Sawmill owners buy fairly large land plots to have sufficient space for the timber storage. Furthermore, they need to pre-finance truckloads of timber before they can sell their *pathays* to the workshop owners.

5.4.4 Workshops - focal points of furniture production

As the focal point of furniture production, workshops have plenty of business relations with other actors in the furniture production system. They deal with sawmills, designers, jigsawers, turners, carvers, showrooms, wood recyclers and sawdust traders.

The workshops sizes vary greatly in terms of employees, most of them have between 5 and 10 workers and cooperate with small production units in their neighbourhood (see Map 5.1).

Workshops assemble plenty of different parts produced by different actors according to a design ordered by showrooms and hand them over the furniture in raw shape. The designs are ordered from one of around a dozen designers in the city for around 6,000 PKR¹⁷. The drawings of furniture designs in real size are stuck on wooden parts in order to be further processed by the jigsawer and carver. Most workshops are specialised in only a few furniture designs that they repeatedly produce and offer to different showroom owners. Therefore they purchase only very few designs and repeatedly make

¹⁶ There were several solar seasoning plants provided to sawmill owners by SMEDA. However, they are not working properly and are therefore not used.

¹⁷1 Euro ~ 120 PKR

copies of them. The product in raw shape is delivered to the showroom owner almost always by the *rairiwala* - and the transportation fee is covered by the workshop.

Table 5.1: Cost of machines used in production in PKR

Machine	Price
Bandsaw	70,000
Jointer	50,000
Planer	40,000
Spindle	26,000
Turner	25,000
Jigsaw	25,000
Drill press	15,000

Source: own survey 2012(estimated by fitter Safar Ali)

An important feature of a workshop is the availability of several machines (see Table 5.1), which are bought most often in Gujranwala. In most cases workshop owners cooperate with jigsawers and turners in their neighbourhood. Conversely, the processes connected to the other machines can also be outsourced, making the production process governed by the workshops highly variable. The fewer machines available within a workshop, the higher the degree of cooperation between small production units.

To start a workshop, land has to be purchased for at least several hundred thousand Rupees. The prices of the land depend on the location, size of the plot and time of purchase. Some workshop owners built their workshop on a land plot that already belonged to their family for several decades. The majority of workshop owners constructed the workshop buildings themselves and ordered the bricks from the near brick kilns. A second point of investment is the machines, which cost around 250,000 PKR in total. A third point of investment may be loans (or “advance money”) paid by some workshop owners to attract experienced carpenters. This can be a sum of up to 100,000 PKR, which is paid back without interest whenever these carpenters leave their employer. To conclude, a workshop founder has to invest at least 200,000 PKR, but in most cases more than 400,000 PKR to start his business. Excluding the wages for the employees and contractors the fixed costs (electricity) are low. There are a few examples of workshop owners who rented the land and even the machines, which increases fixed costs rapidly. However, this is not the common practice to start a workshop.

5.4.5 Small production units with machines

The turner (*kharadi*) and the jigsawer (*chabakay*) get prepared wooden pieces from their client, the workshop owner. The jigsawer makes holes on the wooden plates and the turner makes round pieces from rectangular wooden blocks mostly used as bed pillars later. As there are turneries and jigsawing units in close spatial proximity to the

workshops, the transport of the wooden parts between the small production unit and the workshop is organised spontaneously by carpenters of the workshop - either by foot, bicycle or motorbike. Transportation by foot is also often done by young male household members of the workshop owners, mostly the younger brothers or cousins.

Most turning and jigsawing units are one-man units; few are managed by two or three carpenters. In addition to these two types of specialised manufacturers, there are carpenters who have specialized with one of the other machines necessary for the production process (see Table 5.1), but they are not as prominent in numbers as the two others mentioned above.

The machines of jigsawers and turners cost, depending on their quality, between 20,000 and 30,000 PKR. The fixed costs for the property (electricity and rent) do not exceed 1,000 PKR per month. Further clients for the turner are the sawdust trader and for the jigsawer is the wood recycler (see Subsection 5.4.9).

Sawmills, workshops and small production units have to cope daily with load shedding which affects severely their efficiency.

Box 5.2: Load shedding as a growth constraint

Without exception, all interviewed workshop owners and owners of small production units with machines complained about load shedding occurring every day for several hours (between six and 24 hours). Workshop owners identified load shedding as their major problem for their business operation as they relied on the availability of electricity for several production steps. Carpenters working with machines had to act on the unpredictable time periods when electricity was available. In the workshops periods of load shedding were generally used to stick designs on wooden boards and to transport wood pieces to other units in the neighborhood. However, most of the time during load shedding, fitters just waited for the electricity to come back on. Workshops and small production units could be far more productive without the problem of load shedding.

5.4.6 Small production units: hand carving

Most of the carvers work in small teams of fewer than five people in spatial proximity to workshops. Occasionally there are bigger carving units with more than 10 workers. Some carvers work in the open space and only very few in their own homes. Handcarving can also take place within the workshops.

The centuries-old tradition of handcarving (*munarwat*) is a labour-intensive activity necessary for most of the furniture designs. Hand carvers make predefined patterns on the wooden plates and pillars that have been pre-processed by the workshop, the jigsawer and/or the turner. Hand carved items are usually divided into three different quality categories: the lowest quality can be made by early apprentices; the middle quality is made by carvers with a few years of work experience; and the highest quality can only be

produced by talented carvers with numerous years of working experience. The quality of carvings determines their market prices. A further important factor for price determination is the place of production, as market prices for wood carved items are significantly higher in other Pakistani cities than in Chiniot. Table 5.2 shows that in Lahore, which is only a 160 km drive away from Chiniot, market prices for carved items are almost twice as high.



Photo 5.1: An 18-year-old carver in Mohalla Moazzem Shah working on a tall *taj* for a bed

Photograph: M. Enzner (February 15, 2012)

Hand carvers use a wooden hammer (*thokni*) and around twenty chisels, each costing 50 PKR. It is a common approach for a group of carvers to rent a small property and share the rent and electricity bill with their co-workers. This costs a maximum of 1,000 PKR.

Table 5.2: Comparing market prices of wood crafted items in Chiniot and Lahore (in PKR)

Product name	Workload (h)	Market Price (PKR)		Carpenters' Earning (PKR/h) in	
		Chiniot	Lahore	Chiniot	Lahore
<i>Taj</i> of bed (tall)	8	1,500	3,000	188	375
<i>Taj</i> of bed	16	500	2,000	31	125
<i>Taj</i> of chair	3	400	950	133	317
<i>Taj</i> of chair	6	350	700	58	117
<i>Phool</i> *	3	200	650	67	217
<i>Taj</i> of bed (small)	3	150	400	50	133
<i>Taj</i> of bed (small)	2	150	400	75	200
<i>Taj</i> of bed (small)	2	100	350	67	233

* Decorative feature in flower shape

Source: own survey 2012, n = 8

A practice similar to carving is that of wood-inlay, which was more prevalent in the past. Today, only a few wood-inlay units remain in the city. They cut out pre-defined patterns

on wooden plates and fill these with parts made from a lighter colour wood, such as mango.¹⁸ Figure 5.1 shows parts of wood-inlay.

The art of the historical Punjabi *pinjra* died out almost completely. According to one experienced carpenter in Mohalla Tarkhana, there is only one carpenter left in the whole city, who can perform the *pinjra* technique.

5.4.7 Showrooms

Showrooms are able to offer their customers plenty of different designs. They can afford to buy a variety of furniture designs from dozens of different workshops. Furniture is stored in raw shape and is visible for the customer who can then choose their favoured polishing style. Showrooms are frequented by customers from other cities, especially on Sundays. As agreed upon with the customer, the showrooms coordinate the polishing and in the case of sofa sets, also the upholstering. They pay for the *rairiwala* transporting the furniture in raw shape to the polisher or upholsterer and back in a polished condition. Furthermore, they coordinate the provision and assembling of mirrors and mattresses, as well as transport to the customers. Beyond private customers many showrooms have a second important pillar in wholesale to showroom owners in other Pakistani cities. Many showroom owners use their own kinship network to market their furniture beyond the city of Chiniot.

Setting up a showroom requires financial capital. One showroom owner mentioned that one has to invest around five million Rupees in order to set up a showroom on Shara-e Quaid-e Azam. This does not include the additional cost of procuring a sufficient stock of furniture in raw shape in order to offer the customer a broad selection.

