Our world is changing, and information and communication technology (ICT) is central to this change. ICT has the potential to bring huge advances both economically and socially, and all of us should be able to participate and enjoy these benefits. Digital inclusion is not just about increasing access and making services widely available and easier to use but also assisting people to use ICT to make their lives richer and to engage in their community at all levels; it is about inclusion using digital means.

However, digital inclusion is not something that will happen on its own; it cannot be left to the market economy and trickle-down effect. Although ICT use is becoming more and more widespread, the divide between the people engaged in the digital revolution and those who are not is unfortunately not diminishing. In view of the different dimensions of ICT, NASSCOM Foundation (NF), in partnership with Telecentre.org, initiated the development of the Infomediary Skills module for grassroots telecentre practitioners whilst other partners from India such as MSSRF developed the Community Development module, WorldCorps the Entrepreneurship module and the Grassroots marketing and communication module developed by TARAhaat.

Info-mediary Skills. Deconstructing this term was a task in itself. Breaking it down to its constituent components was the first step, but grasping the concept in its totality took longer than we had bargained for. We were however completely confident about the relevance of this module to all telecentre coordinators, managers and operators including the NASSCOM Knowledge Centre (NKN) coordinators and felt that this module was core to the training process of coordinators. This confidence was a result of NF’s experiences in setting up 100+ telecentres across 70+ districts in 12 states in India. These telecentres are managed and operated by NGOs/ CBOs and SHGs who play the critical role of middle management in the overall NASSCOM Knowledge Network model.

A key feature of this module is that the method used to develop it was primarily bottom-up and needs-based. NF’s aim has been to leverage our core competency - crucial technology support - as a value addition to already existing processes and systems to assist in their effective implementation. This approach helped us in understanding the needs of communities, trainers, and the NKN centre coordinators, resulting in the creation of a more “grounded” module. Throughout the process, the team made sure that the module was as close to “reality” as possible and underpinned wherever possible with real world examples and case studies. The NKN centres provided ‘fodder’ for the module, and all the training was useful to the coordinators, as well as to the trainers, in terms of both what is actually relevant and useful at the grassroots, as well as to refine the module itself. However, the importance of regular relevant training was also emphasised over and over again.

NF with support from NASSCOM invests heavily in training and development for its NKN centre coordinators and partners. Hence these training and development sessions helped during the preparation and completion of the module to arrive at the structure for the same. The process also included interim feedback from peer assist meetings (organized by Telecentre.org) of the groups preparing other modules for the training commons. After incorporating feedback and suggestions from these groups and experts, we put together this holistic module which could be accepted across different organisations and models in the telecentre space. We also kept in mind the possibility of use of this module by telecentres not only in India but around the world.

One of the most commendable aspects of Training Commons was that it enabled a diverse group of organisations and people to come together and actively participate all the while learning from and contributing towards each others’ modules. Training Commons project is a great example of what can be done through collaborative means. Organisations have to be willing to buy into the concept of the Commons and proactively share their knowledge with each other before we can even begin to take the benefits of information and knowledge to the grassroots.

I wish to acknowledge the contribution and support from Telecenter.org, IDRC, SDC and Microsoft in envisioning such a need of the Training Commons. It was they who were instrumental in tapping the strength of NASSCOM Foundation to capture all our learnings and challenges that we grappled with in trying to create
sustainable telecentres. This is only possible through continuous training, re-training and capacity building program for not only our grassroot practioners / telecentre operators but also the NGO leadership that are managing these telecentres and who are a great source of strength for NF in contributing to the success of the NKN. Last and most importantly I wish to acknowledge the invaluable contribution of our Program Manager, Ms. Sagarika Bose, who captured the entire process of setting up the NKN centres, the training and case studies and examples that are so well articulated in this book. Secondly my sincere gratitude also goes to the main players in this exercise ie. our NF implementation partners and the NKN centre coordinators who animatedly and enthusiastically participated and contributed to this module. Their stories have been captured so beautifully as cases from which we can all learn.

I would like to conclude by stating that I feel confident that with training, capacity building, cross-pollination of ideas, a relevant suite of applications and services at the grassroot level, it is not that distant to dream of a time when telecentres across the globe will become the hotbed of grassroots innovations and create a cadre of social entrepreneurs who will help in making the world a much better place. Jim Collins, in his book ‘Good to Great for the Social Sectors’ states, “Social sector organisations increasingly look to business for leadership models and talent, yet I suspect we will find more true leadership in the social sectors than the business sector”.

I hope that the Info-mediary skills module will add value to your work and provide you with insights and support in making you true leaders and torch bearers in the communities that you serve.

If you have any suggestions on this module and /or any other aspects of Telecentres that we could learn from, do not hesitate to pen them down and send it to me at ceo@nasscomfoundation.org.

I wish each and every one of you the very best and may 2008 be the best year in your life so far.

December 2007

Rufina Fernandes
CEO, NASSCOM Foundation
What is a Knowledge Centre?

Information and communication technologies are new age tools that can diminish distances and eradicate isolation, speed up developmental processes and enhance the overall quality of life. A knowledge centre is a model for providing such tools to under-served and marginalised communities in order to help them access relevant information and opportunities to better their quality of life. A knowledge centre has many functions and one of the main ones is to provide ‘information services’ to the groups it serves. In order to provide such services, the knowledge centre coordinator has to become an ‘info-mediary’ or a medium to pass on relevant information to communities as well as be a conduit to pass information about communities and their practices to the world at large.

Each chapter will begin with a master illustration which will use visual elements from within the chapter. These will need to be created after the chapter pages and their component visuals have been okayed. For a sample treatment, refer to the Grassroots Marketing dummy sent earlier.
What are Information and Communication Technologies (ICT)?

India is today one of the six fastest growing economies of the world. The business and regulatory environment is evolving and moving towards constant improvement. A highly talented, skilled and English-speaking human resource base forms its backbone. The Indian economy has transformed into a vibrant, rapidly growing consumer market, comprising over 300 million strong middle class with increasing purchasing power. India provides a large market for consumer goods on the one hand and imports capital goods and technology to modernize its manufacturing base on the other. However, despite these laudable indicators, when it comes to food security, nutrition, bio-energy, environment and livelihood for rural India.

Despite such recent positive economic developments, India still suffers from substantial poverty. The Planning Commission has estimated that 27.5% of the population was living below the poverty line in 2004–2005, down from 51.3% in 1977–1978, and 36% in 1993-1994[1]. The source for this was the 61st round of the National Sample Survey (NSS) and the criterion used was monthly per capita consumption expenditure below Rs.356.35 for rural areas and Rs.538.60 for urban areas. 75% of the poor are in rural areas with most of them comprising daily wagers, self-employed households and landless labourers1.

In such a context, improvement in the standard of living could be attained to an extent by disseminating basic knowledge in the field of hygiene, nutrition, health care, appropriate technology, work organization and a few other fields.

