

Application of PRA to Raise Awareness among Rural People for **Accessing the Information Facilities**

Mahamudul Hasan¹*, Bishal Ganguly¹, Joynaob Sultana¹, Abdulla–Al-Kafy^{1,2} ¹Department of Urban and Regional Planning, Rajshahi University of Engineering and Technology. Rajshahi, Bangladesh, Bangladesh ²GIS and Solid Waste Management Specialist, B and F Company Ltd. 176 Gulshan Avenue, Gulshan-2, Dhaka-1212, Bangladesh

ABSTRACT

The study examines that how the rural people feel the necessity of information in their daily livelihood with the application of Participatory Rural Appraisal (PRA) technique. Engaging rural people, the study tries to find out the lacks of information facilities if unavailable and to emerge the consciousness of rural people about the influence of information in their livelihood. As an output we will find the obstacles which keep them away from the consumption of better services. Different tools of PRA have been used to acquire satisfactory databases on the basis of our objectives. The output according to first objective is positive because a sufficient information service was available in information centre. But the output of second objective is negative, because the community has mere consciousness in availing those services. The study will create a concept to the respective authorities in finding the necessity of creating awareness along with the services provided by them. Then the authorities will prepare a strategically developed framework to arise consciousness.

Keywords: awareness creation, information facilities, participatory rural appraisal, rural people

*Corresponding Author

E-mail:Hassan.ruet@gmail.com.

INTRODUCTION

communities in Bangladesh constitute the larger percentage of the who's population Information developmental needs are not adequately met and consequently they have not been able to productively participate in the development process. The provision of information services has been dispersed and access to various information services has become more difficult; the principal victims of these developments are rural people [1, 2 & 3]. And they are ill because of their economic and information poverty. The positive growth of rural information delivery systems means that there is a good provision of information to rural communities [4, 5]

The study will find out the existing information facilities as well as to emerge the consciousness of rural people about the influence of information in their livelihood. The revised studies tried to derive information facilities importance but at this study, community engagement is the key procedure to find out the existing condition of rural information related services. If unavailable then information service exists below the community's demand line whether the provision of information has lower impact on their expected progress. We need to identify what service is provided or how well it is supported. The aim of the study is to find out the existing information facilities in rural communities of the study

area and also the study will enrich the consciousness of rural people about the influence of information in livelihood. This research study will promote community empowerment in terms of accessibility to information through the participatory rural appraisal which will strengthen and empower the rural people to be aware of the rural community development. Along with the understanding of the present condition of rural livelihood after approaching to information services in their daily lives the study will also create the scope for rural people to unfold the true potential with the government to create remarkable relation that can ease and improve the lives of the rural citizen.

LITERATURE REVIEW

Participatory Rural Appraisal (PRA) is the process of involving local people in the analysis and interpretation of their own situation of a given rural area [6]. PRA is the technique of immediate analysis and survey of village resources for **Participatory** micro-planning and development [7, 8]. The Participatory approach is an informal way of learning from local people about the problems and opportunities in a given rural area [9, 10]. Information plays such an important role in almost every human activity. Rural community is a positive indicator for the development of a nation.

Access to information is basic right of all human being. Kantumoya (1992) [11] viewed Information as embodying interrelated or structured data which are required to enable one to act knowledgably as well as to take appropriate decisions in any given setting [5 & 11]. If there is no access to information people will be deprived from this vital right. A number of authors agreed to the thought that lack of information has impacted negatively on the development process. The importance of information in rural community development cannot be overemphasized

become a because information has supportive input for any development program. It is so vital that is why Kuhlthau (1991) [3] stated that, while other countries in the world aim to reach the moon, we must aim for the time being at any rate to reach the villages by providing them with necessary information [3]. A study conducted by Mchombu (1993) [12] that present the situation of lack of information and its impact on rural community development in Africa [12]. As well as showed that the establishment of Innovative Community Information Centre (ICIC) will strengthen empower the rural people to be among global players in the knowledge-based economy and also it will provide the opportunities for rural community development in general. Another study conducted by researchers Mchombu in 2003 established that rural communities in Asian countries are often left out from participating in government development and other important activities [12]. The reason behind this fact were their diverse interest, literacy level, expertise, and their needed information for survival, and development are hidden from the information existing flow. contradiction between the vital role of information in development and its lack of official recognition in developing countries can hardly escape the attention of Information specialists. To derive the perception many methods have been used among them participatory rural appraisal (PRA) is one of the probable methods in the world [6, 7, 9 & 10].