5.3.8 Polishers and upholsterers

Polishing workshops typically have between five and ten employees. According to the wishes of the showroom owner or the customer, they make the final furniture design by sanding, colouring and lacquering the raw shape furniture. The chemical materials used for the polishing for one complete bedroom set cost around 5,000 PKR. Similar to the polishers, upholsterers perform the last step of manufacturing within the production sequence and are also located also near the polishers. Upholsterers are only employed for sofa sets. While most of the polishers are located close to the showrooms on Shara-e Quaid-e Azam, a few of them are self-employed and travel to showroom owners and customers in other cities to do their work.

¹⁸ There is supposed to be at least one brass-inlay unit in the city which couldn't be located during field research. The allegedly 2,200 carpenters working in brass-inlay and 2,200 in wood-inlay as estimated by SMEDA is a strongly exaggerated figure (SMEDA 2006: 28).

5.3.9 Other actors

There are many other actors indirectly involved in the furniture business in Chiniot. They do not add value to the product, but they make their living from jobs associated with the furniture business.

The *rairiwala* transport wood and wooden products in different manufacturing stages between almost all actors of the production sequence. They circulate between the sawmills, workshops, jigsawers, wood recyclers, sawdust traders, showrooms and polishers. They paid per load and not per distance. The transportation cost is always covered by the sending actors and not by the receiving actors.

The sawdust traders are located in areas with a high concentration of workshops and turneries. There are three sawdust traders located within Hadjiabad and four in close proximity to it. Most of the sawdust (*burra*) is produced by the turneries. They pay 500 PKR for one sack of sawdust and store it on the open field until they sell it to the truck owners for 550 PKR who bring the load to the brick kilns in or near Chiniot.

The wood recycler receives wooden leftovers from the workshops and jigsawers and sorts it according to their size. The bigger parts he sells back to the workshops, if they are still of sufficient size for use in smaller decorative features. The smaller parts he sells as firewood for household consumption.

There are further actors that have been excluded in the model of the production sequence to ensure clarity. For example, there are traders in small wood pieces (not *pathay*), copy shops where workshops copy the hand drawn design and shops that sell chemicals to polishers, working tools to carvers and catalogues to showrooms.

5.4 The share of producers in revenue

While the most luxurious bedroom set cost up to 400,000 PKR, the average model costs roughly between 40,000 and 70,000 PKR. Figure 5.3 shows one example of a bedroom set that costs 100,000 PKR. The figure illustrates the share received by different actors during the production sequence of the final customer price.¹⁹ The PFD and wood trader are excluded in the cost breakdown and are subsumed under “Sheesham wood”.

One can notice that the wooden material - 25 cubic feet of *sheesham* wood - makes up little more than one fourth of the consumer price. The production steps conducted and coordinated by the workshop cost 23,500 PKR and the workshop keeps a margin of 4,500 PKR. The showroom coordinates all necessary steps for turning the raw shape bedroom set into the final shape and adding a mattress and a mirror (7,000 PKR), coordinating the polishing (20,000 PKR) and organising the transport to the customers home (5,000 PKR to

¹⁹The use of colours corresponds to the colours used for the different actors in the Maps 5.1 and 5.2 and Figure 5.2 (Production Sequence Model).

Lahore as an example). The polishing cost measured in the example is above the average of 10,000 PKR including around 5,000 PKR for the chemicals.

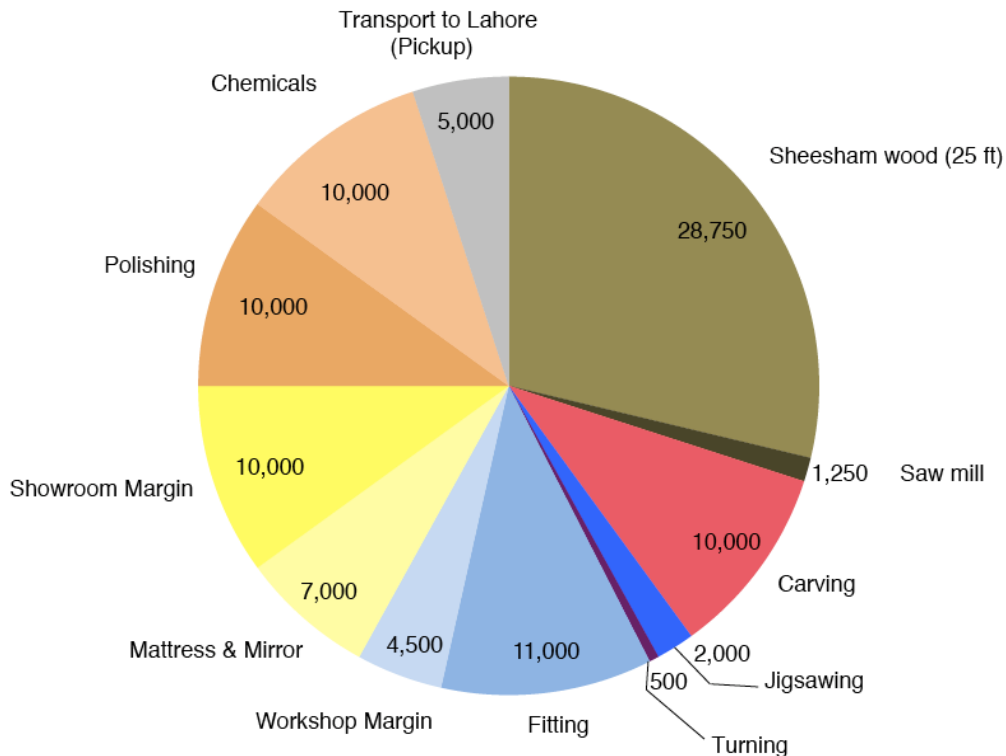


Figure 5.3: Cost breakdown of one bedroom set for 100,000 PKR

Source: own survey 2012, 1 Euro - 120 PKR

Compared to the fact that the showroom does not produce anything, but only coordinates polishing and transport, the showroom's margin of 10,000 PKR appears quite high. The wood trader also keeps a significant margin, although he is not adding value to the product. In this example the carving costs one tenth of the final customer price. In view of the fact that the labour-intensive hand carvings are the most outstanding feature of the set and are probably the crucial reason for the customer to purchase the product, its share is fairly low. Additionally, there were several carvers involved that have to share the 10,000 PKR among each other.

5.5 Power relations

The PFD has the most power of all the actors in the production process due to their monopoly on wood resources. Apart from the PFD, the wood traders, sawmills and showrooms are the most powerful actors within the furniture production sequence. They all have access to capital in order to establish their business through buying land, property,

machines, wood resources and/or raw furniture. Therefore they can benefit from higher margins in their daily business. Less powerful actors are small production units and polishers. Their businesses are not capital intense and other carpenters can replace their operations quickly. The workshops, which coordinate the raw furniture production process, have an intermediate position concerning power relations. They are superior to the small production units but inferior to sawmills and showrooms. They invested less than showrooms, but more than small production units.

The furniture production, coordinated by workshops, is characterised by a low degree of hierarchy. Of course, the workshop owners can choose among plenty of different turners, jigsawers and carvers giving them an upper hand in these business relations. However, the sheer number of potential business partners on both sides and the existence of many intermediate forms of workshop-organisation serve to level the hierarchical divide between the business partners in the production process. There is a constant shifting of workshops and small production units. There are even examples of carving units boasting higher profits than workshops.

There is a clear imbalance of power between workshop owners and showroom owners. The latter tend to be the most powerful actors due to their control of market access and their direct contact with the customer. The business custom of instalment payments indicates the higher position of the showroom owner over the workshop owner. When the furniture in raw shape is delivered to the showroom, most workshop owners receive only their first instalment. In the example presented in Figure 5.3, the showroom owner would have to pay 58,000 PKR to the workshop owner. Instead, he pays two weekly instalments of 20,000 PKR and one of 18,000 PKR. That means the workshop owner gets the total amount of 58,000 PKR after three weeks although the product is already owned by his client and delivered to him. This business custom adversely affects the cash flow of workshops. They have to pre-finance the whole production process because they have to pay their orders immediately, like wood and wages of all involved carpenters. Nevertheless, one has to take into account that around 330 showroom owners have to compete with each other. Workshop owners are not forced to sell to certain showroom owners - instead they can choose for whom they want to produce, which protects them from extreme forms of exploitation by showroom owners.

