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**Need Assessment in
Patan & Mahesana districts
of Gujarat-
e-Gram Project**

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Editorial Team

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Need Assessment in Patan & Mahesana districts of Gujarat- e-Gram Project

PREFACE

The access to information is a key to healthy and dynamic democracy that facilitates participation of all in development. The democratic functioning demands two-way information flow to help planners and policymakers increase the efficiency of the Government delivery system as well as it would ensure greater control of common people over the delivery system. India being the world's largest democracy faces challenges in ensuring easy flow of public information to all irrespective of caste, class, gender and literacy. The revolution in information and communication technologies (ICT) has opened up new opportunities to address the needs of people. The use of ICT has not only brought revolution in the governance but also shows potential to address the developmental needs of the people.

After setting up required infrastructure for ICT related services, the state Government took up the challenge of setting up e-governance programme by providing computer-based services to its people through service nodes of e-dhara, Mahiti shakti and Jan Seva Kendras. The state government is now planning to strengthen the e-governance programme and link it with various development initiatives through ICT based services and bring it to the doorsteps of rural communities and in the process bridge the digital divide.

This Need Assessment study is initiated by GIL in a collaborative effort of SAVE - Saline Area Vitalisation Enterprise and Geographis, Ahmedabad. The planning research exercise is a part of a larger initiative of NISG - National Institute of Smart Governance supported by UNDP - United Nations Development Programme to set up Village Information System (VIS) being implemented nationwide. As pilot project, 100 villages of Patan and Mehsana district have been covered within 3 Months.

AGENDA

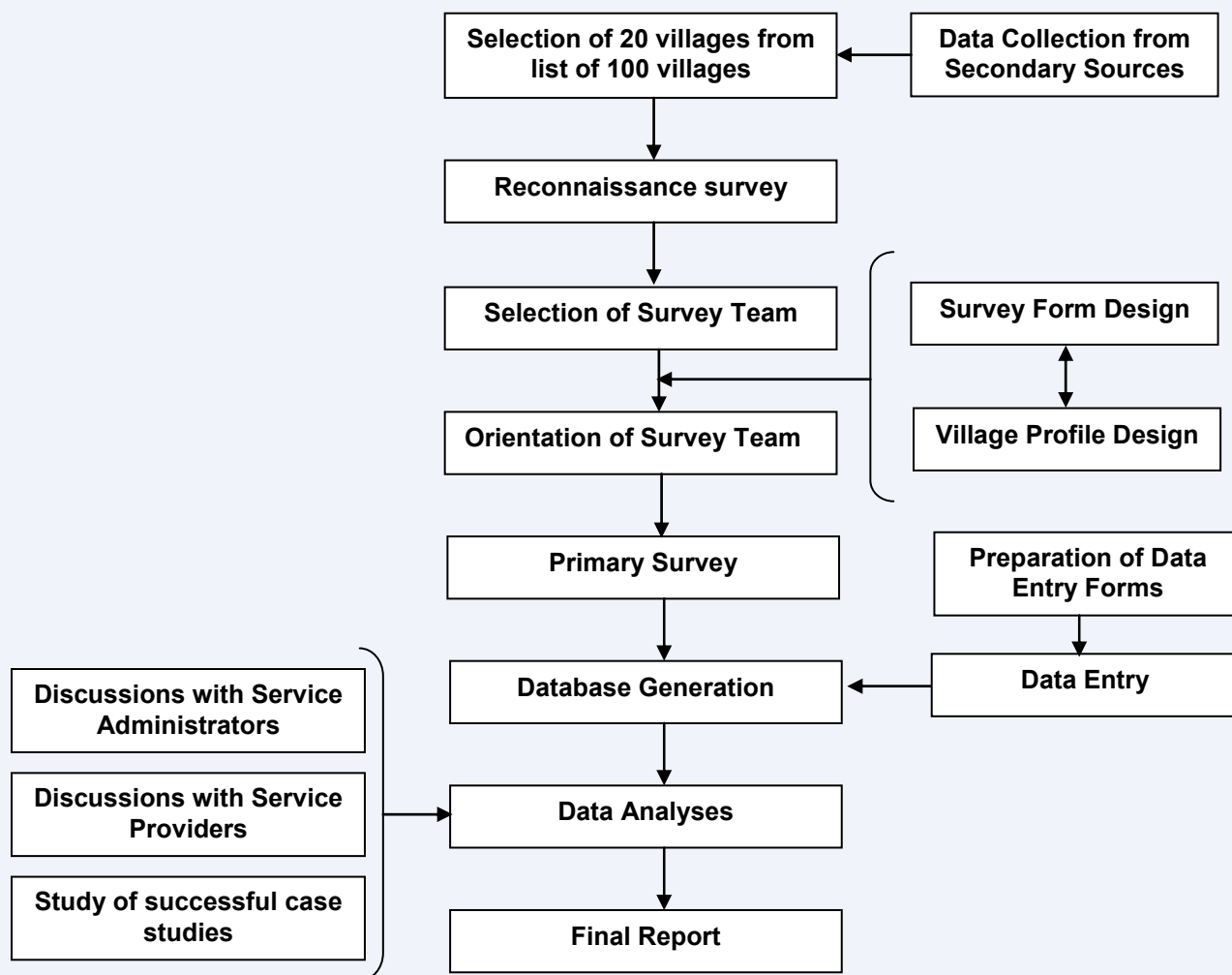
- ✚ About Study
- ✚ Study Methodology
- ✚ Innovative approach of Study
- ✚ Study Area
- ✚ Study Findings
- ✚ Willingness to Pay
- ✚ Case study of ICT from other State
- ✚ Recommendations

About Study

- ✚ The state government motivated by encouraging performance of existing ICT services in the state, is now planning to enlarge the use of ICT in rural areas through ambitious e-gram project, with initial coverage of 1400 villages across the state. As a pilot phase, Government has decided to cover 100 villages of Patan and Mehsana district of North Gujarat.
- ✚ Before initiating the pilot project in two districts, UNDP supported GIL to commission a study for understanding the information needs of the rural communities- primary users of the services. The study also looked in to overall potential and environment of the region in for ICT project. The study was jointly carried out by Saline Area Vitalization Enterprise Ltd and Geographis Pvt Ltd.

