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PLANNING AND DEVELOPMENT: BOGRA TOWN AND THE REGION

Planning for development has to take into cognizance various aspects of a town viz. physical, social or socio-cultural, political and economic. The needs of local population and the population that will be added along with inevitable changes in economic structure are not be ignored when plans are formulated. As the study on Bogra, centres round planning for development, some basic principles of planning aspects of Glasson (1978:19) are examined to see their applicability in case of Bogra:

1. The identification of the problem;
2. The formulation of general goals and more specific and measurable objectives relating to the problem;
3. The identification of possible constraints;
4. The projection of the future situation,
5. The generation and evaluation of alternative courses of action, and the production of a preferred plan, which in its generic form may include any policy statement or strategy as well as a definitive plan.

Finally, the sort of planning that could be considered for our study should be highlighted. Rational planning could be categorised as town and country planning, urban planning, development planning, social and environmental planning, economic planning etc. Therefore, to make a comprehensive plan for Bogra town with reference to its surrounding region, these planning
approaches have been considered.

1. FUNCTIONS OF BOGRA MUNICIPALITY AND CONSTRAINTS, IMPLEMENTATION PLAN

Bogra is administered by a municipality and, the master plan prepared by them (under the UDD/BNPPP 1980) with land use maps and descriptive materials aims at optimal zoning of urban land indicating intensity of landuse, location of development projects, roads, water supply, industrial establishments, public housing, community facilities and private residential and commercial development. The local plans are translated into site development schemes and involve preparation of layout plans, subdivision of plots, designing of street patterns and other public facilities.

However, under the Bengal Municipal Act, 1932, like other municipal towns, Bogra municipality was provided with the powers of building control, regulation of public health and (the power of ) enforcement of those controls, conservancy, drainage, sewerage disposal, and sanitary and public health activities are regulated by the Act. Again, the Act provided the municipality with powers to destroy any shed or hut to prevent epidemics, and illegal construction of buildings. It may acquire land for the construction of lanes/ by lanes for the surrounding houses. It can also use force to prohibit the construction of buildings that might deprive other buildings of the means of access.

In 1960, the municipality administration ordinance was adopted extending the scope of some powers stated above, such as
those regarding public health, water supply and drainage, trees, parks, and garden managements. Building controls were expanded in the new ordinance. In 1977, the paurashava ordinance was introduced with minor changes over the earlier ordinances.

Bogra municipality performs its duties actively and successfully according to its capacity and the funds allocated. Sometimes there may arise unfavourable snags in its functioning.

The unique performances of the municipality, the dynamic growth of various urban functions, substantial interaction with the near and far-flung areas, etc. have led the town to achieve the status of one of the first grade municipal towns in Bangladesh.

A point to note is the way in which the municipality carries out its functions within its limits, only to meet the present needs and demands without effective planning control/restrictions or without considering future extension and development. To check the future deterioration of the urban environment, and congestion, perspective plans are necessary. Setting aside in the town and fringe areas by applying zoning ordinance or other strategies. In a simple way, that Ratcliff (1974:13) has illuminated, town planning is "concerned with providing the right site, at the right time, in the right place, for the right people."

2. DEVELOPMENT PLANNING IN CONTEXT TO BOGRA

In the article on Bogra town on planning aspects,
Rangaswamy and Hossain (1990) mention that regional and urban planning should largely focus on the economic and social development of the people inhabiting a particular area. Whenever any plan is envisaged, it must take into consideration the potential resources - physical economic and human. Considering the availability of resources, planning of Bogra town should be based on the trend and rate of urbanisation, processes involved in urbanisation, predominance of functional activities, spatial organisation for development, local needs of the urbanites, and the service areas which support the very existence of the town.

**Town Development Plans**

The town development plans have been prepared by the Urban Development Directorate as a Sub-Component of Activity three "Area Development Studies of the National Physical Planning Project Work Plan" (UNDP, BGD, 1980).