“People lack many things: jobs, shelter, food, health care and drinkable water. Today, being cut off from basic telecommunications services is a hardship almost as acute as these other deprivations, and may indeed reduce the chances of finding remedies to them.”
- KOFI ANNAN, then United Nations Secretary-General, announcing the need for a Summit on ICTs, March 1999

Despite recent positive economic developments, India still suffers from substantial poverty. Improvement in the standard of living could be attained to an extent by disseminating basic knowledge in the field of hygiene, nutrition, health care, appropriate technology, work organization and a few other fields.
Information and communication technologies (ICT) are new age tools that can diminish distances and eradicate isolation, speed up developmental processes and enhance the overall quality of life. There are various technologies that come under the purview of ICTs. They are telephone, cell phones, computers, Internet, software systems, etc. ICTs enable societies to produce, access, adapt and apply greater amounts of information, more rapidly and at reduced costs, and offer enormous opportunities for enhancing business productivity and economic activity. ICTs can also contribute towards strengthening democracy, increasing social participation, competing in the global market place and removing barriers to modernization, making poor populations fuller agents in the sustainable developmental process.

However, there is major concern regarding ICTs - it has created a new divide, the digital divide. Like the rich-poor, urban-rural divides, the digital divide has created a new kind of poverty – 'information poverty'. Information poverty refers to a lack of access to information and opportunities which keep one from improving one's life and quality of style. Experts consider that if we are able to bridge the digital divide, we would have in essence been rid of the other kinds of divide as well. Our goal as ICT4D practitioners is to help bridge this digital divide and bring the benefits of ICTs to those populations that have been isolated from it.

Types of ICTs

► **Voice based communications** like telephone; cellular phones etc. are the primary modes of ICT that can be used without learning any specific skills.

► **Computers** are ICT tools that can be used for a host of functions starting from documentation to more complex software systems. They are used to access the Internet and perform other basic data based functions. A certain amount of skill is required to operate computers, however, since they are user friendly it does not require much formal instruction.

► **Internet** is a powerful tool that is basically a network of networks that are publicly accessible. The amount and scale of information on the Internet or World Wide Web is infinite. However, care must be taken to ensure the validity of the information one is availing.

► **Community Radio** is a type of radio service that caters to the interests of a certain area, broad-
casting material that is popular to a local audience and often uses local community members as recording artists.

Wireless communication is the transfer of information over a distance without wires.

What is ICT for Development?

“Information and Communication Technologies for Development (ICT4D) is the general term related to the application of Information and Communication Technologies (ICT) in development programmes in countries facing problems like poverty, illiteracy and a general lack of development.”

This millennium is recognized as the information age as it shall become the most important tool for the people. Also, in the current scenario against the backdrop of ICT-enabled social and economic opportunity are some statistics: one-third of the world’s population has yet to make a phone call, fewer than one-fifth has experienced the Internet, and most of the information exchanged over the Internet is in English, the language of some 10% of the world’s population (UNDP et. al., 2001). Given the right enabling environment, ICTs can be leveraged by poor countries, communities and individuals to “leapfrog” into a more empowered, equitable and prosperous future.

Why ICT as a Development tool?

- ICT offers great opportunity for enabling people to use a wide array of services that were hitherto unavailable to them like specialized medical consultancy through telemedicine, weather and best practices information through agro-extension services, and e-governance services such as birth and death certificates, drivers’ license, land records, etc.
- ICT helps in faster communication between people through the use telephone (fixed line and cell phones), email, voice over telephony, fax, etc.
- Diminishes geographical distances and provides access to data and other services that are far away from the user through online experts, online journals, databases etc.
- Can help in redefining education by individualizing content of education. This is especially true for extension services and adult education. Also localization of content is possible to a greater extent using ICT.
- Brings isolated population closer to necessary services like medicine through services like telemedicine.
- Necessary business information like weather predictions, rainfall etc can be accessed by the farmers for more planned cultivation. Also the market prices can be accessed by the farmers to know where they can sell their produce and the best margins.

RELEVANT EXAMPLES OF ICT FOR DEVELOPMENT

- **Government and Governance**, by enabling more efficient management systems and service and enhancing transparency (e-procurement, on-line databases, registries, laws, rights etc), decentralization, citizen outreach and participation;
- **Poverty alleviation** by enhancing aid management systems and facilitating social inclusion, information access and knowledge sharing in remote areas and with/among disadvantaged groups. Opportunities include: health (telemedicine and early warning systems for epidemics), education (distance learning), and social empowerment (through networking), and economic empowerment (for example: better access to relevant knowledge on agricultural production, disease control, and market prices can increase farmers’ incomes);
- **Environmental management**, including through the use of GIS and early warning systems, which can also contribute to enhanced food security;
- **Health** by facilitating interactive information/knowledge-sharing, supporting coordination efforts, etc.
What is a knowledge centre?

Knowledge Centres are “a physical space that provide public access to Information and Communication Technologies for educational, personal, social and economic development.” The centres would provide multi-purpose services to communities such as education, health, e-governance and other services by facilitating access to information and essential services, providing opportunities through capacity building and training tools using ICT as outreach platform.

SERVICES OFFERED BY KNOWLEDGE CENTRES

Knowledge centres inherently serve multi-purpose goals as the community they serve has diverse needs. Some of the popular services offered are:

► Education: IT courses, distance learning courses, vocational training, life skills
► Information related to agriculture, government schemes, law, rights and benefits, weather, market prices, disaster preparedness, etc.
► Communication facilities such as text and voice mail, fax, telephone, voice and video chat, courier services, etc.
► Domain expert support in medicine, agriculture, law, etc. through periodic meetings and/or email correspondence
► Miscellaneous: photocopy, photo studio (digital camera/web camera), lamination, desktop publishing (DTP)
► Payment of Utilities/Bills
► Registration of births / deaths
► Reservation of bus and train tickets
► Assist in identifying and tracking resources that a village has and in planning and monitoring projects
► Local govt. can update communities on various government programmes and schemes and in turn get regular updates from the village on progress on key parameters reflecting the “health” of the village
► Electronic accounting for the funds which are disseminated by the state/district administration for village activities
► Act as a collection and distribution point for farm and other agricultural products

The above list of services is by no means exhaustive and will be based entirely on the needs of the community served.

Equipment

Telecentres typically possess a combination of the following:

► One to five computers (with floppy and CD drives, Internet and multimedia) depending on population served, services offered, etc.
► Peripherals such as a scanner, printer depending on population served, services offered, etc.
► Digital camera
► Power backup – UPS / generator / solar power back-up
► Software: Windows OS, Microsoft Office suite, other optional depending on population served, services offered, etc.
What are information services?

From a knowledge sharing perspective, rural communities need to position themselves more strategically to benefit from whatever resources are available to them, both nationally and internationally. They need to speed up the acquisition of new skills and knowledge that will lead to better farming, management of the environment, and health practices to improve the quality of life. Such a plan calls for clear strategies to optimize use of all branches of the extension services in agriculture, health, small business development etc. All this can happen through the use of ICTs.