5.6 Perspectives to increase income for workshops and small production units

The first and most important factor for increasing profits is access to capital. None of the respondents took out formal loans from a bank or other financial institution. Money seems to be organised almost exclusively through social networks, in most cases kinship ties. However, the Planning & Development Department of the Government of the Punjab has

recently provided 30 small loans of 100,000 PKR to workshop owners in the period between November 2009 and November 2011 (DGME 2012).

The required investment is lower when people already own property in conveniently situated areas. There are several examples of how the owners of property altered its function in the course of the dynamic growth of furniture industry. Many showroom owners in Mohalla Tarkhana owned the property *“before the furniture business started in this area”*, as one of them stated during the field research. Today there are only eight workshops left in this place, but more than 50 showrooms - not including showrooms on Eid-Gah Road (see Map 5.2). Several of the showroom owners in Mohalla Tarkhana have their own workshop located further from the centre. Still, only very few showroom owners are also owners of a workshop. A similar pattern is to be observed for workshops or small production units e.g. in Mohalla Hadjiabad. As the city grew and units of furniture production accumulated increasingly in their neighbourhood, many households started to convert parts of their property to production units. For example, one respondent works as an independent carver in his father’s former teashop. Another respondent started a carving unit in the former guestroom of his household’s home. His father says *“I bought my land on Chinioti Road 20 years ago and it was very cheap at that time. I am lucky, because land prices in this area skyrocketed in the recent years.”*

Box 5.3: Illustrating strategies to increase income

In 2006, a workshop owner set up his workshop in Rashidabad, east of Lahore Road, which has 25 employees today and produces four bed sets and three sofa sets per week. He had the opportunity to borrow the money he needed to set up his business from his relatives. After several years of being in business as a workshop owner, he opened up a showroom on Shara-e Quaid-e Azam of which his son is now in charge. In order to achieve that, he saved money and again borrowed money from relatives. Today his household is debt free and they own both a workshop and a showroom, thus controlling both production as well as marketing. Therefore they can keep both margins within one household.

A second example is a former carver, who had a carving unit and started a workshop with his brother one and a half years ago in Ghafoorabad. They currently have eight employees and produce three bedroom sets per month. He borrowed the money he needed for the land plot, the machines and advance money for one of his employees from his relatives.

The third example is a workshop in Mohalla Tarkhana. It is managed by two Tarkhan brothers who inherited it from their father. The workshop currently has three employees and produces two bedroom sets per month. The owners are presently preparing to expand their small family business. During the last years, the household bought two plots of land, one of it is located near Chinioti Road in Mohalla Hadjiabad. They are planning to move their production to Mohalla Hadjiabad and turn their current workshop into a showroom, selling their own furniture directly to the customer. One brother will be in charge of the showroom and the other brother of the workshop.

Occasionally some workshop owners manage to sell their furniture directly to private customers. In this case, the price is 1,000 PKR to 3,000 PKR lower, but the nature of payment is much more attractive for their cash-flow: Before they start to work they get the first half of the price and when they deliver the product they get the second half. In some cases the customers organise the polishing themselves, in other cases the workshop owner coordinates the polishing. However, this is not the dominate business custom in the city. Apart from these short term increases, some actors manage to increase their profits continually.

5.7 Conclusion:furniture production system

Two major elements driving the Chinioti furniture production system are the demand by upper class Pakistani during marriage occasions and the seemingly inexhaustible pool of labourers willing and motivated to learn carpentry and work in the profession. On the contrary, important limiting factors, which both result from political failure, are the decreasing supply of sheesham wood and the lack of regular and dependable electricity. Directly, the system's economy does not have much exposure to the world market, because the product is predominantly marketed within the country. But indirectly, it is also framed by the globalisation forces of increased exchange of goods and communication paralleled by commercialisation. Products and services available on the global market are used to produce and market the Chinioti furniture, such as wood processing machines, copy machines, chemicals, pickups, mobile phones and internet platforms. However, this furniture production system still uses the century old carving techniques. In spite of the use of many globalised elements in the production process, the purely manual labour of carving probably adds most of the value to the product. It is this characteristic element of "Chinioti Furniture" that is so desired by the upper Pakistani classes.

6 Analysing socio-economic characteristics of carpenters' households

6.1 Social groups

The 50 interviewed carpenters identified themselves within 23 different social groups.²⁰ Eight respondents belong to the *Tarkhan* (16 percent), which is the biggest share of the represented social groups. The second most prominent social group is the *Machhi* (14 percent). Four are each among the *Mochi*, *Kumhar* and *Arain*, three are *Musalli*, two belong to *Syed*, *Sheikh*, *Malik* and *Bhatti* and one are each of the following groups: *Sibra*, *Rahmani*, *Rajputh*, *Mulwan*, *Lohar*, *Qureshi*, *Khookar*, *Julahe*, *Janjooa*, *Ghaloter*, *Dairath* and *Bhutta*.²¹

6.1.1 Social division of labour

On the one hand, *Tarkhan* persist in carpentry. They are still the social group with the biggest share among the respondents. Remarkably, the fathers of seven of them and the grandfathers of all eight interviewees worked as carpenters, demonstrating the persistence of the *Tarkhan* in the carpentry industry.

On the other hand, there is a dynamic development with regards to the carpenter's social group configuration. The vast majority of interviewees - 84 percent - belong to social groups other than *Tarkhan*. This demonstrates that the dominance of the *Tarkhan* in the carpentry is no longer a given. While Ibbetson only mentioned the *Lohar* as a "non-Tarkhan" caste, who engages in carpentry, today there are multiple social groups from almost all strata of society involved in the occupation. It is an interesting fact that only one of the 42 "non-Tarkhan" respondents (two percent) had a father who worked as a carpenter.²² Apparently, the occupation has been open to other social groups for several decades.

Consequently, not every *Tarkhan* is a carpenter. Five out of eight *Tarkhan* households have or had household members having occupations other than carpentry. To be precise these household members work as a construction worker, bike mechanic, car mechanic, government officer and doctor.

²⁰To describe the present-day phenomenon of caste, the term "social group" is used from here on.

²¹*Bhutta* (Ibbetson 1883: 110), *Janjooa*, *Khookar* and *Bhatti* (Ibid.: 313) are listed as tribes in Ibbetson's ethnography. *Malik* is used as a title for a chief or headman (Ibid.: 41). *Sibra*, *Rahmani*, *Ghaloter*, *Dairath* and *Mulwan* are not mentioned.

²² This person said he belongs to the social group of *Bhutta*. According to Ibbetson this could still be a *Tarkhan*, as *Bhutta* appeared to be the most numerous tribe among the *Tarkhan*. In this case none of the 41 "non-Tarkhan" carpenters have or had a father who worked in carpentry.

6.1.2 Hierarchy of social groups

As perceived by 63 percent of the respondents, the *Syed* are the social group that holds the highest status within Chiniot (n = 45).²³ Others identified the *Sheikh* (13 percent), *Arain* (7 percent) and each two percent for *Qazi*, *Machhi*, *Lali* and *Tarkhan*. The lowest rank was ascribed to the *Musalli* - 80 percent of the interviewees (n = 41) are of this opinion. Seven percent places *Mirasi* at the bottom of society, five percent *Mirzadar* and each two percent voted for *Kumhar* and *Noonari*. The perceived rank of social groups in Chiniot strikingly mirrors the description of Punjabi society by Ibbetson more than 100 years ago (see Section 3.3). Also G.F. Pfeffer states that the idea of rank of different social groups still exists in Punjabi society. Punjabi individuals from different social groups are competing in jobs that are not hereditary to their own social group: “*Such a widening of competition has not abolished the caste system. It has raised hopes in people who want to rise to unexpected heights within this system*” (Pfeffer 2012: 183-184).

