Applicability of *Modular City* framework for *MY VILLAGE-MY TOWN* vision in Bangladesh

Asrafi Bintay Akram¹, Tajfia Islam Tiba², Most. Suraiya Akter³, Md. Mehedi Rabbi Piash³

¹Assistant Professor, Department of Sociology, Hajee Mohammad Danesh Science and Technology University, Dinajpur, Bangladesh

²Monitoring and Evaluation Officer, Bangladesh Red Crescent, Society

Abstract: - Very recently Bangladesh government has spotted the light on the slogan 'My Village-My Town': Extension of Modern Civic Amenities in Every Village' i.e. all urban facilities will be available in the villages. In article 16 of the constitution, it is mentioned that the disparities between rural and urban areas should be lessened. It is almost similar to the main theme of the recent slogan of the government. This slogan has driven to create basic facilities including income-generating opportunities, infrastructural development, provision of electricity, ensuring quality health services as well as education for all in rural areas. To accomplish this mission we need a progressive and right policy. This review has focused on the applicability of this model to meet the challenge of implementing the goals of 'My Village-My Town'.

I. INTRODUCTION

 Γ rom sociological point of view we know that basically two factors played a vital role in migration one is push factor (war, natural disaster) and another one is pull factor (seeking for better education, health care facilities, etc). Migration is an important factor influencing growth and redistribution of population and resources in Bangladesh. Due to some unavoidable circumstances, people are pushed to migrate from rural areas to the slums of urban areas. It is the reason for severe urban deprivation and a demolisher of traditional rural life. Around 50.96% of slum dwellers come to slum areas for seeking work/job, 28.76% for poverty, 7.04% for river erosion, 2.15% for insecurity/driven away and 0.84% come to slums due to natural calamities {Statistics and Informatics Division (SID), 2014}. Some 90 out of every 1,000 persons moved to urban areas in 2015, up 17 percent year-on-year, according to Bangladesh Sample Vital Statistics (BSVS) 2015, published by BBS in 2016 (Parvez, 2016).

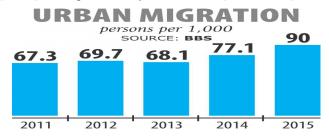


Fig: The increasing internal migration rate over the years (adopted from Parvez, 2016)

After migration to the city, lower-class people seek low-cost areas for their shelter. In this way, the construction of unauthorized shanty houses (slum) on abandoned land, khas or government land along highway sides, within rail stations, along railway-tracks and industry belts, etc started and now it is being continued.

A total of 22, 32,114 slum dwellers were counted in slum census 2014 which is 6.33% of the urban population of the country. The annual population growth rate in the slum census of 2014 is 2.70%. The number of male and female was 11,43,337 and 10,86,337 respectively{Statistics and Informatics Division (SID), 2014}. Over the years the problem becomes acute and then the sociologists, economists, planners, and policymakers were concerned to assess the socio-economic conditions of the slum dwellers and the floating people to chalk out some welfare programs for underprivileged people.

According to the BBS report 2017, the rural education rate is 65% {Statistics and Informatics Division (SID) 2017}. People are becoming much more aware of the civic facilities and the betterment of life. People want to improve their financial status and thus they would like to migrate to urban areas for getting access to more facilities. For push and pull factors this overload of rural people in urban cities creates a huge population pressure in cities. Bangladesh is the 9th most populous country in the world. Its largest city has a population of over 10 million. There are also 27 cities that have populations between 100,000 and 1,000,000, and 68 cities that have a population of at least 10,000. In 1960, 95% of the population lived in rural areas (World Population Review, 2019). But now the number of resident living in rural areas has decreased massively. Rural population (% of the total population) in Bangladesh was reported at 64.96 % in 2016, according to the World Bank collection of development indicators, compiled from officially recognized sources. Besides, in recent years, the growth rate of the population in urban and rural is 3.27% and -0.0799% respectively (Trading Economics, 2020). The negative growth rate of rural areas is really alarming for us. Nowadays it is a big challenge to us how we can

³Students, Department of Sociology, Hajee Mohammad Danesh Science and Technology University, Dinajpur, Bangladesh

