

# Information Access to Villagers through Connecting Different Sectors: infoNetwork Centre Model\*

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## Abstract

Everyone needs information and to be able to access information is a fundamental right. Most Indian villages are not well connected; so villagers are deprived of access to information. The main objective of this paper is to suggest a model infoNetwork centre as a mechanism for connecting the different information providing agencies (health, education, banking, government, employment agencies, agriculture sector, religion, non-governmental organisations, etc.) of society to villagers. In India both government and private organisations operate in many sectors like health, education, and employment. Observation and interview methods are used to understand villager's information needs and suggest a model of "infoNetwork centre" for villages.

**Keywords:** India, infoNetwork Centre, Information Access, Rural Development, Village Knowledge Centre

## 1. Introduction

India has approximately 2.3 hundred thousand Village Panchayats\*\* covering 6,40,000 villages (CAPART, 2009)<sup>1</sup> catering to more than 2/3 of its population. In terms of quality of life in villages India stands at 128<sup>th</sup> position among 177 countries as per the human development index. India introduced the Right to Information act in 2005 to ensure access to information (Right to Information, 2005)<sup>9</sup>. S R Ranganathan's 2<sup>nd</sup> law of library science "Every reader [should have] his/her book" suggests that every reader or user should get book/information, as per his or her needs (Berman, 2011). It is a well-known fact that a country progresses by its skilled and well informed people which acts as a warning to India not to ignore rural India. The former president of India, Dr. APJ Abdul Kalam said:

"With the opportunities available in ICT, it will soon become a reality wherein every one of our villages will have computers and connectivity. These would be the window to the world of knowledge for our villages and also to reap the benefits of our e-governance, tele-education, telemedicine, e-commerce and e-judiciary initiatives".

To fulfill this aim and the information needs of unreached villagers, the concept of connecting different sectors with villages physically and through technology would be effective.

## 2. Background

Initiatives which provide information services to rural India include Village Resource Centres (VRCs) and Village Knowledge Centres (VKC) associated with NGOs/ trusts and state/ central agencies. VKC and VRC are a single window point to remote areas of the country connected through modern information and communication technology. Rojarani surveyed village resource centres and village knowledge centres and concluded that "most of the villagers are illiterate" (Rojarani, 2010)<sup>10</sup>.

### 2.1 Village Resource Centres (VRC)

To provide technology-enabled services directly to the rural population, ISRO (Indian Space Research Organisation) launched the Village Resource Centres (VRCs) programme in association with NGOs/ Trusts and state/ central agencies. 473 VRCs have been set up in 22 States/Union Territories. The VRCs are connected to Knowledge Centres like Agricultural Universities, Skill Development Institutes and Hospitals. Over 6500 programmes have been conducted by the VRCs in the areas of, agriculture/horticulture, fisheries, livestock, water resources, tele-health care, awareness programmes, women empowerment, supplementary education,

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\*\* Gram/Village Panchayat: Local government representing the whole village and its issues consisting of one head (Surpanch) and elected members.

computer literacy, micro credit, micro finance, skill development / vocational training for livelihood support etc. So far, over five hundred thousand people have availed VRC services. (Village Resource Centre, 2010)<sup>18</sup>.

## 2.2 Village Knowledge Centres (VKC)

The VKC is a place to render services from a single window point to rural masses especially in remote areas of the country through modern Information and Communication Technology. These centres not only provide direct quality employment to over one million, but are instrumental in promoting higher level of wealth generation in the rural sector. Some of the initiatives are mentioned in Table 1.

## 3. Organisation

All the above are projects mostly named as village knowledge centres, village resource centres and GrameenGyan Kendra. These centres are located in villages.

## 4. infoNetwork Centres

The objectives of this study are as below:

- To get an overview of and analyse the present village knowledge centres and village resource centres in India;

- To propose a model of an information centre that would provide access to information to villagers by connecting relevant health, education, banking, government, employment agencies, agriculture agencies, Non-Governmental Organisations (NGO's) and village panchayats to villagers through infoNetwork centres; and
- To set up new infoNetwork centres for effective provision of information to villagers.

## 5. Methodology

In the current study observation and interview methods have been employed to gather information on villager's information needs. A qualitative analysis of websites, online & offline literature associated with rural development is carried out. Unstructured interview method containing open-ended questions was used to interview Surpunch (head of Village), school teachers, farmers and village women and children to study the nature of people's needs and their connectivity to agencies dealing with different sectors. Based on the literature review, observation during the visit to the pilot study village and interviews of villagers, a model of infoNetwork centre for villages is proposed. It is proposed to set up an infoNetwork centre in one village (Bidola) and then extend it to cover five towns of Bhiwani district of the state of Haryana.