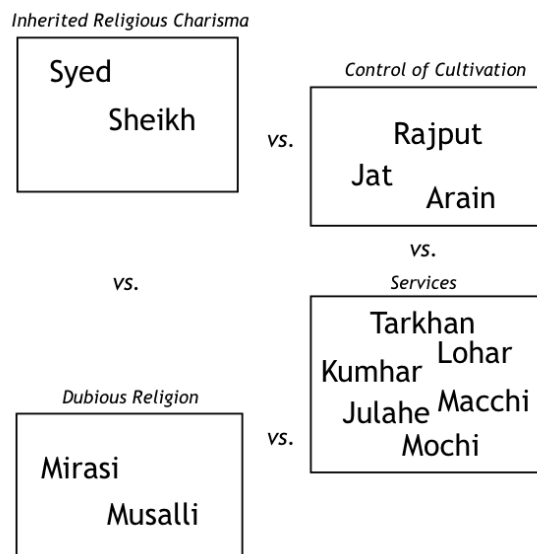


Figure 6.1: The rank of social groups in present-day Punjab society

Draft: modified after Pfeffer 2012: 178

The *Syed* still own large landholdings and hold important political positions, although some of them no longer reside in Chiniot (Hasan 2010: 48). Among the eight interviewed sawmill owners²⁴ who need large land plots for the wood storage, two were *Syed*. One carpenter apprentice presented himself as a *Syed*, contradicting the initial impression of the high

²³ Five respondents didn't want to answer the question about social groups at all and responded with statements like “*All social groups are equal.*” or “*I don't care about social groups*”. Four more respondents didn't want to answer the question concerning the lowest status.

²⁴ Three out of eight interviewed sawmill owners were *Pathan* from Banu. These were the only *Pathan* that were met during the whole field survey. Their origin and kinship ties to *Pathan* regions with sufficient wood resources seems to give them an advantage amongst sawmill owners.

status of *Syeds*. However, it is possible, that his claim is not accepted by a ‘real’ *Syed* (Pfeffer 2012: 179).

The social group that probably benefits most from the Chinioti furniture business is the high-ranked *Sheikh*. In other words: The superior role of showroom owners examined in Chapter 5.5 reflects the high status of the *Sheikh*. Two *Sheikh* showroom owners on Shara-e Quaid-e Azam stated that a number of *Sheikhs* possess showrooms not only in Chiniot but also in other cities in Pakistan. Several *Sheikh* from Chiniot are even involved in business sectors with far more scope and scale. The literature gives accounts that Chinioti *Sheikh* (or just: Chinioti) have become one of the most important business groups in the Pakistani economy as a whole. Although they no longer live in Chiniot they still call themselves “Chinioti”. After the *Khatris* left the city during the separation of Pakistan and India, a number of Chinioti *Sheikh* were able to replace their roles they vacated and thereby widen their business activities. Many *Sheikhs* acquired good positions to play an important role in the textile commerce in Faisalabad. Some Chinioti became members of the Chambers of Commerce in Karachi and Lahore. According to Papanek, the Chinioti owned nine percent of Pakistan’s industry and were the second richest community in the country after the Halai Memon who owned 27 percent (Papanek 1969: 54). Since then, several Chinioti families could even increase their fortune, mainly because they benefitted from privatization programmes during the first ministerial period of Nawaz Sharif.²⁵

The *Tarkhan* were able to improve their social and economic status in Chiniot. Many *Tarkhan* became workshop owners. Some *Tarkhan* could even become showroom owners and thus benefit from higher profit margins as they already owned property in Mohalla Tarkhana (see Map 5.2 and Figure 5.3). However, the *Tarkhan* have far to go to becoming the dominant social group among the approximately 330 showroom owners, which remains *Sheikh* dominated at present. Going beyond the mere financial dimension, the fact that the furniture business flourished helped enhance the status of those with carpentry and carving skills. Today, *Tarkhan* are proud to be the social group that historically held the occupation that is today the most prevalent one in their city. They are aware that they “owned” the skills for a long time before the furniture business flourished in Chiniot. Although they are not placed at the top in the status ranking by the respondents, they receive a lot of respect by carpenters from other social groups, especially in the worker milieu of workshops and small production units. Well-respected *Tarkhanustads* passed their skill over to apprentices from other social groups (see Box 6.1). There are also notions of ‘inherited skill’ prevalent among *Tarkhan*. Many of them believe they can learn the skill

²⁵ Several large-scaled companies are owned by Chiniotis, like “Nishat Group”, a conglomerate of around 30 companies, including the “Muslim Commercial Bank”. Its owner, Mian Mohamed Manshah, is supposed to be the richest Pakistani and calls himself a Chinioti, though born in Rawalpindi. Other businesses belonging to Chiniotis include the “Crescent Group”, “Monnoo Group”, “Tata” and “Alam Group” (Damodaran 2008: 301-320, Papanek 1972: 25, Levin 1974: 231).

faster and possess more talent than people from other social groups.²⁶ In contrast to colonial times, the carpentry occupation is no longer an occupation with a low status. Ninety percent are of the opinion that their job does not have a low status in the society (n = 44). Fifteen persons (34 percent) are even proud of their work and named it literally a “*work of honour*”.

It seems that the status of the former *kamin* increased slightly. Exactly half of the interviewees belong to one of the social groups from the traditional ‘village menials’ (see Section 3.3), such as *Machhi*, *Lohar* and *Kumhar* and the ‘leatherworkers and weavers’, *Mochi* and *Julahe*. The latter two, who were the lowest *kamins* holding ‘impure’ occupations, now have access to the carpentry occupation income it generates.

The lowest group, *Musalli*, have still a low social and economic status. There are probably no *Musalli* showroom or sawmill owners in Chiniot. The fact that some *Musalli* are now carpenters is already a big improvement for them. But some of them are still struggling. One *Musalli* respondent, a polisher who already worked in 26 different workshops and often works more than 100 hours per week, was heavily indebted. Most of the respondents from other social groups associated the *Musalli* repeatedly with their occupation of sewage cleaning, poverty and bonded labour in the brick-kilns²⁷ in the south-west of the city.

Box 6.1: An aged *Tarkhanustad* and workshop owner in Mohalla Tarkhana

The oldest respondent is a 69-year old widower who has five married sons, of which four have already left his household. As he is a *Tarkhan*, all his sons are married to *Tarkhan* women. Two of his sons are craftsmen in Saudi-Arabia, one is a carver in Lahore and one is a doctor in Chiniot. His household currently has five people, since his son lives there with his wife and his two children. It is the same son who works with him daily in his workshop.

The respondent has been working in Mohalla Tarkhana for the last 58 years. He inherited his workshop from his father, who also taught him the skill of *kharad* and lacquered art. His grandfather worked on wooden structures on buildings and he believes his great-grandfather was a wood trader. His workshop is one of the few remaining workshops in Chiniot City that produces lacquered items like *pirha* and *charpois*. He currently has four people working in his workshop. One of his employees has been working for him for the last 52 years. He is also a *Tarkhan* and his father was involved in the construction of the Umar Hayat Mahal.

The old *kharadi* is a well-respected *ustad* and trained around 85 apprentices - each for around two to three years. Most of his former apprentices are now working in areas other than Mohalla Tarkhana in Chiniot City, a few work in the villages of Chiniot District and three are even working in Saudi-Arabia. Although most of these carpenters don’t use the skill of lacquered art anymore, they

²⁶A respondent from Mohalla Tarkhana said “We are doing this job for many generations. Most carpenters need two or three years of apprenticeship, but we *Tarkhan* need only one year.”

²⁷One comparative household interview with a *Musalli* brick-kiln worker revealed a desperate poverty. The whole household, including the three-year old child, have to work all day in order to repay their debts. But it seems they are deprived of any prospect of social or economic improvement.

can use their skills as turners. They adapted their skill to the new product and, as shown in Section 5.4.5, the turner plays a vital role in the furniture production of today. The experienced carpenter has witnessed the changes of the carpentry sector during the last 60 years first-hand. He says:

“Many carpenters - Tarkhan and other social groups - have been trained in my workshop and other workshops in Mohalla Tarkhana. They learned their skills here and brought it to other parts of the city and even beyond this city.”

6.1.3 Separation among social groups

Although the social division of labour has started to decrease in importance, there are other aspects of the social life where the separation of social groups can be observed, especially marriages. Endogamic marriages are not the only choice but remain the prevalent pattern among Chinioti carpenters. Only 32 percent of the unmarried respondents stated that their family would allow them to marry a woman of another social group (n = 22). Similarly, 39 percent of the married or widowed interviewees would allow their children to marry members of another social group (n = 28). The findings on endogamic marriages in Chiniot are also illustrated in Box 6.2.

During the interviews with two of three *Musalli* it became apparent that these carpenters are ridiculed by their colleagues. It is hard to imagine that they regularly eat and drink together in the workshops. Pfeffer states that *“untouchability is never mentioned and always practised in Pakistan”* (2012: 181).

However, the living places of different social group members are no longer as geographically divided as in the past (e.g. Mohalla Tarkhana, Mohalla Qazian). Only a few *Tarkhan* still live in Mohalla Tarkhana as its function changed primarily to sales contrary to wood work production and residence of carpenters in the past. Today carpenters live in many different neighbourhoods in Chiniot.