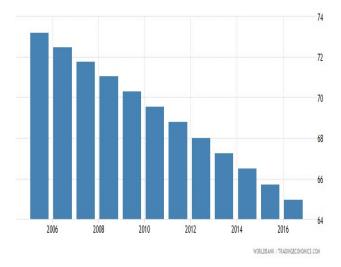


Fig: The rural population rate is decreasing over the years (adopted from Trading Economics, 2020)

resist massive migration of rural people to urban areas. Because most of the cities face so many challenges to provide basic services to their citizens. In this context, we can examine John Friedmann's { J. Friedmann (April 16, 1926 – June 11, 2017) was an Honorary Professor in the School of Community and Regional Planning at the University of British Columbia}(Paul, 2017) model which suggested to create basic facilities particularly generating economic opportunities and quality health services as well as education in rural areas that is almost similar to the vision of slogan 'My Village-My Town'. If this model is implemented in the villages of Bangladesh the migration rate of the rural population to the city might be reduced automatically.

II. THE SCENARIO OF THE MODULAR CITY

The author in his article has explained the development of a city amalgamating rural and urban areas. He has sketched some futuristic features of this city from a general perspective for all over the world. Friedmann is professionally a planner and from this background, he has dreamt of a plan for a district city in this connecting area including household and village community. This district would be town centered and self-governing which can contribute to reduce migration to the city and social cost of this city as well. Friedmann has elucidated the district city formation. He has mentioned some criteria for considering to build up this district city, for example, history, culture and structuring forces of the global economy. Beyond these criteria, he has focused on public policies for this type of city. He has also identified some conflicting issues in this city. These are social, moral and physical formations. Friedmann has pointed out that historically the separation of rural-urban is a continuous process but is not realistic. Rather, practically, development is meant urban-based industrialization. Basically, the city works as the shelter of those people (working people) who search for their destination. In this place, the economy is based on manufacturing and trade-oriented. Agriculture has been become modernized.

A specific form of spatial division is seen in the city which has been created differentiation from the village. The author has identified that people would come cities from an unproductive and culturally retarded area (countryside). Due to the provision of urban services, the densification of the population would be overflowed and optimum size of the city proposed by planners has been failed. Here, Friedmann has criticized the conventional spatial model of development of planners. But along with, the author has raised the question is what would be the model of the spatial form of development indeed? The spatial division of labor is not predetermined as our assumption. In rural areas, all sorts of light industries are established and at the same time, agricultural activities might be acknowledged as urban activities. People struggle to survive in a rapidly changing world. No single dependable incoming source for livelihood and thus people shift their income activities randomly. Eventually, In the name of betterment when people come to the city, an impoverished living condition has been evolved. This is why the formation of the city is being questioned. Because the city cannot support double people in a single oriented space and longdistance migration has created challenges to sustain social and moral bonds with family. Even, inborn city young dwellers struggle to sustain in their city as well. They involve themselves with many illegal activities.

Since, economic development is the prime concern and to do so, arising social defects (victimization, alienation, violence, fear, police repression) of the city are overlooked in the analysis of economists. Many of them take it as the face of nature and think that the separation of rural-urban is not a challenging issue. In this context, the author also wrote the ways of overcoming the rural-urban divide and proposed a model of development that is called 'Agropolitan Development' and this model will contribute to build a city named 'Modular City'.

Friedmann has given some features of the modular city. Such as:

- 1. It would be established in a high-density area like rural or peri-urban area.
- 2. There will be an optimum size of the population as per the area.
- 3. Governed by a unit of local government or district.
- 4. Each district will have a service center and it will be accessible physically.
- 5. Each district will have all kinds of facilities and services (market, office, school, health center, sports center, government service center, post office, telecommunication center, police station, bus terminal, water treatment plant, shell housing for commercial purpose, residential housing for government personnel, etc.).
- 6. Each district center will have the connectivity of other centers through all kinds of networking.

- Physical communication will be well arranged as per the types of vehicles.
- 7. Solar power will be used in households and public purposes.
- 8. Small manufacturing industries will have been established in the district village maintaining a connection with the principal road.
- 9. The financial issue of this center will be maintained by agricultural, industrial, trade and service-oriented incomes and government.
- 10. This module can be customized as per local geography and culture to develop agropolitan district.

The author has suggested that the implementation of this module will raise the living standard of rural people lessening urban migration and its social disruptions. Besides, he has highlighted that enhancement of city services and its provision to all parts of a country will also contribute to diminish migration to the city. Friedmann has spotted light some objectives of agropolitan district. Namely:

- 1. The nature of employment would be non-farming.
- 2. Preservation of the integrity of both households and village communities.
- 3. Self-governance of agropolitan district will ensure local democracy within the context of regional government and administration.
- 4. Physical access from district to district as well as to major urban areas will be facilitated.
- The implementation of this module will reduce the cost of urbanization whilst raising indicators of human development.