PRA Involve rural people with necessary information in their own need assessment and help in problems identifications and prioritization as well as formulating of action plan for a specific given rural area [10]. Participatory Rural Appraisal helps people in a community for development and provide a better livelihood [6 & 8]. Previous studies were conducted to find out the importance of information to the



rural people's livelihood but generating the awareness among them using participatory rural appraisal was not included. PRA creates awareness on information of products and services to ensure the use of rural information centres [7, 9 & 12].

In order to carry out the study social and resource map, service and opportunities map, historical timeline these PRA tools were applied. Social map is used to depict the habitation pattern of the region. It seeks to explore the spatial dimension of people's realities, social stratification, demographics, settlement pattern etc. The resource map focuses on the natural resources in the locality and depicts plane land, hills, rivers, fields, vegetation, etc. A resource map may cover habitation as well. The map is not drawn to scale. It is not done by the experts but by the local people [10]. Service and opportunities map is another PRA method used to explore spatial realities of the local people with specific reference to the local people's of perception the services and opportunities available. Service and opportunities map focus on the availability of services and opportunities [10].

Time line provides an aggregate of the various landmark events as perceived by the local people. It explores the temporal dimension from a historical perspective. Time line captures the chronology of events as recalled by local people. It is drawn as a sequential aggregate of past events. Thus, it provides the historical landmarks of a community, individual or institutions [10].

To establish the priorities of information according to their requirements public consultancy is a useful tool. For attaining the consultancy focus group discussion is needed. A focus group discussion is a form of group interviewing in which a small group usually 10 to 12 people is led by a moderator (interviewer) in a loosely

structured discussion of various topics of interest [10].

METHODOLOGY

Topic Selection

Information plays an important role in almost every human activity. Its values in the development process have been a topic of extensive discussion. Information dissemination and accessibility have reduced the world to a global village. Bangladesh, like the rest of the world, is experiencing change in all aspects of life: from basic cultural values to technology, which has changed not only the mode of communication, but the concept of time.

Here the main aim of the study is to assess the information accessibility by using the participatory tools. Primary and Secondary data are also collected through survey and informative sources. Some methods of the techniques are used by showing necessary diagrams. After that from those diagrams accessibility will be identified.

Conduction of reconnaissance survey

After selection of the site field survey, interviews of organizational respondents, professionals working there, and many published unpublished data of NGOs and development agencies have been utilized in this study.

Conduction of PRA techniques

For the assessment of this analysis some PRA tools are selected from the participatory tools. They are:

- Social and Resource Map
- Service Opportunity Map.

Social Map: In this type of diagram the social pattern of community, household, infrastructure are shown here. And resources of Sadipur area such as land, pond these are shown in resource map.

Service Opportunity Map: In this diagram, it is shown that what types of services are available inside Sadipur area.

Timeline: It explores the temporal dimension from a historical perspective. Timeline captures the chronology of events as recalled by local people.

Cause-effect Diagram: In this type of diagram, causes and effects of a particular problem can be identified. The identification of the causes of a problem actually helps in arriving at possible solutions.

Network Diagram: This type of diagram shows to identify the outside community who influence. Flow Diagram of Methodologies as given in Figure 1.

