Temporal Distribution of Rural Periodic Markets in Bangladesh: A Study on Nawabgonj Sadar Upazila of Chapainawabganj District

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Abstract

Like the underdeveloped and developing countries of the world, there is immense importance of the rural markets, both *haats* and *bazaars* (periodic and regular markets, respectively) in the marketing system of Bangladesh. The study aims to determine the temporal nature, spatiotemporal synchronization, and less natural development of the rural periodic market cycle or to ring the concept of the rural periodic markets. In this study of 40 rural periodic markets (*hats* and *bazaars*) in Nawabgonj Sadar Upazila of Chapainawabgonj district in Bangladesh, a venture tends to decide the above-mentioned subjects by following a descriptive research design with mixed methods and social survey, observation, and case study data collection ways. The result of the study impressively shows the importance of the bi-weekly and weekly rural periodic markets, especially their economic significance in this area.

Keywords: Temporal Distribution, Rural Periodic Market, Haat and Bazar

Introduction

Rural Periodic Markets (RPMs) therefore play a vital role in the economic lives of people, particularly in the marginal economy (Abbott, 1962). Thus, Bangladesh is no exception in that the rural economy is highly dependent on the RPMs. Rural market means periodic market. This periodicity may occur either once, twice, or more frequently in a week (Sultana, 1985). In Bengali, periodic rural markets are known as *haats*. Hence, both periodic rural markets and haats are synonymously used in this article. RPM acts as an outlet for local rural surplus. Rural Periodic Markets (RPMs) do not only act as an important medium of the marketing system in both the underdeveloped and developed countries of the world. The present study deals with the temporal nature, spatiotemporal synchronization, and less natural development of the RPM cycle or ring concept of the rural periodic markets (Sultana, 1985) in the study area. The temporal

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[♦] Article received on 10 May, 2023 & accepted on 15 August, 2023.

To cite this article: Kamruzzaman, M. (2023). Temporal Distribution of Rural Periodic Markets in Bangladesh: A Study on Nawabgonj Sadar Upazila of Chapainawabganj District. *Journal of Rajshahi College*, 1(1 & 2), 105-121.

distribution of RPM means distribution relates to time context. Daily RPMs are 01, weekly 10, and biweekly 29. Spatiotemporal synchronization of the RPM place or center refers to the adjustment made between time and space in connection with the location of the RPM place. The spatial separation of RPM in this study refers to the average distance between different groups of temporally foxed RPM, such as same-day markets, adjacent day markets, oneday separated markets, and two-day separated markets. The logic behind the more or less natural development of the RPM cycle or ring concept is to contact wider areas and varied sections of goods and people within a certain range of distance. RPM cycle development reveals the nature of the organization of economic space in rural areas. In the study area, seven days of the week are considered as seven probable RPM days. RPM held on all seven days of the week in a locality makes a complete ring or cycle (Haque, 1986) in his study in Nawabganj upazila, he also found that almost all the large and intermediateorder haats are situated where transport facilities are good and that there is a clear relationship between the transport system and the development of the haats (Sultana, 1982). In the context of the existing literature review, an effort has been made in the present article to bridge this research gap. To determine the temporal nature and the spatiotemporal synchronization of the periodic rural markets in the study area. In this field, very few studies have so far been made by sociologists, geographers, and other social scientists on the functional role of the periodic rural markets in selected areas of Bangladesh. As I found in the studies of Bagee (1976), Sultana (1985), Patel (1963), and Hague (1986), dealt with the spatio-temporal analysis, classification, distribution, and periodicity of rural markets in rural Bangladesh. Some of them have touched on the economic aspects and functional role of the periodic rural markets. However, they have not sufficiently dealt with the temporal nature, spatiotemporal synchronization, and less natural development of the RPM cycle or ring concept of the rural periodic markets in the study area. Similarity: the studies of Bertocci (1974), Khan (1963), Ali (1976), and many others suggest that any study on the marketing and economic system of rural areas should take into account the role of periodic rural markets. Following O'. Malley (1916) and the Royal Commission on Agriculture, it can be assumed that the purchasing agents, i.e., the Faria and bepari (both buyers and sellers), were active in the rural markets in British India. The study of rural markets is thus considered essential to understanding major aspects of the economic and marketing system of rural Bangladesh, where the physical and human environment has a direct impact on the periodic rural market. The main objective of the study was to determine the temporal nature, spatio-temporal synchronization, and less natural development of the RPM cycle. The study area's biweekly RPMs are very important and the most dominant in number, and weekly RPMs are also important from an economic perspective.

