

IDENTIFYING THE ECONOMIC STRUCTURE AND PROBLEMS OF SHERPUR TOWN

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Abstract

The economic structure of an urban area is an indicator of its economic strength. The present study aims at exploring the economic structure analysis and problems of a town in Bangladesh as a case of Sherpur town. Though Sherpur is the District town of Bangladesh, economy of the town is agriculture based. So some agro-based industries such as rice mills, flower mills, *morrie chira* factories, saw mills, brick fields etc have developed here. Various types of business centres, shops, and markets have developed here. The data for the study area were collected from primary and secondary sources. Employment and establishment sizes were taken to analyze the economic structure as a component of economy. From the employment survey it is evident that employment pattern of manufacturing, whole sale and retail trade, hotels and restaurants, financial institutions, health & education, public administration & defense, community & social services sectors etc did not experience remarkable change of this town in the successive five years 2005-2010, while major change was created in manufacturing sector in year 2001-2010. The local economy was more specialized than the nation in Wholesale & Retail Trade (with L.Q. of 1.31) and Real-estate & Renting sector (with a L.Q. of 1.91) in 2001-2003 and these sectors have some basic employments by which the town earns its living and others sectors are considered as city serving. The infrastructural condition like road condition, utility services and municipal finance are inadequate to improve the economic structure of the town.

Key Words: Economic structure, establishments, employments, location quotient

Introduction

Bangladesh is experiencing the urban expansion and growth for last three decades. The urban population growth received a momentum from 6.27 million (level of urbanization 8.87 percent) in 1974 to 28.61 million (level of urbanization 23.10) in 2001 (BBS, 2005).

Urbanization in Bangladesh has some spatial characteristics. The level of urbanization by district shows a considerable spatial imbalance in the country. There are 64 districts in the country with varying levels of urbanization ranging from a high of 60% to a low of under 10% in at least 13 districts. Dhaka district is the most urbanized with 90%. In 1991, level of urbanization ranged from a high of 51.64% for the (greater) district of Dhaka to a low of 8.53% for greater Faridpur, 9.06% for Tangail, 9.38% Patuakhali and 9.54% for Sylhet (Nazem, 2009).

Structure of city and town is an important phenomenon to measure its strength. How far a city can provide its services depends on such strengths. City planners always make efforts to design a city which stronger and economically, physically and environmentally sound.

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A poorly structured city is a burden for a nation. Productivity of a city depends largely on resources that are available for the city use. The governance, land use, road network, economic opportunities and social and utility facilities are depend on the plan as to how a city is structured as totality.

In Bangladesh, most cities are poorly structured, both physically and economically. Particularly the small towns, which are vulnerable and their structure is even the poorest, as these small towns are growing without proper care and planning.

Large towns and cities including the capital city are developing more or less spontaneously. As a result the large cities become overcrowded with squatters, poverty, unemployment and underemployment. The secondary cities and small towns remain neglected.

So, small and medium sized towns have to be developed and made them strong by decentralizing facilities (economic, administrative, infrastructural, educational etc) to reduce rural urban migration and problems of large cities. Large cities dominate the economy which is the problem of our economy. Resources distribution or allocation of our country is not equal. So, decentralization policy will also lead to make opportunities to increase resources at local level. By studying the economic structure of one town, it will be able to make concept about economic structure of other towns in Bangladesh. Finally, it will be able to create facilities of future development planning in selected area. The present study explores the structural characteristics of Sherpur town as a case.

Objectives of the Study

The specific objectives of this research are:

- To identify the economic structure and major components of economy of Sherpur town.
- To identify the problems related to the town.

Materials and Methods

Sherpur town is selected for this research as a case due to its condition and development characteristics. On the other hand ay research did not conduct in Sherpur town. Sherpur is one of the small and developing districts of Bangladesh which consists of 9 wards and 41 mahallas. It is situated to the northern part of Bangladesh. Sherpur was established as a Paurashava in 1989 and covers an area of 23.38 sq.km and a population of 82179 (BBS, 2001).

This study followed case study and a descriptive research method which involved observation and surveys.

