The Trend of Spatial Labour Mobility in Domjur: Does It Inherits a “J-Curve” Effect

By
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Abstract

The present study is an effort to focus on the nature and process of spatial labour mobility in case of informal sector occupations. In this sense, the study objects to detect the factors that determine labour mobility processes and their influences on the processes. To reveal this, the study is confined to a particular informal sector occupation, namely the Gems and Jewellery industry. For this, the study has selected a specific site, i.e. Domjur in Howrah district, due to its significant position in the map of migration in West Bengal. The study further attempts to detect whether spatial migration in Domjur shows a J-Curve effect in migration. To reveal this, the logical argumentation of the study is based upon literature support, case studies conducted, and the sample survey results. The micro-level field studies, sampling design and data analysis are based on the standard model approach in order to avoid spatial homogeneity.

Keywords: Informal sector, Cluster economy, Location, Mobility.
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1. Introduction

The present paper focuses on the nature and process of spatial labour mobility in case of a selected informal sector occupation in West Bengal. The study objects to detect the factors and their influences to the labour mobility processes to a particular employment-generating informal sector occupation in South Bengal, namely the Gems and Jewellery industry. For this, the study has selected a specific site, i.e. Domjur in Howrah, due to its significant position in the map of labour migration in West Bengal. The study further attempts to detect whether spatial migration in Domjur shows a J-Curve effect in migration. The logical argumentation of the present study is based upon the support of migration literature, case studies conducted, and the primary survey results. The micro-level field studies, sampling design and data analysis have been approached on the basis of the standard model – the model has been approached in order to avoid spatial homogeneity.
2. Methodology of analysis

The logical argumentation of the study is based on literature support, case studies and primary survey results. The survey process is exhaustive. The survey is based on qualitative purposive sampling with semi-structured questionnaire and indirect interview method. The micro-level field studies, sampling design and data analysis are based on the standard model approach. The implication is that the selection of any sampling region does not depend on data availability (or non-availability) and avoids spatial homogeneity. The study also assumes that the producing firms within a cluster of the industry are non-homogeneous in nature. However, the spatial distribution of production units of a single industry is cross-sectional, given and known. Sometimes an ethnographic study has been approached due to data non-availability and data non-responses in the sample survey area.

3. The Industry profile

Domjur in Howrah has appeared as a separate location for long years back with its high product and labour market linkage with Bowbazar 100 years back. The market is well-known for producing gold jewelleries with diamond setting and brass metal jewelleries. The production orders come from the contractors of Bowbazar or from the local customers which get a finishing touch by skilled workers of Bowbazar and are ready for sale. The diamonds required for production are being imported, the raw gold is supplied by the contractor and other raw materials are purchased by the producer mainly from the local market. In the labour market, majority of the labourers in Domjur come from the districts of Howrah, Hooghly and West Midnapore. The labourers get training in Howrah and acquire skills and experiences necessary to enter in Kolkata skilled labour market to earn higher wages. They also move to other cities of the country and even to middle-east Asian countries for higher income earnings.
4. The micro perspective of migration

The literature on labour mobility attributes its origin to geographer Ravenstein (1885, 1889). To Ravenstein, the major cause of labour mobility is considered to be rather economic. In his “laws of migration”, he saw the process of labour migration and economic development as inseparable. The argument holds true for Domjur Gems and Jewellery industry. The primary objective behind migration of Domjur Gems and Jewellery industry workers is still rather economic – i.e. to earn higher income at destination. To follow the “laws of migration”, in the early stages of its development, Domjur attributed the process of labour migration a major weapon to generate development of the region.

To view the validity of the law, later the neo-classical migration literature has been developed - which views the aspect of migration both at the micro and macro aspects. At the micro-level, the theory observes migrants as rational individual agents who decide to move spatially on the basis of their own cost-benefit calculations, which holds true for informal sector Gems and Jewellery workers of Domjur. Borjas (1989a, 1990b) argues that such mobility depends upon skill-specificity and specific labour market structure - which is further intensified in case of this particular informal sector occupation due to heterogeneity in skill and labour market structures of the site, assuming free choices and full information access in the labour market.

In the process of such spatial labour mobility, skill is considered to be a (human) capital - which is earned by investment of social capital and now is invested as a (physical) capital in order to earn higher wage earnings from the far distance areas of the informal labour market structures. Here, accumulation of skill is actually considered as accumulation of (human) capital that results in higher wage earnings - mobility of physical or financial capital may exist there, however, their magnitude and role is much insignificant to explain labour mobility processes of this informal sector activity.