The Phasewise implementation of the plan covers the period from 1980 to 2000 A.D. The study area covers 5306 acres (sq.km.) in which 1119 acres constituted municipal area (1980), and 4187 acres under the extension area. The population of 1980 within the municipal limit and the extension areas were estimated at 60,400 and 48,200 respectively, 84,770 and 1,63,190 for a projected population of the year 2000 A.D.

There are number of problems and drawbacks of the planning mentioned in the report. The present land use plans only represent proposals (prepared by UDD), and the various proposals included are now subjected to discussion.
confirmation and modification by other government agencies and by the municipality.

It is a highly simplified planning approach, aiming only at identifying or forecasting the most likely future development pressures on the town, bearing in mind that it is not possible at present to control private development of land in Bangladesh.

Acquisition of private land at the time of implementation of development plan (phaseswise) will be very difficult due to price hikes. Moreover, there is at present no way, other than the wholesale acquisition of all land in advance, to prevent land planned for one use, from being put to another. Partial solutions may be available if existing legal and administrative mechanisms are used imaginatively. More complete feasible solutions would, in all likelihood, require legislation.

Finally unless a detailed district or regional analysis is provided, the plan will not bring good results.

Land Use Plan:

Fig 2.3 and Appendix I depict the tentative land requirements of identified public sector projects in the periods 1980-2000 A.D.

According to the survey report it was concluded that there is a significant scope for intensification of residential land use in the municipal area, mostly in wards I, III and V. In
the peripheral areas significant intensification is likely to recur by the year 2000, and thus change their status from semi-urban to urban.

Most of the land use extension is anticipated to the north of the city in Fulbari, Barbarkpur and Nisindera Mauzas and to the southwest in Fulbari, Silimpur and Malgram Mauzas. New urban developments are also expected to extend more and more to the east over the river karatoya.

With regard to commercial development the present main commercial area is expected to expand both to the north and south causing a change of land use from residential into commercial. Similar development patterns are expected to occur along the main access roads within the pourashava area.

Wards II and IV are over crowded and the rest of the wards are likely to follow the same development pattern unless the likely process is pre-empted through the strategic location of important new urban development projects such as industrial estates, service centres, transport terminals and major schools. A well planned street development programme is also needed to provide circulation network which would distribute traffic more evenly in the area and would eliminate, as much as possible, the congestion of the main commercial area. The congestion of the central area is also frequently compounded by the railway traffic which runs through the main market.

Public service facilities such as service centres, schools and recreational areas have been located in such a way
that their accessibility is sufficient without the use of motorised transport. Extension of the municipal and district administration is planned mainly to the west from the main centre where sufficiently large land reserves are available in a central location. Land, under predominantly residential use, as a percentage of the total study area, is predicted to increase from 27% in 1980 to 54% by 2000. This means that by the end of the planning period, the whole area will be mostly built-up and that it will be necessary to extend the urban infrastructure to cover all the study area.

**Proposed Plan**

The zoning ordinance is not yet imposed. The proposed planned areas for certain uses are going to the hands of private developers. So it will be difficult to implement the plan unless certain restrictions are adopted. Some developmental works according to the plans are taking place. The most important work is water supply project (BSD/78/017) with an adequate physical base for the design and development of water supply and drainage systems (see Appendix). Technical training centre, bus and truck terminals, etc. have been constructed. The extension and development of Housing Estate and Industrial Estate could also be mentioned in this regard.

Central bus and truck terminals which at present is in the centre of the town near the railway station can be shifted to a more open area on the outskirts to remove the traffic congestion (see plate 2).
However, it is to be noted that the proposed land use plans for the growing Bogra town could bring good results though there might arise some problems.

Planning Measures:

When planning proposals are put forward or envisaged, the assurance of a good environment and quality of life to the inhabitants is most essential. Keeping in mind Bogra as the possible 'regional centre' in the Northern Region or a 'growth pole' for the region according to Zaman (1987), broad base planning is necessary. The most important thing is to restrict the use of land by private developers in the proposed planned areas, whether the land is acquired or not. This strategy can be extended beyond the urban limit up to a certain extent. Again, to restrict the unsystematic use of land leading to haphazard growth, a number of land use zones for specific purposes with the provision of infrastructure and amenities could be given due consideration. The people may be given permission to use the land under specific terms and conditions and should purchase the land, which the government does not need, directly from owners of the plots.