This paper is based on both primary and secondary data sources. Primary data were collected through questionnaire to conduct employment survey and interview method. Three sectors were selected to collect primary data. The selected sectors were:

- Manufacturing Sector
- Trade and Commerce Sector and
- Service Sector



Fig. 1. Study Area

Then there were identified and made lists of 77 items of establishments or units (i.e. all type of industries, all type of shops, stores, hotel and restaurants, financial institutions such as govt. non-govt. and private, public administrative and defense offices, education, health and social work centres) thus sample sizes were selected 77 establishments or units of these sectors. After that, questionnaire was prepared for each sector according to economic indicators to collect information about establishments and employments of the study area. The obtained employment composition of Sherpur town was categorized using Bangladesh Standard Industrial Classification (BSIC) Coding System. Another, city wise questionnaire was prepared to identify the problems of the town. The information was collected from every item of two units. Employment size was calculated by doing average of the two units observed and total employment number was acquired by multiplying the total no of establishments in that type. The total number of establishments was collected from the Executive Engineer and Tax Inspector of the Paurashava headquarters. The National Context data base was obtained from the publications of 'Economic Census, 2001-2003' (National and Zila series) conducted by the Bangladesh Bureau of Statistics (BBS). Other related information of the study area was collected from the Executive Engineer and Tax Inspector of the Paurashava Headquarter. GIS unit of LGED was also another source of related information and map. The 'field visit report' and 'final report' of 'Urban Governance and Infrastructure Improvement Project (UGIIP)' provided the preliminary idea about the area. Arc GIS software was used to produce map and Microsoft Excel was used to calculate data and present data graphically.

To calculate location quotient the following formula was applied. This formula was applied to compare the Regional Economy (often a town) to the National Economy. The formula is:

$$\text{Location Quotient} = \frac{\frac{\text{Regional Employment in Industry I in Year T}}{\text{Total Regional Employment in Year T}}}{\frac{\text{National Employment in Industry I in Year T}}{\text{Total National Employment in Year T}}}$$

Where, An LQ < 1.0 = All Employment is Non-Basic

An LQ = 1.0 = All Employment is Non-Basic

An LQ > 1.0 = Some Employment is Basic

(www.garnet.acns.fsu.edu/~tchapin/urp5261/topics/econbase.htm)

Basic : Firms and individuals serving markets outside the community, and

Non- Basic : Firms and individuals serving markets within the community

Results and Discussions

Analysis of Major Economic Components of Sherpur Town

Existing Land use and Activities

The existing Municipal area is 23.38 Sq. km (BBS, 2001). Most of the municipal area were used for agricultural purpose and occupies 49.97 percent of total town land, residential land which is 28.26 percent, land use under industry and commercial is only 12.60 percent and land use under service sector is only 2.86 percent (UGIIP, 2008).

Establishment and Employment Composition as Economic Component of Sherpur Town

Sherpur is growing slowly depending on only agro based processing industries and trade and commerce. There were 141 rice mills (employed 4589 persons) (food processing industry) within the town in year 2009-2010. It is the growing and developing sector for its spatial advantage. From the above table it can be observed that concerned all employment sectors of this town have experienced 1604 nos. and 623 no. of additional employments and establishments by last five years. The additional employments and establishments of manufacturing sector were 158 nos. and 36 nos. From this statistics it can be normally extracted that there had no remarkable change in this sector. The dominating sector of Sherpur town was wholesale and retail trade. The additional employment and establishment of wholesale and retail sector was 1142 nos. and 512 nos. in last five years.

Table 1. Establishments Employments Composition (Sherpur)

Code	Sector Group	2005-06			2006-07			2007-08			2008-09			2009-10		
		E1	E2	E2%	E1	E2	E2%	E1	E2	E2%	E1	E2	E2%	E1	E2	E2%
D	Manufacturing	336	6357	40.94	344	6424	40.19	360	6524	39.71	367	6403	38.39	372	6515	38.03
G	Wholesale & Retail Trade	3127	6306	40.61	3276	6617	41.40	3383	6858	41.74	3488	7144	42.84	3639	7448	43.48
H	Hotels & Restaurants	145	776	5.00	148	782	4.89	149	796	4.84	154	822	4.93	154	828	4.83