2. Materials and Methods

2.1 Research design and Method

The researcher used a descriptive research design and also applied mixed methods. It is appropriate as a result of its shortening bias and heightening reliability.

2.2 Study Area

Nawabgonj Upazila stretches latitudinally between $24^{\circ}25$ N to $24^{\circ}43$ N and longitudinally between $88^{\circ}05$ E to $88^{\circ}26$ E. Nawabgonj upazila includes Nawabgonj Porashava, 14 union parishads, and a total number of 174 mauzas (BBS, 2011). In this upazila, there are 451.80 square km of land area and a total population of 530592 with a total area of 40 *haats* (Map: 1). Once, the Nawabgonj was with Gour, the famous capital of ancient Bengal (Noor Mohammad, 1373 B.S). Being a much talked about issue, the researcher has conducted this study to identify and understand the spatial nature of rural periodic markets.



Map No: 1 Haats in Nawabganj Sadar Upazila.

2.3 Data Collection

The primary source of data is mainly the respondents, like shopkeepers, customers, laborers, and other stakeholders in the market, along with the rural people who live near the markets. Secondary sources of data include published and reported materials, including books, journals, articles, research reports, official printed documents, dissertations, etc. Documents available in the deputy commissioner office (DCO), local government engineering department (LGED), various non-government organizations (NGOs), etc. Apart from these, various research conducted by various organizations and people has also been considered a secondary source of data. In the study, there are six growth periods: 16 revenue *haats* and 18 non-revenue *haats*. The total number of *haats* is 40. However, in the study area, all centers and *haats* have been considered rural periodic markets (RPM). Nevertheless, the required data have been collected from 2021–2022 RPMs as a sample of the study. Social surveys, observation, and case studies, along with some techniques of data collection and analysis, have given some environmental aspects special priority in the present study.

2.4 Software Used

The computer software packages SPSS (statistical package for social science), Excel, and GIS (geographical information system) are used for maps, diagrams, and data analysis. A brief GIS survey was conducted during the field visit. The data obtained from the global positioning system (GPS) survey was then compiled with the local government engineering department's (LGED) base map in Arc View GIS to show the current distribution pattern of rural markets in this area.

3. Results and Discussion

3.1 Temporal Distribution of Rural Periodic Market

Rural markets are periodic in nature to go in harmony with the limited demand of their hinterland (Sultana, 1985). Temporal distribution of rural periodic markets is the outcome of demanding periodicity in a region. So temporal distribution of rural periodic market centers means distribution related to time context. Periodicity has three types of attributes or characteristics. (i) frequency of occurrence in a certain period, normally a week; (ii) diurnal fixation of the market activities; and (iii) exact day or days of the week on which market activities occurred. The frequency of occurrence in a week means the number of market activities that occurred in a week. In the study area, the nature of weekly periodicity is that there are 40 market centers with a total of 68 frequencies of occurrence. There are three types of frequency of occurrence, as shown in Table 1.

SL. No.	Nature of Weekly Periodicity	Number of Market Centers	Percentage
01.	Daily	01	2.5
02.	Weekly	09	22.5
03.	Bi-weekly	30	75.0

Table 1: Frequency of Occurrence of Market Centers

Source: Field survey, 2022.

