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Case Study of Two Towns in Bihar

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URBAN DEVELOPMENT AND RURAL-URBAN LINKAGES CASE STUDY OF TWO TOWNS IN BIHAR

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ABSTRACT

Urban development characterizes the economic transformation of any region today. Urbanization is usually associated with industrialization and reflects the transition from an agriculture-dependent economy to an industrialized one, accompanied by transfer of labour from the less productive agriculture sector to other sectors. The development process of an urban centre is likely to be linked with the nearby rural economy through exchange of goods, services, labour, capital, etc. In this backdrop, the current study attempts to examine the urban development of Bihar on the basis of detailed survey in two sample towns Biharsharif and Madhubani. The paper attempts to identify the sources of urban output in the two towns and trace the rural-urban linkages with the help of primary data.

The paper is based on data from enterprise surveys conducted in two towns in Bihar. Biharsharif, a class I town, is located in Nalanda district and Madhubani, a class-II town, is located in Madhubani district. The sources of urban output in the two towns have been analysed with the help of information obtained from the enterprise survey regarding identification particulars of the firms, enterprise and worker related details, details of the members of the household which has enterprise/shop located within their living premises, related information about the own account enterprises, details of factory workers, and challenges and problems faced by different types of enterprises. The rural-urban linkages were also traced with the help of the primary data.

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The findings indicate that both towns have seen a gradual decline in industrial activity over the years. They are characterized by small-sized enterprises, which are largely informal in structure. Trading activity was found to be the most important segment of urban development in the two towns. Rural-urban linkages were found to be strong in terms of employment of rural labour in urban enterprises, use of raw material from surrounding rural areas as well as in terms of urban areas providing a market for rural produce. There was also evidence of reverse linkage in terms of rural consumers providing a market for some of the urban products.

The employment linkage was found to be strongest for manufacturing activities, indicating its potential to absorb labour from rural areas in more productive activities, but in both towns manufacturing activities have witnessed a decline during the past two to three decades, and at present most of the manufacturing units surveyed are either contracting or stagnating. In this context, electricity supply was identified as the most important bottleneck for industrialization, along with deficits in other infrastructural facilities, lack of funds, inflation, corruption, lack of skilled workers, etc.

1. SETTING THE CONTEXT

In today's world, urban development characterizes the economic transformation of any region. Urbanization is usually associated with industrialization and reflects the transition from an agriculture-dependent economy to an industrialized one with concomitant development in the infrastructure and access to basic facilities, such as water and sanitation. The recent experiences in many South Asian countries demonstrate that the trajectory of development need not always be from agriculture to industry, as the impetus for growth can come from the service sector (Ghani and Kharas, 2010; Government of India, 2015), however, the process still involves transfer of labour from the less productive agriculture sector to other sectors. An associated process in this context is that of increasing urbanization and urban development.

The relation between economic growth and urban development is often symbiotic. While urbanization is an outcome of the growth process, it is also one of its drivers. Urban centres can facilitate growth through enhancing the productivity of output and employment, mobilizing and channelling savings as well as allowing accumulation of wealth in the form of urban real estate, and imparting fiscal flows along with revenue generation (Pangotra and Govil, 2008). The development process of an urban centre is likely to be linked with the nearby rural economy through exchange of goods, services, labour, capital, information technology and social transactions.

Research evidence indicates that the trends and patterns of urbanization are a direct manifestation of the process of economic developments in space, especially in the context of the contemporary phase of globalization (Kundu, 2009). A positive correlation has been observed between per capita Gross State Domestic Product (GSDP) of states in India and their rate of urbanization (Pangotra and Govil, 2008). For less developed countries, in particular, a large part of urban growth has historically been linked to

stagnation and volatility of agriculture as well as to the lack of sectoral diversification within the agrarian economy (Kundu, 2009).

(a) Urbanization in India and Bihar

According to the Census data, India has been experiencing an upward trajectory in terms of urbanization, albeit at a slow rate. The urbanization rate rose from 25.5 per cent in 1991 to 27.2 per cent in 2001 which further increased to 31.2 per cent in 2011². However, not all the states are progressing at a similar pace. Bihar presents a paradoxical situation in this context, as this state has posted relatively high rates of growth in the last few years, yet there is very low urbanization rate of approximately 11.3 per cent in 2011. Low levels of urbanization in Bihar are associated with low levels of infrastructural development, industrialization, and slow growth of non-agricultural employment opportunities as well as other issues, such as lack of multilevel urban structures and urban poverty.

(i) Pattern of Urbanization in Bihar

Bihar is not only one of India's least urbanized states, but the pattern of urbanization there is also not balanced. South Bihar is considerably more urbanized than the north. Further, 2011 Census data suggested that class I towns (with population more than 1,00,000) accounted for about 57.5 per cent of the total urban population of the state, while class II (population between 50,000 and 1,00,000) and class III (population between 20,000 and 50,000) towns accounted for about 37 per cent of the population. The rest of the towns accounted for only around 5 per cent of the total urban population. On the basis of population range in cities of Bihar, the classification of those cities has been shown in Table 1.

Table 1: Classification of Cities in Bihar into Classes as per Population, 2011

Cities	Population Range	Bihar No. of towns	Bihar % of Population	North Bihar No. of towns	N Bihar % of Population	South Bihar No. of towns	S Bihar % of Population
Class I	> 1,00,000	26	57.5	13	50.2	13	62.9
Class II	50,000 –99,999	28	15.6	13	16.9	15	14.6
Class III	20,000 –49,999	76	21.6	41	26.3	35	18.0
Class IV	10,000 –19,999	22	2.8	12	3.7	10	2.2
Class V	5,000–9,999	38	2.2	20	2.7	18	1.9
Class VI	<5000	9	0.3	2	0.2	7	0.4
Total		199	100.0	101	100.0	98	100.0

Source: Census 2011

2. In the Indian context, a human settlement is called urban, when it has a minimum population of 5000 with a population density of at least 400 per sq km, and has 75 percent of the male population working in non-agricultural sector.

Balanced urban development implies a pyramidal hierarchy with a broad base of small towns, each being served by a larger town of the next order, which in turn forms part of the hinterland of the next higher order town, but Bihar is lacking in this structured urban development. Furthermore, there is considerable regional variation which will be discussed in this paper.

(ii) Rural–urban Linkage

How closely is growth in urban areas and surrounding rural areas interlinked? According to Datt and Ravallion (2010), the post 1991 data for India provided evidence of a positive feedback effect that existed between urban economic growth and reduction of rural poverty, which may be reflective of the growing urban–rural linkages. The crucial importance of urbanization in the context of benefitting from the economic growth has been demonstrated effectively by Krishna and Bajpai (2011) in their study, where they used data for the period 1993–2005 to show that the distribution of benefits from economic growth since the early 1990s has followed an identifiable spatial pattern. People living in the largest cities have been found to achieve the greatest gains, followed by people in small towns and villages close to towns. In addition, policies have an ‘urban bias’, as is seen through the way in which critical infrastructure and access to such potential for skill development and employment opportunities have emerged in towns or peripheries, and are thus, difficult to access from areas that are far away.

In Bihar, the scope to utilize the urban–rural linkages for growth potential is limited. With a total of 14 urban agglomerations, 139 statutory towns and 60 census towns in 2011, the number of urban centers in Bihar is far less than other states. Moreover, these are unevenly distributed across districts and have not achieved full potential toward their contribution to the state’s economic growth, which gets reflected in the extremely high rates of out migration from the state as well as urban centres.

Other features of the Bihar economy that have bearing on the urbanization in the state are low share of workers in manufacturing and low outreach of the financial sector. According to the Sectoral Composition of GSDP at constant prices (2000–2001 to 2010–2011)³, with the increased in the overall secondary sector’s contribution to the GSDP from 10.5 per cent in 2000–2001 to 18.1 per cent in 2010–2011, the contribution from manufacturing decreased from 5.8 to 4.2 per cent in the corresponding period. Bihar’s industrial sector contributes only about 16 per cent to its GSDP against 26 per cent for the national average. The majority of urban workers in Bihar are engaged in wholesale and retail trade and services, rather than in manufacturing and industrial sector which plays a vital role in urban growth. According to an analysis based on the Locational Quotient technique, most cities and towns are largely dependent on the

3. As calculated from Bihar Economic Survey (2013-14) <http://finance.bih.nic.in/Documents/Reports/Economic-Survey-2014-EN.pdf>

primary sector (Pangotra and Govil, 2008)⁴. Biharsharif has been found to be the only large city where industry is the second basic sector. In addition, though Bihar has the highest population density of 1102 persons per sq. km among all the states as well as a high share of rural population at 88.7 percent, the state has limited exposure to banking services.⁵ The per capita availability of financial services is the lowest in the country.

Migration is an important feature of the Bihar economy that results from the lack of economic opportunities in the state (Rodgers et al., 2013). Outmigration from Bihar is very high and it is more from the backward districts. Thus, remittances play an important role in the state economy, especially in reducing rural poverty (ibid). Thus, there are financial linkages that play a vital role between the rural areas of Bihar and urban centres in other states, rather than the usual pattern of linkage between towns and the surrounding rural areas. The poverty ratio in the state is 33.7 per cent as per the 2011–2012 National Sample Survey (NSS) data with little difference in the rural–urban poverty levels, thereby, implying that there are negligible economic opportunities in the urban areas of Bihar. The Census 2011 data indicate considerable gaps in the provision of housing and amenities, such as electricity, water and sanitation, for most of which Bihar lies much below the national average.

(b) Research Questions

In this backdrop, the current study attempts to examine the urban development of Bihar on the basis of detailed survey in two sample towns, Biharsharif and Madhubani. The following research questions provide the basic framework for the present study. At the outset, a typology of towns and cities in terms of their economic role and structure as well as their services has been developed. In addition, on the basis of an enterprise survey in the two towns, an attempt has been made to trace the sources of urban output and growth, to observe the functioning of urban labour markets and to understand the rural–urban linkages with respect to development in the towns that influence the surrounding rural areas.

2. DATA AND METHODOLOGY

The research questions outlined in Section 1 were investigated with the help of primary and secondary data. With the help of secondary data, mainly the data

4. The Location Quotient technique compares the local economy to a reference economy, and thereby, identifies specializations in the local economy. Location quotient (LQ) is the ratio of share of an industry related to employment in the local economy to the share of same in the national economy. A value of $LQ > 1$ for any industry indicates that the local economy is a net exporter of the goods and services provided by the particular industry. On the other hand, if the value is $LQ < 1$, it indicates that employment in the respective industry is lesser in the local economy as compared to the reference economy, and therefore, the local economy is a net importer. In the framework of the standard export base model, the industrial sectors with $LQ > 1$ are designated as “basic” sectors while those with $LQ < 1$ are designated as “non-basic” sectors.