Study Methodology


- ✚ The study adopted a methodology which is a mix of qualitative and quantitative information. The information collection methodology was also used for bringing awareness about the proposed project in the study area and taking in to consideration the stakeholders of the project i.e. ICT service administrators, providers and users. It also helped in assessing the infrastructure needs for running the project on sustainable basis.
- ✚ The study was carried out in 19 villages selected from list of 100 villages (prepared by GIL) covering four talukas of Patan and Mehsana districts. The villages were selected to represent five population sizes categories. The quantitative information of for the study was collected from 1400 individual representing 3% of the village population.
- ✚ The entire study was divided in to two parts i.e the qualitative information and quantitative information collection. The qualitative information was collected to focus on the existing infrastructure both human and physical, the present situation of ICT services and its functioning. The information was largely collected through discussions with stakeholder groups representing the service administrators, providers and users. (ref : Chart below)
- ✚ The information collection about the user needs formed second part of the study that was carried out through collecting 1400 individual response collected through survey form designed to capture the probable needs of the rural communities in the region. The survey form was designed to capture the needs of individual representing caste, class, gender and occupation. The three categories of information that was collected are
 - ✚ The first part of the individual survey form dealt with
 - General information about the respondent,
 - Present sources and contains of information accessed;
 - ✚ Information needs required by everybody irrespective of gender, caste, class, occupation and religion. This includes information related to Government certificates, application forms for schemes and various list prepared by government like voter list, BPL list etc.
 - ✚ The part two of the survey form covered governance and occupation related needs of the respondent,
 - Information needs of documents, list and forms supplied by Government authority
 - Information needs for expanding their business or livelihood activities
 - Input-output marketing and,
 - Pre and post-production services and knowledge base required
- ✚ The third section of the survey form covers
 - The willingness to pay for information and;
 - Suggestions on present system of ICT.



Innovative Approach for Study

- ✚ Selection and orientation of survey team
- ✚ A group of 12 educated youth from villages of Patan and Mehsana districts was selected for household interviews and group discussions. The educational qualification of these investigators ranges from S.S.C., B.R.S. to M.S.W.
- ✚ Prior to starting the fieldwork, the 12-member team was given good understanding of the objectives and scope of the project. During the orientation process the important of quality of information was emphasized. The interactions with the team members also gave us useful information and insights into the situation of the selected villages.

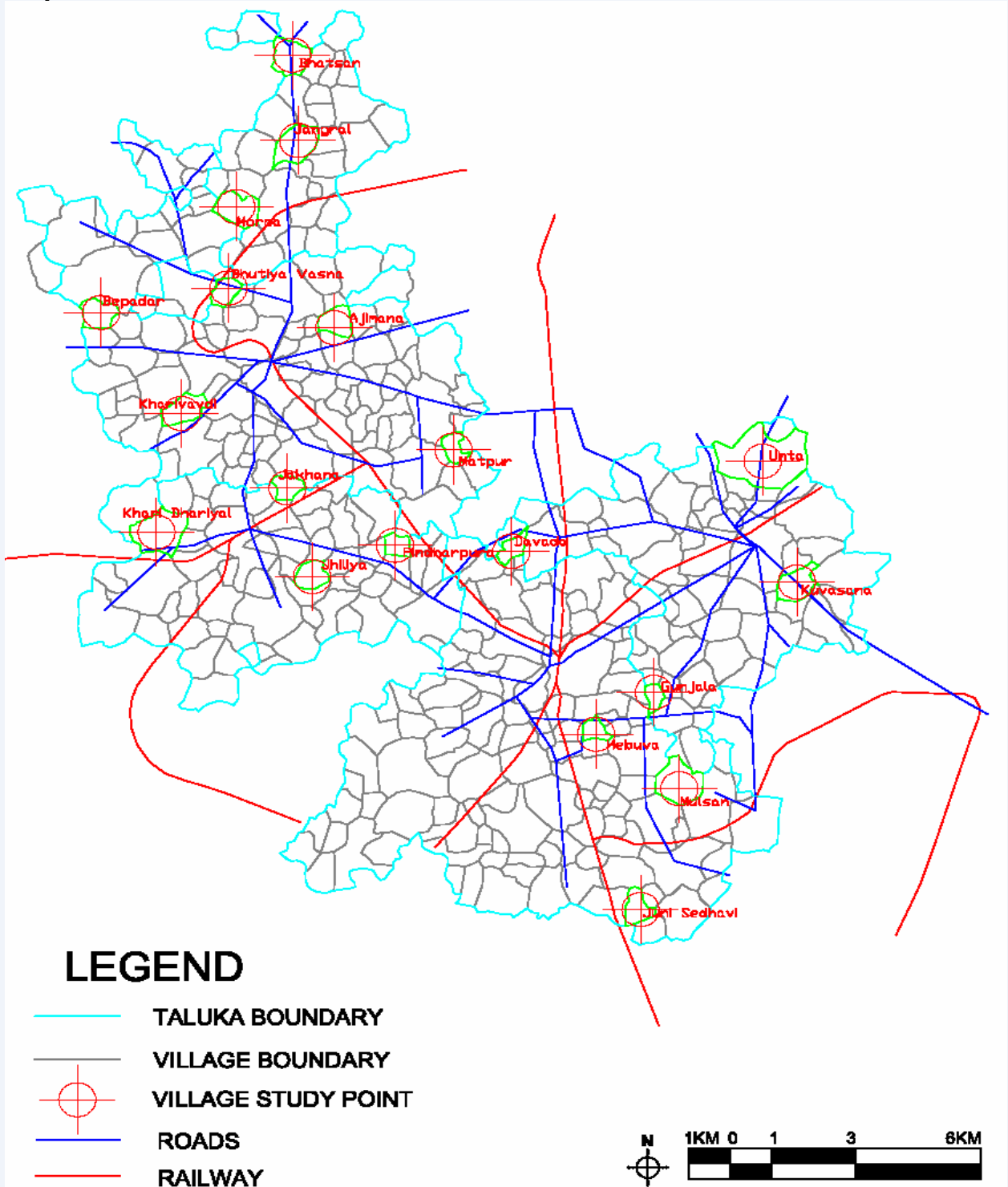
Awareness building exercise

-  The Gramsabhas were organised in all selected villages to brief local people about the project. These meetings were organised with the support of village Talatis and Sarpanches of the respective villages. Falia or cluster meetings followed this. The purpose of the meeting was to convey information about the project and obtain their views on required information and current sources of information. We tried to cover various categories of people in these meetings viz. farmers, women, students, scheduled cast, etc. This exercise facilitated selection of potential samples for personal interviews and gave us common views of local people on existing systems.