Daily rural periodic market refers not to the periodicity achieved by a day's gap but by the limitation of hours; that is, a market center serves the limited need of an area for a limited number of hours, meaning impermanent market activities. The daily market centers constitute only 2.5% of the study area. The weekly market, meaning market activities only once a week, comprises 22.5% of the markets. The bi-weekly market, which is the frequency of occurrence twice a week, is the most dominant type of RPM.



Map No: 2 Frequency of Occurrence of Market Centers

According to Good (1972) 75.0 % of this confirms the total situation of the country. Thus, in the study area, biweekly RPMs are the most dominant in number, and weekly RPMs are also important from an economic perspective.

Diurnal fixation of RPM activities means a certain time of the day is fixed up for market activities (Kamruzzaman, 2002). In this respect, diurnal RPM activities

are shown in Table 1. There are four types of diurnal characteristics of RPMs (Sultana, 1985) that are shown in Table 2.

Sl.	Type of diurnal	Number of	Market	Percentage
No.	fixation	Markets	Periodicity	(%)
01.	Afternoon till	15	2-4 (hour)	37.5
	evening			
02.	Noon till evening	10	5-7 (hour)	25.0
03.	Morning till evening	08	8-10 (hour)	20.0
04.	Morning till late	07	11-14 (hour)	17.5
	night			

 Table 2: Diurnal Characteristics of RPMs

Source: Field survey, 2022.

The markets that sit from afternoon until evening diurnal attributes are the most dominant, constituting 37.5% of the market centers in the study area. Market centers with the diurnal attribute of noon to evening are the next dominant type, constituting 25% of the market. However, morning-to-evening markets follow this at 20.0%, and morning-to-late-night markets are 17.5%. In the study area, it is clearly shown that morning-to-late-night RPMs include Ramchandrapur, Bottala, Namosankarbati, Baroghoria, Moharajpur, Dhulauri, and Amnura *haat* belong to this category.

So from the point of view of the diurnal attributes of the temporal distribution of the rural periodic market centers of the study area, it can be concluded that the afternoon-to-evening RPMs of the upazila are most important, both concerning number and with respect to economic importance. Next come the noon to evening markets. Then follow the morning-to-evening and morning-to-late-night groups of RPMs. They stand almost on the same level, in respect of the number of markets and respect of rank order.

The third attribute or aspect of rural markets is the certain days or days of the week on which market meetings occur (Sultana, 1985). Day-wise frequency distribution of markets and their meeting days are shown in Table 3, and Map 2, Figure 1, indicates the upsurge of market meetings on nearly every alternate day, with the only exception on Wednesday (Hill and Smith, 1972), which instead of having fewer market meetings than Sunday and Friday to go in harmony with the general trend of every alternate day upsurge, has more. Nearly every alternate day's upsurge refers to the limited demand of the surrounding region within a certain time limit.

Sl. No.	Market day	Frequency	Percentage	Nearest Neighbor Minimum Distance Between the Markets in Km	'R' value	Spatial Pattern
01.	Saturday	10	13.23	3.84	1.084	Approaching Uniform
02.	Sunday	07	10.29	6.72	1.67	Approaching Uniform
03.	Monday	11	16.17	4.81	1.50	Approaching Uniform
04.	Tuesday	11	16.17	4.38	1.36	Approaching Uniform
05.	Wednesday	12	17.64	4.94	1.61	Approaching Uniform
06.	Thursday	11	16.17	4.64	1.45	Approaching Uniform
07.	Friday	07	10.29	5.55	1.38	Approaching Uniform
	Total	69	100.00	-	-	-

Table 3: Day-wise Frequency of Market Centers

Source: Field work done by the Author in 2022.



Map No. 3: Day-wise Frequency of Market Centers

In a study conducted by Sultana (1985) in Savar, an interesting feature was found where reflections on administration and religion were presented. She observed that Friday and Sunday have the highest frequency of market days. She also commented on the community, *saying that* it may be true for a country like Bangladesh since the Muslim-dominating country has a tendency for markets to be held on Friday (Symanski, 1971,1973, Hill and Smith, 1972). In the study area, the frequency of market days on Wednesday, Tuesday, Thursday, and Monday is high, though the reflection of administration and religion can be affected as the country was under British rule and possibly in a Muslim-dominated area.