STUDY AREA PROFILE Study Area Justification

The prime agenda of our study is to derive the gap between information facilities and the rural people specially marginalised people. So to reveal the objectives, authors selected mundomala which is traditionally backdated and illiterate Though Mundomala is a Pourashava, but inspecting the area we observe that the prime activity in this area is agriculture [14] & 15]. Discussing with the local people we come to know that political agenda is the establishing reason for paurashava [16]. Among 9 wards authors have selected the Sadipur community, because this area deprived from vital institution than the others

Study Area

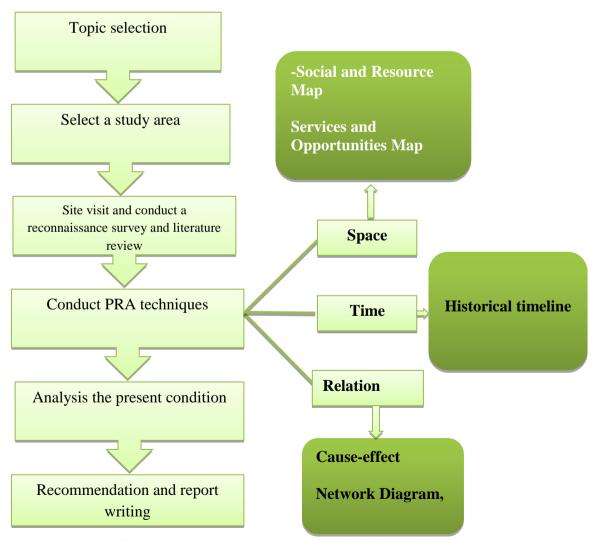


Fig. 1: Flow diagram show the methodology of the study.



Study Area Location | Sadipur Community School | College | Colleg

Fig. 2: Geographic boundary of Sadipur community. Source: Banglapedia, 2016 and Google Earth, 2017

Our study area is located in Mundomala which is a B class municipality. It is established on 14th November in 2002. It is lying in Badhair union. Before founding the municipality, study area (Sadipur Community) confined to union boundary now the area under Municipality coverage [16 & 17].

ANALYSIS

Tanore

Livelihoods approaches have been the subject of much debate in recent years [12 & 18]. Information and communication are widely recognized as basic and fundamentally important elements of any development activity because it draws attention to raise policies, institutions and decision-making processes influence resource access and ownership, determine strategic livelihood options available to community [19]. Enhancing the quality and quantity of information also relies on attention to the flow of information, such as the means communication.

In a community information facilities include health services, basic economics

and income generation, self-governance and community self-management, agriculture and environmental renewal [4 & 12]. When these domains are found available in the community, development occurs at a satisfactory condition. If these facilities can't indulge the expected levels then community face difficulties in their livelihood.

In a village community if the people are eager to access for getting education from primary level to higher level than the village is well developed in education facilities. Quality, frequency and activity are the important factors regarding health facilities if the stated factors are highly concentrated in the community then health facilities are satisfactory.

Agriculture refers to the set of process and activities consisting in cultivating soils, producing crops and rearing animals; it includes harvesting, milking, breeding animals, keeping animals for farming purposes and maintaining the land in good agricultural and environmental condition [16]. When these steps are successfully

completed then the locality is enriched in agricultural information. Self-governance, self-government, or autonomy is abstract concept that applies to several scales of organization. It may refer to personal conduct or family units or to larger scale activities including professions, industry bodies, religions, political units (usually referred to as local including government), autonomous regions or others within nation-states that enjoy some sovereign rights [14]. It falls within the larger context of governance and principles such as consent of the governed, and may involve non-profit organizations and corporate governance. When the bodies are effective in providing information then the community is much wealthy in getting information than the others. If the people are in good number engaged in earning activities then the locality is developed in income facilities. To find out the education, agriculture and economical condition. authors conducted social and resource map, sitting with the local participants (Figure 3).



Fig. 3: Conducting social map with village people.

Source: Field Survey, 2018.