J	Financial Institution	15	272	1.75	15	278	1.74	16	291	1.77	17	310	1.86	17	314	1.83
L	Public Administration & Defense	28	418	2.69	28	418	2.61	28	420	2.56	28	420	2.52	28	420	2.45
M,N	Education, Health & Social Works	79	583	3.75	79	585	3.66	84	616	3.75	87	635	3.81	88	648	3.78
O	Community, Social and Personal Services	316	815	5.25	338	881	5.51	351	926	5.64	357	943	5.65	371	958	5.59
	Total	4046	15527	100	4228	15985	100	4371	16431	100	4498	16677	100.00	4669	17131	100

Source: Field Survey 2010; Here, E1 for Establishments, E2 for Employments

In Table 1 it can be observed that the major growing sector was wholesale and retail trade. About 40.61% of total employment was engaged in wholesale and retail trade sector in 2005-2006 while in 2009-2010 was 43.48%. Only 2.87 percent was increased in successive five years. About 40.94% and 38.03% of total population were engaged in manufacturing sector respectively in year 2005-2006 and 2009-2010. In hotel and restaurants, financial institution, public administration and defense, education, health and social works, community, social and personal services did not face any remarkable change or remain static in successive five years.

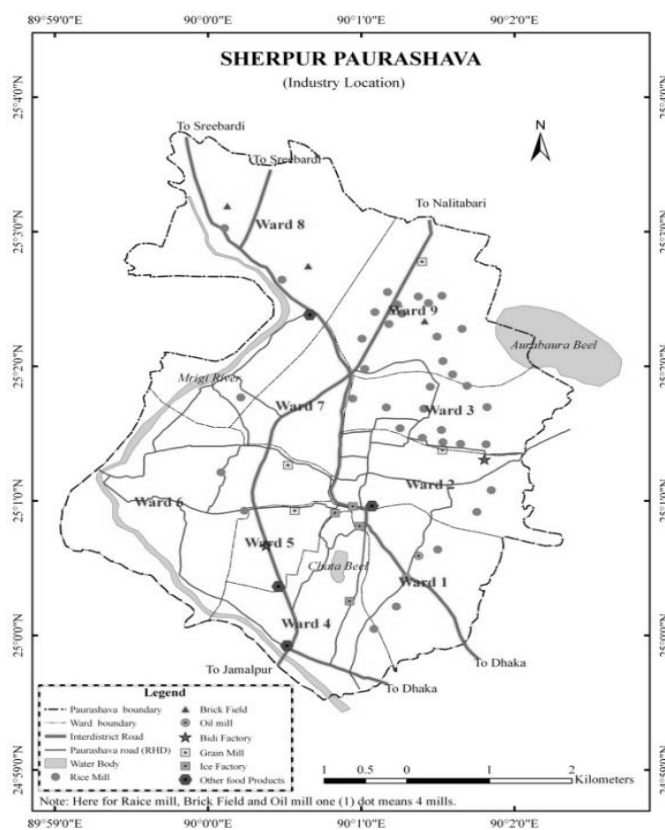


Fig. 2. Industry location in Sherpur Town.

Employment Change in Sherpur Town

According to the Field survey, 38.03% (6515 workers) and 20.21% (1915 workers) of the town's total employment were employed in manufacturing sector respectively in year 2009-2010 and 2001-2003 in Sherpur town. Even while the total number of workers in Manufacturing sector increased from 1915 to 6515 in year 2001-2003 to 2009-2010 which were presented in Table 2 and Figure 3. The employment change in this sector was 4600 nos. and 240.21% from 2001 to 2010. This is the remarkable and rapid change of total employment sector of the town due to increase in the manufacturing employments.

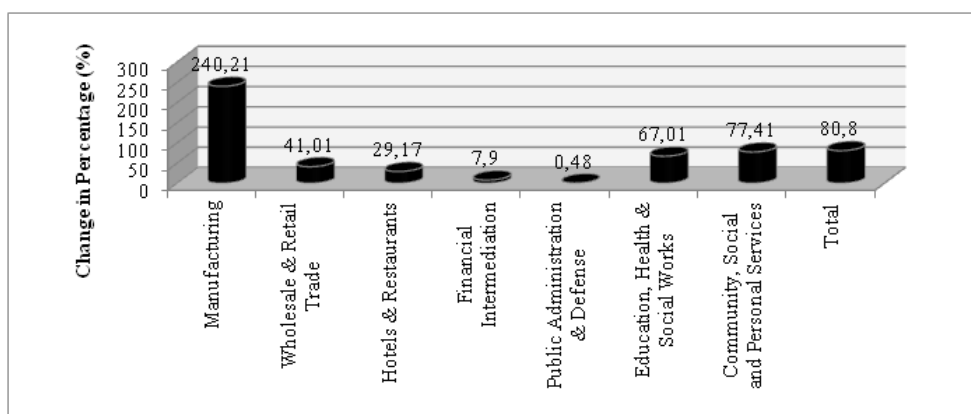


Fig. 3. Employment Change Trend of Sherpur in Percent (%), 2001-2010.