Some specific cases may be highlighted regarding problems and policy recommendation in Bogra town.

The housing situation in Bogra town is not so good though improving. More than 70% houses are semi-pukka and katcha
in extension areas (see Plates 13-15). In the main town area mixed structures are found: katcha, semi-pucka and pucka. It is noted that construction of houses is beyond the means of low and middle income groups. Small plots of low cost land in the extension areas and also in the main town are purchased by the low and middle income groups, and a variety of constructions of low quality mushrooms all around creating permanent problems for planning and development (see Plate 13-15). Hence, responsible private builders should be encouraged and supported by the government for proper construction of housing areas. However, different policies and strategies, such as direct construction, sites and services schemes, nucleus housing, active house building loan schemes, material subsidy, tax relief, rent control etc. may be adopted. Apart from these, a number of staff-quarters should be constructed for the government and semi-government employees.

Since 1950's, industrial entrepreneurship has grown to a satisfactory level. Bogra's importance is largely contributed by industrial development. Most of the industries were setup at the margin of the municipal limit. One industrial estate (BSCIC) has recently started functioning and it is now within the municipal limits. Different types of industries, particularly small-scale industries, are established at random in the extension and fringe areas. Some more industrial estates should be specified along the major routes beyond the urban limit so that the entrepreneurs may purchase land in the proposed areas according to the market value if the land is not acquired.
Bogra is likely to be the industrial core in the northern part of Bangladesh. As per Zaman's view (1967:160), "the promotion of industry as a tool for the establishment of a 'growth pole' at Bogra requires a degree of selectivity about the type of industries promoted, which is capable of inducing growth in the area". Besides other small scale industries, some key industries or others have to be established, such as steel plants, petro-chemicals industry inclusive of the tyre industry, cycle manufacturing etc. Northern Region is agriculturally developed but there is no fertilizer factory in the region, which may be thought of based on the availability of raw materials. However, these industries induce the potentiality of the growth pole as well as constitute a propulsive basis for the growth of other small industries. In this regard, coal and limestone, (Appendices II:409 & IV:471) which are planned to be mined, will form the basis of establishments of many industries and power plants. Cheap and excess agricultural labour forces, and unemployed literate persons are helpful in the establishment of industries. It is not an exaggeration to point out that these vigorous industrial activities must simultaneously invite other development activities likely to promote Bogra as a so called vital regional centre. Therefore, proper industrial policy should be under taken. At the same time the authorities should undertake measures for the revival of a number of sick industries in the town.

Historical evidences show that Rajabazar and Fateh ali bazar were the main business nuclei around which later on all
sorts of commercial and financial establishments sprung up and formed the congested CBA of Bogra. This CBA which houses both retail and wholesale markets caters not only to Bogra but also to other districts in the region. The problem of congestion is further aggravated by this factor. Due to the highly centralised business functions, more and more establishments are coming up after demolishing the old structures. So, decentralisation of commercial activity is necessary which is also mentioned in the proposed plan. However, the wholesale market can be detached from CBA. Two or three large market centres provided with wholesale and retail facilities may be established in convenient locations towards the north, (Fulbari), south (Latifpur) and west (Puran Bogra). These centers can stimulate the growth and development of the surrounding areas. Hierarchically these centres may be less important than the original one. To encourage the entrepreneurs, some subsidies like tax holiday, reduced rent etc. may be given. Weekly closing day may be different for different market areas. On weekly government holiday (Friday, market should be opened for the convenience of the people.

In the congested CBA, foot-path shops along the main streets (see plate 5) and the movement of rickshaws or pulling carts through the narrow lanes should be banned.

Railway station, central bus and truck terminals are found in the station road in the "hard core" of the town, obstructing the easy movement of pedestrian and vehicular traffic. These terminals could be shifted towards the west beside
the by pass road. It is the most convenient location for vehicular movement all around. The width of the roads inside the town is insufficient for the traffic flow and pedestrian movement. So, wherever possible the roads should be widened. In some places, by demolishing some portion of walls or buildings, roads can be made wide to keep the flow of traffic steady and smooth.