Use of information and communication technologies, such as the Internet, community radio and video is vital to communicate both locally and with the global market. Communities may use these channels to announce the products and services, from coffee, honey, handicrafts, and spices, to community-based tourism and many others they can offer. Such access to communication may also enable rural communities to learn what new products they can grow that may find a market in both urban and international markets. In the global market-place, knowledge is one of the most important tools and factors of production. It can help rural communities fight for their own survival and sustainable development.2

Information services thus become one of the most important services that a knowledge centre can offer to its community. This includes a broad array of activities ranging from the informal over-the-counter advice to customized and paid services. To state some examples:

- ‘Ask the expert’ (paid) services on agricultural and allied occupations through linkages with local universities and institutions.
- Search for specific information such as:
  - market prices and markets,
  - institutions of higher education,
  - symptoms of diseases,
  - places of tourist and religious interest
  - information for educational projects
- Over-the-counter advice such as address / telephone numbers / contact details of government offices, institutions of higher learning, medical institutions, etc.

While here we have mentioned only services which may be prompted by queries that come in from the community, the knowledge centre’s role does not end there. It is important for the telecentre operator to take a proactive role in identifying ‘information needs’ of the community. These must then be prioritized and relevant information identified to meet such needs. All this will be explored in detail in the following chapters.

Who is an info-mediary?

Most telecentres are run by a staff of 1-3 people depending on the size of the centre and the community it caters to. Apart from a coordinator or manager there is an instructor who provides IT education and in general facilitates access to various services through the use of the technology tools available in the telecentre. Either of the two persons could be responsible for delivering information services in the community, however, experience says that it is generally the knowledge centre coordinator (or the person who is ultimately responsible for the centre’s operations) who provides this service. For the purposes of this module we will call this person the ‘info-mediary’.

Info: Information + meddary: a human medium
An info-mediary therefore refers to a person who is the medium or channel for passing information

MORE ABOUT TELECENTRES

For more information on the role of a knowledge centre, how to set up and manage a telecentre and other related queries, please read:

- Toolkit for setting up Rural Knowledge Centres: As Experienced through the Information Village Research Project and Jamsetji Tata National Virtual Academy M S Swaminathan Research Foundation (MSSRF/MA/05/25)
- Make ICTs Work for People, NISG, 2004
- Ten Steps for Establishing a Sustainable Multipurpose Community Tectentre: User’s Guide; UNESCO Bangkok
Using Information within your Community

Example 1: Social Advocates

Shobha Uttam and Anjum Khatoum, manager and coordinator of the Technology For The People (TFTP) centres in Old Hyderabad city respectively talk about their experiences. Shobha and Anjum are responsible for running telecentres which started off as vocational units for young women in the area. Given the conservative values of the community, it took a long time for the telecentre management to form a base of trust for itself within the community. Almost a year down the line they heard that one of the young women (not yet eighteen) from their community was going to be married off to a wealthy widower Sheikh from Dubai with several children. When this news came to their ears, Shobha and Anjum decided to act upon it and tried to counsel the family to no avail. Instead abuses were hurled at them and the elders of the community told them that they were infringing on traditional practices and threatened the very existence of the centre. The knowledge centre went through a tough period trying to regain its footing in the community. Though this did not stop either of them, the girl was secretly married off and they could do nothing to stop it. They have learnt their lesson, however, and do their best to empower the girls about their rights as individuals and women. The girls and their future will determine whether Anjum and Shobha’s teachings have gained root in the young minds.

Example 2: Social Advocate

The Sagroli village is located on the border of Maharashtra, Andhra and Karnataka. Since 1960, right from inception of the state of Maharashtra there is a sustained apathy from the govt. authorities at every level and providing basic civic amenities like road, drinking water and health. It is strange that a village of Sagroli with a population of 10,000 has no all season road. People have to walk at least 5 kms for a tar road. In rainy season the situation is unbelievable. Since 2 years the govt has auctioned the sand of the river Manjira worth Rs. 2 Crores for period of one year. This has made the road busy with traffic of about 400 heavy trucks in a day transporting sand. This has made the 5 k.m. road worst. It has very badly affected health of people, developing breathing problems, spondalytis, and many other diseases that we never heard the names. The dust

ROLES OF AN INFO-MEDIARY

An info-mediary can play two possible roles in a telecentre. These are outlined below:

► Information Agent: This is the role where s/he provides information of immediate relevance and demand in the community.

► Social Advocate: In this role, the info-mediary has to pro-actively hunt for social issues in the region and try to identify possible solutions and then mobilize the community to act upon the possible solutions.

It must be noted that in the second role the info-mediary must play a balancing act between helping the community rid itself of social ills without offending cultural and traditional practices which might disrupt the running of the telecentre. This is a tough balance and grassroots experiences provide no easy answers.
Being an Info-mediary

In the previous section we have understood who an info-mediary is and what his/her roles can be in the community. In this section, we will focus on the personality traits and skills required to be an efficient info-mediary.

A trait is a *distinguishing quality* or an *inherited characteristic*.

A skill is a *learned power* of doing something competently or a *developed aptitude* or ability.

Ramesh is enthusiastic about bringing change in his village and educating people about AIDS. Enthusiasm is his *personality trait*.

He is a good designer and has produced a poster with which he intends educating people about AIDS. He has good communication *skills*.

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spreading in air is accumulating on the road side crops like cotton and jowar etc. It has totally destroyed the crops and hopes of the poor farmers. Even after continual follow up, agitations, rasta roko nothing has materialised. At this stage the people approached SSM. After discussion with the people we decided to adopt innovative way of the GANDHIGIRI. People purchase da post card from the local post office. Nearly 2500 people including women and children representing sections and cross sections of the society we wrote letters to various govt. depts including collectors office, transport, B & C, tehsil, police, etc. the SAKAL newspaper took note and gave vast publicity. The school children mailed to Mr. Kalam, president of India. For the week over it was just a mission for the village. No other subject to talk. When the hundreds of post cards were pouring the govt offices, they awakened and started visiting the village. We received call from the collector office promising repairing the road. Still the post card flow was continued and at last the repairing started. Hope the new road will be good enough all season. Thanks to Gandhigiri and the internet facility made available in the village.

*Shital Kumar Joshi*, Co-ordinator VKC Sagroli, Dist. Nanded Maharashtra 431731, [www.ssmandal.net](http://www.ssmandal.net)
Using Information within your Community

The list given below has been put together by telecentre operators from across the country. However, all participants realized that while the list may be exhaustive, finding a person with all these qualities would be next to impossible. Therefore, it was agreed that it is important to come up with one’s own basic list. It is important to note that while skills can be learnt, a trait is an existing quality which is difficult to change or modify.

What are these skills and personality traits?