**Table 1.** History of initiatives taken for VRC and VKC

Organisation	Area Covered	Started In	Services
MSSRF (M.S. Swaminathan Research Foundation), Chennai	10 Villages of Pondicherry	1998 – 2003	Information on agriculture tips, filling up of forms, govt. schemes, computer training, employment / job vacancies.
	8 Villages of Tamilnadu	2005 – 2008	
Indian Institute of Technology Bombay Alumni Association, Bangalore, Azim Premji Foundation, & Akshara Foundation	1 village –Ittamadu (Bangalore)	2005	Access to e-Government services, computer education, info. On agriculture and employment.
My INDIA, BITS Pilani	1 village- Dhandar village near Pilani	2005	Daily news, employment news, education news, transistor, books, and health information.
Group of 9 Students	Sanghvi village, Pune	2011	
	Future plan- 150 villages across India		
Union Bank of India, New Delhi	200 villages across India	May, 2005	Improving agriculture, community development and financial inclusion.
ISRO (Indian Space Research Centre), Bangalore	473 villages across India	Oct., 2004	Tele- health care, Tele – education, Tele- fishery, Weather services, e-governance, land and water resource management, interactive advisory services.

## 5.1 Pilot Project

The village named Bidola, which falls under Bhiwani district of Haryana, is taken for the pilot study. The village has a population of around 3000 people and agriculture is the main occupation. The village is connected to the nearest town by road and has communication network facilities. Even then it lacks access to necessary information. The village has one temple, two schools, one Dharamsala\* (community centre), a veterinary doctor, and Panchayat office\*\*. The villagers are informed about any programme / event using the loudspeaker kept in the temple. But there is no way to get updated information on different fields. Around 10% people have television and 70% have mobile phones. There is no Internet access point, printer and scanner etc.

## 5.2 Full Project

Once pilot study is successfully completed it will be extended to the entire Bhiwani district which has 5,099 km<sup>2</sup> areas with a population of over 1.4 million living in namely Siwani, Tosham, Loharu, Bawani Kheda and Charkhi Dadri which include 442 villages. (Wikipedia, 2013).

## 5.3 infoNetwork Centres

A single window point and connecting hub owned and partially funded by village panchayat and NGO's, linking different agencies to meet information needs of local people by relating them with main source of information.

## 6. Why infoNetwork Centres

- To meet day-to-day information needs of villagers and to minimise digital divide in India;
- To bring awareness among people about health problems, agriculture practices, government schemes, social evils and employment opportunities;
- Public libraries of district are not effective in meeting villager's information needs. As it has to serve 400 villages, where villagers don't use the library and public libraries do not reach their doorsteps;
- Village knowledge centres have been very successful in meeting information needs of people living in villages of Pondicherry, Bangalore District and Pilani;
- No hospitals are available in the villages; infoNetwork centres can provide basic information on diseases;
- There is no linking between different sectors (health, education, agriculture, employment, religion, Bank and government) serving people; infoNetwork centre

will link them to serve people better and these sectors to work together;

- Farmers do not get benefit from farming due to lack of information, which results in poor financial condition of farmers; and
- Today we lack system to make villagers aware of amenities of government and private sector. It is right platform for them to promote their products and services to villagers.

## 6.1 infoNetwork Centre Model for Villages

The model showed in Figure 1 aims to connect different sectors of the society, especially in the villages which lack services and infrastructure, to the government and private agencies for providing necessary information to villagers in both digital and analog forms. The model involves the information provision related to the following sectors: *Education*: School, Training Institute, College, and University; *Government*: Gram Panchayat, Public Library; *Health*: Government Hospital, Private Clinics, Veterinary Hospital; *Employment*: Private Agencies; *Banking*: Private banks, government banks, grameen (Rural) banks, post offices; *Religion*: Temple, Mosque, Church; *NGO*: Local Non-Governmental Organisations.

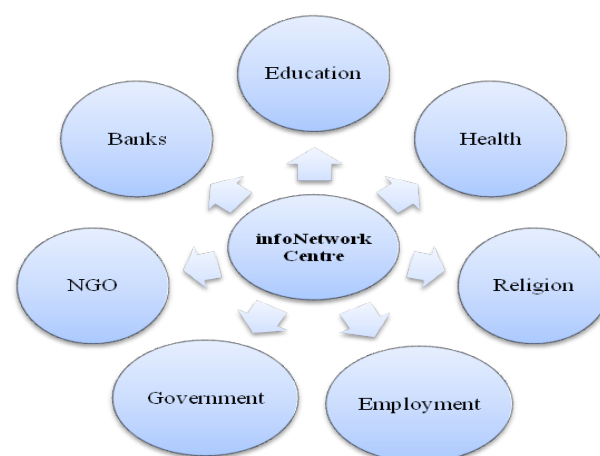


Figure 1. Model of infoNetwork centre for a village.