Study Area

The study area covering 19 villages belong to four taluka viz. Chanasma, Patan , Visnagar and Mehsana in Patan and Mehsana districts forms part of arid zone of Gujarat. However, the ground water potential along with geographical location provided a unique opportunity of development of agriculture, animal husbandry and industries together in same region. The study area reflects higher level of human development as compare to other districts in the arid region of Gujarat. The high literacy and education levels, migration for prosperity, existence of co-operatives and cultivation of cash crops makes the information needs of the region unique. There fore information need assessment for the study area differ from that of other district in arid Gujarat as well as from the other parts of the state like central, south Gujarat and Saurashtra. The unique physical and socio-economic situation provides ample scope for promotion of ICT services in the region.

Map Area:



Study Findings

The study findings are divided in following four broad areas:

- A. Feed back on Existing ICT System
- B. Assessment of Infrastructure available for ICT services
- C. Present sources of information.
- D. Information Needs Assessment

1 Feed back on Existing ICT System

The rural communities in study area are receiving computer-based services provided by the Government, co-operative and private operators (Chirag centres at selected village). The services offered by dairy and private operators are available at village level, while the state government under e-governance provides services at taluka level. The Government and private operators services are connected with Internet through different networks, whereas dairy co-operatives offer services through stand-alone system.

The Government lead computer ICT services are managed by administrators at three different levels i.e. village, taluka and district, while the services provided by dairy co-operative and private operators are administrated from the district head quarter by Mehsana dairy and N-louge.

The services offered by the state government reach to the people through Nagrik Suvidha Kendra and e-dhara Kendras at taluka level. The services provided are facilitating the e-governance through offering services related to government documents, certificates and facility for submission of application for government schemes.

The feed back on the existing ICT services were collected from service administrators, dairy functionaries, network operators and users from three levels i.e district, taluka and village. The feed backs were

From Service administrators

1. The computer based services provided by the state has the largest user followed by dairy networks.
2. The computerization of the land records and other certificates have reduced the corruption at village level.
3. E-dhara and Nagrik Suvidha Kendra are managed by Mamlatdars office. Earlier Talatis were responsible for issuing these certificates manually. Mamlatdar office is over-loaded due to heavy rush from villages of Taluka at single center.
4. The talatis were given 20 days training to use computerised system but all Talatis are not comfortable with use of computers and some of them have found this training insufficient to start operating computers independently.
5. Pre monsoon rush for documents (Crop loan, school admission etc.) leads to longer waiting period and increases pressures on the system
6. Due to centralization of operations the work pressures on taluka level officials have increased substantially
7. Talatis do not get sufficient time to update and correct land records.
8. Talatis feel loss of power as their authority to sign land records has been given at taluka level
9. The land records need to be upgraded frequently to ensure recording of transactions and loan repayment to banks
10. The decentralization of the process of distribution of land records from taluka to villages needs to be accompanied decentralization of powers and scheme for revenue sharing
11. Conversion and coordination among revenue and development administration at village level to facilitate one point service to information users
12. All officials feel that there should be connectivity between village and taluka centers. This would need commensurate technical and physical infrastructure and services

From User

1. Overall the service users are satisfied with the services.
2. The system offer authentic documents.
3. Since the land records are available at taluka level instead of village level, it has increased financial burden of people. (Cost of transportation, record and loss of income)
4. Number of important land records are yet to be computerized for e.g 6-A certificate for land record. In this situation a person have to collect land records from village as well as taluka offices.
5. The correction of errors in computerized document takes longer time hampering the process of crop loan or sell deeds for farmers.
6. The computerized services offered by dairy to its members has increased the transparency in its administration.
7. The services offered by e-dhara and Nargarik Suvidha Kendra should be made available at village level.
8. There should be special arrangements of human resource and system is required during peak rush period.
9. Information related to various government schemes, income generating activity and special groups like students, unemployed etc. should be made available at village level
10. Consultation facility with doctors, agriculture and veterinary experts should be made available at village level.

From service providers

1. The village level “chirag” centres are mainly utilised by youth for computer education and photography. Overall it is under utilised.
2. There is a need for increasing awareness among rural communities about the ICT services offered by chirag centre
3. Connectivity at village level needs to be ensured for upgrading the services by the private operators under chirag center.
4. The chirag centre operators from Mehsana district needs better technical backup from the n-logue.

2 Assessment of infrastructure for ICT projects

The infrastructure needs for proposed ICT based services was evaluated through

1. Assessing the rural connectivity
2. Basic infrastructures essential for operating the computer-based ICT services and
3. Availability of suitable human resource.

The assessment was carried out through discussions with service administrators, service users, providers and supporting organisation like training institutions engaged in computer based education and repairs & services.

2.1 Rural connectivity

The connectivity is an important factor for keeping the entire system dynamic and useful to the target community. Presently, the system from taluka level has connectivity with the district level server. This connectivity offers, the computers of e-dhara and Nagrik Suvidha Kendra facility to upload and download the information from the district server and updated or correct records at central level. However, the study team was informed that under the proposed e-gram project, computers would be stand-alone systems and records would be updated periodically.