6.2 Household economy

6.2.1 Household composition and income sources

Out of the 50 households, 23 are nuclear families and 27 are joint families. Household sizes range from two to 23 members with eight being the average (n = 395). In twelve cases the interviewed person is also the head of the household.

In total, the fifty households have 124 income sources - consequently households have on average between two and three income sources. Almost two third of these income sources, namely 81, are carpentry activities generated by 94 carpenters.²⁸ The second-

²⁸In some cases several household members owned a single workshop, which counts as only one income source.

most prevalent source of income is construction work, mechanical work or factory labour (14 percent). Less than two percent of the total income sources are in agriculture.

In all households except one, women did not earn money for their work. They are mainly engaged in domestic labour, with activities related to raising children, cooking, washing clothes, sewing and purchasing groceries on the market. Some of the women bring drinking water and food to the workshops where their household members work.

6.2.2 Regular income and expenditure

The average household income is 28,396 PKR per month. The household with the highest income (128,700 PKR) exceeds all others by far²⁹, because the head of this household, interestingly a 'low caste' *Kumhar*, earns an average of 106,000 PKR per month with buffalo trading. The lowest income (4,675 PKR) is that of a widow-headed household with four members (see Box 6.2). The GINI coefficient of 0.38, computed from the monthly household income available per household member, is above the national average of 0.30 in 2008 (UNDP 2013). It shows a relatively unequal distribution of income levels among the study's respondents.

The following box illustrates a household lacking of financial security, in contrast with the majority of interviewed households.

Box 6.2: A poverty-stricken widow-headed household

One of the respondents is an eighteen-year-old carpenter who works as a polisher in a workshop in Mohalla Kasaban. With his eight-year old brother and his sixteen-year-old sister, he belongs to a widow-headed-household. He is a *Mochi* and his father and grandfather were shoemakers. His mother is a servant and earns only 2,500 PKR per month. She is the only woman in the whole sample (n = 397) that worked for cash income. Due to a leg injury the carpenter can no longer move properly and his work is less productive than that of other carpenters. This is why he is still - after five years - an apprentice and is earning a wage of only 500 PKR per week. The household's only monetarily valuable item identified by them is a used gas stove valued at 400 PKR. Being asked about his biggest wish for his personal future, he responded:

"My biggest wish is that we have enough wheat for the next week."

The average share of carpenters of the household's income is 59 percent. 18 percent of the respondents contribute less than one-fourth to their total household income and 32 percent of carpenters between one-fourth and half. 16 percent contribute between half and three-fourths and 34 percent more than three-fourths to the household income.

²⁹ If this household is excluded from the values, the average income of the households drops to 25,821 PKR (n = 49).

In general, remittances and financial support from close relatives within Pakistan are not important to the total income of households. Although many households have close family members working in foreign countries, only three benefit from remittances.

Table 6.1: Regular household income per month (in PKR)

	Average	Minimum	Maximum
Household income (in PKR)	28,396	4,675	128,700
Financial means available per household member (in PKR)	3,718	1,305	12,870
Contribution of carpenters to household income	59%	6%	100%

Source: own household survey 2012, n = 50; 1 Euro ~ 120 PKR

However, none of these could define a regular income in PKR.³⁰ A further three households benefit from financial support from close relatives in Pakistan - two of these could specify the concrete contribution, which is a converted eight percent and 42 percent of their total household income.

Table 6.2: Regular household expenses per month (in PKR)

	N*	Average	Minimum	Maximum	Average
Food	50	12,985	4,566	36,528	46%
School fees	4	2,500	100	8,000	5%
Transportation	27	1,692	435	13,050	7%
Electricity	48	1,211	125	7,000	4%
Hygiene	48	1,075	218	6,525	4%
Housing rent	3	1,067	400	1,800	10%
Gas	26	1,026	125	6,000	3%
Clothes	48	1,013	83	5,000	4%

* Number of households who specified expense

Source: own household survey 2012; 1 Euro ~ 120 PKR

Table 6.2 shows major regular household expenses. Households spent on average 46 percent of their regular household income on food. Four percent is spent on electricity, another four on hygiene and a further four on clothes. Around half of the households spent

³⁰One household has a driver working in Dubai who earns 1,900 Derran per month (around 47,000 PKR, as of August 2012). The respondent mentioned they receive money at irregular intervals from Dubai. Assuming he sends 35,000 PKR home per month he would contribute 37 percent to his household's regular income. Another household benefits from occasional gifts, e.g. perfume, from a close family member in Saudi-Arabia.

seven percent on transportation, mostly fuel for their motorbike. Only four households pay school fees and a mere three households pay housing rent.

Beyond the regular income and expenditure there are irregular expenses, like health treatment and marriages and funerals. For example, one household has already spent 300,000 PKR on a heart treatment for the head of household. In the twelve months before the field survey, households spent an average of 11,300 PKR on health treatment (n = 45) and 10,900 PKR on funerals and marriages (n = 47).

6.2.3 Assets and indebtedness

The vast majority of households, 94 percent, possess the housing property that they currently inhabit. The average ratio of people per room is 3.2, which is slightly above the average of the Jhang District in 1998 (GOP 2000: 49).

Almost all households own a washing machine (4,000 to 6,000 PKR) and a sewing machine (2,500 to 5,000 PKR). One third possess a fridge (around 40,000 PKR), which can be seen as an indicator of relatively wealthy households. Thirty percent own a motorcycle, which costs around 40,000 to 50,000 PKR (second-hand around 20,000 PKR). Fourteen percent possess one or more buffaloes or cows.

Apart from the assets a household currently possesses, the perceived most urgent need (material or immaterial) can be useful as an indicator for the prosperity of a household. Nine carpenters, or 23 percent (n = 40), said their household does not have any urgent needs. As a most urgent need, eight carpenters (20 percent) identified an own home - four want an own home without a preference regarding the location and four specifically stated that they wanted to have a home in the city instead of the village. Seven respondents plan to purchase a motorbike as their next large purchase and perceive this as their most urgent need. Three (7.5 percent) said they needed to renovate or enlarge their home and each one (2.5 percent) mentioned the following needs: generator, fridge, to marry nephews, wheat and operation of a sick person.

Nine of the studied households are indebted (18 percent). The minimum debt is 20,000 PKR, the maximum debt is 150,000 PKR and the average debt is 56,000 PKR. Eight out of nine borrowed the money without interest from people within their social networks. One *Musalli* borrowed money from a *Qazi* moneylender and was being the only respondent who had to pay interest on a loan. In addition to the nine indebted carpenter households, there were three carpenters who received “advance money” when they started to work for their current workshop owner (3,000 PKR, 10,000 PKR and 11,000 PKR). They will have to repay their employer without interest as soon as they leave the workshop (see Subsection 5.4.4).

To conclude, households enjoy financial security. In general they have enough resources to cope with potential external shocks. However, irregular events like funerals and marriages and especially diseases or injuries quickly consume a household’s savings. Furthermore,

there are a few households that are deprived of economic possibilities and enjoy no financial security.

6.2.4 Income of carpenters

The average weekly income of the respondents is 3,088 PKR (median: 2,750 PKR). Table 6.3 demonstrates that the average income of contractors (*tekedars*) is slightly higher (plus 314 PKR) and that of wage earners distinctly less (minus 1,088 PKR). Unsurprisingly, apprentices earn the least of the four carpenter groups. A salient feature is the striking range that exists between the minimum and the maximum income and also among the four groups mentioned above. The GINI coefficient computed from the average weekly income of carpenters is 0.35.

The years of work experience varies between a few months and 59 years, with 13 years and six months being the average (median: 10.0). The top ten earners have at least ten years work experience. But in general, work experience and average income do not correlate significantly ($r = 0.07$). For example, there are carpenters who have six years of work experience and earn almost double the income of those having over 40 years of work experience.

Table 6.3: Average income of carpenters per week (in PKR)

	Average	Minimum	Maximu	N
Apprentices	600	300	1,000	5
Wage Earners	2,000	500	3,000	7
Contractors (<i>tekedars</i>)	3,402	1,500	10,000	33
Workshop Owners ³¹	5,035	2,874	10,920	5
Carpenters Total	3,088	300	10,920	50

Source: own household survey 2012, n = 50; 1 Euro ~ 120 PKR

Out of the entire sample there are only a few members of carpenter households who were engaged in work and earned higher average incomes than a carpenter (13,433 PKR, n = 397)³². These higher incomes are from a buffalo trader (106,000 PKR), a tube well trader (43,500 PKR), a government servant in a post office in Faisalabad (22,000 PKR) and a policeman (17,000 PKR). On the other side of the spectrum there are household members whose earnings are far lower than that of carpenters. These are a petrol station worker

³¹ The income of workshop owners is equated with the average weekly profit of their workshop.