## 7. Structure of infoNetwork Centres

The village infoNetwork centre will be connected (Figure 2) to information centres at higher levels. As the whole idea of this model revolves around the sharing and networking, to provide information regarding main information sources, all the centres will be interconnected to each other.

\* Dharamsala: A Place to organise events or functions or used as village guest house.

\*\* Panchayat office: Office in the village where head of the village work.

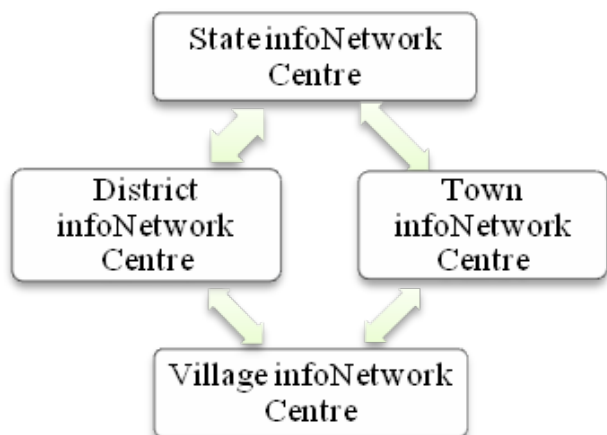


Figure 2. Structure of infoNetwork centres.

## 8. Actual Connections - Functioning Table

infoNetwork centres will act as mediators between agencies and villagers. Villager’s queries listed in the table came up while interviewing them. The Table 2 indicates the organization / agency relevant to the queries.

## 9. Use of infoNetwork Centres

infoNetwork centre will be a centralised place for villagers to gain, share information and interact with private and government agencies in a village. infoNetwork centres will mostly be used for fulfilling information needs of the villagers. During the interview a case of an elderly villager going to the nearest town to get his pension from the bank and finding that it was a bank holiday on that day. So if he would have got this information in village itself that today is: Here infoNetwork centres can play a role by providing the information such as address, phone numbers, etc to villagers. It will act as information ground where people will access and share Information of daily importance (Fisher, 2007)<sup>3</sup>. It will act as a meeting place to hang out, hub for the privates and government agencies for promotion of their products and services.

### 9.1 Information Dissemination by infoNetwork Centres

Villagers are generally busy in their farming and other tasks. It is proposed that information will be disseminated

Table 2. Mediator role of infoNetwork centres between villager’s queries and main source of information

Villagers Queries			Main Source of Information
• Awareness of Government schemes	Connect To	InfoNetwork Centre	Village Panchayat Office
• Awareness on Health problems – AIDS, TB, Eye disease.			Government/Private Hospital
• First Aid training			Veterinary Hospital
• Animals diseases Awareness			Anganwadi**
• Animal health tips			Village School
• Kids Play			District Public Library
• Cooking Tips			Private Job Agencies
• General Knowledge			NGO
• Employment news, Online Application filling, job vacancies info.			Govt. Agriculture Dept.
• Social Evils Awareness – Smoking, Drinking Alcohol, Corruption, and Dowry*.			Agriculture University
• Farmers Training, commodities prices, weather forecast, clean milk production.	Kisan Call Centre***		
• Religious Information	Temple		
		Mosque	
		Church	

\* Dowry: A practice of demanding money and valuable things from the bride’s family during marriage.

\*\* Anganwadi: A place where kids are sent to play and learn basic things of childhood.

\*\*\* Kisan Call Centre: A centre dedicated to answer the queries of farmers regarding the farming and agriculture practices.

to villagers via physical or digital form; via- newspapers and books; physical methods - notice boards, lectures, meetings; digital media - internet and mobile, radio and loudspeaker are ways to disseminate information to them. Posters and grey literature on job openings, admission & training, farming tips, common human and animal's diseases and precaution by their concerned organisations will also be useful. Employment news; posters and calendars on government schemes; agricultural products price index; list of names and addresses of government and private academic institutions, hospitals, job agencies, companies, public libraries and religious places surrounding the village areas within district will be provided in digital form. Information about weather forecast, birth and death certificates etc., exam results, online form filling etc., will be provided by accessing Internet.

