

**INFORMATION NEEDS AND INFORMATION SEEKING**  
**BEHAVIOUR OF THE DWELLERS OF SATJELIA,**  
**SUNDARBANS**

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**Abstract**

Sundarban, the largest habitat of Royal Bengal Tiger is the world's largest mangrove forest. Here people of different classes and religions live together along with its wildlife. Most of the population suffers from poverty, illiteracy, poor communication, natural calamities and threats of the wild. They are fighting against various difficulties day in and day out and they are living at the edge of devastation and death. Yet they add colors of their tradition, rituals, bravery and experiences to the land of tide and ebb. This study tries to find out the information need and behavior of the inhabitants of Satjelia island of Sundarban and states about the sources of information mostly used by them and probes into the varieties of traditional knowledge that are orally transferred from generation to generation. At the end there are some suggestions of the duties and responsibilities of LIS professionals regarding improvement of information service in this area.

**Keywords: Sundarban, Satjelia; Information need; Information behavior; IK.**

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## 1. Introduction

The world's largest halophytic mangrove forest "Sundarban" lies on the Ganga – Brahmaputra delta, where it merges with the Bay of Bengal. After partition of India, the 2/3 of the forest is included in Bangladesh and the rest is in India. The most accepted assumption is that the name of this beautiful forest is derived from the SUNDARI TREE (*Heritiera fomes*), which was abundant in the forest. Sundarban is the ecological resource of a variety of trees, animals, birds and reptiles. It is the home of the Royal Bengal Tigers, which is now an endangered species. (Actionaid international report)

**Satjelia is a remote** island situated in the Gosaba block of Sunderbans. It is surrounded by tidal rivers, canals and creeks and is physically vulnerable. Total population of Satjelia is 8,757 and literacy rate is 87%. Most of the people are very poor. 80% of the people depend on agriculture for their livelihood, though majority of the farmers are marginal. A large section of the population also earns their living by fishing, collecting prawn seeds and honey from the jungle. There are only some tiny industrial units like pottery, fish net, etc. These local people live a challenging life. At every moment they are fighting against poverty, illiteracy, natural calamities, and threat by wild animals, poor communication, and dearth of infrastructure facilities and so on. Still they have faith in life and they want to live a better life with an improved quality of information sources and services to meet their information need essential for their livelihood. ([www.census2011.co.in](http://www.census2011.co.in); Primary record from village panchayat)

Today's society is the information society in which information is the enhancer of the quality of life. In this information era, everybody needs some sort of information; the need may vary from person to person but it has no alternative in our everyday life. It is also true for the common people of Satjelia. They also need a variety of information in their daily life. Though they have very basic information requirements, but due to the poor information infrastructure and geographical situation of sundarban, they can not access and utilize the necessary information needed for their survival. Fisher folks do not receive the right information at the right time (such as weather warnings by A.I.R. while fishing in the sea) that leads them into the dangerous situation. Sometimes they are misled by false information and often they miss better chances by untimely and in appropriate information. But they do not loose hope and continuously tried to

seek or gather information in various ways for existence and for having a prosperous life. As their needs for information is increasing day by day their information seeking behavior is also becoming prominent.

**Information behavior** can be defined by the general model of information behavior developed by Wilson:

According to Wilson, a general model of information behavior needs to include at least the following three elements:

“ an information need and its drivers, i.e., the factors that give rise to an individual’s perception of need;

The factors that affect the individual’s response to the perception of need; and

The processes or actions involved in that response.” (Mahawar, Verma and Saha, 2009)

It may have the following characteristics:

It is necessary for survival.

It results from an information need.

A perception of the usefulness of the kind of information needed in context with the problem.

It depends on the situation of the working environment.

It is different for different groups of people.

Most of the people depend on their own experiences and local knowledge gathered from day to day life, nature and environment where they live in or inherited from their predecessors.