**Personality traits**

- **Flexibility**: The quality of being adaptable to the environment. Able to effectively multi-task in the knowledge center.
- **Respect for community**: The community in which the knowledge center functions is the client group of the knowledge center. Therefore, to be able to effectively involve them in development the coordinator has to be able to effectively communicate with them and involve them, which is possible only with respect.
- **Dynamism**: Energetic and enthusiastic, actively participating in everyday processes and coming up with new ideas and implementing them.
- **Enthusiasm / dedication / proactiveness**: The coordinator should be totally bound to the work s/he does and its fulfillment to his/her best capacities.
- **Non-judgmental / unbiased attitude**: The coordinator should not hold any partiality or prejudice for or against any community group thus ensuring maximum community participation.
- **Patience**: Patience is the ability and willingness to wait a long time or to carry out difficult\time consuming tasks. It also means not easily getting angry or not showing anger in situations of human communication where the other is unreasonable.
- **Empathy**: Feeling of concern and understanding for another’s situation or feelings.
- **Innovation**: Innovation is the introduction of...
new ideas, goods, services, and practices which are intended to be useful.

➤ **Creativity:** Creativity is a skill of originating new functional ideas or concepts.

➤ **Attitude for life-long learning:** Since learning is not a one time process, it is important that the coordinator is open to life long learning i.e. an ongoing gathering of knowledge, information and skills.

**Skills**

➤ **Communication skills:** The set of skills that enables a person to convey information so that it is received and understood. Communication skills refer to the repertoire of behaviors that serve to convey information for the student.

➤ **Domain expertise:** The center coordinator is expected to have sound understanding and knowledge and skills specific to ICTs. This expertise is necessary to help disseminate information.

➤ **Time management:** Time management is tools or techniques for planning and scheduling time, usually with the aim to increase the effectiveness and/or efficiency of time use.

➤ **Analytical/reasoning skills:** These skills are those that enable a person to take informative and value based decisions keeping the consequences in mind. These skills help the center coordinator to analyze the situation at hand and take the best course possible using his/her skills.

➤ **Negotiation skills:** Negotiation skills are the ability to communicate, discuss and agree on something among people with differing objectives and viewpoints.

➤ **Public speaking / presentation skills:** Presentations and public speaking have to be precise, concise and be able to effectively pass on information to the intended target group/audience.

➤ **Facilitation:** A process of decision-making guided by a facilitator (Coordinator) who insures that all affected individuals and groups are involved in a meaningful way and that the decisions are based on their input and made to achieve their mutual interests.

➤ **Counseling:** A knowledge center coordinator often has to deal with various problems of his/her students. Therefore it is necessary that s/he has the skill of listening, analyzing, understanding and effectively communicating various alternatives of dealing with the problems.

➤ **Translation:** Translation is the ability to translate content/exercises in local language for maximum impact on the target group.

➤ **Planning:** The coordinator should have the ability to set organization goals and targets that can be achieved. Also a part of planning deals with thinking of strategic objectives that could help provide maximum benefit of ICTs to the service population.

➤ **Leadership skills:** It is a critical management skill comprising the ability to motivate a group of people (here the stakeholders) towards a common goal.
SUMMARY

- Information and communication technologies are new age tools that can diminish distances and eradicate isolation, speed up developmental processes and enhance the overall quality of life.

- Technologies such as computers, radio, cell phones can help provide many developmental services such as those related to education, health, livelihoods, environment, etc.

- A knowledge centre is a model for providing such tools to under-served and marginalised communities in order to help them access relevant information and opportunities to better their quality of life.

- A knowledge centre has many functions and one of the main ones is to provide ‘information services’ to the groups it serves.

- In order to provide such services, the knowledge centre coordinator has to become an ‘info-mediary’ or a medium to pass on relevant information to communities as well as be a conduit to pass information about communities and their practices to the world at large.

- An info-mediary can take on roles of an ‘information agent’ and a ‘social advocate’.

Glossary

- **Information and communication technologies (ICTs):** There are various technologies that come under the purview of ICTs. They are telephone, cell phones, computers, Internet, software systems, etc. ICTs enable societies to produce, access, adapt and apply greater amounts of information, more rapidly and at reduced costs, and offer enormous opportunities for enhancing business productivity and economic activity.

- **ICT for development (ICT for D):** ICT for D is the general term related to the application of ICT in development programmes in countries facing problems like poverty, illiteracy and a general lack of development.

- **Knowledge centre / Telecentre:** Knowledge Centres are “a physical space that provide public access to Information and Communication Technologies for educational, personal, social and economic development.”

- **Information Services:** Acquisition of new skills and knowledge through ICTs in order to access better farming techniques, management of the environment, and health practices to improve the quality of life can be referred to as information services.

- **Info-mediary:** An info-mediary therefore refers to a person who is the medium or channel for passing information.

- **Information Agent:** This is the role where s/he provides information of immediate relevance and demand in the community.

- **Social Advocate:** In this role, the info-mediary has to pro-actively hunt for social issues in the region and try to identify possible solutions and then mobilize the community to act upon the possible solutions.
EVALUATION

A. Question and Answers
a. Describe how different ICTs can be used for development.
b. State the different kinds of information services that can be provided in a knowledge centre.
c. Who is an info-mediary? What role can s/he play in a community?

B. Identify a major social issue in your community (one that is related to traditional practices but against fundamental human rights). Now think of a plan to tackle this issue sensitively.

C. Exercise: Go through the list above and put together your own basic list of traits and skills for a good info-mediary.
Information and Communities

This chapter will help you understand the importance of information and its role in communities; the difference between data, information and knowledge; the importance of understanding a community's information needs; establishing a two-way process to collect and disseminate information in communities.

By the end of this chapter, a learner should be able to understand:

► Have a clear understanding of the importance of relevant information to communities
► Have a clear understanding of the difference between data, information and knowledge
► Be able to develop a plan on how to gather the information needs of a community
► Be able to plan and operationalise a two-way information & communication flow between a knowledge centre and the community it serves
WHAT IS INFORMATION?

Information could be:
- Knowledge derived from study, experience or instruction.
- Any kind of knowledge which is derived from study, study means by reading books, magazines, journals, newsletter etc. Experiences which an individual gains with the passage of time, instruction which we get from our seniors or by reading something.
- Knowledge of specific events or situations that has been gathered or received by communication, intelligence or news.

WHAT CAN BE DONE?

Sikanderpur is an urban village on the Delhi-Gurgaon border. Despite being a part of the NCR, its inhabitants face many health problems. Common in the monsoon months are mosquito borne (vector borne) diseases.

What can be done?

WHAT CAN SHE DO?

Shanti and her family are daily wage earners. She received a Summons (in the form of a letter) from the District court of Chandrapur to appear as a witness for the prosecution for a case. Shanti does not know which case they are referring to and why she is being called. Going to the district town will cost her a day’s wages. What can she do?

WHAT CAN HE DO?

Raju is a bright 18 year old boy. He lives in Siripur village in Orissa. He is the captain of the local cricket team and has organised many inter-village cricket tournaments. He recently appeared for his class X exams; he has failed these. What are his options?

WHAT CAN HE DO?