5. www.sidbi.in/sites/default/files/psig/Status_of_FI_Bihar.pdf accessed on 2nd January, 2015.

collected from the Census of India, the trends and patterns of urban development and typologies of the urban areas in Bihar were analyzed. Various rounds of the Census data have been used in this study. The primary data collection was done by conducting two surveys in each sample town.

The enterprise survey was conducted with the factories, shops and establishments in the sample towns. In order to extract information about the outputs and growth of the firms, the survey included various questions regarding identifying the particulars of the firms, enterprise details, worker related details, details of the members of the household which has enterprise or shop located within their living premises, related information about the own account enterprises (OAE), factory workers details as well as challenges and problems faced by OAE. The survey was conducted during the months of June and July in the year 2014. A pilot study was conducted during June, 2014, which was followed by the full survey during July, 2014.

Qualitative research tools were also used for the study. In-depth interviews in industrial settings, corporations, etc. were conducted in order to collect and understand perceptions regarding development, changes in labour markets, employment opportunities, challenges to expansion and growth, urban planning, etc. A total of 12 in-depth interviews were conducted with vulnerable workers in the two towns. Ten interviews were also held with key informants and local urban administrators, state government officials, local resource persons and officials from various other institutions such as chambers of commerce. These consultations and interviews were used to understand macro processes, policies and challenges.

The selection of towns was made on the basis of their size, location, main economy, level of economic development, proximity to rural centres and large urban centres. On the basis of 2011 Census data, Madhubani, located in northern Bihar, is a class-II town with population of 75,736 and is one of the poorest regions of Bihar. It is a market town and is connected to and dependent on surrounding rural areas. Similarly, according to 2011 Census data, Biharsharif is a class-I town with a population of 2.97 lakhs. It is a prosperous urban centre, close to Patna, with strong agricultural links and as per the typology of the urban centres—discussed in the next section on Profile of Urbanization in Bihar and Typology of Towns—it is the only town in Bihar with considerable presence of manufacturing activities. The two towns belong to districts with very different urbanization rates. According to 2011 Census data, Madhubani has an urbanization of 3.6 per cent and Nalanda has an urbanization of 15.9 per cent. Therefore, examining the two towns would provide a glimpse into different kinds of issues.

(a) Sampling Methodology

For the enterprise survey, lists of all the factories and shops/establishments were collected from the concerned departments of the state government. Smaller numbers of units were selected from these lists based on the stratified random sampling. The stratification of the factories and shops/establishments was done on the basis of broad

industrial classification of activities. Among each group, proportionate sample has been drawn. Using the above methodology, an enterprise survey of 251 units was conducted in the two sample towns; out of which 139 units were covered in Biharsharif and 112 units were covered in Madhubani.

3. PROFILE OF URBANIZATION IN BIHAR AND TYPOLOGY OF TOWNS

Bihar, with a population of 104.1 million, is demographically the third largest state of India after Uttar Pradesh and Maharashtra, but with 11.3 per cent urbanization, it is the second least urbanized state of India. A comparative picture of the urbanization process in Bihar vis-a-vis the major states of India shows that most of the major states are more urbanized compared to the national level, but Bihar along with UP is below the national average (Table A1 in Annexure I). However, in comparison to the major states, the population growth rate is the highest in Bihar. Nevertheless, the urban population is growing at a much faster rate than the total population in major states including Uttar Pradesh. However, the difference is much less for Maharashtra, Bihar and Punjab.

(a) District Level Trend and Pattern of Urbanization

The trend and pattern of urbanization at the district level is presented in Table A2 in Annexure I. Patna is the focus of urbanization in Bihar, which is evident from the fact that with an urban population of 43.1 per cent in 2011, Patna shared 21.4 per cent of the total urban population of Bihar. All the other districts have less than six per cent share in the state's urban population. In 2001, the number of districts with urban population more than the state average was only nine. This increased to 11 in 2011. Begusarai and Jehanabad were the two new entrants in the above state average group. Fourteen districts recorded a decline (marginal) in their percentage of urban population during 2001–2011.

In terms of the decadal growth rate of urban population, out of the total 37 districts, 23 districts had the growth rate above the state's average of 27.5 per cent during 1991–2001. During 2001–2011, only eight districts had the decadal growth rate of urban population, that is, more than the state average of 37.4 per cent. Begusarai district emerged as an outlier with a growth rate of 429.5 per cent (Table A2 in Annexure I).

(b) Economic profile of urban areas in Bihar

The economic data of Census 2011 is partially available and indicate that work participation rate (WPR) in Bihar is 33.4 per cent, while WPR in urban areas of the state is lower at 28.6 per cent. Moreover, gender differential is evident from the WPR for male (46.5 per cent) vis-a-vis that for female (19.1 per cent). Female WPR in the urban areas is only 10.4 per cent. The main workers in Bihar constitute 61.5 per cent of the total workforce, and 78.3 per cent of the main workers are from urban areas. Among the total main workers in urban areas, the share of agricultural and non-agricultural workers is 17.6 per cent and 82.4 per cent, respectively. Among the non-agricultural

main workers, household industries have only 5.9 per cent, whereas 76.6 per cent workers are engaged in other industries. Other industries include service sector as well as factory, plantation, mining, construction, political workers etc.

An urbanized district should have more than 75 per cent of its male main workers engaged in the non-agricultural activities. The percentage of male workers engaged in non-agricultural activities in urban areas in Bihar varies from 47.2 per cent in Sheohar district to 91.3 per cent in Samastipur district (Table A3 in Annexure I). Of the 38 districts in the state, 13 districts do not have even 75 per cent of the male workers engaged in non-agricultural activities in its urban areas. Erstwhile undivided Bihar did not take very significant strides in the industrial and economic spheres despite being endowed with mineral resources. After separation of the state, Bihar remained with little mineral resources to take up any significant industrial activities.

(c) Functional Classification of towns in Bihar, 2001

The 2001 Economic Census data provide some indication with regard to the predominant economic activities in each district of the state according to the following nine categories⁶: Agriculture and allied activities, Mining and Quarrying, Manufacturing, Electricity, Gas and Water Supply, Construction, Wholesale, Retail trade, Repair work, Hotel and Restaurants, Transport, Storage and Communication, Financial intermediation, Renting & Business activities and Other services (Public Administration, Defence, Education, Health & other services). Agriculture and allied activities is usually not considered as an urban economic activity. In Bihar, workers in agriculture and allied activities were in the range of 25 per cent to 50 per cent in as many as 13 urban areas (Table A5 in Annexure I). Urban areas, however, have a larger proportion of workers in the secondary and tertiary sectors, and it is this aspect that is relevant to the functional classification of urban areas.

Data used for the functional classification relate to the main workers in all nine industrial categories for the urban areas of Bihar. There is no separate table available in the Census that exclusively provides data for all towns and cities, hence, the urban areas from the district level tables have been selected as proxy for representing towns and cities. The Census provides data for cities on the basis of nine industrial categories, but for Bihar it has covered only 13 cities. Therefore, in the current exercise, all urban areas have been selected from the district level tables that can provide information on at least 37 urban areas representing 37 districts.

Broadly, the classification has been done by excluding the agriculture and allied activities and clubbing the remaining eight activities in three broad categories, that are, Manufacturing, Trade and Transport and Other Services. Manufacturing includes household and non-household industries, electricity, gas and water supply and construction. Trade and transport includes wholesale, retail trade, repair work, hotel and restaurants, transport, storage and communication. Other services include financial

6. Census data for 2011 is not yet available for the current level of economic participation of workers in the nine categories of industries, according to the 1998 NIC classification.

intermediation, real estate, renting and business activities, public administration, defence, education, health and other services.

The classification shows that only one urban area of Biharsharif has been found to have manufacturing as dominant activities because in this area more workers are employed in manufacturing than trade and transport and other services. Being the state capital, Patna has been classified as service city because the state administration activities are located here. Banka is another urban area in Bihar which has also been classified as service city because in this city more people are employed in the service sector than manufacturing and trade and transport. All the rest of 34 urban areas have been classified under trade and transport category as these activities are dominant in the remaining urban areas (Table A4 in Annexure I).

The sub classification of the broad categories shows that within manufacturing, household and non-household industries are predominant economic activities in comparison with electricity, gas and water supply and construction activities. Similarly, within trade and transport of the wholesale, retail trade, repair, hotels and restaurants are predominant economic activities, whereas transport, storage and communication are subsidiary activities. Likewise, within other services, public administration, education, health and other services are predominant economic activities in comparison with financial intermediation, real estate and business activities (Table A5 in Annexure I).

4. OVERVIEW OF SAMPLE TOWNS

The primary data collected for the present study from both the sample towns is based on the interviews of representatives from Nalanda Chamber of Commerce, officials of the District Industrial Centre in Biharsharif, Mithilanchal Chamber of Commerce, and entrepreneurs. The data collected showed that these towns are characterized by low urbanization and industrialization, and both the towns have witnessed a decline in industrial activity in the past few decades.

Out of the two sample towns, Madhubani located in the northern region of Bihar has a poorer economic base than Biharsharif which is located in South Bihar. Overall, Bihar has a low manufacturing base as has been discussed earlier, and within Bihar, North Bihar has a weaker base for manufacturing activities compared to its Southern counterpart (Table A6 in Annexure I). The data from Census 2011 show the relatively poorer urban facilities in Madhubani district vis-à-vis Nalanda (Table 2).

The urban amenities are by and large better in Biharsharif compared to Madhubani, even when adjusted related to their respective populations of 2.97 lakhs and 75.7 thousand, respectively. However, there are exceptions because road length, number of domestic electricity connections and number of banks per thousand persons are more in Madhubani compared to Biharsharif.

Table 2: Comparative Urban Facilities in Two Districts (Census 2011)

Facility	Biharsharif (Total)	Madhubani (Total)	Biharsharif (per 1000 persons)	Madhubani (per 1000 persons)
Length of Road (km)	124	45	0.417	0.594
System of drainage	Open and closed	open		
No. of Latrines (flush/pour flush)	61075	6829	205	90
Electrification (no. of connections)				
• Domestic	37110	12050	124	159
• Industrial	6836	45	23	0.59
• Commercial	6217	358	21	4.7
Number of medical facilities (no. of beds in brackets)				
• Hospitals (allopathic and others)	3 (422)	1 (175)		
• Medicine shops (no.)	180	28	0.61	0.37
Educational facilities (no. of primary and middle schools)	146	22	0.49	0.29
No. of nationalized banks	25	10	0.08	0.13

(a) Decline in Industrial Activity

The two sample towns, despite their differences in the size of population, urbanization and availability of urban amenities, etc., nevertheless appear to be suffering from a common ailment of low and declining levels of industrialization, albeit in varying degrees.