Though the distribution of markets is random, acquiring 'An R-value of 1.06 in the study area, it seems that markets are more or less uniformly distributed in space when considered concerning time context. Time context here denotes the temporal distribution of holding markets on seven days of the week, which is shown in Table 3.

Based on the facts shown in Table 3, the following comments can be made. Although the overall distribution of the market center is random in the study area, there may be an underlying natural law of the evolution of the market to give service to all of the surrounding areas. That is why the day-wise temporal distribution of the market center is somewhat uniform or approaching uniform somehow, or rather to serve the mere necessities of life of all residents in the study area.

In the study area, the frequency of market days on Wednesday, Tuesday, Thursday, and Monday is high, though the reflection of administration and religion can be affected as the country was under British rule and possibly in a Muslim-dominated area.

3.2 Spatio-temporal Synchronization of Rural Periodic Market

Spatio-temporal synchronization of a rural periodic marketplace or center refers to the adjustment made between time and space in connection with the marketplace and its location. In other words, it refers to the co-coordinating relationship of markets in space and time (Sultana, 1981). Like any type of economic activity, market activities need a fixed space. To run market activities smoothly, a threshold population and a defined place are essential. The threshold population indicates the minimum number of people, which is essential to running an economic establishment like RPM. Periodic markets fall short of this threshold population to run the establishment all week round, which is why the a question of periodicity. So the permanency of a rural market in space is based on its temporal fixation; thus, to fulfill the purpose of the fixation of time and space relationships, emerges the picture of spatio-temporal synchronization of the marketplace (Baqee, 1976). So spatio-temporal synchronization is the adjustment made between some forms of temporal meeting schedules and neighboring spatial meeting points in space. Survival of a periodic or rural market depends not only on the periodicity of the market but also on the requirement of a threshold population or minimum range to survive a periodic market. The concept of spatio-temporal synchronization has arisen from the above reality.

The spatial location of a market center refers to its location in space. The distance between spatial locations of the market center is measured with a distance unit; here it is in km. Temporal location is recognized with the help of the very fixed day of the week on which a market meeting occurs in space. Spatial separation of market centers, in this study, refers to the average distance between different groups of temporally fixed.



RPMs refer to same-day RPMs, adjacent-day RPMs, one-day RPMs, two-day separated RPMs, and two days separated RPMs. Seven days a week, between two RPMs, temporal separation may vary from a minimum zero to a maximum of two complete days, either backward or forward, such as when two RPMs are held on the same day. Say, for example, that on the Friday of the week, leading to temporal separation zero, it may be Friday-Saturday or Thursday-Friday, here

the type of temporal separation is adjacent day. If two RPM centers meet either on Friday-Sunday or on Wednesday-Friday, the RPMs are one day temporarily separated, and market centers meeting on Friday-Monday or Thursday-Friday are called two days temporarily separated. Table 4 illustrates the spatio-temporal synchronization of market centers in the Nawabganj upazila (Kamruzzaman, 2017). From this table, it is seen that the market operating on the same day is spatially farthest located. However, the average distance of the same-day RPM is 5.55 km. in the study area.

Sl. No.	Temporal Separation (in day)	Average Spatial Separation (in km)	'R' Value	
01.	Same day market	5.55	1.38	
02.	Adjacent day market	3.81	1.48	
03.	One day separated markets	3.47	1.26	
04.	Two day separated markets	3.21	1.28	

Table 4: Spatial Temporal Characteristics of Market Centers

Source: Field work done by the Author in 2022.