Bogra is a place of medium grade educational institutes. As per the pressure of the people in the region, the existing colleges and other educational institutions should be more developed including accommodation facilities for the teachers and other staff, and students. In the same way proper attention should be given to strengthen the health services. One general hospital is facing problems, such as inadequate number of physicians, shortage of beds, insufficient medicines etc.

The establishment of agricultural university or college, medical college, modern ayurvedic college and institutes of job-oriented courses etc. could be considered. Other public institutions (mainly administration) could be grouped zone-wise in particular places.

The existing utility services are to some extent satisfactory. Large scale water supply project is near completion. Though the Public Health Engineering Department and the municipality are taking steps to improve the drainage and sanitary conditions, (see Appendix IV:4/4) they should expedite their work, particularly for removing service open latrines
which pollutes the good urban environment.

The authorities should take care of disposal of night soil and garbage and pay proper attention to other physical aspects of amenities such as underground drainage, supply of water and electricity, improvement of roads in the neighbourhood, recreational arrangements etc keeping pace with the future expansion of the town.

The charm of the town may be increased from the recreational point of view. In Malgram Mauza, there are two big tanks. These may be created as tourist places of interest with the provision of children's park, motor-boats, beautiful gardens, 'son et lumiere' (sound and light) with fountain, etc.

The ribbon development and haphazard and uncontinued growth, has left green belts of agricultural land. If possible, in some areas the green belt should be preserved to maintain the natural environment.

Unproductive or vacant land should be utilised for urban purposes instead of keeping it as "institutional desert". Minimum amounts of land to serve the maximum purposes—should be the motto and planning strategy for development activity, since the agricultural land is very fertile and scarce. Also, the ribbon development should not form a barrier to the less developed interior land behind.

Unplanned and haphazard development should not be allowed, especially in the extension and fringe areas,
(1982) has rightly mentioned in her study of Rajshahi city that "to allow further linear development will be uneconomic, it would be very costly to provide social facilities and public utility services."

As Bogra was hit by severe earthquakes several times the effect of earthquake on building structure may be thought over for constructing houses which may cause less damages. Bogra lies in the earthquake zone where the probable maximum Richter magnitude (intensity) of earthquake is 6.5-7 on Richter scale (Appendix: IV:4(3).)

Finally the number of lower order rural service centres that are beyond the urban limit, may be pointed out. These may form the future suburbs of Bogra when Bogra would be a fullfledged regional centre or growth pole. So the authorities would think over whether zoning ordinance for land use should be enforced or not.

3. BOGRA TOWN AND REGIONAL PLANNING

Any fullfledged urban planning must have linkage and coherence with regional planning. Sundaram (1977:3) advocates that "regional planning is sometimes regarded as an extended form of town planning", Rap (1981:193) views that socio-economic planning of a city will be incomplete if it does not attempt to present an integrated development of the city and its region.

Therefore, the knowledge of the character of the
surrounding areas of the town and the pattern of their relationship are prerequisites for making appropriate plans. In chapter 10, we have highlighted Bogra's position in the region. Growth of different types of urban functions and rapid development of transport systems have placed Bogra in a unique situation in the region. Its two different and distinct physiographic regions show various characteristics allowing different types of planning prospects.

For our convenience and from practical viewpoint we may consider administrative district as a region and therefore preparation of a physical development plan for each district is a must before preparing development plan for any town. Therefore, this would be 'Town and country' planning wherein the role of the physical, social and economic setup of the towns will be determined as well as fitting use of open lands in rural areas. (Gandhi, 1973, 213). Hence, in our case, Bogra's linkage with distant areas beyond district limits are observed, so that the extent of planning strategy should be considered on a broad canvas. There should be coordination to planning measures between districts.