(i) Biharsharif

Biharsharif has fertile land in the surrounding rural areas, high agricultural productivity and plentiful crops, such as rice, wheat, maize, potato, onion, tomato, cauliflower, cabbage and green chilli, but the survey findings reported a string of closed industrial ventures in and around the town. Although the town, with good and improving connectivity with the capital city of Patna, has clearly been growing with rising population and traffic, it is still pre-dominantly reliant on agriculture. Important insights have emerged about the industrialization process in Biharsharif based on the interviews held with entrepreneurs, bank officials and representatives from the office of District Industrial Centre (DIC) located in Ramchandrapur Industrial Estate in Biharsharif.

There were many cold storage units in Biharsharif earlier, but the numbers have dwindled steadily over the years to around 16 at present.⁷ The production of potatoes and onions—the main products to be stored in cold storage units—was also plentiful earlier, and the produces were exported to other states, such as West Bengal and Odisha. Biharsharif slowly lost this advantage because no government assistance was provided to farmers in terms of irrigation facilities, improved modern technology, transport facilities or cooling facilities, all of which apparently were provided in the neighbouring states such as West Bengal. Above all, the electricity situation was very poor and the option of using diesel based generators was very costly.

The result was steady closure of many of the cold storage units, and several of these units were converted into go-downs and rented out, some even sold their land for construction of market complexes. According to some owners of cold storage unit, the increase in land prices and encroachment of urban areas into villages along with increase in house construction led to decline in areas under potato and onion cultivation, which eventually led to underutilization of capacity in the remaining cold storage units.

Apart from cold storage units, there were other industrial activities that also went into decline. Weaving industry is one of them, which underwent deterioration because of the lack of supply of threads and electricity bottleneck. There were factories for producing threads and paper, three or four bidi-making factories, and a semi-government shoe factory that used to supply shoes to the army and the police—all these factories were closed down. The bidi-making factories in Biharsharif came under the cottage and small-scale industry, where many people found employment. However, following the union demands for higher wages and the government's Labour Act, the owners preferred to close the factories and provide people with raw material at home from where they can carry out the work. At present many women work in bidi-rolling at home, while men pursue other occupations. Another factory that was closed down because of the intermittent power-cuts was a factory which produced tyres and tubes for cycles.

Erratic industrial policy, red tape and corruption were mentioned by entrepreneurs as other important reasons behind industrial closures in Biharsharif as well as behind the lack of investment in industries. A usual fallout of uncertain industrial policy is litigations, where entrepreneurs need to fight long legal battles to protect their own interests.

The present cold storage units are under private limited companies; as earlier cooperative units have closed down. Many of the cold storage units had taken loans from banks, but defaulted in their repayment, thereby making banks wary of extending loans again to this sector.

7. While Cold Storage units are no longer counted as manufacturing units, because they just preserve vegetables and fruits, however, these are still considered as industrial units by DIC. In this study, these units have been considered as industrial ventures here because of the scale of investment, use of technology, lack of similarity with other trading and service units, etc.

(ii) Madhubani

Madhubani, the other sample town, has practically no industry at present, according to all the key informant interviews. There has been little economic development in Madhubani, and people migrate from here to access employment, education opportunities, etc. Much of the industrial activity has been reported to have closed primarily because of severe electricity shortage, infrastructural inadequacies as well as erratic government policy⁸.

Around 30 years back, there was a thread factory in Pandaul in Madhubani district, which was set up with an investment of Rs. 30 crores. But it was closed down owing to the shortage of electricity as well as failure of government policies. Currently, there are some rice mills, ply wood units, poultry feed units, etc. in Pandaul⁹. There was also a sugar mill in Rayyam and Rahika, but this mill was closed down not only because of the above two reasons but also because of the fact that the sugarcane farmers were not getting price for their product. The farmers here still produce sugarcane and sell 'Gur' (molasses) in the market. The key informants emphasized that without the fundamental requirements of water, electricity, roads, etc.; industry cannot develop. Furthermore, security is an important requirement.

According to cinema hall owners, even the business of film showing is currently going through a crisis in Madhubani. Usually, the viewers here are from rural areas. The urban footfall is much less because of access to TV, dish, cable, etc. But even for the rural viewers, the crowds have thinned compared to earlier years during the festival seasons. Pirated CDs are another source of competition to films. From the owner of a movie hall, who is our key informant, we came to know that costs in the business have escalated because money needs to be spent for obtaining film release order, diesel and mobil for generator, a UFO machine for running film, the monthly rent of which is Rs. 6000 to Rs. 7000, etc. Power shortage and poor quality of power are the main reasons behind lack of industrial activity in the area. For film industry, specifically, there is a need for three-phase power supply, which is usually not available. The use of generator cuts into profits. In addition, they have complained about having to pay higher rate for high tension electricity and that too for minimum fixed units, which is not always utilized.

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8. While there are some brick-kilns near Madhubani town, this study did not cover these, since only the enterprises close to the town were covered.
 9. Only the enterprises in and around Madhubani town were covered under the survey and hence, Pandaul was not covered

Box no. 1 Makhana-growing and Fisheries in Madhubani

Makhana: 'Khaan-paan-makhaan' is a well-known saying in Madhubani area. Makhana is a unique product from this region. The survey team gathered considerable information about the process of growing makhana. In a pond with one acre area, 100 kg of makhana seeds have to be planted in November, or some makhana plants which have grown elsewhere, have to be replanted. This work needs skill and capital. Around 60 to 70 labourers are needed and each labourer has to be paid around Rs. 200 to Rs.250. The rent for the pond is around Rs. 10,000 to Rs. 15,000 annually. After planting, manure worth Rs. 3000 and insecticides have to be added. If the growth of the plants is not adequate, then per acre a quintal of urea is to be added. In one acre area, around 10 to 11 quintal makhana is produced. The makhana is ripe for picking around July end or August beginning. Taking makhana out from the pond is also a difficult task and is usually done by the Mallah and Machhuara (fishing) communities.

The raw makhana with seeds is usually sold in the market for Rs 60 to Rs. 70 per kg. The raw makhana can be converted into 'Lawa' makhana using a difficult process, and it is usually carried out by the Mallah communities. Some other communities engaged in this work are Sahani, Kewat and Machhuara. Around three kgs of raw makhana yields one kg of Lawa makhana, and the cost of conversion is around Rs 120 Rs. 140 per kg.

Fisheries: Usually, seeds worth Rs 5000 to Rs. 6000 are used for one acre. Fish seeds come in three sizes: (i) Ghani, (ii) Finger and (iii) Fry. The seeds have different rates. Medicines and chuna are added to the pond water to keep it clean. Separate medicines are needed if the fish gets sick, or to prevent sickness and also for adequate growth. Around Rs. 10,000 is spent for feed. Private ponds require rental to be paid at Rs. 10,000 to Rs. 15,000 per annum. Around five to six quintal fish are bred if everything goes according to the plan. To catch the fish from the ponds, labourers have to be employed who take 10 kgs out of 80 kgs fish as their payment. If the catch is more, they get paid at Rs. 500 to Rs. 600 per quintal.

Source: Field Survey.

The rural populace around Madhubani town engages in farming, but that too is only for a few months in a year. Growing makhana and pisciculture or breeding fish are the two main agriculture-based activities which have linkages to the urban market. Other than that there is large-scale migration from the rural areas for sustenance in the medium as well as long term.

At present, there is no sizeable industry that employs a large number of people. However, there are villages near Madhubani town where many residents are known for their 'Mithila painting' or 'Madhubani painting', which is a local art form. These artists do not have a lot of linkage with the local Madhubani town, but have links with bigger cities such as Patna, Delhi, etc., and have buyers even from overseas. Brokers come from Patna to buy their products and sell these in other cities. There is also some handicraft based on Sikki grass. The survey team interviewed employees in a handicraft emporium run by Sarisab Pati Rural Women's Development Association

and learned about the decline of this handicraft industry over time. Earlier 140 women workers used to work for this association, but with decline in demand for this handicraft and lack of marketing, the number has dwindled to 40 now. The raw material, Sikki grass, for these products is bought from the impoverished Musahar community, so they are also adversely affected by this situation (see Annexure II for details).

Overall, with low industrialization, the economy in and around Madhubani town is very dependent on agriculture based activities, such as growing makhana and fisheries. Makhana is an agricultural product that can be sold either in the raw form or in the processed form in the market. Makhana farming is expensive and the farmers are usually not well-off. So, they often take resort to loans from money lenders and traders at three to five per cent per month interest rate. The capital being borrowed, the farmers are in a hurry to sell their product and repay the debt. Fish is very often bred in the same ponds where makhana is grown, only at a different time. Usually, ponds are rented out for makhana from October and from July for fish-breeding. Unlike for makhana, there is no problem in marketing and selling fish and there is more profit (see Box no. 1 and Annexure II for further details).

5. FINDINGS FROM THE ENTERPRISE SURVEY

The lack of industrialization in the two sample towns is reflected in the findings from the enterprise survey conducted in these two towns. The overall functional classification for the districts in Bihar has indicated that trade is the main source of urban output, and this is observed on the basis of number of the different types of enterprises prevalent in the sample towns, Biharsharif and Madhubani (Table 3). In majority of the cases, the owners were the respondents. Trading units accounted for 68 per cent out of 251 units that were surveyed. Manufacturing (including cold storage units) and other services held second and third position in the sample towns, with 18 per cent and 11 per cent shares, respectively, and there were a few enterprises which are engaged in both service and trade.

Table 3: Distribution of Surveyed Enterprises by the Type of Activity
(Percentage in Brackets)

Type of Unit	Biharsharif	Madhubani	Total
Manufacturing	38 (27)	8 (7)	46 (18)
Trade	84 (60)	87 (78)	171 (68)
Other Services	12 (9)	16 (14)	28 (11)
Service and Trade	5 (4)	1 (1)	6 (3)
Total	139 (100)	112 (100)	251 (100)

Manufacturing units include agro-processing units, such as rice, oil and flour mills, cold storage units as well as furniture units, saw mills, etc. Trading is observed in food, textiles and garments, utensils, electrical items, jewellery, watches, shoes, etc. Other services comprise cyber cafes, hotels, restaurants, medical services, cinema halls, etc. Six units which combined services and trading consisted of enterprises which sell motor parts, pump sets, cycles/motorcycles, cycle tyre and parts,

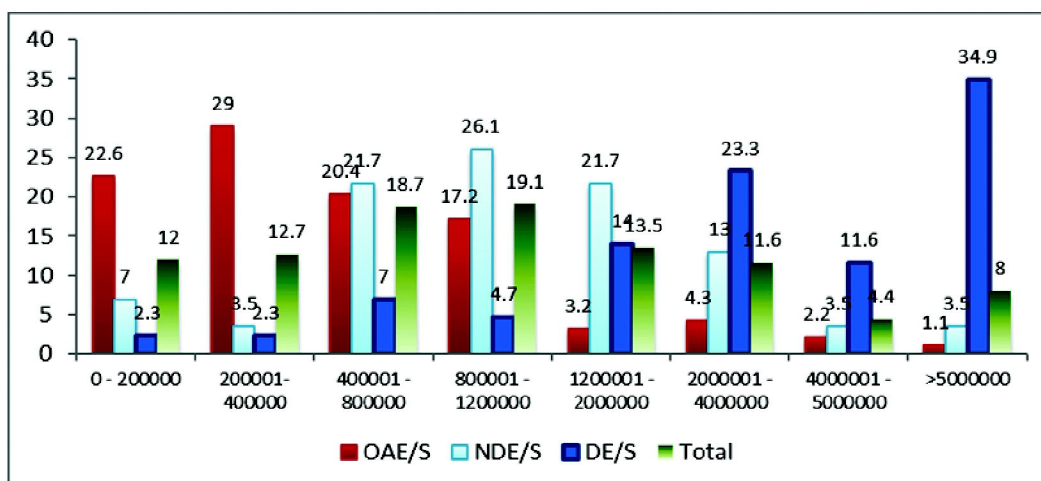
motorcycle parts, etc. and provide repairing services for the same. In keeping with lower urbanization levels, Madhubani exhibits far less manufacturing activity than Biharsharif.