After conducting the social map we have found the habitation pattern of the community while the resource map focuses on the natural resources. The focus here is on the depiction of habitation patterns and the nature of housing and social infrastructure: roads, drainage

systems, schools, drinking water facilities etc. Participatory modelling is a three dimensional depiction of an area. It is made by local people not by expert. The main feature of a social map is that it is a in developing help broad understanding of the various facts of social reality like stratification. demographics, settlement patterns, social infrastructure etc. [10].

In Sadipur, authors have sketched the social map from the villagers as well as community people who have enough knowledge about their own village. We were able to manage 8 villagers among of there was one Sub-assistant Agricultural officer (SAAO) middle aged male who was our key informants one NGO worker four farmer both young and middle aged and two young female housewives. Authors select NGOs worker as they are regular visitor of the village. They have to do their duties regularly from one side of the village to another.



Fig. 4: Semi-pacca house. Source: Field Survey, 2018.

Authors have figured-out "Sadipur Community". The minor distributor road connects the community with major distributor road which was Sadipur to Rajshahi main highway. Alongside the minor road all sorts of commercial activity was going on at the time of our survey. We started our journey to Sadipur, Tanore on March 2018. Our study area belongs to



Mundumala. For mapping at first we invite the community people. Then we explain our purpose of mapping. As our aim was to encourage community people to let them know the necessity of community engagement for development, we have faith on them and they also have faith upon us. We were able to earn their belief and they easily come closer to us and help us so thoroughly (Figure 4).

We have found that most of the houses are semi-Pacca. These structures are made of mud and tin. Belongingness of individuals land area is sufficient but those are unused which indicates that they are deprived from the implementation of information to the land usage. Religious community influences much to the rural community. Superstitions are highly concentrated there. According to field map we have digitized that in Arc GIS which has given in Figure 5

To gather the related data on economy, local government activities, educational and social facilities Service and opportunities map is another PRA method which explores spatial realities of the local people with specific reference to the local people's perception of the services and opportunities available. A service and opportunities map appears similar to a mobility map in many ways. Service and opportunities map focus on the availability of services and opportunities.

To know the availability of service and opportunities in our study area Sadipur community, we formed several group consists of 6 or 7 members both female and male. who have knowledge of the outside world and also who are willing to participate were selected. Mr. Samser Rahman (40) Sub-assistant Agricultural Officer (SAAO) and village member Noyon (30) was our helping hand. With their guidance, we could arrange a group

discussion among variety of farmers, housewives, community member. Then all necessary information was gathered from them about their perceptions of the service and opportunities in their localities as well as their views and aspirations about their own development. Through this method we come to know people's feelings of deprivation, their needs, and the importance of the services and the development of the area as per their needs.

They can avail all short of necessary services such as Financial, social, commercial etc. Financial services like Different NGOs were actively working among the villagers and they could benefit from these NGOs. Different NGOs like ASA, TMSS, BRAC etc, were active branch working in Mundomala.

BRAC contributes in different social sector such as poverty stricken program, microfinance, capacity development, disaster management and climate change. gender justice and diversity, social empowerment, urban development, human rights, health, nutrition and population, development, education, integrated and food security, water agriculture sanitation and hygiene, migration, investment, social enterprises etc. All these programs run through two active branches in Mundumala these are "Progoti" "Seba" at a distance of 5-8 km.

NGOs were sufficient to help the villagers with necessary information service related to financial. Also "Migration Scheme" helps them to set out their journey for abroad. They give loan up to 7 million. The range depends on the cost of departed country. Educational facility is also at hand. Two primary govt. schools, one nongovt. Higher secondary school and one Dakhil Madrasa perform on the verge of Mundumala Paurashava within a distance about 0.5–10 km. For this reason, female

education rate increasing gradually and the rate of early marriage declining day by day. The villagers thought that early marriage decreases at 10% nowadays.

Sadipur Community Social Map The structure (Semi pacea) Structure (Facca) Structure (Pacca) Mosque Structure (Pacca) The structure

Fig. 5: Digitized social map; Source: field survey, 2018 and Arc GIS.