Ajit Gorde is a marginal farmer in the Satara district of Maharashtra. Alongside his main crop he often grows vegetables such as tomatoes to sell. Sometimes he gets a good rate, sometimes not. He wants to get the best rate for his vegetables every time. What can he do?

What is the importance of information in communities?

A wise man once said, “As a general rule the most successful man in life is the man who has the best information.” Information can provide access to new learning opportunities, new ideas, services, products, to help people make their own choices. In addition, reliable and up-to-date information about government policies and programs allows people to become better citizens. It is for this reason that information is considered equivalent to power.

In each of the above cases, the solution is a piece of information. Most of us possess this information. How can we reach it to uninformed communities?
Every monsoon, the village of Sikanderpur faces many cases of malaria. This happens every year without fail.

While many community members in the village are aware that mosquitoes spread malaria, they are unable to think of what to do.

One of the first steps to address this issue is to make sure that all stagnant bodies of water are either removed or treated.

This along with other precautionary steps can easily help stem the cases of malaria and have a positive effect on the health of people in the community.

Information can be on any topic under the sun – agriculture, fishing, soil, education, vocations, economy, nuclear science, nanotechnology, etc. However, in our context, we will focus only on the kinds of information that can help a member of our community improve their life / lifestyle. Therefore, relevant information in our context would refer to anything related to agriculture and agri-business, child and maternal health tips, soil condition, weather, crop prices, condition of roads and transportation, vocational courses, rights of the girl child, schemes available from the government, awareness about HIV/AIDS, procedure for grievance redressal, etc.

If you consider the examples on the previous page, you will notice that there are roughly two kinds of information:

- **A more or less static** (although new developments, research and changing cultural notions do not make this kind completely static) base of information such as agriculture and agri-business, child and maternal health tips, soil condition, weather, crop prices, condition of roads and transportation, vocational courses, rights of the girl child, schemes available from the government, awareness about HIV/AIDS, procedure for grievance redressal, etc. The validity of such information lasts longer.

- **Dynamic** information such as weather information, crop prices, examination results, classified / yellow page type information, job vacancies, etc. The validity of this kind is also very short.
Are information, data and knowledge the same?

We often use these three words – data, information and knowledge - inter-changeably. While this is largely acceptable, it is important to note the difference as applies to our context.

The whole purpose in collecting data, information and knowledge is to be able to make wise decisions. Let’s understand this with an example.

In simple terms

**DATA** is the basic unit of information

**INFORMATION** is the basic unit of knowledge

**KNOWLEDGE** is the basic unit of wisdom

Sunita might know that in 1998 there were no computer centres in her village or block town. In 2000 one centre was started in the block town. In 2002 there were two centres. At present there are 7 centres in the block, her village and surrounding villages. **This is data.**

When Sunita and her community members start to realize that the definite increase in computer centres is a pattern and many people are getting employed. Some of these centres offer more than computer education. **This is information.**

Apart from a being a source for jobs, IT can facilitate other things such as education, health based services and governance related services. There is more to computers than merely computer education. **This is knowledge.**

In this example, the journey from data to knowledge took a few years to evolve; it may take place faster in other circumstances. The role of the knowledge centre coordinator is to keep abreast of the latest relevant information and knowledge in the outside world and keep relaying this to his/her community. However, how will he know what information is relevant to his community? What steps can he take to find out the information needs of his community?
What information is relevant to communities?

When we talk of rural development and leveraging the power of information and communication technologies one needs to understand rural demographics. In a country like India, the existence of a huge infrastructural gap and a total lack of governance practices such that after more than 60 years of our independence we are still struggling to provide for proper drinking water are stark facts of life in rural India. Further, there is a lack of basic health facilities and proper educational facilities. Our challenge is twin fold - provide a platform to bridge the digital divide as well as act as a facilitator for proper holistic development of the areas.

As a knowledge centre coordinator, you probably already base your work decisions on what you know about your community’s needs. If you are involved in community activities and events, you will be familiar with your locality’s socioeconomic make-up. A full-scale needs assessment, like the one outlined in the module on Community Development, will probably not be necessary. However, you may find it useful to familiarize yourself with the process. Should you feel that there is a need to carry out a needs assessment, this section helps you decide how best to go about it and what you can expect to gain from doing one. By following the steps outlined here, you can help organize your study and reduce both time and costs.

Knowledge centre coordinators who will be manning such centres in rural hinterlands of the country need to start by understanding and identifying the local user needs before embarking on a process of establishing a knowledge centre. The process of understanding community needs can be done through the following steps:

- Assessing Community Information Needs
- Gathering Information on Knowledge Needs

AN EXPERIENCE: Anita Jadhav, Satara, Maharashtra

When we started our centre we had to face a few social and economic problems. We had to start our Agro Clinic and for permissions we had to do many rounds of the district administration for the license. We started our nursery and here we also had to take proper care on the seed sowing process for proper results. Also later when these seeds were planted the farmer fields we also kept a watch over the way the plantings were done. When we able demonstrate the proper use of modern technology to the farmers they started to come to us. After the nursery we started the agro clinic and we also conducted awareness meetings along with the Agriculture Department under different government sponsored schemes for the clinic to take off in a proper manner. We also used films and CDs to convince the farmers on the use of modern technology. It took some time as there was apprehension on the realistic returns as shown in the films but eventually we were able to demonstrate results and convince them all.
Assessing Community Information Needs

Communities are socially, economically and culturally heterogeneous. This diversity in the social fabric needs to be understood. Therefore most telecentre projects try to recruit local people who are already aware about neighboring conditions. Local coordinators are also aware of the most influential members of the community who can be tapped to promote the knowledge centre and spread awareness about the potential of the centre. Later in the chapter we will talk about how this can be done.

However, even if the coordinator is local, intuitively knowing the problems of the locality are one thing and expressing and prioritizing them in a manner which would result in a solution is another. The module on Community Development explores in detail the different methods of Participatory Rural Appraisal (PRA) which can be used to do a community needs analysis. In this module we will endeavour to give you handy tips to help you in the process.

In order to establish the information needs of the community, two points need to be kept in mind:

- **Access** to information hitherto and the means through which this was done.
- **Local attitudes** must be factored because existing behavioral patterns resist change unless there is a direct perceived benefit (which may not always be possible to demonstrate in the short term especially with regard to social issues).

Two factors that will help coordinators blend in with the community are:

- **Ability** to cater to the diverse groups
- A sense of **assurance** must be transmitted to locals to give a feeling of comfort and buy-in with the project. This can only be done if one becomes a part and parcel of the local community.

Example: UNICEF’s Sisu Samrakshak is an ICT based child and maternity training tool. When this was first piloted in Andhra Pradesh, Karimnagar district, caste equations in a particular village were initially next to insurmountable. To begin with, coordinators, set up different time slots for different caste groups in order to avoid conflict. With time and dedicated work by the coordinators, different women’s groups were brought together and their common needs overrode caste barriers leading to no further problems.