The enterprises typically exhibited small scale operation where out of the 251 units that have been surveyed; the share of Non Directory Enterprises¹⁰ (NDE) is the highest at 46 per cent, followed by Own Account Enterprises (OAE) with a share of 37 per cent and Directory Enterprises (DE) with only 17 per cent (Table 4). Thus, the OAEs comprise a fairly large proportion of the sample. Since the OAE units are of relatively smaller size and do not employ hired workers on a regular basis, the impact of such units on the growth in other segments of the economy is limited. Between the two towns, Biharsharif accounts for most of the Directory Enterprises, while in the Madhubani sample, Own Account Enterprises comprise 50 percent, vis-à-vis 27 percent for Biharsharif.

Table 4: Distribution of Surveyed Enterprises in the Sample Towns
(percentage in brackets)

Type of Enterprise	Total	Biharsharif	Madhubani
Own Account Enterprise	93 (37)	37 (27)	56 (50)
Non Directory Enterprise	115 (46)	72 (52)	43 (38)
Directory Enterprise	43 (17)	30 (21)	13 (12)
All Enterprises	251 (100)	139 (100)	112 (100)

Figure 1: Distribution of types of enterprises by size of annual turnover (percentage)



10. An enterprise, which is run usually without the help of any hired worker employed on a fairly regular basis, is defined as an Own Account Enterprise (OAE). The DEs are enterprises which employ 6 or more workers (household and hired workers taken together) of whom at least one hired worker is employed on a fairly regular basis. The NDEs refer to enterprises which employ less than six workers (household and hired workers taken together) of whom at least one hired worker is employed on a fairly regular basis.

The smallness of size is reflected in the 75 per cent share of enterprises with a turnover of less than Rs. 20 lakhs (Figure 1 and Table 5)¹¹. It is also reflected in the fact that around 82 per cent of the surveyed enterprises have been found to employ less than five workers (Table 6). Among the bigger units, there are cold storage units and saw mills, all of which are located in Biharsharif. In Madhubani, DEs include hotels and restaurants, electronics shops, and cinema hall.

Table 5: Distribution of Enterprises by Annual Turnover (Rs) of Enterprise (Percentage)

Unit type	Up to 2 lakh	2-4 lakh	4-8 lakh	8-12 lakh	12-20 lakh	20-40 lakh	40-50 lakh	Above 50 lakh	Total
Manufacturing	8.7	10.9	15.2	15.2	15.2	15.2	6.5	13.0	100.0
Trading	11.7	13.5	19.3	21.1	15.2	9.9	3.5	5.8	100.0
Other Services	21.4	14.3	10.7	14.3	3.6	14.3	7.1	14.3	100.0
Service and Trade	0.0	0.0	66.7	16.7	0.0	16.7	0.0	0.0	100.0
Grand Total	12.0	12.7	18.7	19.1	13.5	11.6	4.4	8.0	100.0

The NDEs in Biharsharif comprise grocery or kirana stores, cloth store, furniture manufacturing, saw mill, cycle repair, hardware, engineering works, electronics, shops, etc. In Madhubani, some of the NDEs surveyed constitute grocery store, medicine store, machinery, book, cycle repair shops, cloth shops, jewellery shops, etc. However, in both the towns, OAEs include cloth stores, grocery store, shoe stores, etc. Biharsharif has some flour mills and Madhubani has some electrical goods shops, clinics, etc.

Table 6: Distribution of Enterprises by Number of Workers

Type of enterprise/shop	Total worker			Total
	1 – 5	6 –9	>10	
Own Account Enterprise	93	0	0	93
Non Directory Enterprise	115	0	0	115
Directory Enterprise	0	24	19	43
Total (number)	208	24	19	251
Percentage share (%)	(82.9)	(9.6)	(7.6)	(100.0)

Among the different types of activities, only seven manufacturing units are large, employing more than nine hired workers. This includes all the cold storage units; some saw mills and furniture units. More than 92 per cent of the trading enterprises employ less than five hired workers, but the corresponding percentage for other services is lower than 50 per cent. The service units employing more workers are cinema halls, hotels, restaurants, etc.

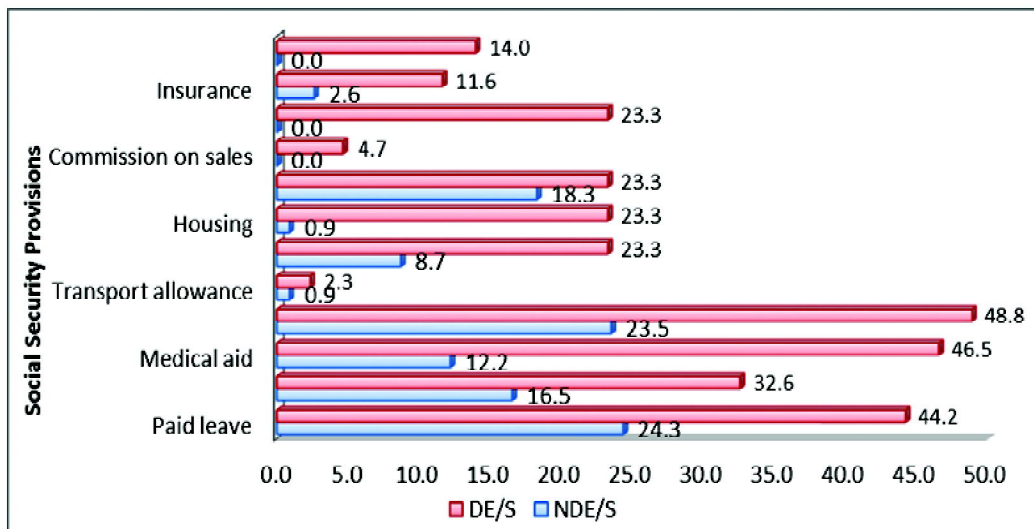
11. It may be noted that the total number of Directory Enterprises in the sample is fairly small at 43, but given that a high share of around 60 percent or nearly 26 enterprises fall in the category of turnover of above Rs 20 lakh, indicates that these are relatively large units.

(a) Structure of Enterprises: Formal vs. Informal¹²

Around 69 per cent of the survey enterprises claimed that they are registered with some authority. But the survey enterprises were by and large informal in their structure as reflected in the very low share of written employment contracts provided to the workers (5.1 per cent of surveyed enterprises), high share of absence of contract (33 per cent in Madhubani although just four per cent in Biharsharif), and the practice of not maintaining accounts (51 per cent). The provision of drinking water (72.8 per cent) and toilet facilities (48.7 per cent) at the worksite shows considerable deficiency. For both the types of provision, services units and manufacturing units are better off.

A low share of the survey units was found to provide social benefits, such as sick leave, paid leave, PF, gratuity, bonus, housing, clothing, meals, etc. More than three-fourth of the survey enterprises had fixed premises outside household premises as well as permanent structure, so the informality was less in this regard. The services units had a high share of location within the household premises. The association of social security provisioning with larger enterprises is evident from Figure 2. Almost all the benefits are provided relatively much more by DEs, although even for those, the maximum percentage of reporting units does not exceed 49 per cent. Clothing, paid leave, medical aid, etc. were provided by 44 to 49 per cent of the DEs, and even provident fund and bonus were provided by around one-fourth of the DEs which were surveyed.

Figure 2: Provision of selected social security benefits in DE and NDE Units (% of enterprises surveyed)



12. The degree of formality in the survey enterprises has been probed with the help of information regarding whether the enterprise is registered, the type of contract provided to the workers, whether the enterprise maintains regular accounts, the frequency of inspection and the incidence of registration of the units. The facilities provided to the workers have also been investigated.

(b) Functioning of Urban Labour Markets

(i) Hiring of different types of workers and working hours

Of the 158 enterprises which hire workers, most employed adult males and regular (referred to as permanent) employees, whereas approximately half of these enterprises also employed temporary workers. Further, it was observed that 16 to 17 per cent of the surveyed enterprises reported about hiring casual and contract workers. The hiring of unskilled workers had been reported by 74 per cent of the 158 enterprises, followed by skilled workers (reported by 50 per cent enterprises) and semi-skilled workers (reported by 21.4 per cent enterprises).

Of the total hired workers in the surveyed enterprises, there are 38 per cent regular, 34 per cent temporary, nine per cent casual and 20 per cent contractual workers. Manufacturing enterprises showed a high share of contract workers; for instance the cold storage units have 55 to 65 per cent share of contract workers. On the other hand, there was a high share of regular workers for other services. Between the two survey towns, Madhubani showed a higher share of regular workers (58 per cent) compared to Biharsharif (30 per cent). The latter has more contract (24 per cent) and casual workers (12 per cent) than Madhubani (8 per cent contract and 2 per cent casual workers).

Working hours were found to be long for 80 per cent enterprises which reported daily working hours to be 9 to 12, and about half of the enterprises reported that employees work for seven days in a week, whereas the other half reported that employees work for six days in a week.

(ii) Rural-Urban Linkages

Hiring of Workers from Rural Areas: Of the 158 enterprises that hire workers, 55 per cent reported about hiring workers from rural areas along with workers from urban areas (data not shown). This demonstrates quite strong linkages of the survey enterprises with the rural milieu. Of the 87 enterprises that reported hiring workers from rural areas, 56 are NDE or smaller units and the rest are DE. The distribution of enterprises that hire rural workers between the two towns is 62 in Biharsharif and 25 in Madhubani. Biharsharif has a much higher share of enterprises hiring rural workers at 60.8 percent vis-a-vis Madhubani at 44.6 percent. The use of hired workers commuting from rural areas was reported more by manufacturing enterprises (72.2 percent)¹³.