This locally developed knowledge is termed as “Indigenous knowledge” (IK). IK is the community knowledge that originates from local beliefs, culture, norms, livelihood etc. It is adaptable, sustainable and cost effective but it is not systematically documented. The indigenous knowledge, which forms the basis of a community, is invaluable for the betterment of livelihood of the community members and the development of any society. ([www.ens.gu.edu.au](http://www.ens.gu.edu.au))

## 1.1 Review of Literature

Several works have been done on information behavior of different backward communities.

Ikoja – Odongo, R. and Ocholla, D.N. done a study on “Information needs and Information seeking behavior of Artisan Fisher folk of Uganda”. They examined the information need and information seeking behavior of the fisher folk and the findings revealed that they require

different kinds of information to carry out their fishing activities effectively. The study describes the methods they favor for accessing information and highlights the role of Govt. departments in fisheries information provision. (Ikoja-Odongo and Ocholla,2003)

Actionaid International , an international development Organization of South Africa made a study on the information needs of the poor and vulnerable communities especially women and children of Sundarban and how they receive critical information . The study also assessed how the use of information helps them to change socio- economic condition. (Actionaid international report)

Ratna Bandyopadhyay worked on “Sharing traditional knowledge and cultures of different tribes of West Bengal, India”. Her study focused on the traditional knowledge and culture of various tribes of West Bengal that are handed down orally and discussed about the role of libraries and librarians in knowledge management and also gave suggestions on how to coordinate these efforts for greater synergy and effectiveness. (Bandyopadhyay,2008)

Ogunlade and Oladele did a study on “information needs and seeking behavior among urban farmers in Kwara state, Nigeria”.The study suggested that urban farmers could produce better result if the necessary technical and financial impetus was provided. (Ogunlade and Oladele,2006)

A study was done by Njoku on the “information needs and information seeking behavior of fishermen in Lagos state, Nigeria”. The study examined information needs, sources and information seeking behavior as well as problems encountered by the fishermen in a bid to obtain information. It was concluded that the means and sources of information seeking found in fishermen in Lagos State are no longer adequate to meet advanced technology in the field and this can be detrimental to the profession. (Njoku,2004)

Helen Emmanuel done a study on ‘information needs and information seeking behavior of rural farmers in Okpokwu local government area of Benue state of Nigeria’. The study investigates the

information needs and information seeking behavior of the farmers. It also suggests some recommendations to improve the information service.(Emmanuel,2012)

Aziagba, P.C. and Okede,G.W. made a study on ‘ information seeking behavior of cassava farmers in upata clan, ekpeye community of Rivers state, Nigeria.’ They observed how the farmers seek information. (Aziagba and Okede,2011)

Adam Gambo Saleh and Fatima Ibrahim Lasisi worked on the ‘information needs and information seeking behavior of rural women in Borno state, Nigeria’. They identified the information needs of the rural women and examined their information seeking behavior. (Saleh and Lasisi,2011)

## 1.2 Objectives

- To study the information need of the residents(mainly farmers and fishermen) of Satjelia
- To study their information seeking behavior.
- To know about the various information sources used by them.
- To asses their satisfaction level with the present information service
- .To identify, analyze and report the indigenouse knowledge.
- To focus the role of LIS professionals in developing the information system and in collecting, preserving and disseminating the IK.

## 1.3 Importance of the study

The selected study area is completely different from the modern enlightened world in almost all aspects excluding some basic needs. The people there live in close connection with the nature and often depend on the Mother Nature for their everyday information need. But what is their exact position in this 21<sup>st</sup> century world? Do they also belong to the present information society? We, the information professionals must know what are their information needs, how they fulfill that, if they are satisfied with that and must take steps to strengthen the information infrastructure and make them aware of the right information at the right time. So, people of this unique land should be studied well for the advancement of their lifestyle.

#### 1.4 Scope and Limitation

The present study had been carried out at Satjelia, a remote island of Sundarban in West Bengal with the local farmers and fishermen available during the study period. So, the study is limited into 2 aspects: limited in the island of Satjelia and limited by the number of respondents. Many of the fishers were out for fishing during the study, so they were not available and there are people who fall under both the category of farmers and fishers.