At present, NIC provides hardware and software support in e-dhara and Nagrik Suvidha Kendra. All requests related to debugging or making changes in software programmes are being processed centrally by NIC, which is time consuming. Few suggestions/requests of users have not been processed since many months. There is a need to get periodical feedback of users to make these systems more effective. Government on contract basis recruits operators of these systems and their technical qualification starts from DTP operators to ITI certified courses. Most important issue is to make supplementary system in case of failure of hardware or software or non-availability of human resources who are operating the system.

2.2 Service infrastructure

The service providers

The service providers are located at all three levels i.e. village, taluka and district in both the study district. Under the present situation the sources for accessing ICT based information service are associated with the dairy co-operatives, cyber cafe operators, CHIRAG centers and government e-governance system.

It was observed that the though the service providers are available at all three levels, the computer related coaching classes, application developers and computer repairers are mostly located at the district head quarters. Thus services for repairing, up dating and maintenance of the computer system is available at a distance range from 40 Km to 80 Km from the proposed project villages. There will be an urgent need to provide backup support at taluka level to take care of perceived problems linked with rural connectivity and technical problems in computer system.

Service promoters-N - logue communications

Training and technical support

Government Institutes

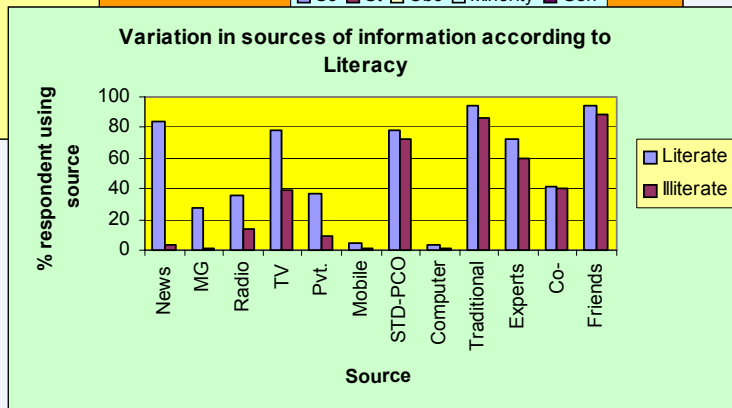
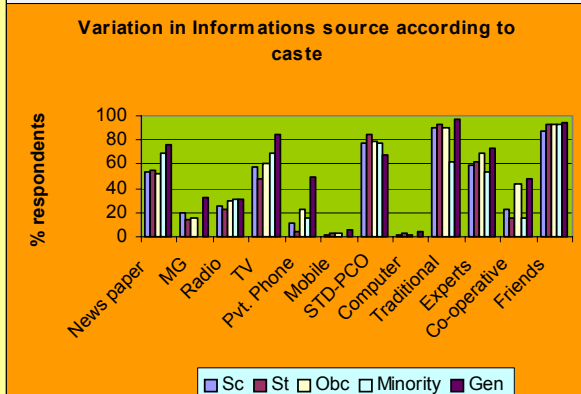
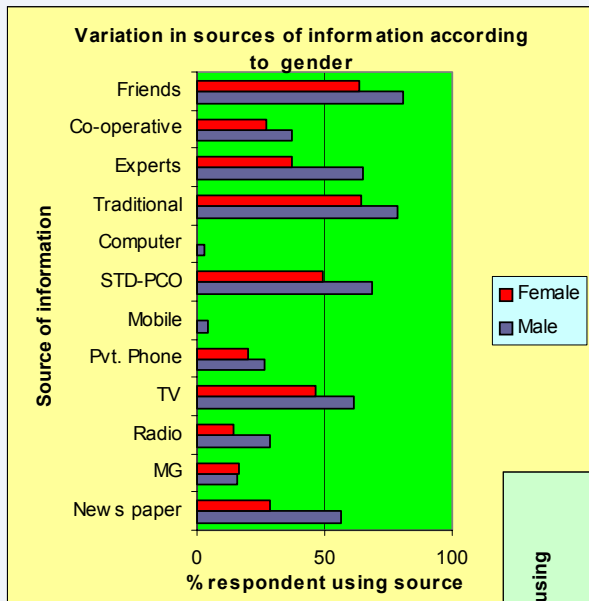
- a) Academic institutions
- b) The Industrial Technical Institute (ITI), Visnagar
- c) Private Coaching classes

3. Present sources of information

The rural communities satisfy their information needs through thirteen sources identified through discussion with the cross section of the communities. Primarily, choice of information source and frequency of its use depends on affordability and access to source. The type of source is further restricted by gender, literacy, age and type of information required.