Lastly, Friedmann mentioned the modular city as a model of socially and ecologically sustainable development. Anyone can customize it as per needs.

III. COULD WE APPLY THIS MODEL FOR BANGLADESH?

The modular city will be a new form of a city. Decentralization is one of the main features of this city. This model could be established in rural or peri-urban. It would be extended from village to district level. All kinds of facilities, connections will be provided there. It will be self-governing.

In Bangladesh, we have a separate administrative system for each district but these are connected with the capital Dhaka. All systems including administration are centralized. Infrastructural development is seen in every district but planning, decision making or formation depend on the central executive governing body. So, most of the time planning, decision making, financing all influential mechanisms are decided from the city center and it is followed the top-down approach. This is why in the context of the democratic, autocratic or socialist country how this model will be applicable for the root-level community is questionable here. The centralization or top-down approach fails to address the needs of the community. Friedmann has projected this plan or model theoretically but no practical orientation is presented at

this point and thus the outcome of this model is unfamiliar to us, especially in the third world countries where the form of democracy is different from the West. The author has suggested as to the modernization of agriculture but the implementing part is untold here. So, how the nature of modernization is not defined. On the other hand, this model suggested an optimum population in the district center. But how a center will achieve an optimum population is unspeakable. In addition, the formation of self-governing bodies is indescribable. This model has emphasized on urbanization, not ruralization in the development of the rural or urban-peri area. However, we have no practical outcome to suggest for implementing that urbanization is the best mechanism for rural development. Though, urbanization of rural areas may trim down the migrants' rates. In a nutshell, Friedmann has claimed that this agropolitan development will be a socially and ecologically sustainable model. But, the environment and development of agriculture have been excluded in his proposed planning. Land and environment are crucial issues for Bangladesh. Diversification of weather and production are interlinked and the strength of our agrarian production-based economy. As per the author, the building of the industry will be in the village area. Whereas land is a finite resource, so, industrialization has already been pointed as the cause of the scarcity of cultivable land. According to the GED 2012,to meet the need of the increasing demand of urbanization the agricultural land which is already limited, is reducing at a rate of 1% per annum(Evan, Shahriar and Siddiqua, 2017-18). Moreover, when lots of people will engage in off farming activities in the village area this will be a threat to our agricultural production. These people of farming activities are skilled in agriculture traditionally. Their indigenous knowledge and skill will be unused in off farming activities. Therefore, would in the name of development to involve in non-farming activities avoiding farming activities be a wise decision or not-----it is undefined.

Friedmann has also approached a top-down perspective. But the strong point of this model is customization. Friedmann has kept the option to refine this model as per the need of the district center. As a result, a centralized governing system or centralization will not be a big problem if we can apply this model in a customizable way. In Bangladesh our local government has some self—governing power like monitoring, implementing or execution which can contribute to this model for development in a bottom-up way. However, Friedmann's model can be applied in Bangladesh but it should consider the following suggestions:

Gender perspective:

In our country patriarchal society existed both in the rural and urban areas. In comparison to urban areas, rural women have less access to economic opportunities as well as education and health. Through decentralization and local democracy of Friedmann's model equal participation of women in all sectors must be ensured. Otherwise, this approach will not meet the needs of all people particularly women.

Environmental perspective:

Friedmann's model emphasizes on small manufacturing industries. In this respect, we have to keep in mind that by all means, we have to protect our environment and quality of food. While establishing the small manufacturing industries chemical, the waste management system must be environment-friendly. So every village and town needs an environmental agency also to ensure the risk minimization of the village environment.

Prioritize river and canals communication:

Friedmann's model focuses on road-based communication with all villages and districts. Bangladesh is a riverine country so it should also prioritize river and canal based communication with all districts. Besides. It is necessary to improve the quality of water transport services as well as securing the fish farming of villages. If needed bridge and culvert can be constructed but mostly it should be focused on a water-based communication system that will help much in Bangladesh.