The rural-urban linkage is identified with more clarity when we observe that of the 610 adult workers hired for the survey enterprises¹⁴, as many as 443 workers or

13. Although services and trade enterprises showed high share of hiring workers from rural areas (83.3 per cent of enterprises), it may be noted that only six such units were covered in the sample.

14. The analysis is based on the reports of 152 enterprises out of the 158 survey enterprises. Four enterprises hire only child workers and two enterprises could not provide disaggregated data for workers from rural and urban areas.

72.6 per cent are from rural areas (Table 7). The DEs' share of rural workers is higher than NDEs, and Biharsharif data show that nearly 80 per cent workers come from nearby villages, while for Madhubani, the corresponding share is lower.¹⁵

Table 7: Hired workers among enterprises and sample towns

		Hired adult worker (Current year)			Percentage of hired worker from rural areas (%)
		Rural area	Urban area	Total	
Type of Establishment	NDE/S	126	92	218	57.8
	DE/S	317	75	392	80.9
Town	Bihar Sharif	360	91	451	79.8
	Madhubani	83	76	159	52.2
Type of Activity	Manufacturing	207	23	230	90.0
	Trading	148	91	239	61.9
	Other Services	77	51	128	60.2
	Service and Trade	11	2	13	84.6
	Total	443	167	610	72.6

Among different types of activities, the manufacturing enterprises use maximum hired labour from rural areas (90 per cent of workers), followed by service and trade (84.6 per cent of workers)¹⁶. The other two categories also have a high share of around 60 per cent. Cold storage units¹⁷, saw mills and furniture making units are some of the types of manufacturing units which hire many rural workers. Among the service and trade units, the automobile workshops, units engaged in cycle repairing and selling cycle parts, etc. hire more rural workers. In trading activity, the enterprises which hire more rural workers are grocery shops, general stores, garment stores, electronic shops, chemists' shops, etc. Other service enterprises hiring large number of rural workers constitute cinema halls, hotel or restaurants, courier services, automobile showrooms, tailors, etc.

Nearly half of the hired workers travel a distance of 4 kms to 6 kms daily and spend around Rs. 16 to Rs. 20 daily to reach the workplace. Informal hiring practices abound in the labour market, as around half of the 158 enterprises reported that

15. However, it may be noted that many of the daily commuters from nearby rural areas, such as rickshaw-pullers, masons, etc., are not part of the enterprise survey, and were covered under qualitative interviews.

16. These were, however, very few in number.

17. Cold Storage units have been included as part of manufacturing rather than trade or services because of their scale of operation and dissimilarity with either trade or services.

they hire workers through family or friends connections and around 40 per cent reported that workers come seeking employment. The role of advertisement and employment exchange is insignificant and that of social connections, i.e. the informal network of family, friends, and community, is the most. The enterprises reported that they find it more difficult to recruit skilled than unskilled workers.

Box No. 2: The Decline of Cold Storage Units in Biharsharif

Over time there has been a steady decline in the number of cold storage units in the area, till there are now only around 16 units left. The closure have reportedly occurred mainly because of power shortage, competition from neighbouring states such as West Bengal, lack of modern technology for chilling, etc. At present, with high land prices, setting up new units faces the problem of prohibitively high cost. Moreover, local banks are reluctant to extend loans because of the default in loan payment in the past. The remaining cold storage units were have followed survival strategies that include giving advances to farmers for output, storing fruits brought in from North India, and so on. Most surveyed units were found to have undergone contraction in business in the last five years. The respondents said that while prices rose for both inputs and outputs, sales declined.

The decline in fortunes of the cold storage units have significant implications for the Biharsharif town and the surroundings because these large units employ large number of workers (on an average 20–30 workers) and have high rural–urban linkages, both in terms of backward input linkage as well as hiring a large number of workers from rural areas.

Backward and Forward Linkages: The rural–urban linkages are also manifested through forward linkages, such as where the products of the enterprises are sold, as well as through backward linkages, such as from where the raw materials or inputs of the enterprises are obtained. Manufacturing enterprises were found to exhibit the maximum rural–urban linkage in terms of input–output, because much of the raw materials in these units are procured locally from surrounding rural areas. For instance, cold storage units in Biharsharif source potatoes and onions from the local farmers. There are agro-based mills, such as rice mills, flour mills, oil mills, etc. The products of the surveyed enterprises are largely sold locally as 88.4 per cent of the 251 surveyed units reported selling their products at local destinations. For the manufacturing enterprises, the share of local destination is the highest with 93.5 per cent.

The local destination can have consumers both from the town itself as well as the rural inhabitants coming to the town to buy these products. For instance, there are many rural people who watch movies in the cinema hall in the town. People also come from rural areas for other purchases, such as garments, shoes, food, etc. as well as for education and medical treatment. There is traffic in the opposite direction as well as ice cream vendors, utensil vendors and the like peddle their goods in the nearby villages as well as in the town. These imply considerable forward linkage as well.

There are rural–urban linkages via self-employment and employment in vulnerable occupations. Many villagers near Madhubani commute daily to the town

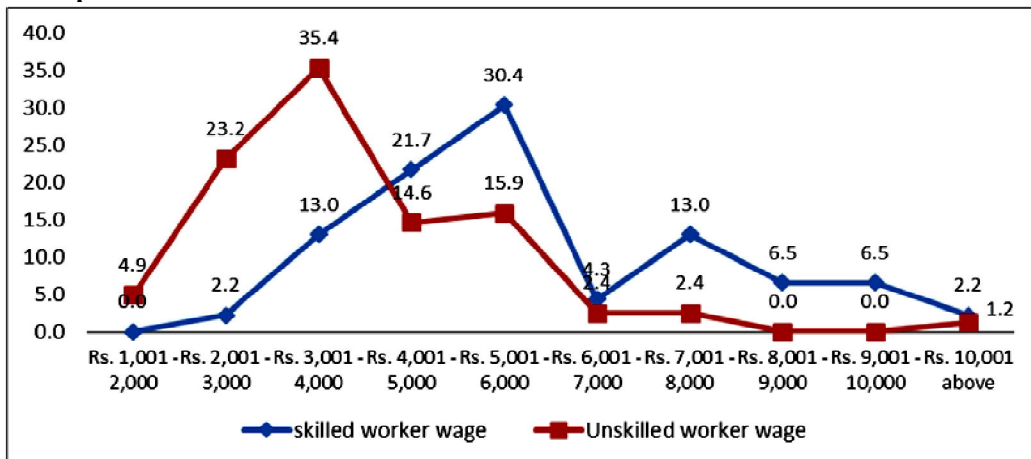
to earn their living as rickshaw-puller, masons or vendors. In Biharsharif, there are many erstwhile rural inhabitants who live in settlements in the outskirts of the town. There is considerable outmigration from villages near Madhubani, so that there is link with the other parts of Bihar and other states of India, too. There are some forward linkages as well because much of the output of the manufacturing units are sold locally to both rural as well as urban customers. Subsequently, there are vendors from the town who sell their merchandise in the rural areas, thereby showing the importance of rural demand for these products.

(iii) Wages paid to Workers

In keeping with the informal nature of the majority of the enterprises, wages for unskilled workers (including that for semi-skilled workers) were found to be fairly depressed, with the majority getting paid just Rs. 3000 to Rs. 4000 per month. Skilled workers get paid a little more between Rs. 5000 and Rs. 8000 per month. Thus, the gap between skilled and unskilled workers is not very large. The wages are lower on an average in Madhubani than in Biharsharif. Figure 3 shows that the wages paid to unskilled (including semi-skilled) workers in NDEs are very low¹⁸. Among enterprises reporting employment of unskilled workers, 63.5 per cent paid less than Rs. 4000 per month, out of which 28.1 per cent paid between Rs. 1000 and Rs. 3000 per month. Around 35.3 per cent of the reporting enterprises pay their workers in a range of Rs. 4000 to Rs. 8000 per month.

Skilled workers earn slightly more than the unskilled workers, as might be expected, but the wage gap is not much. The bulk (56.6 per cent) of the enterprises reporting skilled workers in NDEs pay between Rs. 4000 and Rs. 7000 a month. Out of these,

Figure 3: Monthly Wage Rate (Rs) for NDEs by percentage of Reporting Enterprises



18. The wages for workers employed by DEs are not analyzed, given the small number of enterprises in the sample (43 in all).

the highest share (30.4 per cent) is for those who are paid between Rs. 5000 and Rs. 6000. In approximately 15.2 per cent enterprises, workers earn very low wages between Rs. 2000 and Rs. 4000 per month, while 28.2 per cent have wages in the range of Rs. 7000 and Rs. 10,000 or above.

(c) Growth in Urban Output

The assessment of urban growth was based on the perception of the respondents in the enterprises which have been operating for the last five years. Expansion in business was reported by a high share of 64 per cent for the 224 units which have been operating for the last five years, but 20 per cent reported contraction and 16 per cent reported stagnation (Table 8). The driver for expansion was the trading units with almost all trading activities such as trading in automobile parts, construction materials, electrical and electronic goods, chemists' shops, fruit and vegetable vendors, grocery stores, general stores, hardware shops, jewellery stores, etc. reporting expansion. Garments as well as shoes and leather businesses are exception among them as these businesses reported mixed progress because sales are dampened by competition.

Table 8: Enterprise Status over the Last Five Years (No. of Units)

Unit type	Expanding	Stagnant	Contracting	Total
Manufacturing	17	9	18	44
Trading	105	26	17	148
Services	17	1	8	26
Service and Trade	5	0	1	6
Total (% in brackets)	144 (64)	36 (16)	44 (20)	224 (100)

Manufacturing activities showed contraction except the saw mills. Other services as well as service & trade units¹⁹ mostly exhibited growth except cinema halls, which faced competition from television, pirated CDs, etc. apart from being adversely affected by high cost. Some of the services which have been a source of growth are clinics, hotels/restaurants, courier services, tailors, etc.

(d) Problems faced by the Enterprises

The maximum number of enterprises reported facing problems and bottlenecks related to electricity shortage, general infrastructure, lack of access to funds, corruption, lack of skilled workers, limited market, government policy issues including red tape, taxation and lack of stability in government policy. Furthermore, many respondents in Madhubani even mentioned a general dearth of economic development in the region, including poor availability of education and health facilities.

Electricity was the key bottleneck area indicated by all types of enterprises. For DEs and NDEs, this was followed by poor public infrastructure. However, for OAEs,

19. The number of Service and trade units in the sample, however, is very small.

the second most challenging problem was lack of sufficient funds. Larger shopping complexes have become a source of competition for enterprises dealing in garments and some other traded items. Some respondents mentioned inadequate market. For instance, some medical clinic-owners mentioned insufficient footfall of customers. Many enterprises of all types suggested that the tourism destinations can be developed. Furthermore, the entrepreneurs in DEs emphasized on providing training for agricultural development, skill development and general development of educational institutions, as enterprises find it difficult to recruit skilled workers.