#### 1.5 Research Questions

- What are the information needs of the dwellers of Satjelia?
- How and where do they seek information?
- What are the different sources of information?
- What is their satisfaction level with the present information source and service?
- What are the various indigenous knowledge they use?

## 2. **Methodology**

To do the project work systematically and to fulfill its purpose, the whole work was divided into several phases.

### PHASE-I

At first, a friendly relationship was made with the local people to make them comfortable to cooperate with us to get some basic ideas about their livelihood.

### PHASE-II

100 local farmers and fishermen (inhabitants of Satjelia) were selected by the random sampling method from the voter list.

### PHASE-III

The selected people were directly interviewed on the basis of the verbal communication that was made earlier.

STUDY AREA: Satjelia, Gosaba (Block), 24 Pgn(S).

No. of Farmers: 50

No. of Fishers: 50

PERIOD OF STUDY: 4 months (September – December, 2014)

## PHASE-IV

The data collected from the survey work, was thereafter compiled and analyzed.

### 3. Result and Analysis

Table I: Information Need & Information Seeking Behaviour

Information need	Information seeking behavior	Source
Information about farming ( soil, seeds, fertilizers, pesticides, tractors, Pumps, diseases of crops etc.)	Discussion with the fertilizer shop owner And attending group meetings organized By local NGO	Market place, NGO
Weather related information ( tide & ebb, seasonal rain, cyclone Sea waves etc.)	Consult almanacs & newspapers & listen to the weather forecasts by radio & sometimes announcements by local administration.	Radio, Newspaper, Local announcements.
Information about cattle (their variety, rearing methods, diseases etc.)	Exchange views and have suggestions/ solutions from other people in the market place & sometimes attend group meetings organized by local NGO.	Market place(people) and NGO
Health related information (diseases, medicines etc.)	Visit local quacks or in serious cases go to distant hospitals. Visit health camps organized by local NGO.	Local quacks & hospitals. Health camps organized by NGO.
Economic information(loans, facilities etc.)	Visit the bank in Block town, discuss with NGO workers.	Bank, NGO
Market information (rates of vegetables, fishes and common household things).	Go to the local market (village haat) and interact with the vendors	Marketplace
Educational information (for their children)	Consult the teachers of the local schools	School, teachers
Recreational information (local cultural functions, fairs, plays etc.)	See posters, announcements by local clubs or gather information from the market place	Poster, announcements and market place

The above table reveals the information need, the source of information and the information seeking behavior of the people under study.

Table II: Use of formal sources of information

Sources	number of responses	% of responses
Newspaper	56	56%
Almanac	60	60%
Radio	72	72%
Television	4	4%
Poster	20	20%

Table II shows the use of formal sources of information. The maximum number of respondents ,(72%) use radio as the formal source of information, (60%) use almanac, (56%) use newspaper, (20%) sees poster and only (4%) watch television to collect information.

Table III: Use of informal sources of information

Source	Number of responses	% of responses
Local market place	100	100%
Local school/teachers	44	44%
Local NGO	28	28%
Bank in Block town	20	20%
Hospital	8	8%
Nature/ natural phenomena	88	88%
Local quacks	100	100%
Senior & experienced people	100	100%
Announcements	28	28%

Thus, it is clear from the above table (Table III) that the maximum number of respondents i.e. (100%) uses local market place, visit local quacks and consult senior and experienced people as their information sources. (88%) depend on nature or natural phenomena for their information,

(44%) consult teachers personally or go to schools for the source of information, and (28%) collect their information from local NGOs and announcements by local administration, clubs etc. (20%) go to bank for information about loans etc. and only (8%) go to hospital for health related information.

Table IV: Level of satisfaction on the information sources & services available

Level of satisfaction	Number of responses	% of responses
Satisfactory	28	28%
Fair	12	12%
Unsatisfactory	60	60%

Table IV shows that the level of satisfaction. The maximum number of respondents i.e. (60%) is unsatisfied with the sources and services available. (28%) of the respondents said it satisfactory and only (12%) said fair.