³² Average weekly income multiplied by the factor 4.35 (weeks per month).

(6,000 PKR), an Imam (4,000 PKR), a bicycle mechanic (3,915 PKR)³³, a construction labourer (3,000 PKR), a servant (2,500 PKR) and an auto mechanic (1,088 PKR)³⁴. By and large carpenters strive to work as contractors (*tekedars*), who have the potential to realise higher incomes than the fixed wages of wage earners. Two thirds work as *tekedars*, whose income is subject to a high volatility (see Figure 6.2).

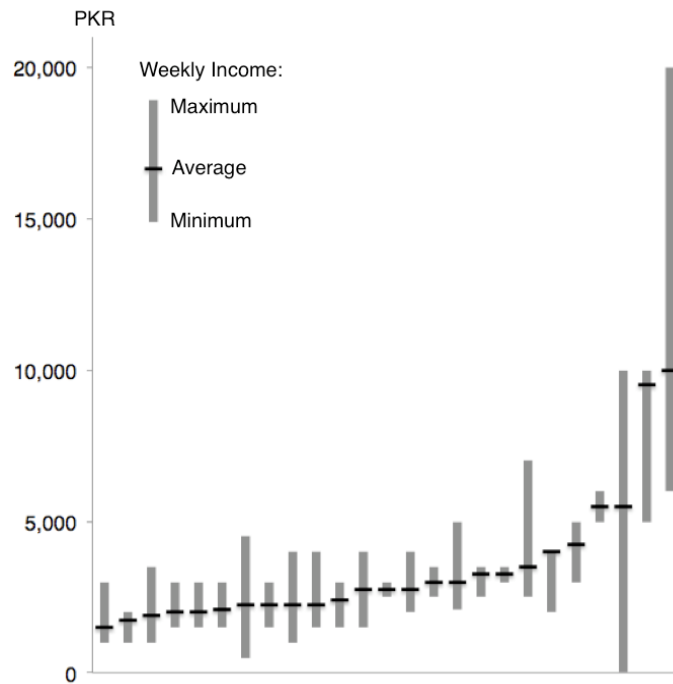


Figure 6.2: Variations in contractors' weekly incomes

Draft: own design

Source: own household survey 2012, n = 25, 1 Euro ~ 120 PKR

The maximum average income amongst contractors is that of a talented carver with 18 years of work experience (see Box 6.4). In general, *tekedars* earn their maximum income in the marriage season (winter), when the demand for furniture is high and their minimum income is during the summer. The amplitude between weekly maximum and minimum income can be even greater for workshop owners. They can potentially earn the most of all occupations involved with furniture production, but they also bear the risk of losing money or having a negative income.

³³ Daily income of 150 PKR multiplied by the factor 6 (working days per week) and 4.35 (weeks per month).

³⁴ Weekly income of 250 PKR multiplied with the factor 4.35 (weeks per month).

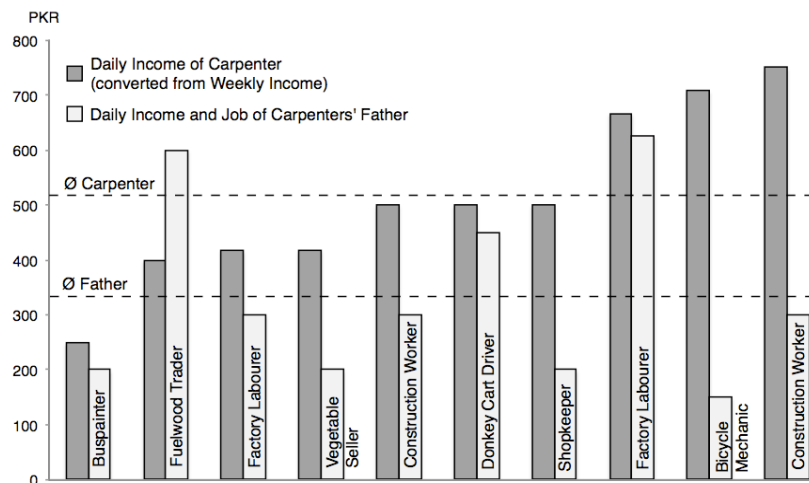


Figure 6.3: Comparing the income of carpenters and their fathers

Draft: own design

Source: own household survey 2012, n = 10; 1 Euro ~ 120 PKR

There are ten respondents whose fathers are still working in an occupation different from carpentry. Figure 6.3 compares the daily income of carpenters with the income of their fathers. It shows that in nine out of ten cases the income of the carpenter is higher than that of their father. Therefore it can be assumed that the work of carpentry is seen as an attractive income source by low-income households where the heads of households are factory workers, construction workers or small peasants.

6.3 Socio-geographic characteristics of carpenters

The interviewed carpenters are on average 27 years old, which means they are at least three years older than the average of the total household sample. The youngest is 13 years, the oldest is 69 years.

The vast majority, namely 92 percent, were born in Chiniot City and only eight percent in surrounding villages in the Chiniot District: Talib Wala, Wala Rai, Jhani Shah and Chak Bahadur. Fathers and grandfathers were born in the same places with one exception (Faisalabad). While one person commutes daily to his workshop, three stay permanently during 6 days of the week in Chiniot City: two stay with relatives and one sleeps in his workshop.

Today, the carpenters' places of residence are spread to almost all parts of the city with one exception. None of the interviewees mentioned the upper class satellite town as their place of residence. Two thirds (66 percent) of the interviewed persons work in the same *mohalla* they live in. For example, there are high concentrations of carpenters living in Hadjiabad, Thatti Garbi, Moazzem Shah and Shanewaz Colony.

Table 6.4: Socio-geographic characteristics of carpenters

	Average	Minimum	Maximum	N
Age of carpenter in years	27	13	69	50
Years of formal school education	4	0	12	50
Years of working experience	13½	1	58	50
Years in current workshop	6¾	1	58	50
No of Workshops in Working Life	3	1	23	50
Starting Age	13	6	25	49
Length of Apprenticeship in years	3	1	5½	40
No of Apprentices taught in the past	5	0	85	45

Source: own household survey 2012, n = 50

Formal education among the respondents varies strongly. While two thirds of them attended school for an average of 6 years (n = 33), one third did not attend any school (n = 17), which overall results in an average school education of four years (n=50). In general, carpenters had more formal school education than their fathers. Only 23 percent of their fathers attended school, which is less than 2 years of formal school education in average (n = 35). Only two mothers of interviewees went to school - each for five years, resulting in an average formal school education of four months (n = 31).

The average age at which people commence their apprenticeship is 13 years, ranging from six to 25 years (n = 50). For carving apprentices in particular, the starting age can be very young; there are even carving apprentices who are only five years old.

Five distinct carpenter types were identified; these are the fitter, the jigsawer, the turner, the carver and the polisher. The vast majority of carpenters focus on their specialisation throughout their working life.

The working experience of the respondents is on average 13 years and six months, with a few months being the minimum value and 58 years the maximum value.

Only two of the respondents had other jobs before they became carpenters. And only one person fulfils his carpentry occupation part-time due to his high age (68 years). Labour turnover is relatively low, as the average time a carpenter works at one workshop is four years and four months, before leaving to work in another workshop (n = 50).

Most interviewees work six days a week, having Fridays off. Most of them reported that they work eight hours per day, a few even up to twelve hours. One indebted person reported that he sometimes works up to 100 hours per week. Occasionally fitters, jigsawers and turners work at nights to exploit the times of available electricity. The

payment is in all cases distributed in cash weekly on Thursday nights by the workshop owners.

6.4 Apprenticeship

Each interviewed fully-trained carpenter had an *ustad* who trained him for an average period of three years and two months (n = 40). Five respondents mentioned they had only a period of one year apprenticeship. The maximum period of apprenticeship was five years and six months.³⁵ None of the carpenters had any kind of formal vocational education.

The 45 fully-trained carpenters were training 35 apprentices at the time of the survey. These apprentices do not necessarily belong to the same social group as their *ustad*.