Modernization of agriculture:

The total land area of Bangladesh is about 130170 sq. Km in 2018 of which about 70.63% is cultivable (Trading Economics, 2020). In 2018, the share of agriculture in Bangladesh's gross domestic product (GDP) was only 13.07%, the industry contributed approximately 28.54% and the services sector contributed about 52.96% (Plecher, 2020). On the basis of this report, it can be said that a large portion of the total land is cultivable but it is pintsized in terms of contribution in GDP compare to the industry and service sector of Bangladesh. Lack of modernization of agriculture is one of the key factors contributing to this uneven scenario. Agriculture should be modernized by introducing labor using technological change, securing tenure among smallholders, improving access to land for women, using balanced fertilizer, ensuring seed qualities not only promoting exotic features but also conservation of indigenous qualities, special loan facilities for landless and marginal peasants and so on. Monthly training of farmers and workers by agricultural experts should be arranged that will support to integrate the ancestral knowledge with modern one as to agriculture.

Considering farming as a prioritizing profession:

Though the basic economic structure of Bangladesh is agriculture, people of Bangladesh consider farming as a less prioritizing profession, especially to the educated unemployed youth generation. Thus, they don't want to be involved in it

and not permit their next generation to do so. Moreover, educated youth prefer to be unemployed rather than being involved in farming. In 2018, the unemployment rate in Bangladesh was at approximately 4.31 % (Plecher, 2019). Those youth who are involving and doing well in the farming sector should be rewarded and this news has to be circulated that will inspire others to involve in farming (for example the government could take initiative to provide various civic facilities freely for the family members of those youths for their self-entrepreneurship in agricultural sector). Since the social structure of Bangladesh is agro-based so we cannot change it suddenly. Therefore, we have to plan gradually to build up our agro oriented modular cities considering intensive inclusion of agricultural structure and resources.

Utilizing human resources:

As the model doesn't suggest how to achieve optimum population, it seems difficult to achieve excluding contextspecific socio-cultural reality. We have an overpopulated country. Accordingly, if we properly use our manpower, it will promote development. We can divide our population into several groups on the basis of age and sex and sort out activities in accordance with the capabilities of these population groups. Total population of Bangladesh is about 159,453,001 (July 2018 est.) of which people aged between years are about 40.07% 30,626,005&female33,267,339 (Mundi, 2019). People of this age group are generally considered as economically active population, of which the larger portion is female and our rural infrastructure provide fewer opportunities for their earning due to cultural and social taboo. The proposed modular city should consider this issue and create opportunities for utilizing the skills of rural women and generate suitable sociocultural induced earning sources. This may include the activities of poultry farming, animal husbandry, sewing and other handicrafts making and so on.

Administrative restriction to migration:

After providing proper and contextual opportunities in every village Bangladesh Government should be limited or restricted internal migration officially so that the residents of that villages will be aware of their scope in their own villages for further betterment. In this respect, we can follow the suggestions of developed or developing countries who practice this rule. To move towards town will not be a flexible issue for any village citizen. When, how, where and why a person would like to move, officially he or she will be bound to notify the concerned authority of the local government of Bangladesh.

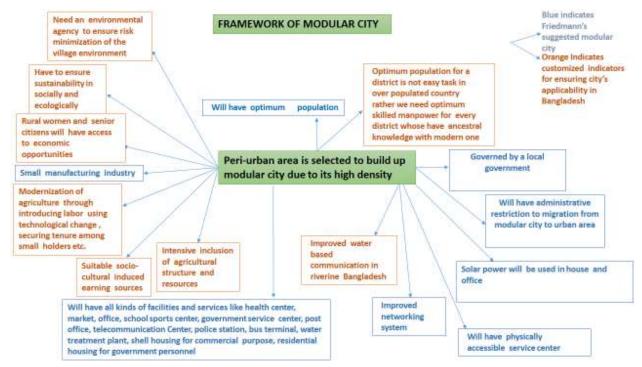


Fig: Customized Modular City for Bangladesh

IV. CONCLUSION

To conclude, it can be said that we cannot change the rural infrastructure in a day but we can make enough opportunities for the rural people that will be available in urban areas so that they won't need to migrate to urban areas. It will bring prosperity for the rural areas and reduce the extra burden of the population of urban areas. We must always give voice to the unheard information of any development activities. It is highly recommended that the grass root individuals should be consulted with their active participation before the implementation of any planning and policies issue regarding them. As citizens of Bangladesh, we can advocate that the Bangladesh Government could consider Friedmann's model for envisioning 'My Village-My Town' dream considering the above-mentioned suggestions.

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