Adjacent day RPMs are spatially 3.81 km. A part Far, temporally one-dayseparated RPMs are spatially 3.47 km. apart, and two-day-separated RPMs have a minimum spatial separation of 3.21 km. So in the study area, it was found that spatial placement of RPMs and temporal placement of RPMs are inversely related, that is, the closest proximity in space leads to the longest separation in time. The idea advanced by Fagelund and Smith (Fagerlund and Smith, 1970) that the average distance between RPMs meeting on the same day is greater than the average distance between RPMs meeting on different days is also confirmed by the result found in this study. Except for the same-day RPMs, the difference in spatial separation of adjacent-day RPMs, one-day separated RPMs, and twoday separated RPMs is very little, yet the trend is downward with the upward trend of spatial separation. Figure 3 shows that this inverse relationship of temporal and spatial separation, this trend of inverse relationship, is also existing in Ankola, Uganda (Good, 1972), and with a little bit of difference, the spatial separation of one-day separated RPMs is a bit greater than two-day separated RPMs, as observed in Ghana (Good, 1972) and Dhaka (Baqee, 1976). The "R" index calculated on the four types of temporally separated RPM groups, as shown in the fourth column of Table 4, reflects the fact that when emphasis is given on both spatial and temporal distribution, the RPM distribution is somewhat uniform or approaching uniformity. The trend of approaching uniformity is coming down from same-day to two-day-separated RPMs. When the pattern of distribution is considered only on spatial points, it is random. From the above discussion, it can be concluded that in the study area, the rural landscape chooses its RPMs meeting in such a fashion to serve the surrounding area, either from one or from another RPM the whole week round. So the RPMs here are more or less well synchronized in space and time.

3.3 RPM Cycle or Ring of the Study Area

The RPM center operating in a sequential order is described as a marketing or RPM cycle. The RPM cycle, as defined by Symanski, is 'interrelated groups of neighboring periodic markets taking place on different days' (Symanski, 1971). Dixit (1984) describes the RPM cycle or ring as "a wholly indigenous phenomenon expressing an intelligent mutual self-interest among neighboring Billages chiefs" (Dixit, 1984). In other words, well-developed RPM synchronization gives rise to well-developed RPM rings or cycles.

The logic behind the more or less natural development of the RPM cycle or ring concept is to contact a wider area and varied sections of goods and people within a certain range of distance. RPM cycle development reveals the nature of the organization of economic space in rural areas. In the study area, seven days of the week are considered as seven probable RPM days. RPM is held on all seven days of the week in a locality to make a complete ring or cycle.

Thus, in Nawabganj Sadar Upazila, seven complete RPM rings exist, including 1, 2, and 3, with a twice-RPM meeting on Tuesday outside of the upazila recognized as Tuesday (Haque, 1986). On those days, they usually attend the *haats*, which are situated in a nearby upazila and adjacent to their village. Two incomplete RPM rings are possibly completed with RPM outside the upazila, which is available. The spatial locations of these rings are shown in Map 8 and Table 5. Along with the RPMs making the rings and their characteristics, whether they are complete or not, and the position regarding the pucca (metalled) road passing these rings.

RPM rings	Character istic of the <i>Haat</i>	Communication Connection	RPM Contained	RPM days	Absent days of the Week
01	Complete	All Connected	1.Sarjan	Monday-Thursday	Sat
		Pucca Road two	2.Diar Dhainager	Friday-Wednesday	
		Water Ways	3.Mohipur	Sunday-Wednesday	
			4.Gobratala	Tuesday	