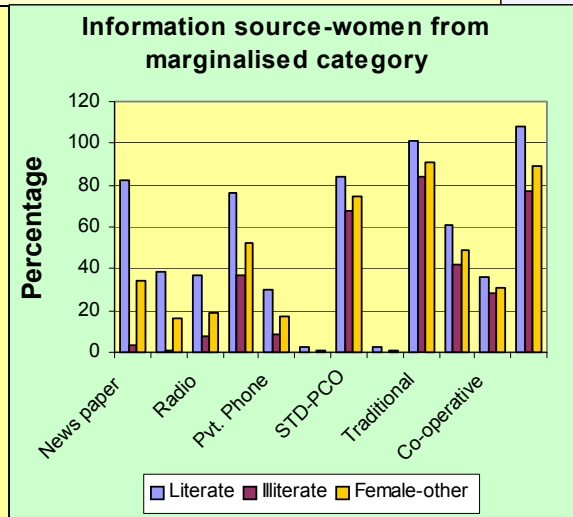
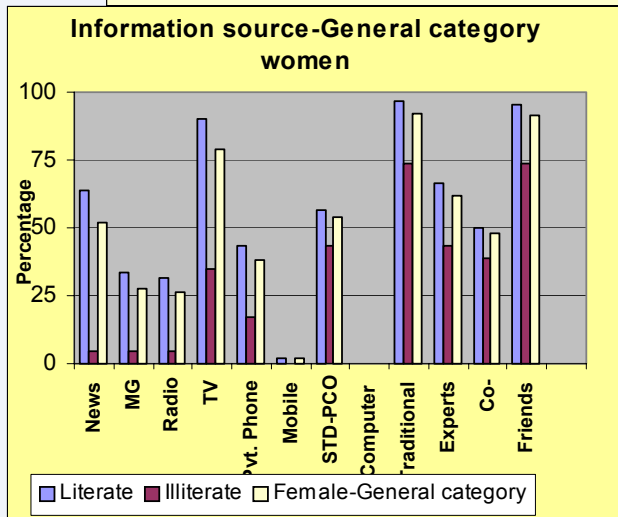
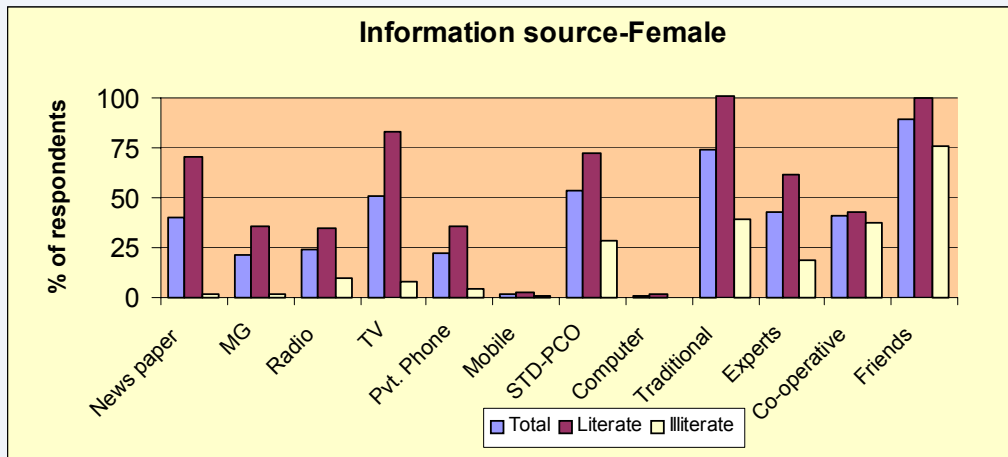
During the study emphasis was given to understand the present sources of information and its frequency of use across caste, gender, age and occupation. It was found that accessing information through informal channels such as through friends and traditional mediums are most prominent among all categories. The traditional mediums are almost accessible to most of the respondents; however its use frequency is low, due to increasing use of radio and television by the Government department for mass communications. In present situation, the space for traditional medium is reducing and is used mainly by some NGOs the region.

In recent years trend of using television, radio, newspaper, STD and interaction with Talati ,gram sevaks and dairy experts for accessing is increasing across the rural communities. However, its use varies according to gender, caste and economic class. For e.g. most of the people using newspapers belong to socio-economically higher class. The following graphs shows variation in sources of information according to gender, caste and literacy.



3.1 Literacy level and source of information

3.2 Female and Source of information



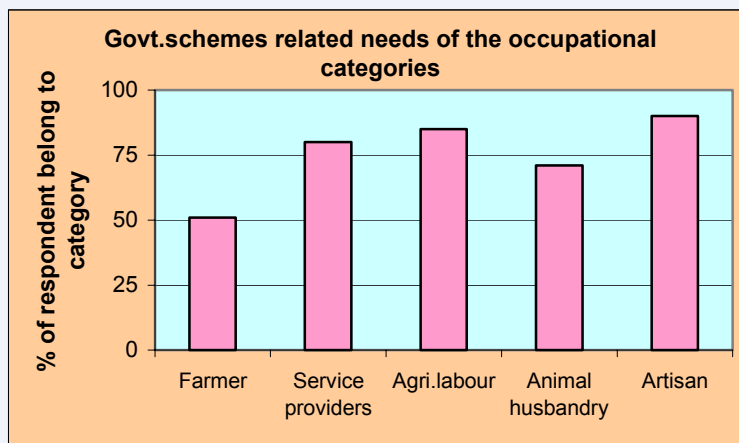
4. Information Needs Assessment

4.1 Type of information needs

4.1.1 General information needs

Sr. No	Need priority	Certificate	Application forms	Govt. Schemes	List
1	High (More than 80% users)	Birth & death, income, Age, caste, resident, nominee	Ration card, voters list	Drinking Water, health, education, PDS	Voters
2	Medium (50% to 80% Users)		Electricity		Ration card
3	Low (<50% users)	Marriage, handicapped, character	Certificates, Govt. scheme, farmer book, 7-12, 8-A, telephone, insurance	Jyotigram, Hariyali, Sujalam-sufalam, social welfare and security, infrastructure	BPL beneficiaries, Govt. scheme beneficiary, citizen

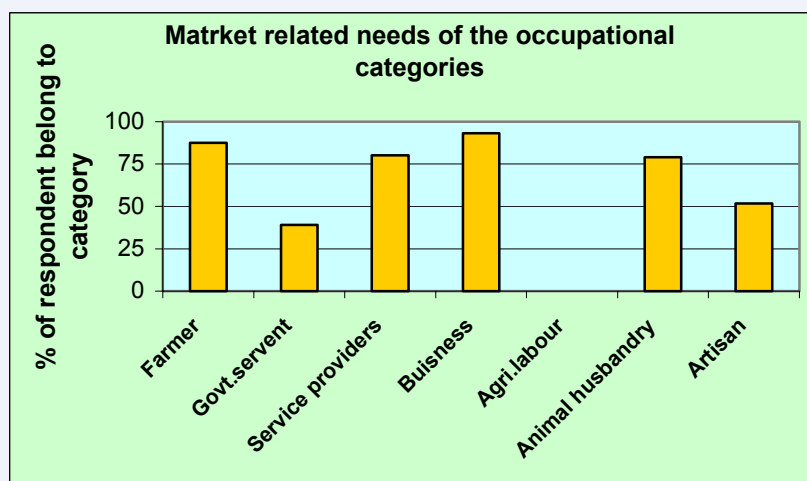
Needs priority related to Government documents and programmes