Fig. 6: Availability of Services Source: Field Survey, 2018.



Union Parishad called Bad hair situated on the centre of Mundumala Thana. Birth certificate, National Identity Card, Widow, Autism and Maternity allowance etc. distributed through Union Parishad. A list of union facilities is given below in Table 1.

Table 1: Existing Union Facilities.

Table 1: Existing Union Facilities.			
Service Name	Description		
VGD	Per card 30 kg		
VGF	Per card 10 kg		
Old People	Per card 400 tk		
allowance			
Widow	Per card 400 tk		
allowance			
Autism	Per card 500 tk		
allowance			
Maternity	Per card 500 tk		
allowance			
Fair Price	5 months of the year, per card 30 kg,		
	price 10 tk per kg rice		
UGPP	80 Days of the year, per day 200tk		

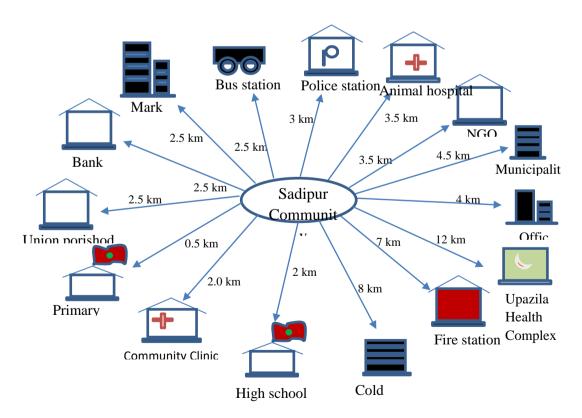
To get Birth-death Registration certificate villagers have to pay BDT. Government fixed charge for birth certificate according to age is given below in Table 2.

Table 2: Birth-Death Registration Certificate.

Age	Fees
0–45 days	Free
45 days to 5 years	Per card 25 tk
Greater than 5 years	Per card 50 tk

But during field survey by consulting with Sadipur community people, authors have explored they face difficulty to get these govt. service specifically Widow, Autism and Maternity allowance, VGF card. They compliant us for seeking these facilities always caused financial burden. Even if they worthy of VDT card but union parishad don't allow them.

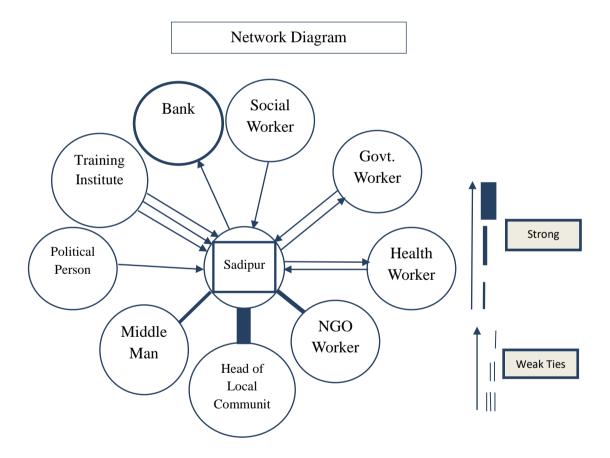
Service and Opportunities Map



Participants: Kulsum Begum, Rahima Khatun, Biswaiit Rov, Tapon *Fig. 7:* Service and opportunities map source: Field Survey, 2018.

Alongside the road there situated a market where the people make a hue and cry, this phenomenon called "Hat Bazar". This hat deals in two times per week. Local vegitables are available at this place and also other necessary ingredients to live. Villagers don't have to suffer much for availing market services. But in case of agricultural services farmer have to suffer because of expired fertilizer. Main dealer belongs to one person and he deals in monopoly market system and farmers have to bear up the problem. For this date expired fertilizer farmer couldn't get expected crops. On the other hand cost of cultivation increases gradually.