Box No. 3 Insights into Selected Sectors

Large Enterprises: Most of the large enterprises are located in Biharsharif and all such units reported being badly affected by the poor supply of electricity. The owners of large hotels and restaurants complained of not getting good profit from AC rooms because of power shortage. The alternative of using generators adds to cost. Some hotels have been forced to close down, as the profit margin is low. Some owners of the furniture-making units complained about higher cost of production because of generator usage that lead to increase in price of products. For this reason, the above-mentioned products cannot compete in the market.

Accessing credit is one of the important constraints of this sector, especially because they are relatively more capital-intensive. Often they face difficulty in getting credit from the formal sector, especially in terms of being asked to pay bribes. Many large enterprises complained about a dual tax structure and said that it should be replaced by a single tax structure.

A few owners face problems in procuring raw materials particularly when these are sourced from other states (as in the case of saw mills), where the owners have to pay a huge amount of bribe. The inspectors often harass the truck owners in the name of overload. The area under potato has declined over time with increased demand for land, so the supply of raw material for the cold storage owners has become limited, and this has an adverse impact on obtaining credit for the cold storages units.

All the large units pointed out the need for good roads because it directly or indirectly affects the profitability of the unit. With better roads, the time taken to bring raw material would be less, thereby, reducing cost. The owners of furniture manufacturing complained that owing to lack of proper drainage facility in the vicinity of their shop, many a time they face water logging and raw materials get damaged.

Own Account Enterprises: Many OAEs found space to be a major constraint. The alternative of renting premises is not attractive because of high rent. The entrepreneurs suggested that the panchayat or municipality should construct the shop building and rent these out.

Power shortage has a major impact on their sales. Many grocery shop owners complained that they are forced to close the shop in the early evening, as they have to bear a high cost of generator and also the customers hesitate to go out for shopping during power cuts.

Change in customers' preference is also responsible for reduced sale by OAEs. The customers are now used to buying packaged atta/maida (flour), dal (lentils), etc., so they do not buy unpackaged produce from the grocers. Giving the consumable items on credit to customers is a common practice in small towns. The grocery shop owners complained that customers repay very late after taking goods on credit. Some time they do not repay, leading to altercations.

Again most of the OAE units face problems because of the lack of road infrastructure that reflect the need for a planned way of investing in infrastructure. In rainy seasons, often their earnings are less as the customers are not interested in coming to the shops in water logged areas. Some of the vegetable and fruit vendors said that traffic police harassed them most of the time, and they demand bribe for keeping the vending cart in a particular place. Sometimes they take the vegetable or fruits without any payment or paying less.

Considering the town-specific issues in Biharsharif, the DEs highlighted the power shortage and NDEs cited encroachment on roads, lack of space, problem of parking, etc. But the issues cited by OAEs were different in nature as these issue comprised non-repayment by customers, bribe, insufficient profit margin, etc.

In Madhubani, apart from the electricity shortage, the DEs and NDEs focused on steep hike in the transport cost. Located in North Bihar, Madhubani is relatively less accessible and dependent on transport of goods over longer distances compared to Biharsharif. Moreover, NDE units in Madhubani highlighted the problem of increasing tax burden and changing tax rates. The OAEs had similar complaints regarding tax rates and even pointed at lack of security.

In general, entrepreneurs in Madhubani blamed the lack of industrialization and urbanization for poor development and as a consequence there is low demand for goods and services. In Biharsharif, the need for holistic town planning, better infrastructure and all-round urban development was highlighted by some respondents. Inflation, corruption, lack of skilled workers and lack of a stable tax policy were among the other crucial problem areas outlined by the enterprises.

7. CONCLUDING REMARKS

Madhubani and Biharsharif have seen a gradual decline in industrial activity over the years. Both towns are characterized by small-sized enterprises, which are largely informal in structure. Some industrial activity remains in Biharsharif in the form of saw mills, cold storage units, etc., but much of the activity is agro-based. Biharsharif also has better connectivity than Madhubani and can possibly revive some industrial activity with better power supply as well as credit supply. In general, the survey team found some planning for industries around clusters for the Nalanda district at the District Industrial Centre located in Biharsharif.

The self-employed, in the form of OAEs, were found to comprise a fairly large proportion of the sample, and more so for Madhubani. These units are of relatively

smaller size and do not employ hired workers, so the growth impulses that these can transmit to other segments of the economy are limited. The smallness of size is also reflected in the 75 per cent share of enterprises with a turnover of less than Rs. 20 lakhs, while around 82 per cent of the surveyed enterprises were found to employ less than five workers.

Few enterprises were found in manufacturing activities, and trade was found to be the main source of urban output in terms of number of enterprises. The evidence of rural-urban linkages through hiring of local labour by enterprises was the strongest for manufacturing activities, and the backward linkage through use of local inputs was also the most for these enterprises. In addition, though the manufacturing enterprises hire both skilled and unskilled workers, the trading and other service units hire more unskilled workers. In the sample towns, there were not only very few manufacturing enterprises, but also seven manufacturing units that were large, employing more than nine hired workers. This includes all cold storage units, some saw mills and furniture units. Although trading and other services enterprises also hire local rural labour, the linkages are weaker in comparison with manufacturing enterprises. Moreover, the enterprises related to trading and other services are small in size. More than 92 per cent of the trading enterprises employ less than five hired workers.

Biharsharif has shown some presence of manufacturing activity and these units have strong backward linkages with the nearby rural areas. Because of the dominance of trading activity in the towns, despite fairly strong rural-urban linkages, the towns have not been able to provide a lot pull factor to the rural areas, and it has not been possible to transmit growth impulses in the areas. Biharsharif has some industrial activity and some linkages with the nearby villages owing to pull factors of better jobs. Moreover, its rising population and good connectivity with Patna has contributed to better demand for products, as well as rising land prices, more construction activity, etc. However, higher land prices and subsequent construction activity along with paucity in irrigation facilities have impacted the area under agricultural production adversely, and this has indirectly affected some of the activities, such as cold storage units because of lower supply of inputs.

Overall, between the two cites, Madhubani presents a worse scenario because the linkage of workers travelling from nearby villages is more owing to push factor than any industrial activity in Madhubani. In fact, these push factors prompt more migration from the villages to other states for most part of the year as well as multiplicity of occupations to make ends meet. For instance, the residents combine two months' farming in the village with six months' work as a construction or other type of labourer in Delhi, Gujarat, Punjab and other states. High share of OAEs in enterprises (50 per cent of total survey enterprises in Madhubani) imply limited scope for absorption of local rural labour.

A high degree of informality was observed among the survey enterprises, and the informality was reflected in the very low share of written employment contracts,

high share of absence of contract and the practice of not maintaining accounts. Less than three-fourth of the enterprises reported that they provide drinking water at the worksite, and sanitation facilities were found to be very deficient with just 48.7 per cent units providing toilet facilities. For both types of provision, services units and manufacturing units are better off. The incidence of training programmes for workers was extremely low. An important feature of the informality of the survey enterprises was the very low share of units providing social benefits, such as sick leave, paid leave, PF, gratuity, bonus, housing, clothing, meals, etc.

In keeping with the informal nature of the majority of enterprises, wages for unskilled workers were found to be fairly depressed as majority of them get paid just Rs. 3000 to 4000 per month. Skilled workers get paid a little more between Rs. 5000 and Rs. 7000 per month. Thus, the gap between skilled and unskilled workers is not very large. The wages are lower on an average in Madhubani than in Biharsharif.

Manufacturing units are amongst the lowest payers of social benefits to workers as well as the largest hirers of labourers from rural and remote areas. It throws up a question regarding the poor bargaining power of workers coming in to work from rural hinterland vis-a-vis those coming from urban or peri-urban areas. Nearly half of the hired workers travel a distance of 4 to 6 kms daily and spend around Rs. 16 to Rs. 20 daily for reaching the workplace. Persistence of informal practices is seen in the hiring practices in the labour market-, as around half of the 158 enterprises reported that they hire workers through family or friends and around 40 per cent reported that workers come seeking employment. The role of advertisement and employment exchange is negligible and that of social connections the most.

Rural-urban linkage was observed to be the highest for manufacturing activities both in terms of labour and input-output linkage, yet manufacturing enterprises have been suffering most contraction and stagnation with the exception of saw mills. The growth in the two sample towns has come mainly from trading activities with almost all types of trading activities reporting expansion except garments as well as shoes and leather businesses as these businesses show mixed progress. Other services as well as service and trade units have mostly exhibited growth except cinema halls that suffer loss because of competition from television, pirated CDs, etc. as well as owing to high cost. Overall, the contraction in manufacturing activities has significant adverse implications in terms of opportunity of pulling surplus rural labour into more productive activities because of weaker rural-urban linkages.

The surveys made it evident that major obstacles; such as poor electricity supply, infrastructural bottlenecks, credit at affordable rates, supply of skilled workers, more stable tax policy, serious governance deficits in the form of corruption; need to be addressed urgently if the economies are to follow a trajectory of industrialized growth. Alongside, there is need for investment in industry and measures for skill development.

Among the two towns, Biharsharif does not appear to suffer from demand or limited market problems, and the problems are more on the supply side. Urban growth in Madhubani is hampered by lack of infrastructure on the supply side as well as by

limited local demand for products, such as makhana and fish, which it can grow. There is severe indebtedness on the part of the makhana farmers, who use sales proceeds to first repay their debt.

To conclude, firstly, the two towns need all-round improvement in infrastructure, especially in the supply of electricity in order to revitalize their economy.²⁰ Small shopkeepers, in particular, will directly benefit because an improved electricity supply would enable them to keep their shops open beyond daytime, thus, boosting sales and revenue. It has been observed in the study, even trading and other service units have potential for employment of rural workers. The bigger enterprises, which use high-cost diesel generators as a substitute for electricity, will become more competitive and therefore would lower use of diesel, and this will have a favourable impact on the environment. Dedicated supply for Industrial Estates can also be thought of.

The second important area that needs attention is financial expansion and inclusion. While the number of bank branches has expanded in the survey towns, especially in Biharsharif, the credit–deposit ratio is still very low. It also appears that capacity–building is needed on the part of the bank officials for processing loans of large size. Simultaneously, screening procedure of loan applicants needs to be tightened to filter out the non-serious ones. The OAEs would particularly benefit from easier availability of funds, because these entrepreneurs find it difficult to access formal loans. Furthermore, it was found in the survey that there are many Muslim entrepreneurs in the OAE segment, and thus, this minority community would directly benefit from better availability of capital.