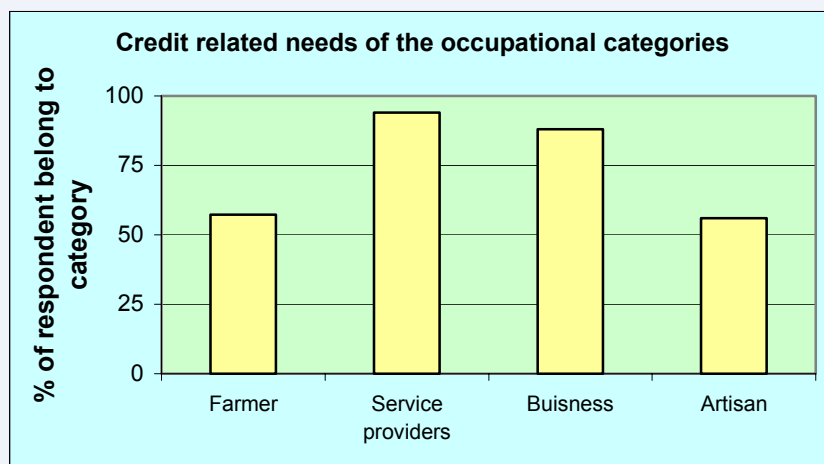
General information needs according to occupation

Sr. No	Information related to	Needs priority		
		High (More than 80% users)	Medium (50% to 80% Users)	Low (<50% users)
1	Education	✓		
2	Health	✓		
3	Govt. facility	✓		
4	Private doctors	✓		
5	Laboratory		✓	
6	Ayurvedic			✓
7	Vaccination	✓		
8	Source of water		✓	
9	Bus-timetable	✓		
10	Train-timetable			✓
11	Train –reservation			✓
12	Important persons		✓	
13	Vehicle registration			✓

Information needs for basic facilities



Market related need



Credit -information needs

Sr. No	Need priority	Certificate	Application forms	Govt. Schemes	List
1	High (More than 80% users)	Birth & death, income, Age, caste, resident,	Ration card, voter list	Drinking Water, health, education, PDS	Voter, Govt. scheme beneficiary,
2	Medium (50% to 80% Users)	Nominee, Character	Electricity	Social welfare and security, infrastructure	Ration card, BPL beneficiaries,
3	Low (<50% users)	Marriage, handicapped,	Certificates, Govt. scheme, farmer book, 7-12, 8-A, telephone, insurance,	Jyotigram, Hariyali, Sujalam-Sufalam,	Citizen

Women specific needs related Government documents and programmes

Priority Information Needs	Farming	Animal husbandry
High	Agriculture implements, seeds and fertilizer	Fodder, animal health care, vaccination
Medium	Credit, crop diseases, markets and transportation	Government schemes, dairy services,
Low	Soil testing, Irrigation, insurance, value addition and packing, weather	Storage, production of milk items. Animal purchase

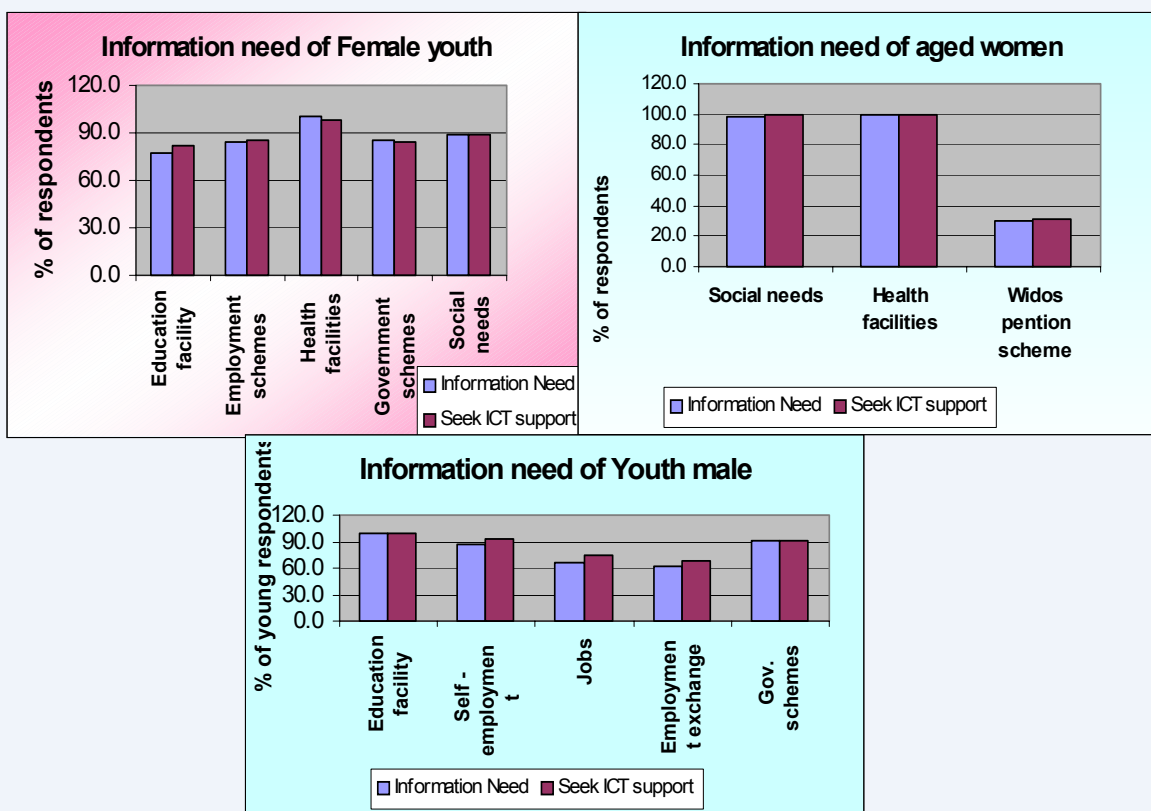
Information need of women engaged with farming and Animal Husbandry