 Table 5: RPM Rings of the Nawabgonj Sadar Upazila

RPM rings	Character istic of the <i>Haat</i>	Communication Connection	RPM Contained	RPM days	Absent days of the Week
02	Complete	All connected pucca road three water way	5.chapai 6.Nasipur 7.Chakjhoru 8.Pulsa 9.Balugram 10.Nayagola 11.Amnura	Sunday Friday Wednesday Thursday Monday Saturday-Wednesday Saturday-Wednesday	Tues
03	Complete	All Connected Pucca Road four Water Way	12.Baliadanga 13. Ramgibonpur 14.Baroghoria 15. Moharajpur 16.Ramchandrapur	Tuesday Friday Saturday -Wednesday Monday-Thursday Sunday-Wednesday	-
04	Complete	All Connected Pucca Road four Water Way	17.Namosonkerbati18.Bottala19.Horipur20. Dariapur	Monday-Thursday Friday-Tuesday Monday-Thursday Saturday -Wednesday	Sun
05	Complete	All connected kucha road no water way	 Clabber Nasirabad Chataidubi Binpara 	Friday-Tuesday Sunday-Wednesday Saturday-Wednesday Monday-Thursday	-
06	Complete	All Connected Pucca Road four Water Way	25.Kalinagar 26.Bagchar 27. Bagdanga 28.Shiber 39. Roufshaheb 30. Chalkatir	Saturday-Tuesday Monday-Thursday Saturday-Wednesday Friday-Tuesday Sunday-Wednesday Monday-Thruway	-
07	In Complete	All Connected Kucha Road &all Water Way	31.Janatar 32.johorpur 33.Naraynpur	Saturday-Tuesday Saturday-Tuesday Monday-Thursday	Sun, wed
08	Complete	All Connected Kucha Road no Water Way	34.Goraipara 35.Bulbul 36.Charbgdanga 37.Noranthropur	Saturday-Tuesday Sunday-Wednesday Daily Monday-Thursday	Fri
09	Incomplete	All Connected Kucha Road & all Water Way	38.Dhulauri 39.Hormar 40.Raninagar	Monday-Thursday Sunday-Wednesday Friday-Tuesday	Sat

Source: Field survey, completion on the basis of field data.



Map No: 8 RPM Rings of the Nawabgonj Sadar Upazila

These nine RPM rings in the study area have been numbered 3 to 6 in map (8) as well as in table (5). In the northern part of the study area two complete rings are located numbered 1 and 2 from south to north 3, 4, 5, and 6 complete rings are in the middle of the study area, and the western part 7 rings are incomplete, 8 complete rings are located in the south part of the study area.

In the study area, the only highway and continuous pucca road of the locality Rajshahi Sona-mosque Road passing from East to West and another pucca road passing Nawabganj Sadar to Gobratala. An interesting thing is that Pucca Road has crossed through all four complete RPM rings. Waterway also passed through these complete four rings, the remaining three complete RPM rings are only connected with seasonal waterways and Kutcha Road. Two incomplete RPM rings are connected with the waterway, and four complete rings are well communicated and are connected by Pucca Road but the other three complete RPM rings and two incomplete rings are connected only to Kucha Road. All modern vehicle amenities are present in the northern part of the study area but in the southern part, only carts and some vane and head-loaded transport facilities are available. So it can be concluded that well well-developed transport connection helps in better organization of RPMs in the study area in more than region but this facility is very limited in the southern part of the study area which affects better organization of the RPMs.

4. Summary of Findings

The study area has a total of 40 RPMs, of which 6 are growth centers, 16 are revenue collection, and 18 are non-government RPMs. According to the findings of the questionnaire survey in the study area, it was found that the location of the RPMs. Temporal distribution of RPM means distribution relates to time context. Daily RPMs are 01, weekly 10, and biweekly 29. In respect of diurnal market activities, there are four types, like morning till evening (20.0%) and noon till evening (25.00%). Afternoon till evening (37.5%), morning till late night (17.5%), the day-wise frequency distribution of RPM Wednesday is very high: 12 (17.64%) *haat* are healed that day, then Monday 11 (16.17%) and Thursday 11 (16.17%).

Spatio-temporal synchronization of RPM place or center refers to the adjustment made between time and space in connection with the location of RPM place. The spatial separation of RPM in this study refers to the average distance between different groups of temporally foxed RPM, such as same-day markets, adjacent-day markets, one-day separated markets, and two-day separated markets. It is seen that RPMs operating on the same day are spatially 5.55 km. apart, adjacent day markets are spatially 3.81 km. apart, temporally one-day separated markets are spatially 3.47 km. apart, and two-day or maximum temporally separated RPMs have a minimum spatial separated RPM groups shown in the fourth column of Table 4 reflects the fact that when is given on both special and temporal.