The *ustad* works closely with his trainees and sometimes provides education beyond carpentry (see also Box 6.3). For example one *ustad* completed a religious education parallel to his carpentry occupation. He already trained 23 apprentices in the past. In his small carving unit, he reads the Quran daily with his young apprentices because he feels a responsibility to educate them religiously in addition next to the transfer of woodcarving skills. The items apprentices carve during their apprenticeship belong to their *ustads*, who sell them to their clients. The apprentices' wage is always paid by their *ustad*, even if their *ustad* works in a workshop. On the one hand, it is possible that some apprentices are to a certain degree exploited by their *ustad*, who uses their cheap labour to make more profit. For example, one 13-year-aged carving apprentice has already three years work experience and currently works nine hours per day, but he earns only 300 PKR per week. His current wage is far below the market price of the items he carves adding to the income of his *ustad*. On the other hand, exploitation within the *ustad*-apprenticeship-system is constrained by the fact that the apprentice can leave his *ustad* at any time and offer his skills to workshop owners. Therefore, the empowering potential of the *ustad* clearly outweighs the exploitative potential. Most apprentices directly become contractors though some become wage earners. Some of the interviewed contractors were wage earners before they worked independently, but none of the wage earners was a contractor before.

Under the current circumstances, apprentices can assume that the period of apprenticeship and their time investment will pay off in the future and they will be able to support their households in future with a reliable income source (see Subsection 6.2.4).

6.5 Labour Migration

A significant share of Chinioti carpenters, namely 26 percent, worked in carpentry in at least one other Pakistani city for a duration ranging from several months up to eight years. Although labour migration can also mean to leave the country, none of the

³⁵ One respondent, a jigsawer, had seven years of half-time apprenticeship parallel to his first job.

respondents worked in countries other than Pakistan. Eight of the respondents had already worked as carpenters in Lahore near the Shezan Factory on Bund Road³⁶, three in Islamabad and Gujrat³⁷, two in Faisalabad, Sialkot and Multan and each one in Wehari, Daska, Abbotabad, Kohat, Peshawar, Hyderabad, Mansehra, Rawalpindi, Karachi, Layer and Gujranwala. The main reason that carpenters migrated to these cities is that they can earn higher incomes with the same effort (see Table 5.2). Additionally, many *ustads* advise their apprentices to temporary migrate to other cities to benefit from higher incomes. Some *ustads* can arrange the first contacts with the help of their social network. Another reason seems to be that a “Chinioti apprenticeship” is valued highly in the furniture industry in these cities. One respondent said about his time in Gujrat: *“When I went to Gujrat to work there, everybody called me ‘ustad’ although I have never been an ‘ustad’ before. People there respect carpenters from Chiniot. Still, I get phone calls from workshop owners in Gujrat who want me to work for them.”*

Box 6.3: A highly-skilled carver as an example for labour migration and apprenticeship

There is a well-respected *ustad* in Mohalla Thatti Garbi who belongs to the *Julahe* social group, is 29 years old and already has 18 years of work experience. His carved items belong to the highest quality category and he notes that attaining his current skill level requires nine years of practical work experience. His income of an average of 10,000 PKR per week is far above most of the other carpenters. He has currently seven apprentices and he already trained 26 apprentices in the past, each for an average period of two years. He says: *“The ustad is a very important person in the lives of the apprentices in Chiniot - students strongly respect their ustad. He is like a father to them, because apprentices are in general very young and spend more time with their ustad than with their father. During my work in other cities I could see how apprentices even insult their ustad. This would never happen in Chiniot.”*

The *ustad* was born in Chiniot, but he already worked in six other cities in Pakistan. He worked four years each in Lahore and Karachi, six months in Islamabad and a few months in Sialkot, Rawalpindi and Mansehra. About his apprentices he says: *“Plenty of my former apprentices are now working in Lahore, Islamabad, and even in Muscat and Saudi-Arabia. I advise them to work at least for several months in other cities, like I did in the past. You can earn much more money in these cities and also learn important things for your life.”*

³⁶ During one short field visit to Lahore, a workshop with six carvers was asked about their place of origin. Five of them responded Chiniot.

³⁷ One interviewee, who worked eight years in Gujrat, estimated that there are around 200 to 250 Chiniotis working in the furniture sector in Gujrat. Although this estimation has to be treated with caution, it indicates his perception of plenty Chinioti carpenters working in the furniture sector of Gujrat.

7 Conclusions

Like in the Punjab colonial period, woodwork remains the dominant occupation in Chiniot and vitally contributing to the income of many households. Carving as the dominant feature of Chinioti woodwork prevails until today. The contact between the British Empire and South Asia led to the emergence of furniture production in the Punjab and, as a result, to the present-day demand for wooden furniture in the higher classes of Pakistani society. By adapting their woodworking skills from architectural features to furniture, carpenters could adapt to maintain their markets.

This study has shown that out of the three predominant characteristics of caste identity, the social division of labour is the one subject to the most distinct change. Two major patterns become apparent: First, the historical carpenter caste, *Tarkhan*, persist in their carpentry occupation. Secondly, other social groups are increasingly joining the occupation of carpentry. Members of all social groups have access to the carpentry occupation. Furthermore, in Chiniot, the occupation is no longer subject to a low status. However, other features of social group identity remain. The concept of rank of social groups still exists in large parts of society. The perceived high and low status of social groups is very similar to the one described by Ibbetson in the late 19th century. *Syed* and *Sheikh* have still the highest rank and *Musalli* the lowest rank. The status of *Tarkhan* in Chiniot improved due to their hold of key positions in the production system of a prospering woodwork economy. The low rank of *Musalli* coincides often with low household incomes, debt and for some *Musalli* even bonded labour in the brick kilns. But, today, they at least have access acquiring woodworking skills and can participate in the furniture production process. A further caste characteristic, separateness, also still exists through endogamic marriages. To conclude, caste remains a real force among Chinioti carpenters and in Punjabi society in general. It depends on the situation, whether the social group is of minor importance (choice of profession) or of high importance (endogamic marriages, commensality, status).

The study has also shown that carpenters' livelihoods today are much more strongly influenced by the economic forces of supply and demand than they were in the 19th century. In the heavily commercialised present day furniture industry, carpenters have to compete for income. Provided that they have the physical condition and are willing to spend around three years in training as apprentices, the occupation seems to offer an attractive source of income, especially for low-income households. The labour migration of Chiniot-trained carpenters to other Pakistani cities is - especially for young and unmarried carpenters - a strategy to further increase incomes by benefitting from higher market prices there. In general, incomes are plateau at a certain level when households don't have access to capital and cannot start a workshop, a showroom or a sawmill. To acquire the necessary capital some households manage to borrow money, typically with the help of

their social networks, mostly of their own kin. Only few households own property in advantageous locations that they could convert into a showroom.

It also became clear during this study that the centuries-old *ustad*-centered system of apprenticeship still exists in the city of Chiniot. It is one important factor explaining why the skills of Chinioti carpenters and carvers “survived” up to the present day.