## 9.2 Setting Up of infoNetwork Centres

### 9.2.1 infoNetwork Centre Infrastructure

The centre will be accommodated in a place decided by the village panchayat according to availability of space and budget. But initially till villagers recognize their importance the centres could be located in a school, temple or Dharamsala (community centre) as these are

frequented by villagers in need of information. The village panchayat will be responsible for providing the housing the centre and to meet expenses related to electricity, telephone and Internet; and to arrange the volunteers for infoNetwork centres. Infrastructure and financial requirements needed to start and functions infoNetwork centre are given below in Table 3.

### 9.2.2 Functioning of infoNetwork Centres

infoNetwork centres will act as mediators between agencies and villagers (Table 2). Different government and private agencies will send information to village infoNetwork centre, which will be disseminated to the villagers. In today's competitive world every sector organisation – health, education, banking, jobs, and agriculture needs to reach its customers. For example, Union Bank of India has a programme to ensure that every family in the command area villages has at least one active bank account also provides financial counselling and informs them about banks schemes /products (CSR Village Resource Centre, 2005)<sup>2</sup>. Information about such programmes could disseminate through the infoNetwork centres. infoNetwork centres will also document traditional knowledge. A monitoring and evaluation mechanism has to be put in place to assess the progress and impact of centres.

**Table 3.** Infrastructure and financial requirements

Human Resource	No. of Items	Cost Amount (Rupees)
Information officer	1	10,000 per month
Villagers & high school students as volunteers	Min. 3 Volunteers	500 per month
<b>Building</b>		
Office/hall & open space	1 Place	-
Electricity	Arranged by Solar panel	25,000
Water	-	-
Furniture	Computers furniture, office furniture set	5000
Computer	1	25,000
Peripherals –Printer Photocopier & Scanner	1	5,000
<b>Connectivity</b>		
Internet	Modem set	500
Projector	1 set	15,000
Radio & Loudspeaker	1	2,000
Audio/Video conference	1 system	40,000
Notice Board	1	100
Mobile	1	3,000
Motorcycle - Bike	1	35,000
<b>Total</b>		<b>₹ 1,66,100</b> <b>(\$2,832.80) USD</b>

## 10. Findings

### 10.1 Observations

Village Bidola and its surrounding villages Bagnwala, Miran, Chapar and Saral in the Bhiwani district of Haryana were visited. It was found that people's main occupation here is agriculture and this is desert area. Here most of the old and adult persons are illiterate but young generation is going to schools and colleges. These villages are well connected by roads and telecommunications but having less facility of water and electricity. The village panchayat is less effective to provide information to villagers. People have to travel long distances to get even a small piece of information. Temple loudspeaker is mainly used to make necessary announcements in village. People are frustrated as there is no provision of getting information from government offices, banks, hospitals, job agencies and NGO's. There is no access to Internet; only a few access it via their mobiles. Every category students, old people, farmers, businessman, and women have their own needs which we found during interview. Based on the interviews and observation made, there is urgent need of infoNetwork centres in these villages.

### 10.2 Main Issues and Solutions

Many programmes are initiated in India but are not maintained and managed. Basically issues like lack of awareness, identifying volunteers, involvement and participation of villagers to access information, insufficient space, less knowledgeable heads of villages and non-availability of Internet are the major factors for this. These problems could be solved if villagers get motivated and understood centres importance. High school children can work as volunteers; for awareness, sharing news with women works as they spread it fast; applying local ways to attract people like organising camel races, movie shows to create awareness and involve them in accessing information. Local teachers could help village heads to understand and take decision on functioning of centre.

### 10.3 Expected Outcome

Some of the possible outcomes of from these infonetwork centres would be information sharing and creating awareness among villagers living in the unreached areas; Networking of governmental, non-governmental sectors; Knowledge Connectivity; Better opportunity of employment; and online access to market rates and better marketing of rural produce etc. the outcomes are dependent on the interest of people and their confidence

in these infoNetwork centres that it will solve their information issues and will improve their life.

## 11. Conclusion

infoNetwork centres are need of hour in developing countries. They are technically similar to village knowledge/resource centres but also have the goal of connecting different sectors of society in serving the villagers. Organisations need to realise the potential in networking for uplifting the rural society. As Dr. Kalam's also said "The youth of the nation need to come together. The nation needs people working in the fields rather than propounding theories in plush offices. The youth of villages need to be involved to work for the progress of the community, which will help check migration to urban areas". (Chatterjee, 2010)<sup>8</sup> infoNetwork centres can be very effective because its idea is to connect different sectors of society to serve the villagers. Furthermore all sectors whether private or government, are willing to sell their products and services to their customers by reaching their doorsteps in this competitive world. On the other hand, people living in villages are handicapped due to lack of valid and necessary information. Their quality of life is poor. But if all the sectors working for society's development become active and start sharing their information regarding their services then it would make a difference to the lives of unreached and poor villagers.

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