In an ‘industrial district’, “the mysteries of the trade become no mysteries”; and “children learn many of them unconsciously”, as Alfred Marshall points out. The factor is strong in case of Domjur than any other spatial cluster of the industry in West Bengal. This is why specialized abilities has been transmitted from one generation to another form their teen age and has become an important characteristic of the area. In this way, skills are embodied within one from his/her childhood or teen-age in Domjur - he may become unconscious regarding incorporation of this skill within him from the childhood, however, may possess some specialized skill after a particular age (usually teen age). For this, an informal mode of skill formation process appears at the local level. Since it appears for majority of the people of the area, the area has become renowned for specialized skill and knowledge in jewellery production and has acted upon as an important determinant for concentration of firms requiring this hereditary skill in production.

With specialized skills, high division of labour appears within the firms due to differentiated skill possession by individuals with differentiated abilities. This has led to product specialization (particularly of diamond setting in Domjur) and innovation with
labour-intensive techniques of production - the ‘karigars’ of Domjur are much renowned throughout the country for their skill and innovativeness. The reason may be found on the fact: in an “industrial district”, good ideas are promptly adopted into the production process because good ideas are in the “air” of the district, which works well into the well-established social networks with well-developed bonding and tie-ups at the local level which is strong in Domjur (and Ghatal). In this way, this localized industry has offered “a constant market for skill”, particularly when the production of the “industrial district” is skill-based. The employers are assured with supply of skilled workers since there is always a supply of skill in the local market.

One major cause behind such a spatial labour mobility in this particular informal industry lies in the fact that skill has always a tendency to flow in absence of much paper works and conditionality regarding recruitment of labourer. Skill usually attempts to find a market for its own - therefore, skill always shows the tendency to flow at destination(s) for earning higher incomes. Here, social capital plays the role of a guarantor at the time of recruitment of labour – however, such informal bonding and belongingness becomes insufficient to tie up labour at a particular place.

To explain how the process of spatial labour mobility occurs, the micro-foundation aspect of labour mobility process may be approached. Here, worker is often trained in the local informal labour market at their teen-age. After completion of their training, most of the workers become semi-skilled who either work for higher wages and experiences at the local level or move to other far distant destinations to earn higher wages and to find out market for their skill. In this way, the semi-skilled and skilled workers make their skill marketable by finding out new physical location(s) even. The physical (spatial/horizontal) mobility of the informal sector labour provides him the scope for selling their skill at higher prices. The workers usually accept the costs and risks of physical out-migration if their probable income becomes higher than their earnings at the local market. Here, a cost-benefit calculation at the micro level approaches a stochastic behaviour and makes horizontal mobility of the informal labour a reality.

Here the question may arise: why skilled informal labour flows spatially? It is due to the actual wage differentials across locations. A skilled labour would decide to migrate spatially if there lies a spatial wage differential between the two locations. The amount of wage differential should be sufficient to cover the cost and risks of migration. Let us consider that the wage at origin is \( w \) and the wage at destination is \( w^* \). Let \( c \) is a fixed cost type of component which includes all the major costs of migration (such as the cost of fooding and lodging at destination, mental cost of staying outside home, travel expenses etc.) and informal risk premium \( r \) (which include familiar contacts at destination, ensured job, better work conditionality etc.). Then a skilled worker would decide to migrate if the wage differential is higher than the cost and risks of migration, i.e.

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(w^* - w) > (c + r).
\]

It is to be noted here that the informal risk premium \( r \) would be high enough if the supply of social capital to the migrant worker is higher at destination. Further, the supply of social capital also influences costs of migration \( c \) to a certain extent – higher
is the supply of social capital, the lower is the costs of migration for the migrant labourer.4

Here the human capital frame may be referred, as developed by Becker (1962) and Sjaastad (1962), which considers migration as an investment decision. They provide the theoretical explanation of consideration of migration beyond costs consideration. Since individuals differ in terms of personal skills, knowledge, physical abilities, age, sex, and so on - such differences are reflected in terms of expectations over diverging returns on migration investment. Hence, such expected differentials are actually considered to be partial explanation over inter-individual properties to migrate.