Using locally available material such as seeds, cards, paper, chalks, marker pens, color pens we ask them to list the services where they require. Ask them to place representing the services cards opportunities at different locations around their locality. Ask them to depict the services and opportunities visually or with symbols. Draw a circle in the middle of the floor representing their locality. In this entire method we had to spend 2 hours. The local people were interested in this method for this we don't have to suffer. The digitized service and opportunities map is given below.



Participants: Kulsum Begum, Rahima Khatun, Biswajit Roy, Tapon Sarkar.

Facilitators: Mahamudul, Bishal and Joynob.

Fig. 8: Service and opportunities map source: Field Survey, 2018.

We service have found the and opportunities related information Mundomala through drawing the service and opportunities map using the local participants and the map says that sectors of services are close proximity to the Sadipur community. Though the dwellers need to travel high distance high distance needs to get access in the Upazila health complex (approx. 12 km), they have said distance is not a matter of obstacle for them. To get required facilities they overcome long distance if needed but they are not aware to get better services which are emergency to their present condition.

To derive the data of influence of different agencies and organization, we need to represent the network diagram tool (Figure 8).

It focusses on the contacts of an individual household group or community with the outside world. It addresses the nature and relationships quality of that relationship perform frequency of contact Network diagram provides a picture of the depth and diversity of existing linkages (Kumar, 2002). The network diagram has more to do with the depiction and analysis of the nature, quality, diversity and reasons for and frequency of contact of the participants with outsiders. Network diagram can be made by individuals, household's group's community organization's etc.

Network diagram actually represents the activity of observed indicators obtained by discussion with rural people. At the outset we explain our purpose of the study to the participants and initiate a group consisting of at least 6 members. For conducting the overall diagram Kulsum Begum, Rahima Khatun, Biswajit Roy Tapon Sarkar was our participants and main facilitator was Mahamudul, Bishal and Joynob. Then we asked the participants to identify their outside network for example if they need

some information regarding agricultural how they get solution and from which institution they get the solution. from Government organization or Nongovernment organization (NGO). As well as the quality of relationship and the frequency of contacts and also the major NGO workers influence issue. some community providing special schemes such as Progoti and Seba. Middleman remains at the point of the relation between the community and local government representative which become an impedance to get direct services (Figure 9).

The village people face problem for the approval of allowance. Victim (Hasina) says, "We can't manage the approval conducting cordial consent to the local representatives." They do not get the allowance book by their hand. So they don't remain up to date with the information whether the money is arrived or not (Figure 10).



Fig. 9: Presence of middleman in government activities. Source: Field Survey, 2018.

To justify the necessity of information we have conducted a PRA tool named historical timeline. It has significance in acquiring knowledge about trends of development through periodical events.

This is to know the sequence of changes in the village with respect to social, economic, agricultural and other aspects of a living situation. It reveals trends of periodical developments for which elderly persons of the village are the witnesses by virtue of their experience and age. Accordingly, elderly persons of the village were contacted to describe the past history of the village systematically indicating the period when major changes occurred in the village.



Fig. 10: Talking to Hasina (widowed victim), Source: field survey, 2018.



Fig. 11: Preparation of historical timeline; Source: field survey, 2018.

In the beginning of nineteen century, the village was established. During the first half of 19th century village people constructed its kacha path. In 1954 first radio was purchased in the village. Community Primary school was established in Sadipur community during 1968. In let 19th century severe drought

was occurred. The electricity connection was arrived at 1984. Barind Multipurpose Authority introduced deep well for intensifying agriculture production in 1986. In 1990 the city connected road was constructed. After implementing the road bus service was started. To develop the rural community and improve their livelihood saving and credit schemes were started by different NGO'S. In 2002 hybrid crops was introduced in this village. In 2010 heavy hailstorms occurred and damage the agriculture production. Due to continuous fall in water table the people encourage to produce limited water consuming crops.

Table 3: Historical timeline of village Sadipur.