Gathering community information needs

Identifying needs can be helpful at almost any point in your initiative. In fact, it can be done on an ongoing basis throughout your initiative.

There are many ways to identify local needs and resources. You can interview key people, hold community meetings or focus groups, or follow one of a number of other methods. The most important part of identifying local needs and resources is listening to the insights of group members, community members, leaders, and others while incorporating community data and history into the analysis.

**Phase 1: Brainstorm!**

Before you start the needs assessment process, take some time to think broadly about what you’re really after. Are you interested in finding out the health needs of the entire community, or are you going to focus on the services a targeted group is receiving? Determining the focus of your area of interest is a key first step to putting together a useful, usable plan. Ask yourself:

- What are the top five or ten pressing issues facing my community?
- What are the priorities of the local people?
- Which issues, questions, and behaviors are of particular interest to our organization, and why?
- What don’t we know about these issues, ques-
Using Information within your Community

- What do we already know about the needs and available resources around this topic in our community?
- Are there a few selected experts in the community who can answer some of our questions before we finalize our questions? (Their input may narrow the remaining questions you need to ask other community members.)

**Phase 3: Decide what you still need to know, and finalize the questions you will ask.**

This is the time to review the questions you created in brainstorming sessions and in initial inquiries with colleagues. But before going out into the community with the newly formulated questions, run them by your group one more time to make sure that they will clearly convey your interests. Also, talk to a couple of influential people outside your organization, and refine your questions with the help of their edits. Once this process is complete, your group should have a set of questions to ask designated community members.

**Phase 4: Identify your target population.**

Who in the community has the information that will help you answer the questions you have formulated? Probably, a wide range of people can help answer the questions; you will want to identify those who will provide the most useful information. For example, if you want to learn why drains are clogged, you will need to talk to Panchayat members. However, the Gram Sevak and the ANM may also be excellent resources.

Once you’ve identified your target audiences, you may wish to revisit the questions you plan to ask and make sure they’re appropriate for each group. For example, community members, Panchayat, and PHC officials will all have slightly different perspectives on the problem of water borne diseases, and will likely identify different problems as the root cause.

**Phase 5: Decide what methods you will use to collect information.**

The next step is to determine which method you will use to collect information. For example, individual interviews followed by a survey is an excellent combination if your organization has a large enough budget. Calling influential community members is useful if the issue is acute or if you are already knowledgeable in the area.
Regardless of the method you choose, it is important to take into account:
- The amount of time available
- The number of people assisting you
- Available resources
- The size and characteristics of the target population(s)
- Your relationship with the target population(s)

Volunteers from the community provide several advantages in helping with the needs assessment - they don't cost anything (or very little if you offer them a small stipend for their time) and they save telecentre staff time. One of the disadvantages in using volunteers to help with needs assessments is that they may present a biased interpretation of what the community needs; thus, it is important to select volunteers who reflect a broad array of the community. In addition, it may be difficult to find volunteers who are willing to devote their time to this process and who have experience in performing research and would also need to be trained.

Some options apart from the PRA techniques outlined in the module on Community Development are given below:
- **Listening Sessions:** Listening sessions are public forums you can use to learn about the community's perspectives on local issues and options. They are generally fairly small, with specific questions asked of participants. They can help you get a sense of what community members know and feel about the issue, as well as resources, barriers, and possible solutions. For example, informal gatherings in the village square.
- **Panchayat meetings:** They tend to be both larger in number of participants and broader in scope than listening sessions. They are gatherings where citizens discuss important issues at a well-publicized location and time. They give people of diverse backgrounds a chance to express their views, and are also a first step toward understanding the community's needs and resources. A good public forum informs the group of where the community is and where the members would like to go.
- **Talking to Community 'Gatekeepers':** Key informants of the community (also known as “gatekeepers”) are people who hold socially responsible positions (such as educators, public officials, priests and business representatives), or are active in community events. Key informants, by virtue of their positions in the community, have wide contact with people in the community; typically community members turn to key informants for help in answering their questions. By interviewing key informants, you can get a better understanding of their impressions of the library needs of the community. However, this method provides subjective data since it is based on opinions that may not reflect the needs of the entire community.

**Phase 6: What is missing? What are the limitations of the assessment or study?**

Once you’ve identified your questions, your audience, and your data collection methods, you’re almost ready to implement your plan. But first, it’s a good idea to review your plan and identify and fix, to the extent possible its limitations. Taking a look at the weaknesses in the method you are using can strengthen the study or prompt supplemental ideas. Evaluate the effort that you have put together, and build from what you find.

**Phase 7: Determine whether you have the resources to conduct the study.**

Make sure you have the resources to conduct the study. This is something you should have held in the
Using Information within your Community

Phase 1: Brainstorm!

Phase 2: Start with what you know.

Phase 3: Decide what you still need to know, and finalize the questions you will ask with your colleagues.

Phase 4: Identify your target population.

Phase 5: Decide what methods you will use to collect information. A survey, for example.

Phase 6 and 7: Decide the limitations and determine whether you have the resources to conduct the study.

To sum it up

Needs and resources are really two sides of the same coin. Without each other, they don’t buy much! In order to get a comprehensive view of your community, it is important to look at what you have and what you need. With these things in mind, you can have a positive impact on the problem you wish to address. Understanding your community in this manner will also help your organization clarify where it would like to go and how it will get there.
WHAT KIND OF INFORMATION WILL BE COLLECTED?

If the needs assessment is being done for the first time, it is sometimes a good idea to collect general information about the community as well.

- **Historical Development**: To help you understand how the community became what it is today and to provide insight into the kinds of resources to collect and weed;

- **Geographical and Transportation Information**: To help you understand your community’s growth patterns and population distribution;

- **Political and Legal Factions**: To help you decide strategies for community-based selection;

- **Demographic Data** (e.g., age characteristics, size, race, and transience of the population): To help you recognize the demographics of your community and identify population distribution changes;

- **Economic Data**: To help you identify your community’s economic base;

- **Social, Cultural, Educational and Recreational Organizations**: To help you determine your community’s values and social patterns.

On finishing the information needs study, you must:

- Rank the needs expressed in order of priority expressed by the community

- One must also take into consideration what issues can be addressed given limited resources, urgency of the problem, etc.

- At the end of this process, it is a good idea to share your findings with the community in some way: holding a group meeting, creating displays in the centre.
empowers people to solve intelligently the problems that exist in their community. The spread of new information (also called innovative ideas) in society follows a four-step process: the awareness stage; the interest stage; the examination and testing stage; and the adoption/rejection stage.

STEP 1: Awareness stage

In this first stage, individuals in the community get information on a new idea or useful practice. This new information creates an environment that allows people to start thinking about the new practice. Examples of such innovations may include, for example: a new hybrid seed, soil conservation, or use of condoms to combat HIV/AIDS. The first stage implies that the information is provided in such a way that people are able to understand the new idea/practice. They understand the language, format, and the steps in adopting the idea/practice.