Physical Survey and planning Implementation

We should have clear knowledge about the general topography of the land, role of rivers and "bils" (depression), climatic condition, geological structures, hydrography, soil structure, land classification and land use classification as well.
Bogra district region has a surplus mainly in rice, potato and chilly production. West Bogra (Barind tract) is highly devoted to rice cultivation whereas East Bogra region produces various types of vegetables and fruits, chili, spices, jute, rice etc. Greater portion of these produce is exported to different parts of Bangladesh after meeting local demands. For preservation and storage purpose, many cold storages and godowns are constructed by public and private sectors, yet these are not sufficient to meet the storage requirements.

Rapid development of irrigation schemes ensures much production of rice which is the backbone of the economy. More attention should be given to expand the scheme through proper water management, keeping in mind the ecosystem so that it is not disturbed by continual withdrawal of ground water. In the same way, cultivators of vegetables, watermelon, banana, etc. should be encouraged to raise the production.

In recent times East Bogra region has been facing flood problems due to erosion of the embankment of the river Jamuna. It causes much destruction of economy and infrastructure, and large scale forced migration towards Bogra. Instead of taking temporary measures, long term solutions are necessary.

Supplies fall quite short of the demand for fish and milk. East Bogra has a number of biogas depressions and West Bogra possesses numerous ponds and tanks. Many tanks are kept unproductive. These water bodies serve irrigation schemes. Whoever fish is a produce of high value and part of the diet of
the people, there should be more emphasis on pisciculture. Existing schemes of fisheries should be activated either by making cooperative societies or through other means. East Bogra is the main milk producing area. Some problem arises as milk cannot be transported from far off areas due to its perishable nature and local transport problems. By setting up milk collecting centres and providing storage facilities, the problems regarding milk supply could be solved and producers also could get a higher price. At the same time establishment of big and mechanised dairy farm can be thought of. Moreover, due to the acute shortage of bullocks for ploughing and milch cows, slaughtering of these animals should be curtailed. As a result, a new environment may be created to grow more vegetables, to produce more fish and more milk, and to provide bullocks with the price to the farmers from which people would be economically benefitted.

Finally, the authorities should pay attention towards proper utilisation of land. Land should be placed under crops, favourable to the region, of high food value to the local people, and guaranteeing good income to the cultivators.

Social Survey and Relevance of Planning

Social survey comprises distribution of population in the different urban centres, market centres & villages with trend of population growth (natural increase) and migration, education service, health facilities, postal and tele-communication systems, cinema houses, clubs, drinking water, accessibility to the areas etc.
It is a fact that in Bogra, like other areas, all rural service centres, at any level, provide services to their surrounding areas according to their capacities. Some, however, are linked with Bogra town particularly for commercial purpose or service industries.

If these centres are provided with basic infrastructures like transport, electricity, banking etc., they will develop rapidly promoting more integration with service centres and villages. On the other hand, interaction with Bogra town will be accelerated, as observed at present. Other social services, as stated above, are expanding in rural areas gradually. Thus, if the rural people get benefits even up to a certain extent, the pressure on different urban facilities at Bogra will be lessened. However, for special purposes like higher education, better medical facilities, communication channels etc., the local people's dependence on Bogra town would be very high. Increasing urban facilities in rural areas will reduce the number of permanent migrants towards Bogra town. No doubt, large scale movement of population will take place due to developing transport systems and high increase in population growth in the rural areas.

It is observed that, the on going family planning projects in rural areas are not up to the mark. The consequent high rate of population increase creates tremendous pressures on the socio-economic structure. For this reason everywhere in Bangladesh, development is obstructed. It is the foremost duty of
the authorities and the elite group to educate the people and
make them aware of the benefits of small families.

Transport and Communication Survey:

This type of survey furnishes information regarding
villages without proper means of communication and obstruction to
the flow of traffic on account of the absence of overhead bridges
over railway lines and rivers. Traffic data helps in finding out
the number of bus services, roads (width and length) required to
be extended to new areas or augmentation of existing services, as
revealed by traffic trends. Hence the volume and intensity of
traffic on the different roads helps to determine correct width
and pavement of the carriageway. Besides, the evaluation of
railway services the possibility or viability of establishment of
aerodrome can be judged.