5. The lee hypothesis

Later, the migration literature founds to have an enriched and varied field of enquiry when Lee (1966) revised Ravenstein’s 19th century laws of migration, and proposed several determinants of migration associated with the area of origin, the area of destination, the intervening obstacle variables such as distance, physical barriers, immigration laws etc., and individual factors. In this, the Lee Hypothesis becomes relevant to explain the urban-urban migration. It lists out factors determining migration other than wage differentials. To Lee, migration takes place within well defined “streams” (i.e. from specific places at the origin to specific places at the destination) not only due to the fact that opportunities tend to be highly localized but also because the flow of knowledge back from destination facilitates later migrants – which applies well to explain Domjur Gems and Jewellery labour mobility processes in which migration appears from well-defined “streams” with the regular flow of knowledge back from destination.

Let us make the Lee analysis in some detail. Lee stated that migration is selective with respect to individual characteristics of migrants due to response differentials to the “plus” and “minus” factors by the migrants at origins and at destinations. To Reniers (1999), in these cases, abilities also vary between migrants to cope with the intervening variables. Therefore, migrants are rarely representatives of their community of origin. This is consistent with the neo-classical idea of migration selectivity by individual differences in human capital environments and cost and risk differentials associated with migration.

The analytical frame of Lee, also known as the “push-pull” model, works well to explain mobility of informal sector workers other than income differential variables. To Passaris (1989), it is basically an individual choice and equilibrium model. Two main forces are typically distinguished to create the pushes and pulls here:

1. Rural population growth causes a Malthusian pressure on agricultural and natural resources, and pushes people out of marginal rural areas, and
2. Economic conditions lure people into cities and industrialized destinations.5

However, modification continued later to the inclusion of other factors other than unemployment that influence expected income gains that can be achieved through migration. To the later migration economists, the potential gain in the form of higher

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wages is balanced with factors such as the opportunity costs of migration, the cost of travel, temporary unemployment while making all installation at the destination, and the physiological costs of migration. In fact, the costs and risks associated with migration (particularly in case of international migration) explain why it is generally not the poorest of the region who migrate and why social networks (social capital) are so crucial in lowering physiological costs of migration in the region.

The selectivity aspect of migration detects that the selection of migrants also depends on specific skills (and educational) background of the migrants, depending on the specific type of labour demand in migrant receiving areas. This theoretically explains why the likelihood of migration is age-specific (actually it decreases with age) and skill (or education) specific (individuals with higher education and skills exhibit higher migration propensity), as well in Domjur. Therefore, as Bauer and Zimmerman (1998) point out, we have to take into account not only the aggregate labour market variables such as wage differentials and employment opportunities, but also the internal structure and segmentation of labour markets as well as individual socio-economic characteristics and capital when we consider real migration decisions.

6. The macro perspective of migration

The macro perspective of neo-classical migration theory started to be stressed upon before Lee when Lewis (1954) has started to show the issue of rural-urban migration as indispensable, therefore a constituent part, to the entire development process. In this, surplus rural labour is transferred to the urban industrial sector for its expansion. The theoretical perspective on developmental economics in this sense considers the process of economic development as a linear universal process consisting of successive stages of development (Rostow, 1960). Todaro (1969) has argued that the process of economic progress is constituted by this gradual and continuous rural-urban labour transfer process. In the MIRAB model, it is argued that it is Migration (MI), Remittances (R), Aid (A) and Bureaucracy (B) that influence the economic ‘take-off’ of the developing nations.

Todaro (1969) and Harris and Todaro (1970) have examined the basic two-sector rural-urban labour migration model which has remained the basis of neo-classical migration theory since then. The model explains the apparently contradictory phenomenon of continuous rural-urban labour migration in the developing economies despite rising unemployment in the urban center. The simple wage differential approach has been modified here to rural-urban expected income differential – the income differential adjusted for the probability to find a job in the urban location. The expected income in the destination area not only depends on actual earnings at destination but also on the probability of finding out an employment. As long as rural-urban income differential remains high enough to outweigh the risk of becoming unemployed, relatively higher permanent income will continue to attract a steady stream of rural migrants. Those unable to find out a job in the urban sector join the informal labour market. The Harris-Todaro model does apply well to detect migration pattern of Domjur.6

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7. The new transformations in the migration literature

To explain why people of Domjur tend to migrate between particular places and why they migrate in a spatially clustered concentrated non-random pattern, the spatial model, as developed by geographers and demographers, analyzes migration within the context of well-defined streams and localized opportunities. This appears due to individual characteristics and differential abilities of individuals to intervening variables. The people of Domjur differ in their individual characteristics to bear the physical and psychological costs of labour mobility well which are reflected in mobility of labour within well-defined streams and communities of the region (King and Schneider, 1991; Schwartz and Notini, 1994; Skeldon, 1998; Bauer and Zimmermann, 1998). The model explains why specific sites like Domjur in West Bengal are renowned as migration-sending areas. Reniers (1999) says the flow of labour becomes area selective due to individual characteristics (e.g. community preference) and differential abilities of the individuals to address the intervening variables.