Information Need priority	Agriculture labour	Farmer-rain fed Farming	Farmer – irrigated farming	Husbandry
High	Wage rates, employment, Govt. schemes and labour rights	Seeds, fertilizer, crop diseases and market	Seeds, fertilizer, crop diseases and market	Fodder, animal health care, vaccination
Medium		Soil testing, Agri. implements, Credits, irrigation, markets, Govt. schemes, weather, insurance	Soil testing, Agri. implements, Credits, irrigation, markets, Govt. schemes, weather, insurance, transportation	Government schemes, dairy services,
Low	Occupational health, migration and alternative livelihoods.	Storage, packaging and transportation.	Storage, packaging	Storage, production of milk items. animal purchase

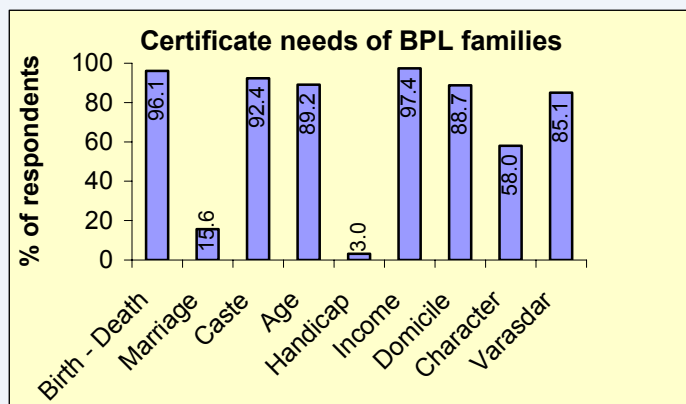
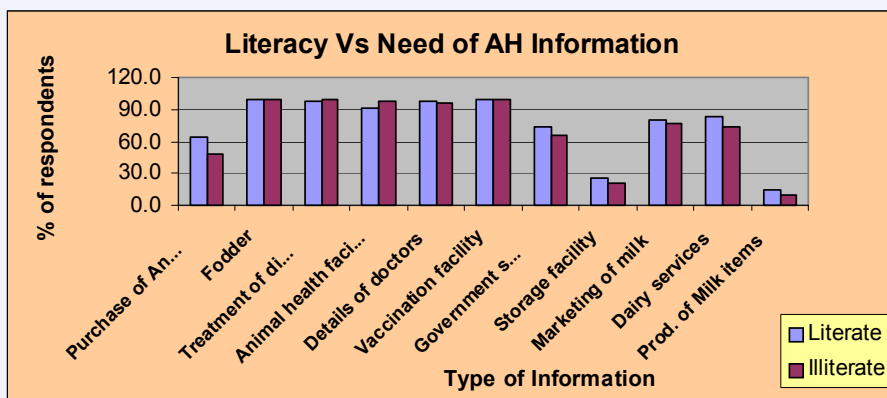
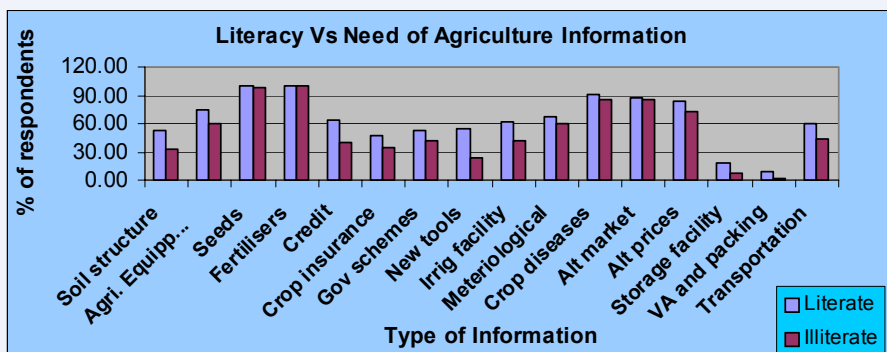
Information need according to various occupations

Information Need priority	Artisan	Service providers	Govt. servant	Business/trader
High	Govt. schemes, occupational trends, Govt. business policies	Raw material, credits, legal, markets, Govt. schemes.	Saving schemes, credits, insurance	Raw material, credits, legal, markets, Govt. schemes, transportation.
Medium	Implements, technologies, market,	Repair and maintenance	Pension	Storage
Low	Occupational health, packaging, trainings		Share markets	

Information needs of respondents engaged with non -farm sector



Age wise Information Needs



Sr. No	Need priority	Certificate	Application forms	Govt. Schemes	List
1	High (More than 80% users)	Birth & death, income, Age, caste, resident, nominee	Ration card, voter list	Drinking Water, health, education, PDS	Voter
2	Medium (50% to 80% Users)	Character	Electricity		Ration card
3	Low (<50% users)	Marriage, handicapped,	Certificates, Govt. scheme, farmer book, 7-12, 8-A, telephone, insurance,	Jyotigram, Hariyali, Sujalam-sufalam, social welfare and security, infrastructure	BPL beneficiaries, Govt. scheme beneficiary, citizen

Overall needs of BPL families for Government documents and Programmes

Sr. No	Information related to	Needs priority		
		High (More than 80% users)	Medium (50% to 80% Users)	Low (<50% users)
1	Education	✓		
2	Health	✓		
3	Govt. facility	✓		
4	Private doctors	✓		
5	Laboratory		✓	
6	Aurvedic			✓
7	Vaccination	✓		
8	Source of water		✓	
9	Bus-timetable	✓		
10	Train-timetable			✓
11	Train –reservation			✓
12	Important persons		✓	
13	Vehicle registration			✓

Information needs of BPL category respondents for basic facilities

Information Need priority	Artisan	Service providers	Govt. servant	Business/trader
High	Govt. schemes, occupational trends, Govt. business policies	Legal information, credits,	Saving schemes, pension, insurance, credits	Raw material, credits, Govt. schemes, transportation.
Medium	Implements, technologies, market, credits, trainings, marketing	Self-employment, Repair and maintenance	Share market	Storage, legal information
Low	Occupational health, packing	Extension		

Information need of BPL respondents engaged in non – farm sector

Willingness to Pay

- ✚ The survey indicates that majority of population is willing to pay for the ICT based services if provided at village level and at affordable price which indicates acceptance for charges services. The respondents belonging to illiterate, female and marginalized communities' categories have some reservation about pricing for the information.
- ✚ The analysis also shows higher willingness to pay from the lower caste especially OBC community who are lacking access to information under present situation. The respondent belongs to schedule caste showed low willingness to pay for information services. The respondents belonging to this category have expressed their concern about the cost of the services. They feel that the poor families belonging to BPL category and other vulnerable population should get the services free of cost or at a subsidized rate.