Table 2. Employment Change Trend of Sherpur Town 2001-2010.

Code	Sector Group	2001-2003		2009-2010		2001-2010		
		Employment	Employment %	Employment	Employment %	Change	Change in thousand	Change in Percent
D	Manufacturing	1915	20.21	6515	38.03	4600	2402.09	240.21
G	Wholesale & Retail Trade	5282	55.75	7448	43.48	2166	410.07	41.01
H	Hotels & Restaurants	641	6.77	828	4.83	187	291.73	29.17
J	Financial Intermediation	291	3.07	314	1.83	23	79.04	7.90
L	Public Administration & Defense	418	4.41	420	2.45	2	4.78	0.48
M,N	Education, Health & Social Works	388	4.09	648	3.78	260	670.10	67.01
O	Community, Social and Personal Services	540	5.70	958	5.59	418	774.07	77.41
	Total	9475	100	17131	100	7656	808.02	80.80

Source: *Economic census, 2001-2003; field survey, 2010.*

In the year 2001-2003, 5282 workers (55.75%) were employed in Wholesale & Retail Trade sector in Sherpur town while in 2009-2010, it was 43.48%. About 641 workers (6.77%) were employed in Hotel & Restaurants sector in 2001-2003 while it was 4.83%

in 2009-2010. On the other hand, the employment of the two sectors; Education, Health, & Social Work and Community, Social & Personal Services were increased day by day and the changes of these sectors can be observed from 67.01% to 77.41 percent in the successive 10 years.

Sector Wise Employment Concentration Pattern in Sherpur Town: A Comparison between the Urban (Nation) and Sherpur Town

The ratio concentration has been calculated for all sectors to determine whether or not the local economy has a greater share of the sector. If an industry or a sector has a greater share than what we expect from given industry or sector, this means that "extra" employment of that sector is assumed to be Basic because those jobs are above what a local economy should have to serve local needs. (mailer.fsu.edu/~tchapin/garnet-tchapin/urp5261/glossary.htm). Altogether 12 sectors have been examined whether the sectors performance is better locally if compared with the nation. Location Quotient Technique has been used to determine such performance on concentration of the sectors. Out of 12, two sectors were more specialized locally and thus appeared to be basic sector.

In 2001-2003, the local economy was more dominated by Wholesale & Retail Trade (with a L.Q. of 1.31) and Real-estate & Renting (with L.Q. of 1.91) and was weak in Manufacturing, construction, Transport, Storage & Communication, Education, Health & Social works sectors (L.Q. of 0.71, 0.35, 0.32, 0.61) which were shown in Table 3 and Figure 4.

Table 3. Calculation of location quotient for selected sectors in Sherpur Town (2001-2003).

Code	Sector Name	Regional (Sherpur Town) Employment (2001-03)		Urban National Employment (2001-2003)		LQ
		Employment	Employment %	Employment	Employment %	
C	Mining and Quarrying	0	0.00	3404	0.06	0.00
D	Manufacturing	1915	19.27	1467895	27.16	0.71
E	Electricity, Gas and Water Supply	0	0.00	19729	0.37	0.00
F	Construction.	20	0.20	31347	0.58	0.35
G	Wholesale & Retail Trade	5282	53.14	2195019	40.61	1.31
H	Hotels & Restaurants	641	6.45	323120	5.98	1.08
I	Transport, Storage and Communication	87	0.88	147251	2.72	0.32
J	Financial Institution	291	2.93	159997	2.96	0.99
K	Real Estate and Renting	357	3.59	101463	1.88	1.91
L	Public Administration & Defense	418	4.21	267047	4.94	0.85
M,N	Education, Health & Social Works	388	3.90	348375	6.45	0.61
O	Community, Social and Personal Services	540	5.43	340447	6.30	0.86
	Total	9939	100	5405094	100	