Governance issues must be ironed out including removal of the corrupt practices that allegedly exist at every stage of setting up an enterprise and running it. The governance issues also have another side, which is policy planning. Stability in government policy regarding approval of projects, land allotment, loan approval, taxation structure, etc. is highly desirable.

In terms of initiatives to boost industrial and urban development, there is a need to set up industries in the state to provide stable job opportunities to the locals. The rural–urban linkages—especially in Biharsharif which has more manufacturing activity—are well-established from the study. Biharsharif has a very productive rural hinterland with production of a variety of vegetables. Agro-processing industries, such as making juice/pulp, etc., as well as frozen and packaged fruits and vegetables could be given a boost in the town because raw material would be cheaply available. Furniture-making, saw mills and grill-making, etc. are actively growing and so can be further expanded. Biharsharif, being in the Buddhist circuit, is already seeing expansion in service areas such as hotels and restaurants, and this aspect of tourism should be promoted in this area.

In Madhubani, people depend a lot on income from migration, and more

²⁰ During a recent visit to the sample towns in 2015, the authors have found a much improved position for electricity supply.

employment opportunities will give a boost not only to the urban populace, but also to the surrounding rural areas. Madhubani suffers from a limited market, and this market needs to be expanded. In the makhana-based activity, the produce from the rural areas near the town must be linked to the entire supply chain by involving both the raw makhana and refined 'Lawa' makhana through an organized (preferably Government) network, so that the farmers—many from mallah, machhuara communities—benefit more from the final profits and can escape perennial indebtedness. A similar planning could be undertaken for the pisciculture in the area. Similar government support is needed for the Mithila handicraft industry in Madhubani, where the handicraft products need to be linked up with the local markets within-state as well as in markets outside the state for sale. In this chain of production, a major beneficiary could be the SC Musahar community that would receive higher prices for the grass they supply. Women comprise the main workers engaged in handicraft making, and thus would directly benefit from any boost given to this industry. But government support must eventually enhance competitiveness, so that the industry can survive in the market without support.

There is a need to establish skill development or training facilities for workers, because some of the bigger enterprises indicated difficulty in recruiting skilled workers. In this context, there is a widely felt need for establishment of better educational opportunities at all levels, such as schools, colleges, vocational training, etc. in addition to better medical facilities, including hospitals and healthcare facilities in both the towns. Such provision of urban facilities could help to retain good workers and prevent them from migrating to other parts of the state or the country.

The widespread incidence of informality in the survey enterprises underscores the need to expand formalization of the labour market, so that in their work place workers get better wages (to begin with at least go beyond the poverty level) as well as water and sanitation along with other basic facilities. Furthermore, they must receive an acceptable level of social benefits including medical leave, meals, PF, gratuity, bonus, etc. The working hours, too, must be reduced in keeping with norms laid down by the state government.

Finally, the enterprise survey showed a virtual absence of women workers. In the key informant interviews, though women workers were mentioned in the context of Mithila handicraft in Madhubani, which had started out as a co-operative, the low female participation in wage work is a challenge that needs to be addressed with urgency and ways must be explored, such as job schemes targeting women in the area, skill development of women, etc. It is possible that the expansion of education and healthcare facilities will give rise to more job opportunities for women.

ANNEXURE I

Table A1: Growth of Urban and Total Population in Some Major States of India

States	Level of Urbanization 2001 (%)	Level of Urbanization in 2011 (%)	Annual Compound Growth Rate of Urban Population (%) (2001-2011)	Annual Compound Growth Rate of Total Population (%) (2001-2011)
Bihar	10.47	11.30	3.08	2.52
Gujarat	37.35	42.58	3.12	2.04
Karnataka	33.98	38.57	2.78	1.60
Maharashtra	42.39	45.23	2.14	2.05
Punjab	36.00	37.49	2.33	1.81
Tamil Nadu	43.86	48.45	2.42	1.06
Uttar Pradesh	21.42	22.28	2.57	1.78
West Bengal	28.03	31.89	2.64	1.65
India	27.78	31.16	2.80	1.96

Source: Census data.

Table A 2 : District Level Trend and Pattern of Urbanization in Bihar

Name	Urban Population			% Urban Population		Share in Total Urban Population of Bihar		Decadal Growth Rate	Decadal Growth Rate	Difference in % Urban Population
	1991	2001	2011	2001	2011	2001	2011	1991-2001	2001-2011	2001-2011
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Patna	1,376,677	1,961,532	2,514,590	41.6	43.1	22.9	21.4	42.5	28.2	1.5
Munger	283,172	317,847	380,120	27.9	27.8	3.7	3.2	12.2	19.6	-0.1
Bhagalpur	343,456	452,427	602,532	18.7	19.8	5.3	5.1	31.7	33.2	1.2
Begusarai	177,694	107,623	569,823	4.6	19.2	1.3	4.8	-39.4	429.5	14.6
Sheikhpura	64,575	81,313	109,002	15.5	17.1	1.0	0.9	25.9	34.1	1.7
Nalanda	296,214	353,629	457,894	14.9	15.9	4.1	3.9	19.4	29.5	1.0
Rohtas	267,147	326,806	427,765	13.3	14.5	3.8	3.6	22.3	30.9	1.1
Bhojpur	235,480	312,414	389,861	13.9	14.3	3.7	3.3	32.7	24.8	0.4
Lakhisarai	85,343	117,740	143,011	14.7	14.3	1.4	1.2	38.0	21.5	-0.4
Gaya	355,889	475,949	581,601	13.7	13.2	5.6	4.9	33.7	22.2	-0.5

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Jehanabad	74,471	111,612	135,196	7.4	12.0	1.3	1.1	49.9	21.1	4.6
Purnia	158,145	222,398	343,005	8.7	10.5	2.6	2.9	40.6	54.2	1.8
Pashchim										
Champanan	235,366	309,559	393,165	10.2	10.0	3.6	3.3	31.5	27.0	-0.2
Muzaffarpur	274,965	348,353	473,437	9.3	9.9	4.1	4.0	26.7	35.9	0.6
Darbhanga	218,394	267,348	383,328	8.1	9.7	3.1	3.3	22.4	43.4	1.6
Nawada	94,556	138,443	215,579	7.7	9.7	1.6	1.8	46.4	55.7	2.1
Buxar	90,818	128,974	164,499	9.2	9.6	1.5	1.4	42.0	27.5	0.4
Kishanganj	99,281	129,008	161,123	10.0	9.5	1.5	1.4	29.9	24.9	-0.4
Aurangabad	118,049	170,057	236,854	8.4	9.3	2.0	2.0	44.1	39.3	0.9
Saran	234,360	298,637	353,202	9.2	8.9	3.5	3.0	27.4	18.3	-0.3
Katihar	171,618	218,277	273,822	9.1	8.9	2.6	2.3	27.2	25.4	-0.2
Jamui	74,565	103,244	145,333	7.4	8.3	1.2	1.2	38.5	40.8	0.9
Saharsa	80,149	125,167	156,540	8.3	8.2	1.5	1.3	56.2	25.1	-0.1
Purba										
Champanan	173,359	251,086	401,343	6.4	7.9	2.9	3.4	44.8	59.8	1.5
Vaishali	143,356	186,655	233,079	6.9	6.7	2.2	2.0	30.2	24.9	-0.2
Gopalganj	96,866	130,590	162,805	6.1	6.4	1.5	1.4	34.8	24.7	0.3
Araria	102,275	132,351	168,777	6.1	6.0	1.5	1.4	29.4	27.5	-0.1
Sitamarhi	119,597	153,313	190,498	5.7	5.6	1.8	1.6	28.2	24.3	-0.2
Siwan	115,508	149,489	182,913	5.5	5.5	1.7	1.6	29.4	22.4	0.0
Khagaria	58,802	76,327	87,159	6.0	5.2	0.9	0.7	29.8	14.2	-0.7
Supaul	91,528	88,208	105,558	5.1	4.7	1.0	0.9	-3.6	19.7	-0.4
Madhepura	76,833	67,967	88,461	4.5	4.4	0.8	0.8	-11.5	30.2	0.0
Sheohar	13,915	21,262	28,116	4.1	4.3	0.2	0.2	52.8	32.2	0.2
Kaimur										
(Bhabua)	27,040	41,775	65,571	3.2	4.0	0.5	0.6	54.5	57.0	0.8
Madhubani	102,761	124,545	161,495	3.5	3.6	1.5	1.4	21.2	29.7	0.1
Banka	44,634	56,420	71,313	3.5	3.5	0.7	0.6	26.4	26.4	0.0
Samastipur	134,872	123,455	147,797	3.6	3.5	1.4	1.3	-8.5	19.7	-0.2
Arwal*			51,849		7.4	0.0	0.4			7.4
BIHAR	6,711,933	8,558,345	11,758,016	10.8	11.3	100.0	100.0	27.5	37.4	0.5

Source: Census, 1991, 2001, 2011.

*The data for Arwal are not available for 2001 since it is a newly formed district.

**Table A3: Main Non-Agricultural Workers in the Urban Districts of Bihar (%)
(Census 2011)**

Name	Non-Agricultural			Name	Non-Agricultural		
	Persons	Male	Female		Persons	Male	Female
Samastipur	91.0	91.3	89.0	Sitamarhi	77.1	77.4	75.1
Siwan	89.9	90.5	85.5	Purnia	75.3	77.0	65.5
Muzaffarpur	90.4	90.3	91.2	Vaishali	76.9	76.3	82.7
Munger	89.9	90.2	87.3	Begusarai	76.2	75.8	78.3
Patna	89.6	89.7	88.6	Kishanganj	75.7	75.1	79.1
Bhagalpur	89.1	88.9	90.4	Jehanabad	74.2	74.7	70.7
Gaya	88.1	88.4	86.6	Jamui	76.4	74.3	84.1
Darbhanga	87.0	87.3	84.8	Madhubani	71.7	74.0	59.7
Buxar	85.5	85.5	85.3	Supaul	72.4	73.7	61.8
Katihar	83.9	83.9	83.7	Madhepura	73.6	72.8	77.7
Khagaria	83.4	83.5	82.5	Sheikhpura	71.9	72.7	66.2
Rohtas	84.0	83.4	89.3	Gopalganj	71.4	72.1	67.0
Saharsa	83.1	83.2	82.5	PashchimChamparan	72.1	72.1	71.8
Aurangabad	83.0	83.1	82.5	Lakhisarai	69.6	71.3	58.2
Bhojpur	82.8	82.8	82.1	PurbaChamparan	68.0	67.9	68.8
Araria	76.6	79.2	62.4	Banka	60.6	60.1	64.9
Nalanda	77.1	78.4	71.1	Arwal	51.8	51.3	55.8
Nawada	76.6	78.0	68.9	Sheohar	46.9	47.2	45.3
Kaimur (Bhabua)	78.4	77.7	86.8				
Saran	78.1	77.5	83.9	BIHAR	82.4	82.6	81.2