STEP 2: Interest stage

Most information flow models show that a few individuals in every community are quick to take hold of new ideas. These people pass on these ideas to the rest of the community. These individuals are often called information ‘gatekeepers’ or, sometimes, opinion leaders. They also act as role models by adopting new ideas quickly, so that other members of the community can imitate and learn from them. Many members of the community may be afraid to adopt new ideas/practices. They fear the risk involved. They may sense that they lack adequate information about the new idea/practice to feel confident about its value. If the new practice is attractive because it addresses a need in the life of an individual or community, people may start to develop an interest in it. They will try to find out more about the idea/practice. This may lead to a search for more information. Those seeking more information become excited and interested. They

Understanding the information process

Rapid human development depends on the creation of a strong civil society. Community members build their capacity for integrating information and knowledge into their various development activities. Such capacity

The Flow of Development Information at the Grassroots Level

STEP 1: Awareness stage
Babu hears about Tulsi farming from the radio.

STEP 2: Interest stage
He goes to the office mentioned in the radio programme and meets the expert.

STEP 3: Examination and testing stage
The expert sends his team to examine the soil and help Babu set up an organic Tulsi growing farm.

STEP 4: Adoption/rejection of the new practice
After one season, Babu sold his crop for a good profit to the official. Encouraged by his success, other farmers in the village too want to take up Tulsi growing.
stimulate the rest of the community. Conversation and discussion play an important role at this stage.

**STEP 3: Examination and testing stage**

In this stage, the idea that passes the interest stage is tried out on a small scale. There is some evaluation and consultation to see whether the idea / practice is worth trying out. This could involve physical or virtual tours. For example, in the case of certain agricultural practices, people may be taken to see a new crop / plant at an agri-research station, or to see what happens on a farm plot where manure has been applied. Alternatively, films or CD-ROMs on the new technique or idea may be shown to interested groups.

**STEP 4: Adoption/rejection of the new practice**

After the three stages have been completed, a decision may be taken to adopt or reject the new idea/practice. Some of the factors to influence the decision are:

- **Income levels or level of disposable income available and / or required for new project**
- **Risk involved and / or anticipated in new practice**
- **Individual / community priorities (depends on new topic introduced, i.e. if it is a new agricultural practice, individual farmers may be motivated to start it. However, if the topic introduced is more social in nature such as child marriage or girl child empowerment, community attitudes determine success.)**
- **Self-confidence is important if individuals are to successfully adopt a new behaviour or implement a new practice**
- **Successful role models set a good example**
- **Good leaders, who encourage and reassure people about what they can achieve if they work together in the community, are extremely important in taking on challenging development tasks. This would mean recruiting influential people in the community into the project early on.**

New ideas/practices are likely to be adopted if they have the following characteristics:

- **Relative advantage:** This term is used to define the extent to which the new practice is seen as better than the one it is replacing. If the new idea is risky, harder to implement because it requires too much work, or expensive, it may not be acceptable for adoption by the community. Risks may be financial or may involve the lack of adequate information. The relative advantage of a new idea needs to be communicated within the community to create an environment that allows the rapid spread of new ideas.

- **Compatibility/suitability:** This term is used to define the extent to which the new practice is in harmony with the needs, values, cultural system, and power system of the members of the community. If there are too many changes required to be made by members of the community, in order to accept the new practice and make it compatible with the existing cultural and value system, people may resist adopting the new idea/practice.

- **Complexity:** This factor refers to how difficult it is for people to apply the new practice. If applying the new practice is found to be too hard for members of the community, individuals may find it impossible to follow it. If the new practice has too many steps to follow, this may also limit its popularity in the community and hence its application.

- **Observability:** This factor refers to a possibility of testing out the new idea/practice on a small scale at first. If the results can be seen and be proven (demonstrated) to potential adopters in the community, they will want to adopt it.

The process of adopting new ideas can be speeded up through the participation of members of the community. They will then know what to adopt. It will be easier to decide. They will feel free to express their knowledge and information needs, and other needs they have, to build capacity to deal with the expected social changes. Wider participation by members of the community may also help in identifying other structural limits that prevent the adoption of new practices. Examples of limits, for example, are the shortage of: land, financial resources, transport, and marketing information. The community can then address these problems in order to support the adoption of new ideas and practices. People need both technical knowledge
Using Information within your Community

and awareness-raising information. These types of information/knowledge are not separate from other areas of life. They are part of the development process. In the process, information and knowledge become a development resource. This information resource gives the community power over their environment and life in general. In some cases, the development of rural people is not a priority for experts, top politicians and civil servants working from the capital cities of Africa. It is, therefore, important for rural communities to take up the responsibility of organizing themselves and ensuring that their community has access to adequate supplies of information and knowledge to support their development. In many cases in Africa, if rural people do not take up this challenge, there is no one else who will do it for them.

SUMMARY

- Any kind of knowledge which is derived from:
  - study, by reading books, magazines, journals, newsletter
  - experiences which an individual gains with the passage of time
  - instruction from seniors / elders

- Information can be both static and dynamic.

- Data, information and knowledge are often used interchangeably but have different meanings.

- In order to provide relevant information to communities, one must do a information needs assessment.

- It is important to understand the four stages of the flow of development information at the grassroots - awareness, interest, examination, acceptance / rejection. Keeping this model in mind, one can plan to provide information services to grassroots communities.
Glossary

- **Data**: factual information (as measurements or statistics) used as a basis for reasoning, discussion, or calculation, but on its own may have little significance.

- **Information**: A collection of data or facts derived from study or instruction which can be of some relevance.

- **Knowledge**: Facts or ideas acquired by investigation, observation, or experience which can be applied in multiple situations.

- **PRA**: Participatory rural appraisal (PRA) is a label given to a growing family of participatory approaches and methods that emphasize local knowledge and enable local people to make their own appraisal, analysis, and plans. PRA uses group animation and exercises to facilitate information sharing, analysis, and action among stakeholders.

(Evaluation)

A. Answer the following questions:

1. Give instances of static and dynamic information.
2. What is the difference between data, information and knowledge? Substantiate with examples.
3. Describe the steps involved in studying the information needs of your community.
4. What are the problems due to which a new idea may be rejected by the community? What can be done to avoid such pitfalls?

B. Go back to your community and conduct an information needs analysis. Write a report on your findings and send it back to us. The report must contain the prioritization of the needs expressed by community members.

(Footnotes)

1 Benjamin Disraeli (1804 - 1881)
2 This section has been adapted from Community Tool Box: http://ctb.ku.edu
3 Adapted from: Sharing Knowledge for Community Development and Transformation: A Handbook; Written by Kingo J. Mchombu; DLR International in Canada for the Oxfam Horn of Africa Capacity Building Programme, with support of Canadian International Development Agency (CIDA), August 2004
4 http://www.worldbank.org/wbi/sourcebook/sba104.htm
Locating and Collecting Information

This chapter will help you identify sources to collect information from both internal (within the community) and external (mass media, institutions, experts, etc.) sources. It details the relative advantages and disadvantages of the various sources and provides handy tips to the knowledge centre coordinator.