Source: *Economic Census, 2001-2003.*

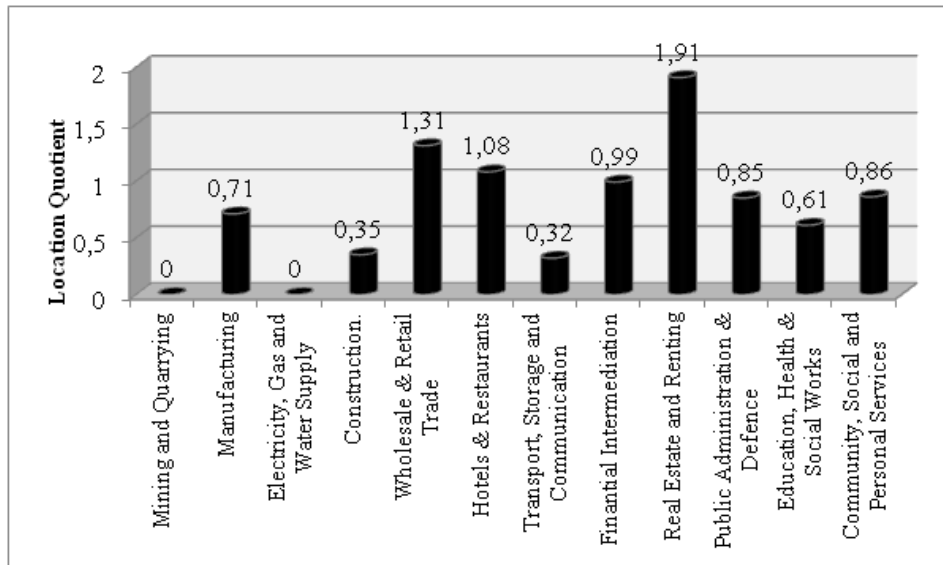


Fig. 4. Location Quotient for Selected Sectors in Sherpur (2001-2003).

From this statistics it can be said that, Wholesale & Retail Trade (with L.Q. of 1.31) and Real-estate & Renting sectors (with a L.Q. of 1.91) had some basic employments (that is surplus to regional self sufficiency) because the value of these two sectors is greater than 1. On the other hand, Manufacturing, construction, Transport, Storage & Communication, Education, Health & Social works etc have more nonbasic employments because the ratios of less than unity (1) indicate a local or nonbasic activity. Other sectors were nearly in line with the Urban National employment

Other Related Components of Economic Structure

The economic structure of a town or city is related to the physical (i.e. infrastructural and social) condition of that town. Economic structure of a town is identified by studying the road networking system, land use pattern, municipal finance condition as well.

Road Networking Situation in Sherpur Town

Total length of roads of all types of Sherpur Town is 75.74 km. Of them, 61.14 km are pacca and 14.61 km are katcha roads (UGIIP, 2008). The main road is Dhaka-Sreebardi road and Jhenaigati-Jamalpur road passes through the core of the town Centre. It has no highway and railway road network.

Connectivity Analysis of Transport Network

Connectivity of a transport network means how the various node (where two or more lines or road meet) are related with one another. Connectivity of transport network has been measured in four ways:

- i. Cyclomatic Number
The value of Cyclomatic Number was 28.
- ii. Alpha Measure Index
The value of Alpha Measure Index was 0.19.

- iii. Beta Measure Index
The Beta Measure Index was 1.36.
- iv. Gamma Measure Index
The value of Gamma Measure Index was 0.04.

By analyzing the connectivity of transport network, it can be observed that transport network system of Sherpur District was moderate, path or tree like and less developed.

Balance of Payment

From the balance of payment sheet of the FY 2008-2009 indicating the deficit type of budget in this town. The municipality could not pay all its salaries and allowances from its tax collection. The expenditure of paying salaries of Honorarium Mayor, Commissioner and other employees of the municipality was Tk 10.66 million where total tax collection was about Tk 8.94 million (UGIIP, 2008). So here deficit was Tk 1.72 million.