Table V: A list of IK used

IK	FARMERS	FISHERS
Local proverbs	+	
Natural phenomena (tide and ebb, cyclone etc.)	+	+
Color and patterns of clouds	+	+
Structure of the moon	+	
Morals from real life experiences of the senior people	+	+
Sound made by animals		+
Nature of the sea waves		+
Intuitions based on daily life experiences	+	+

#### Local Proverbs:

Some local proverbs are there that help them to get the news of rainfall and take decisions accordingly. For e.g.

“ bina bay/ jodi barsha hoy/ kotha rakhi dhan” i.e. in the Bengali month of Kartika, if it rains without any storm then they will grow a huge amount of paddy that year.

“ poobe jodi othe aar/ danga jol ekakar” i.e. if in the month of Ashar (Bengali) there is dark cloud in the east then devastating flood can occur.

“ Dur shobha, nikot jol.” There is a saying that if there is a ring (hollow of light) around the moon, then rain will come soon.

#### Natural Phenomena:

They mostly depend on the experiences gathered from the natural phenomena (tide and ebb, cyclone, flood etc.) for precaution from damages caused by calamities. The old people and those who are illiterate closely observe the natural phenomena like from which direction the wind is blowing etc. and accordingly get the message directly from the nature of what is going to happen.

#### Color & Patterns of Clouds:

They can decide whether the rain would come sooner or later or if it would rain heavily or not according to the color and type (patterns) of the cloud.

#### Morals from real life experiences:

They always take the help of senior people who have a lot of real life experiences that comes with moral lessons. It is of great help to them for living a safe adventurous life.

#### Sounds of Animals and footsteps:

Sounds made by animals (especially by monkeys and birds) often help them to be aware of the Royal Bengal Tiger, while they are out in the jungle for fishing or for collecting honey. Some people can also identify the sound of swimming of the Bengal tiger and accordingly they change their route of journey or take other protective actions.

By observing the pugmark of small animals on the bank of rivers they get to know that on this side of the river bank there is no possibility of staying of the Bengal Tiger. Because there experience tells that where there is the tiger, there are no other animals.

Sea waves:

Fishermen are quite familiar to the normal sea waves. They can predict when the sea is safe for going out. During the Tsunami, they guessed that something was going to be wrong by observing the abnormal tidal flow.

Intuitions:

Their simple lifestyle is based on some extra – ordinary courage, intuitions, wits, and experiences which we call the indigenous knowledge (IK). For e.g. from their experiences they say that if anyone is in face to face with a tiger then he/she should keep a direct eye contact with that tiger because as long as they have the eye contact it will not attack.

### 3.1 Dissemination of information

The main process of exchange of information or ideas occurs through face to face verbal communication. Whenever they gathered in the local market place or meet some friends or relatives they share and discuss about their needs and availability of information or about some traditional knowledge based on their experiences that may be helpful. Besides they also use mobile phones for the communication of information. About 32% from the sample population (100) responded positively that they use mobile phones as a means of communication for sharing information.

### 3.2 Barriers to the access of Information

Geographical situation – Satjelia is a remote island which is surrounded by rivers, canals and creeks. The geographical location is a major barrier for the development of transport and communication system. So it acts as a barrier to the access of information.

Lacks of awareness – The dwellers are not aware of the information available in neighboring areas or even in their local territories.

Illiteracy – Though the literacy rate of this island is quite high, the dwellers have only little or no formal education. And most of them are first generation learners. They do not know where and how to get the required information.

Poverty – Most of the people there are of below poverty line, so due to lack of funds they cannot always avail the information.

Language barrier – They only know the local language (Bengali), so they can only understand the information which is available in that language whether in printed form or it is broadcasted.

Shyness – Because of lack of awareness, illiteracy and poverty they feel quite shy to approach a person or an organization where their needs can be met.

Lack of Government initiative – There is not any standard infrastructure or technological advancement found in that island (Satjelia) for the betterment of the local people. Government should take more projects to solve this problem.