The development of transport system in Bogra district
in context with the Northern Region has been discussed in chapters
8 & 10. If more development in road transport takes place in the
interior rural areas connecting the rest of the service centres,
Bogra's intensity of interaction with all the areas of Bogra
district and other districts would be augmented significantly.

At present the role of railways is declining due to
increasing use of fast moving motor vehicles with a frequency of
services. Generally the regional road runs parallel to the rail
line which evoke competition. However, the main problem due to
two types of lines (broad gauge and metre gauge) should be solved
through conversion of Santahar-Bogra metre gauge line to broad
gauge.
Construction work is going on to make the Dhaka-Rangpur road (some portion) into an International Route. At the same time, there is a proposal to construct Jamuna bridge to connect the eastern and western part of Bangladesh. It will provide trainline, bus route and natural gas transmission line. If these things would come to exist, more prospect for Bogra town would be ensured. The construction of the bridge should be taken upon priority basis which definitely would bring in great development of the entire region. In this regard, Zaman (1987:163-64) points out that completion of the proposed bridge will reduce road distances, diminish problems of ferry services, bring the market of the Northern Region within easy reach of the Central and Eastern Regions and improve the scope for uniform development of both the Northern and Southern Regions. Hence, the bridge will link Bogra growth pole with the country's capital Dhaka and port city of Chittagong which will later, encourage private, national, and foreign investors for the promotion of export oriented industries in the region.

Other Economic Aspects:

Different types of small scale manufacturing and processing industries, mainly using local raw materials, should be widespread in the central places of rural areas. At the same time, referring district centres as growth centres (other than Bogra), Zaman (1987:171) points out that these centres would also be the location of some large scale industries. As the growth centres are the largest urban centres of the districts, then provide the major administrative and commercial activities
On the other hand, once the development of Bogra gets momentum, there would be a rapid increase of migrated people from all areas of the region to Bogra town which would create slums. Then the district centres will lessen the congestion of the growth pole and absorb a great deal of migrants from rural areas. Furthermore, these centres will act as a focal point for trade relations between the rural area and the growth pole.

Greater Bogra district and adjacent areas (beyond district limits) are rich in mineral resources. Depending on available deposits of limestone, the proposed Joypurhat cement factory should be installed at the earliest. Acute shortage of cement hampers construction work. Long-awaited coal mining of Jamalganj is going to be postponed due to newly discovered coal fields in Dinajpur and Rangpur districts. (Appendix II: 407 & IV: 4/7). Coal mining project should be implemented immediately. Different types of industries depending on coal and limestone will appear and change the economy of the region. Acute shortage of power which hampers industrial development can greatly be solved through setting up of power plants.

It may be pointed out that before further deterioration of urban environment or aggravation of existing problems, the authorities should take immediate steps to implement proper planning keeping in view the present and further requirements of the town dwellers. Citizens of the town should be involved in the planning body and their participation by way of suggestions and proposals should be given due weightage. There should exist cooperation and coordination among various
organisations to make all efforts to offer the best to the urbanites.

As it is the case of rapid urbanisation, various problems crop up in the urban and rural areas, and socially and economically the divide between the two becomes pronounced. Most of the urban centres are nothing more than overgrown villages. Lack of proper urban planning and lack of implementation of urbanisation policy could be attributed to the overcrowding and unlimited population growth in urban areas without the proper infrastructure facilities and quality of urban life. So in a region, where there is a lopsided or unbalanced growth of urban areas, regional level planning should lay emphasis on the growth of small and medium towns. Activities in these towns should be motivated according to the needs of the people. Development, by far, should cover the whole region rather than concentrating on the towns alone, because growth of towns leads to the development of their respective regions and vice versa. Therefore, integrated rural-urban planning would necessarily and inherently help to promote urban growth to a greater extent.

As Bogra is the most accessible place for all districts of the Northern Region, the benefits of making it a regional centre by offering central functions through patronising the existing commercial-industrial setup is to be considered. At the same time, the dependence on Dhaka for many purposes could reduce so that the people of the region would get services from Bogra on 'the principle of least effort'. Therefore, considering Bogra a future vital regional centre, appropriate perspective plan is to be taken in hand.