Problems of Sherpur Town

Economic Problems

Problems related to Municipal Finance

By analyzing the balance of payment sheet of Sherpur municipality in FY2008-2009 it can be said that the Budget of that year was deficit type. Because, Salaries, Allowances of the Honorarium Chairman/Commissioners and other Maintenance cost is almost double than the income of the municipality which is collected from the tax. As a result, it is not possible to undertake infrastructural development programme from the revenues or income of the municipality.

Poor Condition of Slums

From the observation and according to UGIIP report of Sherpur Paurashava, it can be said that most of the slum areas are very poor to look at. There have no any utility services facilities such as water supply, drainage facilities, sewerage facilities, sanitation facilities and even electricity facilities etc.

Shopping and Marketing problems

From the observation and case study, About 50 percent of all markets and bazaars were located in Word no. 2 (centre of the town) and rest of the markets were located in ward no.1, 3, 4, 5, 6, 7, 8 and 9. Gathering of peoples are very high in this ward due to unequal distribution of market facilities in Sherpur town. So, traffic congestion is increasing rapidly day by day in this ward.

Social Problems:

Transport and Communication Problems

The condition of road is not so good and narrow in width. Many dwellers of the town reported that traffic congestion is growing up day by day.

Educational Problems

The educational institutions had no sufficient teachers and institutions. The quality of teachers and institutions is not so good. Primary schools are not sufficient as required.

Health Care Problems

There was a Zila Sadar Hospital which had 9 doctors and 50 beds in Sherpur Town. It denoted that one bed for 1644 peoples and one doctor for 9131 peoples. From this scenario it can be understood that number of beds and number of doctors were not sufficient.

Water Supply and Drinking Water

There was only 30.28 km piped water supply available in Sherpur town. There were five production tube wells (PTW), one treatment plant, one over head tank, 5 pump houses, 17 communities tap, 1350 hand tube wells covering 38 percent requirement of the population (UGIIP, 2008). No attention has been given to the Ward No.8 and Ward No. 9 where access of Paurashava water supply is Zero.

Sewerage Problems

There are no piped sewers at Sherpur town. There are low-cost drains and some areas have no drains.

Drainage Problems

Resident of all the urbanized areas reported that the numbers of drains in their areas were inadequate. As a result, localized flooding occurs after every rainfall, causing inconvenience to the residents and spreading waterborne diseases. From the interview it can be understood that there are mainly (10) ten (T&T office area, west side if Upazila office, bus stand area, front side of new market, girls school road side area, etc are remarkable) scattered low-lying areas which were become flooded in Sherpur town due to absence of network based drainage system, inadequate operation, cleaning and maintenance of drains, blockings in the existing drain.

Waste Management

The solid waste management system is not satisfactory. From the observation it can be said that the town had no sufficient dustbins and that's why the town was not clean enough. The Paurashava have no any controlled dumping place for solid wastes disposal.

Conclusions

Though Sherpur is a district town, rural and urban characteristics are mixed. Economy of the town is agriculture based. Most of the people are engaged in agriculture. Some agro-based industries, business centres, Government, semi government, private organizations, and NGOs were established here. The establishments and employment pattern in manufacturing, whole sale and retail trade, hotels and restaurants, financial institutions, health & education, public administration & defense, community & social services sectors etc did not experience remarkable change in this town in the successive five years 2005-2010. A little change was seen in terms of employments in whole sale and retail sector. There was no change in industry or manufacturing sector. However, remarkable change has been observed in the manufacturing sector during 2001 to 2010 due to generating a huge amount of employment in rice mills and brick fields.

Location Quotient analysis shows that the town may have specialized in some sectors if compared with the nation (Urban). In 2001-2003, the local economy was more

specialized than the nation in Wholesale & Retail Trade (with L.Q. of 1.31) and Real-estate & Renting (with a L.Q. of 1.91). However, in Manufacturing, construction, Transport, Storage & Communication, Education, Health & Social works were weaker in Sherpur than the urban national (L.Q. of 0.71, 0.35, 0.32, and 0.61). So, Wholesale & Retail Trade and Real estate & Renting sector had some basic employment in 2001-2003.

Economic development is related to the physical, social and infrastructural condition of the town. Physical and infrastructural condition of Sherpur town was not good and faced many problems. To sum up, the overall situation of economic structure was poor and almost static. Agriculture based structure indicated that local resources were the back bone of the economy of Sherpur town.

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