### 3.3 Discussion

#### **Research Question 1 . What are the information needs of the dwellers of Satjelia?**

The dwellers who are mainly farmers and fishermen of Satjelia basically require eight types of information: agricultural information, weather related information, information regarding animal husbandry, health care information, market related information, economic information, educational information and recreational information. Their need for agricultural information include information about types of soil and their fertility, fertilizers, herbicides or pesticides, advanced seeds, tractor, pumps, diseases of crops and preservation of crops. They want to know the weather forecast i.e. about seasonal rainfall, storms or cyclones, tsunamis etc. They need to know about everyday high tide and low tide. As they also rear cattle like hens, ducks, cows, goats and fishes so they require information about their breeding variety, rearing methods, their diseases and medicines. They need information about medicines for various diseases, vaccines and also the information about doctors in big cities so that they can consult him in case of critical situation. The population requires educational information for their children who are the first generation learners. Sometimes they visit bank and have discussions with the employees there or they discuss with NGO workers for economic information. Market related information like rate of fish and vegetables etc. are also a need for their livelihood and they get this kind of

information at the market place from vendors. Recreational information like various cultural programs, plays, fairs etc is for relaxation from the everyday routine.

**Research Question 2 . How and where do they seek information?**

They mostly gather information from the local market place. They discuss with shop owners or with local vendors. They attend meetings or health camps organized by local NGOs. Very often they exchange their ideas with senior, experienced people or with local school teachers. They also listen to radio broadcasts, or announcements made by local administration and sometimes read newspapers. There is no hospital in this island. They have to go to the Block town for severe cases. In general they consult local quacks. So almanac and newspaper are the main documentary resources they use. The main institutional resources are: local NGO, school, bank and hospital. And main human resources are: senior and experienced people, NGO workers, shop owners, vendors, school teachers and quacks.

**Research Question 3 . What are the different sources of information?**

The study identifies total 14 sources of information. There are 5 formal sources of information, like newspaper, almanac, radio, T.V. and poster. And They use 10 different informal sources of information such as, market place, school and/or teachers, NGO, bank, hospital, quacks, senior or aged people, natural phenomena and announcements. They mostly use informal sources of information.

**Research Question 4 . What is their satisfaction level with the present information source and service?**

Maximum number of people is not satisfied with the available information sources and services. A few of them thinks it is fair or satisfactory.

**Research Question 5. What are the various indigenous knowledge they use?**

The study identifies 8 types of indigenous knowledge used by the dwellers of Satjelia. They are: local proverbs, natural phenomena like tide and ebb, color and patterns of clouds, shape of the moon, nature of sea waves, sound made by animals, senior people with their real life experiences and intuitions based on their daily life experiences.

#### 4. Conclusion

From the present study it is revealed that their primary information need is related with agriculture, weather, cattle, health and market. Educational, economic and recreational information is their secondary need. Though they use various formal and informal information sources, informal information sources are the popular sources and are mostly used. And most of the respondents are not satisfied with the available sources and services of information. Those who have advanced information need have to suffer from the poor information system and their desire for the information often dies unsatisfied.

Their information seeking behavior is of different types according to their education, attitude, familiarity with the source etc.

IK covers the basic needs of the community people and it is invaluable in the development of any society even in this era of science and technology.

Libraries and information professionals can do a great deal in this area. In Satjelia (the study area) there is not a single library, though the literacy rate is quite high.

##### 4.1 Suggestions:

Here are some suggestions that LIS professionals can do:

- They can build up community information service
- They can provide adult literacy programs.
- They can increase the use of formal source of information such as reference books, periodicals etc.
- They can act as skilled reference person (human resource)
- They can arrange group meetings, seminars, slide shows, poster presentation, talk hour etc through extension service to make them aware of information.
- They must have to take the lead role or initiative for the collection, organization, preservation and dissemination of the invaluable traditional knowledge for the posterity.
- Government should also take initiative to provide them with advanced technology, faster access to information and a better livelihood.

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