References

- Abbas, G. (2007): *Tazias of Chiniot*. Tarikh Publications, Lahore.
- Ali, I. (1988): *The Punjab Under Imperialism: 1885-1947*. Princeton University Press, Delhi.
- Ali, I. (1997): Canal Colonization and Socio-Economic Change. In: Banga, I. (ed.): *Five Punjabi Centuries. Polity, Economy, Society and Culture, c.1500-1990*. Manohar, Delhi. pp. 341-357.
- Barber, B. (1968): Social Mobility in Hindu India. In: Silverberg, J. (ed.): *Social Mobility in the Caste System in India*. Mouton, The Hague. pp. 18-35.
- Bayly, S. (1999): *Caste, Society and Politics in India. From the Eighteenth Century to the Modern Age*. Cambridge University Press, Delhi.
- Beidelman, T.O. (1959): *A Comparative Analysis of the Jajmani System (= Monographs of the Association for Asian Studies VIII)*. J.J. Augustin, New York.
- Birdwood, G. (1880): *The industrial arts of India*. Chapman and Hall, London.
- Böck, M., Rao, A. (1995): Aspekte der Gesellschaftsstruktur Indiens: Kasten und Stämme. In: Rothermund, D. (ed.): *Indien. Kultur, Geschichte, Politik, Wirtschaft, Umwelt*. C.H.Beck. München. pp. 111-131.
- Chatterjee, S., Pande, M., Pangging, G., Goswami, G. (2005): Carvers, Conservation and Certification in India. In: Cunningham, A., Campbell, B., Belcher, B. (eds.): *Carving out a future. Forests, Livelihoods and the International Woodcarving Trade*. Earthscan, London. pp. 103-120.
- Commander, S. (1983): The Jajmani System in North India: An Examination of its Logic and Status across Two Centuries. In: *Modern Asian Studies* 17 (2), pp. 183-311.
- Cunningham, A., Campbell, B., Belcher, B. (2005): Ecological Footprints: Carving, Sustainability and Scarcity. In: Cunningham, A., Campbell, B., Belcher, B. (eds.) (2005): *Carving out a Future. Forests, Livelihoods and the International Woodcarving Trade*. Earthscan, London. pp. 199-228.
- Damodaran, H. (2008): *India's New Capitalists. Caste, Business and Industry in a Modern Nation*. Palgrave Macmillan, New York.
- Dettmann, K. (1978): Die britische Agrarkolonisation im Norden des Industrieflandes. Der Ausbau der Kanalkolonien im Fünfstromland. In: *Mitteilungen der Fränkischen Geographischen Gesellschaft* 23/24, pp. 375-411.
- Dettmann, K. (1980): Städtewesen und Stadtstrukturen im Norden des Industrieflandes. In: *Mitteilungen der Fränkischen Geographischen Gesellschaft* 25/26, pp.351-393.
- DGME (Directorate General Monitoring & Evaluation) Planning & Development Department, Government of the Punjab (2012): *Customized Lending Programme for Furniture Cluster at Chiniot*. Lahore.

- Dirks, N.E. (2001): *Castes of Mind. Colonialism and the Making of Modern India*. Princeton University Press, Princeton, NJ.
- Dumont, L. (1980): *Homo Hierarchicus: the Caste System and its Implications*. The University of Chicago Press, Chicago, London.
- Gilmartin, D. (1988): *Empire and Islam. Punjab and the Making of Pakistan*. Tauris & Co, London.
- Gould, H.A. (1986): The Hindu Jajmani System: A Case of Economic Particularism. In: *Journal of Anthropological Research* 24 (3), pp. 269-278.
- GOP (Government of Pakistan), Statistics Division, 2000: *District Census Report of Jhang, 1998*. Islamabad.
- Gusfield, J. R. (1967): Tradition and Modernity: Misplaced Polarities in the Study of Social Change. In: *American Journal of Sociology* 27 (4), pp. 351-362.
- Hasan, A. (2010): Migration, small towns and social transformations in Pakistan. In: *Environment and Urbanization* 22 (1), pp. 33-50.
- Hunter, W.W., Cotton, J.S., Burn, R., Meyer, W.S. (eds.) (1909): *Imperial Gazetteer of India, Atlas*. Vol. 26. Clarendon Press, Oxford.
- Ibbetson, D. (1883): *Panjab Castes* (Reprint 2011). Sang-e-meel Publications, Lahore.
- Kipling, J.L. (1888a): The Industries of the Punjab. In: *The Journal of Indian Art* 2 (20), pp. 25-59.
- Kipling, J.L. (1888b): The Industries of the Punjab. In: *The Journal of Indian Art* 2 (20), pp. 65-69.
- Levin, S. (1974): The Upper Bourgeoisie from the Muslim Commercial Community of Memons in Pakistan, 1947 to 1971. In: *Asian Survey* 14 (3), pp. 231-243.
- Madina Furniture House (no date given): *Ideal Chineoty Bedroom Design Book 10* (unpublished brochure).
- Maffey, J.L. (1903): *A Monograph on Wood Carving in the United Provinces of Agra and Oudh*. Government Press, Allahabad.
- McGowan, A. (2009): *Crafting the Nation in Colonial India*. Palgrave Macmillan, New York.
- Naazish Ata-Ullah (1998): Stylistic Hybridity and Colonial Art and Design Education. A Wooden Carved Screen by Ram Singh. In: Barringer, T. & Flynn, T. (eds.): *Colonialism and the Object. Empire, Material Culture and the Museum*. Taylor & Francis, London. pp. 68-81.
- Nadeem Omar Tarar (2011): From 'Primitive' Artisans to 'Modern' Craftsmen: Colonialism, Culture, and Art Education in the Late Nineteenth-Century Punjab. In: *South Asian Studies* 27 (2), pp. 199-219.

O'Dwyer, M. F. (1890): Wood Manufactures in the Punjab. In: *The Journal of Indian Art* 3 (30), pp. 33-39.

Orenstein (1962): Exploitation or Function in the Interpretation of Jajmani. In: *Southwestern Journal of Anthropology* 18 (4), pp. 302-316.

Papanek, G. F., (1969): *The industrial entrepreneurs - education, occupational background and finance.* Harvard University. Centre for International Affairs, Development Advisory Service, Cambridge, MA.

Papanek, H. (1972): Pakistan's Big Businessmen: Muslim Separatism, Entrepreneurship, and Partial Modernization. In: *Economic Development and Cultural Change* 21 (1), pp.1-32.

Pfeffer, G. F. (2012): Caste and Kinship in Pakistani Punjab. In: Kreutzmann, H., Mahmood, T. (eds.): *Understanding Pakistan*, WVB, Berlin. pp.173-191.

Prakash, G. (1990): Writing Post-Orientalist Histories of the Third World. Perspectives from Indian Historiography. In: *Comparative Studies in Society and History* 32 (2), pp.383-408.

PG (Punjab Government) (1884): *Gazetteer of the Jhang District. 1883-84* (Reprint 2000). Sang-e-meel Publications, Lahore.

PG (Punjab Government) (1905): *Gazetteer of Chenab Colony (Lyallpur), 1903* (Reprint 1996). Sang-e-meel Publications, Lahore.

PG (Punjab Government) (1907a): *Gazetteer of the Punjab, 1.* Atlantic Publishers. New Delhi.

PG (Punjab Government) (1907b): *Gazetteer of the Punjab, 2.* Atlantic Publishers. New Delhi.

PG (Punjab Government) (1930a): *Punjab District Gazetteers: Jhang District, 1929.* Superintendent, Government Printing, Lahore.

PG (Punjab Government) (1930b): *Punjab District Gazetteers: Muzaffargarh District, 1929.* (Reprint 2012). Sang-e-Meel Publications, Lahore.

PSIC (Punjab Small Industries Corporation)(ed.) (2010): *Crafts of Chiniot.* In: *Crafts and Craftsmen of the Punjab* 6, Lahore.

Roy, T. (2000): *The Economic History of India 1857-1947.* Oxford University Press, New Delhi.

Rostow, W.W. (1960): *The Stages of Economic Growth.* Cambridge University Press, Cambridge.

Sharma, H.C. (1997): Changing World of Artisans, 1849-1947. In: Banga, I. (ed.): *Five Punjabi Centuries. Polity, Economy, Society and Culture, c.1500-1990.* Manohar, Delhi. pp. 496-506.

Singer, M. (1971): Beyond Tradition and Modernity in Madras. In: *Comparative Studies in Society and History* 13 (2), pp.160-195.

SMEDA (Small and Medium Enterprise Development Authority) (2006): Wood Working Cluster Chiniot - Pakistan. Diagnostic Study. Cluster Profile Chiniot. no place given.

Srinivas, M.N. (1962): Caste in Modern India. Asia Publishing House, London.

SDPI (Sustainably Development Policy Institute) (2011): Pakistan Forest Digest 2 (1). Available at: <http://www.sdpi.org/publications/publication33-1.html> (accessed 8.8.2012).

Talbot, I. (1988): Punjab and the Raj, 1849-1947. Manohar, New Delhi.

UNDP (United Nations Development Programme) (2013): International Human Development Indicators. Available at: <http://hdrstats.undp.org/en/indicators/67106.html> (accessed 10.2.2013), United Nations Development Programme.

Wiser, W.H. (1936): The Hindu Jajmani System. A socio-economic system interrelating members of a Hindu village community in services. Lucknow Publishing House, Lucknow.

WWF (World Wide Fund for Nature)(2010): Conversion of Forests to Non-Forestry Uses in Pakistan. August 2010.

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Prof. Dr. Hermann Kreutzmann

Contact

Centre for Development Studies (ZELF)

Institute of Geographical Sciences

Freie Universität Berlin

Malteserstr. 74-100

D-12249 Berlin

h.kreutzmann@fu-berlin.de

Tel: +49 - 30 - 838 70223

Fax: +49 - 30 - 838 70757

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