Here, labour mobility facilitates information flow back from destination to origin, thereby contributing to later mobility from the origin (Lee, 1966). The already “settled” migrants function as the “bridgeheads”, thereby reduces material-psychological costs and risks of later migrants by providing information, remittance, feedback and higher standard of living for their family members (the functioning of the ‘feedback mechanism’) through the formation of a migrant community (network). Here, “networks” are defined as sets of interpersonal ties that connect migrants, former migrants, and non-migrants at the origin and at destination through bonds of kinship, friendship and shared community. Here, the network connections are considered to be a form of social capital that people of Domjur draw upon to gain access to employment at destination. At the receiving end, social capital (in the form of migrated kin) influences to legal, political and financial obstacles to immigration and at the sending end it reduces the costs and risks of migration.

In this way, the skilled and experienced workers of Domjur try to utilize their social capital possession and move to the formal market of other cities in India like Surat, Mumbai, Delhi, Hyderabad and Chennai (and even to middle-east Asian countries) in order to earn higher incomes. Sometimes they directly move to other cities in India from the district level. Higher is the skill, higher is the probability for inter-state (and international) migration, thereby enhancing higher (expected) income earnings and other considerations such as better work condition, higher education for their children, better health care facilities for their family members etc. This ‘stochastic’ pattern of skill-deterministic labour mobility strictly depends upon individual characteristics to cope with the costs and risks of migration at destination.

Once such “chain” (network) migration brings network connections at a critical level at the origin, migration appears to be self-perpetuating since it caters the entire social structure to sustain the process. To Lee, this forms an established migrant community at destination and increases probability of subsequent migration. Such social bonding and feelings of being part of one (transitional) community explains why migrants tend to remit substantial money to non-migrants - which is absent in neo-
classical individual-centered approach (Djajic, 1986; Taylor, 1999). However, migrants here are referred as restrictive “gatekeepers”, unwilling to assist prospective migrants beyond the community (Appleyard, 1992; Massey et al, 1993; Bocker, 1994; Waldorf, 1998; Levitt, 1998; Massey, 1999; De Haas, 2003).8

Therefore, the migration flows (and counter-flows) of goods, remittances, ideas and information tend to be geographically structured with spatially clustered flows. This morphology explains well the migration pattern of Domjur, though is not totally explained by income, employment (unemployment) and opportunity differentials between destination and the origin – rather it explains why particular areas or groups tend to specialize in mobility to particular destinations. Vertovec (1999) refers that migration system link people, families and communities over space.

Migration then becomes almost systematic out of these specific sites, following a particular pattern or “system” (Massey, 1990). Here, a migration system is referred as a set of places linked by flaws and counter-flows of people, goods, services and information that facilitate further exchange (including migration) between places. Such “system” migration sometimes becomes sufficient to alter socio-cultural-economic-institutional conditions at both the sending and receiving ends, as is the case of Domjur (Levitt, 1998). The causes and consequences of migration then should not be considered separately – rather they are parts of the same system, i.e. the entire development space of the region within which migration process operates. Our case-study reveals that several people of Wadipur, Rudrapur, Baruipara, Kolra and other villages in Domjur lived in kaccha houses during the 1980s, now they live in pacca houses.

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urban migration flows, Portes and Borocz (1987), McKee and Tisdell (1988), Fawcett (1989), Martin (1992), Gurak and Cases (1992) and Kritz et al (1992) extended this approach to international migration by incorporation of the process of “leapfrogging”. Such an international level migration gives the worker of the informal labour market of villages and small towns to become a global worker, who earns much higher income than the local and national market. A few people in Domjur Gems and Jewellery industry have reported during the survey that they had started their life with an monthly earning of Rs. 4,000-5,000 in the local market, have migrated to Dubai, Bahrain and other middle-East countries with an earning of Rs 20,000-22,000 per month during the 1980s, have returned back during the 1990s, and have become independent entrepreneurs by establishing their own business (the case of vertical labour mobility) – now their sons look after their business.