Case studies of ICT from other state

- ✚ The experiences of computer based ICT services are increasing in the country. Depending on amount of experience in use of computer in ICT, various states have achieved different levels of integration of computer based ICT services in governance. The model of e-governance is most popular among the state driven services, however, many states and NGOs have started addressing day to day needs through formation and implementation of innovative projects on ICT based services.
- ✚ The mode of operation of the computer based ICT services varies from place to place depending on the socio-economic and political situation. Broadly, the operations can be divided in two categories - In first category the state Government supported ICT based services offer services related to the Government records and schemes under e-governance model.
- ✚ The second model is a public-private partnership model offering additional services along with the services offered under e-governance by the Government. Such kiosks are also promoted by non-government initiatives mainly MSSRF and Spartek group in Tamilnadu and Andhra Pradesh.
- ✚ The technologies used for providing ICT services ranges from simple dial up to high tech and fast broadband networks which depends on availability of IT infrastructure in the state. In many cases various combinations of available technologies are also made for connecting remote locations.
- ✚ The National Alliance on ICT under the M S Swaminathan Research Foundation (MSSRF) in Chennai is a reflection of the growing recognition amongst development practitioners, academicians, the private sector and civil society organizations of the relevance of ICT for development. The alliance has more than a 100 partners provide important platform for increasing the scale of ICT services in India. The national alliance on ICT envisaged nationwide movement facilitating the “setting up of knowledge centres/info kiosks in each of India’s 600,000 villages by the year 2007”.
- ✚ National level efforts are being made for creating IT managers required for Rural Knowledge Revolution. The aim of NVA is to give recognition to grassroots ICT Managers and to build a cadre of about a million ICT grassroots leaders and master trainers over a period of time.

Recommendations

The satisfaction of information needs of the rural communities is a challenging works but possible. The growing innovations in the use of information technology have opened up new era of information dissemination. However, the objective of such initiatives needs to emphasis on satisfying the information needs of the poorest among poor and those who faces difficulties in access to information necessary for improving and securing their life. Since the application of computer based ICT services is new in India and Gujarat it is essential to look in to the sustainability and cost effectiveness of the services apart from addressing needs. Based on the feed back and experience of the existing ICT based services in the study area and experiences from other ICT based initiatives following recommendations needs to be considered before new initiatives for ICT services.

Recommendations of the study are summarized as under.

- Need to conceptualize whole system comprehensively
- Need to provide information at village-level
- Need to integrate various ongoing programs to provide total services
- Design services keeping users in the center, particularly poor and women
- Increase awareness and computer literacy among people through mass media in order to reduce gap between the users and the system
- Facilitate articulation of potential needs of the people
- The system should have inbuilt mechanism to use the massive data generated for designing and monitoring of development as well as disaster related initiatives
- Government should encourage integration of other stakeholders in its efforts as well as facilitate and participate in National Alliance on ICT
- There is a scope to expand the goal of the programme by including social and women empowerment objective. The Government should encourage and give priority to women SHGs and SC/ST youth in allocation of the kiosks in CHIRAG programme to make them agents of change.

eGovernance News

Centre of Excellence – Training Activities

GIL has created a Centre of Excellence and it is providing state of the art Information Technology Training and Support Infrastructure to the Government personnel. It is conveniently located within the Udyog Bhavan and is easily accessible by all Government departments.

Short Term Training Program conducted:

- ✚ Training on **IT Management**. Topics for the same are as follows:
 - Business Process Reengineering (BPR)
 - Strategic IT Planning
 - IT Outsourcing
 - Project Management
- ✚ Presentation on **m-Governance** (mobile Governance)
- ✚ Presentation on Laptop Lecture and Presentation on **Digital Key Certificate**
- ✚ Presentation on **IBM RISC based pSeries** products
- ✚ Presentation on **National e-Governance Plan (NeGP)** and Vision and Roadmap for Capacity Building
- ✚ **Red Hat Linux** Technical Session
- ✚ **Microsoft Office Indic Gujarati** Training to **405 Govt. Employees** of all Secretariat, 25 Boards & Corporations. More Batches has been conducted for Finance Dept, Education Dept, Agriculture Dept and GAD (personnel).

Long Term Training Programs conducted:

- ✚ Training on **.NET Technology** (40 Hrs)
- ✚ Training on **Oracle-DBA**(120 Hrs)
- ✚ **Project Management** Training
- ✚ **Microsoft Windows 2003 Server** and Messaging Technology(Currently Going on)

eGovernance News

Departmental Training conducted:

- ✚ Training on “Roaming Ration Card” to Food and Civil Supply & Consumer affairs Department
- ✚ Integrated Workflow and Document Management System(IWDMS) operational Training of Application to Legal Department
- ✚ Training on GSWAN connectivity and e-Gram by Panchayat Department

Future Training to be conducted:

- ✚ .NET Training (40 Hrs) to all Departments (Around 4 more batches)
- ✚ Training on DB2
- ✚ Training on Red Hat Linux
- ✚ Training on Oracle DBA (Around 3-5 Batches)
- ✚ Project Management Training (Around 5 batches)

Lecture and Presentation Conducted Outside:

- ✚ “Open Standards Day” on 3rd June, 2005
- ✚ Seminar on “Accelerating e-Governance Transformation” on 9th August, 2005

WEB CORNER

Invite Project Organized by GIL & IBM

<http://www.invite.co.in>

<http://www.examaterts.com>

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