S.	Year	Activity			
No.					
1	1899	Village was established			
2	1943	Village kacha path was constructed by local people			
3	1954	First radio was purchased in the village			
4	1968	First school was opened in the village			
5	1981	Severe drought occurred			
6	1984	Village was electrified			
7	1986	Ground water irrigation was started			
8	1987	Agriculture production intensified			
9	1990	Road from Sadipur to Rajshahi was constructed			
10	1991	Bus service was started			
11	2001	Savings and credit program was started			
12	2002	Hybrid crops introduced (like maize and paddy)			
13	2010	Heavy hailstorm occurred			
14	2015	Awareness of climate resilient crops			

Participants: Goni mia(78 age), Md. Kaium Hossain (67 age)

Facilitator: Mahamudul Hasan, Bishal Ganguly, Joynob Sultana

The historical time line creates a perception that when the community people knows the development gap between them and other community. They find out the executive reason for their backwardness, then they eager to avail that type of information which initiates development opportunities for other communities and simultaneously moving forward to attain that information.

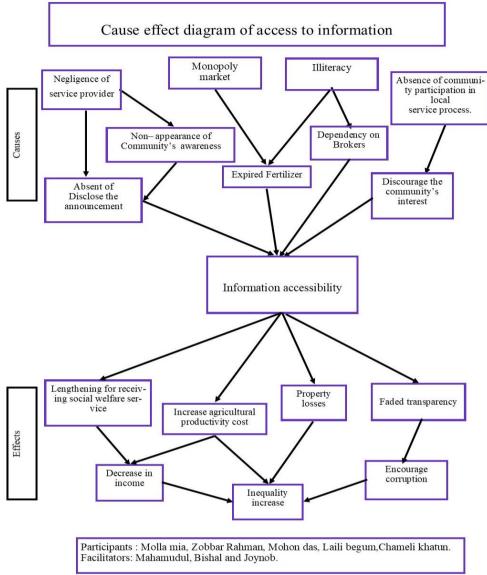


Fig. 12: Cause Effect Diagram. Source: Field Survey, 2018.

Cause-effect diagram presents visually the causes, effects and their linkages, which in arriving help at an in-depth understanding of information availability. Also, it provides scope for analysis and subsequent action by the local people. Firstly, the cause of information unavailability in the study area identified then we have prepared a causeeffect diagram and showed their linkages (Figure 12).

Negligence of service provider, monopoly market, illiteracy and absence of

community participation are the causes of information unavailability. Negligence of service provider means the unwillingness of government bodies to provide facilities according to their demand when consumer goes to the provider they feel that under privileged. For that the consumers hardly go to the authorities and prefer middleman. Thus they are deprived from direct benefits of the services. The market exist monopoly services for that the customers are forced to buy product without any observation. That not only increases production expenses but also decrease the

Table 4: Result of its objective.

	Objectives	Methods	Representation Tools	Results
1.		Space, time and relation methods.	Service and opportunity map.	Lack of information facility in which people are more vulnerable because they do not get all the govt. provided allowance such as VGD, VGF, Old People allowance, Widow allowance, Autism allowance, Maternity allowance without middle man.
			Cause-effect diagram.	The accountability of the local government is low to local people. For that transparency of their act is at lean so the community is deprived from their daily basic needs.
			Historical Timeline.	In 1990 when city connectivity road established towards Rajshahi. The development of this area has appeared simultaneously.
			Social Map	Most of the houses are semi-pacca. Most of the structures are made of mud and tin. Belongingness of individuals land area is sufficient but those are unused. Religious community is influenced much to the Rural community.

Table 5: Result of second objective.

Objectives	Methods	Representation Tools	Results
To emerge the consciousness of rural people about the influence of information in their livelihood.	Space, time and relation methods.	Social map.	To acquire the community perception towards the consciousness of the information facility the social map is more functional than the others. Here the social map indicates that people who are not affluent to the social services and the assignation is not abundant, there more deprived from better livelihood services.
		Network	Individual influence in the community. Bank manager has
		diagram.	least and local institution head has most influence.

economic status like poor transform to poorer. A local authority is not interested to involve local concern communities in social welfare service process. Thus, the bureaucratic process is not only lengthening the social welfare services but also faded transparency. As a result the deprivation of information facilities ultimately creates inequality in social life.