The logic behind the more or less natural development of the RPM cycle or ring concept is to contact a wider area and varied sections of goods and people within a certain range of distance. RPM cycle development reveals the nature of the organization of economic space in rural areas. In the study area, seven days of the week are considered as seven probable RPM days. RPM is held on all seven days of the week in a locality to make a complete ring or cycle.

Thus, in Nawabgonj Sadar Upazila, seven complete RPM rings exist, including 1, 2, and 3 rings, with a twice-RPM meeting on Tuesday outside of the upazila being recognized as Tuesday. In those days there are usually attended the *haats* which are situated in nearby upazila and adjusted to their village. Two incomplete RPM rings are possibly completing with RPM outside the upazila which are available. The spatial locations of these rings have been presented in Map 8 and Table 5, along with the RPMs making the rings and their characteristics, whether they are complete or not, and the position of the pucca (metallic) road passing these rings.

The research work enables us to elaborately determine the temporal nature, spatiotemporal synchronization, and less natural development of the RPM cycle or ring concept of the rural periodic markets in the study area. Rural markets are not the creation of one day, just to buy and sell agricultural products; they are the long-established situation of a society. Certain inherent geographical situations and socioeconomic advantages have historically led to the growth of the RPM without any well-thought-out planning. Thus this study of the RPM of the Nawabgonj upazila may help in future planning of now study field of Bangladesh. The periodic rural markets also play an important role in the growth of permanent market centers. The RPMs can make local people wise and conscious and undergo gradual development and modern or digital changes.

5. Conclusion and Recommendation

Rural markets are not the creation of one day, just to buy and sell agricultural products, but it is the long-established situation of a society. Certain inherent geographical situations of socio-economic advantages have led historically to the growth of the RPM without any well-thought-out planning. The organization of a well-planned RPM system is one of the basic needs for the integrated development of the RPM environmental perspective in the study area as well as in Bangladesh. So such a well-organized organization will facilitate agricultural production and increase the dispersal and collection of goods and services, to achieve this end, the existing situations of the RPM are to be evaluated first. Thus this study of the RPM of the Nawabganj upazila may help in future planning of now study field of Bangladesh.

Nawabganj upazila RPMs are facing some environmental perspectives problems. Since Nawabganj Upazila represents all RPMs of Bangladesh hence; these are not only the problems of Nawabganj Upazila RPMs, but also the problems of all RPMs of Bangladesh. Thus, according to the findings of the study, there is a need for guiding the RPMs development policy; which considers the following.

- 1. All RPMs should be established after considering the environmental aspects, and these RPMs must be well-planned.
- 2. Every RPM must be connected by pucca roads where electricity, drainage, dumping, and other systems should be available.
- 3. A cold storage system in the first-order RPMs should be established to ensure perishable food preservation.
- 4. Small industries like mango juice, sugarcane, and some seasonal agricultural products should be established to modify the seasonal fruits.
- 5. In the rainy season, the cattle and goat *haat* become very unhealthy, and RPM becomes risky for movement. So, it is recommended that a healthy platform be built up.

- 6. Improvement of the capability of revenue collection is essential because some anomalies are privileged in every RPM.
- 7. Many *haats* sit on the road, and for this reason, roadside accidents become common phenomena in these *haats*. So a concrete measure should be taken so the road and its side remain free as the broker and *faria could not* trap the innocent buyers and sellers.
- 8. Effective measures should be taken to protect the *haat* management committee, ensuring the proper law and order situation.
- 9. In the era of electronic media, the positive role of media should be ensured for making conscious community members in the *haat*.
- 10. By improving infrastructural facilities, the number of temporary shops should be reduced.
- 11. To ensure a healthy environment, plantations should be strengthened as the biodiversity in the RPM area remains well.

Along with the above measures for reducing air and water sound pollution, some effective means should be found. Moreover, the supply of pure drinking water should be ensured by sinking deep tub wells in the *haat* area. In addition, political and local influence sometimes affects the human environment of many *haat*s. So good administrative measures should be strengthened in the RPMs.

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