To the inverted U-curve or J-curve approach, a temporary increase in migration (i.e. a migration hump) is an indispensable part of the development process. To detect whether the J-Curve effect works well in case of Domjur, it is to be stated that in the early stages of development, an increase in the wealth has led to a rise in migration of the region. With the establishment of migration “networks”, an increasing proportion of the population is able to migrate, selectivity of migration tends to decrease, and the process of economic development tends to lead to an increasing diffusion of migration access communities. Therefore, economic development of the region and decreasing income differentials with destination areas tend to follow a J-curve or inverted U-curve effect on migration in case of Domjur Gems and Jewellery industry – steeply increasing in the initial phase of development of the region and then gradually decreasing.

However, several researchers have shown, by using “labour frontiers”, that migration tends to decrease only at later stages of the development process of any region and the region is transmitted from net labour exporters to net labour importers (Bohning, 1994; Rotte et al, 1997; Olesen, 2002). However, the present scenario of the Domjur region discards such a phase – presently the informal economy of the region acts as a steeply increasing migration发送 region, as per our primary survey results.

8. Conclusion

The nature of labour mobility processes of Domjur Gems and Jewellery industry detects the fact that economic development of the region and decreasing income differentials with destination areas tend to follow a J-curve or inverted U-curve effect steeply increasing in the initial phase of development of the region and then gradually decreasing. Several researchers have shown, by using “labour frontiers”, that migration tends to decrease only at later stages of the development process of any region and the region is transmitted from net labour exporters to net labour importers. The present scenario of the Domjur region discards such a phase – presently the informal economy of the region acts as a steeply increasing migration sending region.
9. Appendix


2) By social capital here we mean social organizations (such as trust, norms, reciprocity, co-ordination, interactions, belongingness and networks) between workers and producers that facilitate better co-ordinated actions.


5) However, several researchers argue that the push-pull model in the neo-Malthusian frame lacks empirical testing. Further, it ignores the heterogeneity and internal stratification of societies.

6) The ‘historical-structural’ paradigm states that the access to resources, hence economic-political power, is unequally distributed among developed and developing countries. The capitalist expansion reinforces these inequalities. The developing economies are trapped to this disadvantaged position within the global geo-political structure.

7) In this, the “dependency” theory by Frank (1966a, 1969b) and Baran (1973) considers that global capitalism and migration contributed to “development of underdevelopment”. To Emmanuel Wallerstein (1974a, 1980b), labour follows where capital goes - individuals do not possess free choice and are fundamentally constrained by structural forces. Following this, the ‘world system’ theory classifies countries according to their degree of dependency (Castle and Miller, 2003).


9) The Network Theory has been criticized on the ground that empirical researchers consisting case-studies with samples on dependent (network) variables are potentially biased to instances where such networks play infusionist role.

10) The Leap-frogging phenomenon conveys: (i) There is an initial phase, in which all regions are roughly equal in size; (ii) The process of agglomeration starts; (iii) The further reduction of transport costs causes a long gradual decline; (iv) The transport costs are virtually absent and manufacturing activity in all the regions becomes approximately of the same size (Mabogunje, 1970; Arizpe, 1981; Borocz, 1987; Fawcett, 1989; Massey, 1990; Massey, 1991; Martin, 1993; Martin and Taylor, 1996; Olesen, 2002; van Dalen et al, 2005).

11) The historical-structural paradigm has been criticized by the neo-classical theory on the ground that people move not of free choice - they are forced to move since traditional economic structures are undermined due to their incorporation into geo-political-economic system. The Cumulative Causation theory of Myrdal may also be referred herewith.

12) Here, “migrant syndrome” is considered in which migration is referred as a process of draining labour and human capital resources (Almeida, 1973; Lipton, 1980; Reichert, 1981; Penninx, 1982; Lewis, 1986; Massey et al, 1993; Reniers, 1999; Taylor 1999). A “migration hump” refers that in the early stages of development, an increase in the wealth leads to a rise in migration.

13) The Zelinsky model, the Skeldon model and the Martin-Taylor model may be integrated into a spatio-temporal transitional migration perspective with complex linear inter-linkages between the occurrence of various forms of migration and general socio-economic technological demographic transformation process incorporated in “development” process.

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10. References