CONCLUSION

The goal of our study is to assess the information availability of the study area. This study does this assessment using PRA techniques. Three types of PRA techniques space, time and relation methods are used to fulfill the objectives of the study. Community people of the Sadipur area help to conduct this study, preparing map and analysis the vulnerability condition of them. First gain the knowledge about Sadipur community social map and resource map is created. The outcome and

result of the field study is tabulated below shortly and then brief analysis come up.

The output according to its objective is positive because a sufficient information service was available in information center. But the output of second objective is negative, because the community has mere consciousness in availing those services (Table 4 & 5).

REFERENCES

- [1] Issa A. The information needs of rural dwellers in Kwara state. *Tijjani*. A., et al.(Eds.) Issues in information provision: Nigerian perspectives. Zaria: Naliss. 1998.
- [2] Iyoro A. Serial availability, accessibility and utilization: perceptions of in-training information professionals in a Nigerian university. *The Nigerian library link*. 2004; 11(2): 66–71p.



- [3] Kuhlthau CC. Inside the search process: Information seeking from the user's perspective. *Journal of the American Society for Information Science*. 1991; 42(5): 361–371p.
- [4] Mohammed Z. Development Information at the Community Level: Current Thoughts and Findings. Paper presented at the A Paper Presented at the Workshop on Development Information Strategies in Nigeria. Organized by the British Council, Kaduna. December. 1996
- [5] Nwagha GK. Information needs of rural women in Nigeria. *Information Development*. 1992; 8(2): 76–82p.
- [6] Rural P. Participatory Rural Appraisal (PRA). 2008
- [7] Chambers R, Henman V. Participatory rural appraisal. *CAB International*. 2001
- [8] Ferdous L, Kafy A.-A, Gafur AMR, Wakil MA. An Analysis on Influencing Factors of Rural Housing and Settlement Pattern in Rajshahi, Bangladesh. *Landscape Architecture and Regional Planning*. 2017; 2(4): 99–109p.
- [9] Chambers R. Participatory rural appraisal (PRA): Challenges, potentials and paradigm. *World development*. 1994; 22(10): 1437–1454p.
- [10] Kumar S. Methods for community participation: a complete guide for practitioners. 2002
- [11] Kantumoya, A. (1992). Public libraries and community information services in Africa. *African Journal of*

- *Library, Archives and Information Science*. 1992; 2(1): 33–38p.
- [12] Mchombu K J. Information needs and seeking patterns for rural people's development in Africa: Printing and Publishing Company Botswana, Gaborone, BW. 1993
- [13] Sturges P, Chimseu G. The chain of information provision in the villages of Malawi: a rapid rural appraisal. *The International Information & Library Review.* 1996; 28(2): 135–156p.
- [14] Statistics B.B.O. Statistical Pocketbook Bangladesh 2015. *BBS*, *Dhaka*. 2002
- [15] Statistics B.B.O. Statistical Yearbook of Bangladesh. Statistics Division, Ministry of Planning, Dhaka, Government of the People's Republic of Bangladesh. 2011
- [16] Clemett A, Amin MM, Ara S, Akan MMR. Background Information for Rajshahi City, Bangladesh. *WASPA Asia Project Report*. 2006; 2: 1–29p.
- [17] Faridatul I, Jahan S. People's Perception Regarding the Development of Community Facilities: A Case Study of Rajshahi City Corporation. *Journal of Bangladesh Institute of Planners*. 9363p.
- [18] Ogunrombi S, Oladokun S. Sources of information used by agricultural extension workers in Ogbomosho area of Oyo state. *Leading Libraries and Information Centres*. 1993; 1(1): 7p.
- [19] Aboyade BO. The provision of information for rural development. *Fountain Publications*. 1987.