Table A4: Functional Classification of Urban Areas in Bihar, 2001

Sl.No.	Town Name	Class	C Status	Classification
1	2	3	4	4
01.	BETTIAH	I	M	Trade And Transport
02.	MOTIHARI	I	M	Trade And Transport
03.	SHEOHAR	III	NA	Trade And Transport
04.	SITAMARHI	II	M	Trade And Transport
05.	MADHUBANI	II	M	Trade And Transport
06.	SUPAUL	II	M	Trade And Transport
07.	ARARIA	II	M	Trade And Transport
08.	KISHANGANJ	II	M	Trade And Transport
09.	PURNIA	I	M	Trade And Transport
10.	KATI HAR	I	M	Trade And Transport
11.	MADHEPURA	III	M	Trade And Transport

1	2	3	4	4
12.	SAHARSA	I	M	Trade And Transport
13.	DARBHANGA	I	M. Corp.	Trade And Transport
14.	MUZAFFARPUR	I	M. Corp.	Trade And Transport
15.	GOPALGANJ	II	M	Trade And Transport
16.	SIWAN	I	M	Trade And Transport
17.	CHAPRA	I	M	Trade And Transport
18.	HAJIPUR	I	M	Trade And Transport
19.	SAMASTIPUR	II	M	Trade And Transport
20.	BEGUSARAI	II	M	Trade And Transport
21.	KHAGARIA	III	M	Trade And Transport
22.	BHAGALPUR	I	M. Corp.	Trade And Transport
23.	BANKA	III	M	Other Services
24.	MUNGER	I	M	Trade And Transport
25.	LAKHISARAI	II	M	Trade And Transport
26.	SHEIKHPURA	III	M	Trade And Transport
27.	BIHARSHARIF	I	M	Manufacturing
28.	PATNA	I	M. Corp.	Other Services
29.	ARRAH	I	M	Trade And Transport
30.	BUXAR	II	M	Trade And Transport
31.	BHABUA	III	M	Trade And Transport
32.	SASARAM	I	M	Trade And Transport
33.	JEHANABAD	II	M	Trade And Transport
34.	AURANGABAD	II	M	Trade And Transport
35.	GAYA	I	M. Corp.	Trade And Transport
36.	NAWADA	II	M	Trade And Transport
37.	JAMUI	II	M	Trade And Transport
	BIHAR			Trade And Transport

Source: 2001 Economic Census

Table A5 : Bihar–Urban Main Workers in the Nine Industrial Categories, 2001

No.	Agri-cultural and Allied	Mining and Quarrying	Manu-facturing	Electri-city Gas & Water Supply	Const-ruction	Whole-sale, Retail Trade- Repair, Hotel and Restau-rant	Trans- port, Storage & Commn.	Financial inter- media- tion, Real Estate Renting and Business	Total Services
1	2	3	4	5	6	7	8	9	10
1. BETTIAH	32.4	0.2	17.2	0.5	2.7	24.4	5.4	4.5	12.7
2. MOTIHARI	25.8	0.1	13.3	0.5	2.3	28.6	6.0	6.1	17.2
3. SHEOHAR	51.7	0.0	11.6	0.1	1.3	21.8	2.1	3.0	8.3
4. SITAMARHI	23.3	0.2	16.2	0.5	3.4	29.7	5.6	5.8	15.4
5. MADHUBANI	25.3	0.1	16.1	0.6	3.0	27.8	5.2	5.8	16.2
6. SUPAUL	33.8	0.1	12.5	0.6	5.0	20.8	5.4	5.6	16.1
7. ARARIA	24.4	0.1	14.7	0.5	4.2	28.3	7.6	6.0	14.1
8. KISHANGANJ	30.5	0.1	11.4	0.3	3.6	25.0	10.2	3.8	15.0
9. PURNIA	22.6	0.1	10.1	0.8	3.7	27.6	7.3	7.7	20.0
10. KATIHAR	12.2	0.3	13.5	0.6	4.0	26.5	18.0	5.8	19.1
11. MADHEPURA	29.6	0.0	9.7	0.4	2.7	25.4	6.0	6.9	19.2
12. SAHARSA	15.9	0.2	10.5	1.4	5.3	24.9	9.0	6.3	26.5
13. DARBHANGA	4.8	0.1	14.3	1.1	4.8	29.5	9.2	11.7	24.4
14. MUZAFFARPUR	8.2	0.2	13.0	1.8	3.0	31.3	8.4	10.4	23.7
15. GOPALGANJ	35.6	0.1	12.6	0.5	3.7	24.5	3.9	5.7	13.3
16. SIWAN	14.9	0.1	13.3	0.6	4.6	38.2	6.3	6.4	15.7
17. CHAPRA	24.1	0.2	11.7	0.9	5.2	25.9	9.8	6.2	15.9
18. HAJIPUR	30.4	0.1	14.5	0.7	4.5	23.8	6.4	5.2	14.4
19. SAMASTIPUR	11.6	0.1	14.3	0.8	2.3	34.6	11.7	6.1	18.5
20. BEGUSARAI	10.1	0.3	17.5	0.8	3.8	30.5	6.9	8.8	21.3
21. KHAGARIA	20.1	0.1	18.0	0.3	5.0	28.8	8.2	4.5	15.1
22. BHAGALPUR	13.4	0.1	24.0	1.1	4.4	23.5	7.2	8.4	17.9
23. BANKA	41.0	0.0	14.2	0.8	3.0	15.1	4.6	6.2	15.1
24. MUNGER	12.1	1.0	21.9	0.9	6.1	20.1	12.9	6.7	18.4
25. LAKHISARAI	36.7	0.1	14.6	0.5	4.7	21.8	6.9	4.5	10.1
26. SHEIKHPURA	31.0	3.7	17.3	0.7	2.9	23.8	5.4	4.2	10.8
27. BIHARSHARIF	21.7	0.4	27.1	0.7	3.6	22.6	5.9	5.0	12.9
28. PATNA	11.2	0.2	13.9	1.4	5.1	23.5	9.0	9.9	25.8

1	2	3	4	5	6	7	8	9	10
29. ARRAH	18.0	12.1	10.3	0.7	4.5	24.5	6.2	6.1	17.6
30. BUXAR	15.0	0.2	14.4	0.7	5.1	29.2	8.0	8.6	18.9
31. BHABUA	18.1	0.1	15.2	1.1	3.1	27.5	7.0	7.1	20.8
32. SASARAM	16.9	0.6	13.3	1.1	5.4	30.9	7.0	7.2	17.5
33. JEHANABAD	35.9	0.2	10.4	0.9	2.8	21.4	5.2	8.7	14.5
34. AURANGABAD	20.9	0.6	13.4	1.0	6.7	26.1	5.5	6.5	19.2
35. GAYA	13.8	0.4	17.7	1.2	3.7	26.5	7.3	8.3	21.1
36. NAWADA	20.4	0.2	14.8	0.6	2.4	31.3	7.5	6.2	16.7
37. JAMUI	20.5	0.4	22.6	0.6	2.8	22.3	11.6	5.7	13.5

Table A6: Distribution of Unorganized Enterprises (%) NSS 67th Round 2010-11 Urban

State/Region	Manufacturing	Trade	Other Services	Total
Bihar				
-Own Account Enterprises - Establishment	13	49	38	100
	21	37	41	100
India				
-Own Account Enterprises - Establishment	26	38	36	100
	29	37	34	100
North Bihar				
-Own Account Enterprises - Establishment	12	53	35	100
	19	45	36	100
South Bihar				
-Own Account Enterprises - Establishment	13	47	39	100
	23	32	45	100

ANNEXURE II NOTE ON AGRO-BASED ACTIVITIES IN AND AROUND MADHUBANI TOWN

1. HANDICRAFT

The survey team visited a handicraft emporium run by Sarisab Pati Rural Women's Development Association, referred to as Samiti from now on. The Samiti has its marketing outlet in the Madhubani town, while its headquarters and workshop are in the village SP in Pandaul block, which is around 21 km from Madhubani. Around 40 women workers make products from Sikki grass here. Sikki is a type of grass found in Bihar and UP during July–August which is dried and used to make a variety of handicrafts. Sikki grass is usually bought from the Musahar SC community in Samastipur district. The women at the Samiti also make Mithila painting, toys, appliqué work on chadar, bangles, shawls, jackets, etc. Moreover, they carry out Madhubani painting work on tussar silk sari, cloth squares and paper.

The Samiti had started making such products way back in 1985, and some of the members have acquired the capability to train others. In the early years, the Samiti had been a profitable venture, but the market for this handicraft venture has also seen a decline over time. Earlier, a total of 140 women used to work for the Samiti, but the number has now come down to 40 only. There has been shrinkage in outreach as well. As of now, the Samiti markets its products in fairs only, the season being from November to February. The Samiti being registered with District Industries Centre (DIC), for past five to six years they used to participate in fairs locally and outside the district within the state, such as in Patna and Muzaffarpur, but they can no longer do so as the DIC does not bear the cost anymore.

2. MAKHANA

North Bihar is the most important producer of makhana, and Assam too has some production. Makhana is usually produced in ponds or ditches with still water. The raw makhana can be converted into 'Lawa' makhana using a difficult process, and it is usually carried out by the Mallah communities. Some other communities engaged in this work are Sahani, Kewat and Machhuara. The biggest challenge the makhana producing farmers face is related to marketing their product. There are few local buyers, and therefore, they rely on middlemen who lift their produce.

Considerable forward linkage is possible from raw makhana production as was learnt from an interview with a 'Lawa makhana' producer near Patna, who has a factory for refining raw makhana to produce the refined version. He told the survey team that makhana is a product unique to Bihar, and he sells the product in other states in India and also exports abroad. In fact, when the team met him, he had just started an outlet for selling makhana within the Patna airport. He reported that he procures makhana directly from the farmers in and around Madhubani.

3. FISHERIES

The work of breeding fish starts in March and ends within six to eight months. People mostly have to resort to debt for breeding fish. They have to keep their ornaments mortgaged at 25 to 36 per cent rate of interest to get money, which they can repay only after selling fish in the market. Since 2012, ponds are allotted for seven years, although earlier these ponds were allotted for three years, and before that for one year. The pond is rented out for makhana from October and from July for fish-breeding. The rental is fixed according to the estimated revenue from it, which is around one-tenth of the produce. For instance, if it is estimated that 10 quintals of makhana will be produced, then the rent would be 1 quintal's price which would have to be deposited. The procedure of payment is similar for fisheries. The rent is increased by 20 per cent after every third year. Unlike makhana, there is no problem in marketing and selling fish, and there is more profit.

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