By the end of this chapter, the learner will:

- Be able to list sources - internal and external – of information.
- Have a clear understanding about how to go about collecting relevant information for the community.
- Have a clear understanding about the ethics involved in information collection and dissemination and relate to the reasons to abide by them.
In the previous chapter we discussed the importance of information for the development of communities and in order to provide a wide variety of opportunities to people. In this chapter our focus will be to understand different sources where telecentre coordinators may be able to locate relevant information for communities. In addition, we will discuss the relative advantages and disadvantages of these sources. A handy list of government websites providing key information about schemes and projects is appended.

Experience on-ground has shown that most people (indeed often many telecentre operators) think that all the information needs of the community can be met by external sources such mass media and government sources. This is completely untrue. Apart from the gatekeepers of the community, village elders are often a key source of information on indigenous knowledge. Indigenous or traditional knowledge with respect to agricultural practices, health, medicine, handicrafts and other areas are available within most communities. It is important to tap such local sources for two reasons – to meet information needs in related fields and to capture such dying practices for the sake of history and preserving our national heritage.

To sum up, there are two sources of information:

➤ **External sources**: Mass media, experts, government institutions, etc.

➤ **Local sources**: Influential people in the community or ‘gatekeepers’, local markets, government functionaries in the village community, keepers of traditional or indigenous knowledge, i.e. village elders and specific families or groups that practice certain crafts.

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### EXTERNAL SOURCES OF INFORMATION

Information from the world at large is available through many different types of media - people, institutions, books, government bodies, newspapers, radio, television, the Internet. This can sometimes be overwhelming, especially for new telecentre coordinators - where do I look for information on new schemes; where can one find ideas on new agricultural practices; students in my village are asking about higher educational courses in the states and scholarships they can avail; and so on. We therefore have a handy guide to help you get started off.

#### Education

➤ **School education**: Village education committees and Education Officer at Block / Taluqa level, SCERT diads.

➤ **Tertiary education**: Newspaper advertisements, websites of AICTE, UGC, ministry of education at state level

➤ **Scholarships for backward communities**: Newspaper advertisements, ministry of education offices and websites, etc.

#### Health

➤ **Preventive health**

- Immunizations and inoculations: Newspaper advertisements, radio announcements, local PHC, village ANM and Gram Sevak
- Public hygiene and sanitation: Local PHC, village ANM and Gram Sevak

➤ **Health system and grievance redressal**: Local PHC, village ANM and Gram Sevak

#### Agriculture and allied services

➤ **Agriculture and allied services**: Agricultural extension offices and extension officers, sales agents of agri-based companies; agricultural experts

#### Self-employment

➤ **Self-employment**: Banks and micro-credit institutions

#### Jobs

➤ **Jobs**: Employment exchange

#### Marginalised groups
It is important to remember that this is a guide to seek information and is by no means either comprehensive or exhaustive, i.e. you may need to look for information in other ‘locations’ as well.

While information may be more or less available in the above-mentioned sources, it is up to the person seeking the information to sift through the available sources in order to locate valid, relevant and useful information. In rural communities, where information is a scarce community, this task falls upon the telecentre coordinator.

Begin with questions concerning where the information came. Does the source come from a national or international organization? Does it come from an educational institution? The way to know if the online source comes from a national or international organization is often found in the web address such as .edu or .gov. The best online sources will give information concerning what organization they are. Looking at the online information does it clearly state who is sponsoring the website? Is there a link to a page stating who the organization is? Can you verify the legitimacy of the sponsor? Most dependable websites will have a date and who wrote the article. It is like dependable written sources should have the name of the author and the credentials they have on the topic.

When new knowledge centre coordinators set-out in their work they are full of energy and passion. Once they start work however, reality becomes apparent and many a times, disillusion sets in which ultimately affects their work. It is therefore important to take cognisance of the challenges lying in one’s path so that one may be better prepared to tackle them. Given below is a list of challenges along with possible methods to tackle them.

<table>
<thead>
<tr>
<th>CHALLENGE</th>
<th>POSSIBLE SOLUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Human intermediaries</strong>, i.e. employees of different organisations and institutions (government and sometimes private) are not always keen to extend all possible support to the common man. Many ask for bribes while others are simply not keen to work or put themselves out.</td>
<td>Form a rapport with key functionaries in the village and taluqa level</td>
</tr>
<tr>
<td>Your village’s ‘gatekeepers’ might have useful connections which might be tapped.</td>
<td></td>
</tr>
<tr>
<td><strong>Datedness</strong> schemes and projects are often discontinued especially when a change of government takes place, but information is sometimes slow to trickle down to the grassroots.</td>
<td>Check and double check with the human intermediaries involved</td>
</tr>
<tr>
<td></td>
<td>Check date of printing / publishing (in case of newspaper or web information)</td>
</tr>
<tr>
<td><strong>Validity</strong> of information: Not all information appearing in mass media are valid or true.</td>
<td>Check author and his/her expertise on the matter. Run a check on the publisher of the information as well</td>
</tr>
</tbody>
</table>

**Online Sources**

Online sources of information refer to web based information, primarily available on relevant websites, but could also refer to information gathered by sending emails to relevant sources such as experts at institutions and organisations specialising in the area in which information is sought.
The Internet as an environment for finding information

This section is taken in its entirety from mmtk_searching_handout.doc; available online from http://www.itrainonline.org/

There are several distinguishing features about mapping and navigating the Internet, which are worth bearing in mind before we embark on our journey to find the information we seek:

➤ As content is being continuously updated and added, there are no accurate current statistics concerning the amount of information accessible on the Internet – it was estimated in 2001 to contain 3 billion documents.

➤ These documents are not indexed with any standard system. Unlike most libraries with their indices of subject headings, authors and titles, the Web needs us to guess at what words will be in the pages we want.

➤ It is not possible to search the WWW directly. Your computer cannot find or go to all the web pages, which reside on computers (“servers”) all over the world. What you can do through your computer, using the skills we will be developing in this unit, is access some of the many search tools available, and get them to do the work.

➤ A search tool lets you search its database or list of sites – this is a relatively small subset of the entire World Wide Web. The search tool gives you hypertext links with URLs to other pages. You click on these links, and retrieve documents, images, sound, and more from individual servers around the world.

Behind the mechanics of how the information is stored and distributed, lie people who have produced it – People who are just as flawed as the ones who produce printed information. The existence of information on the Internet makes it neither more nor less accurate than if it were published somewhere else. Likewise content will only exist on the Internet if some person has seen fit to publish it there. An idea cannot make its way onto the Internet without the backing of a human being – however valuable and sought-after that idea is.

Getting started – choosing the right search tool for the job

There are dozens of search tools accessible on the Internet. This brief tour will introduce you to the basics of the tools available, but a deeper understanding will only come from practice and actually using the tools.

Search engines

Search engines work by searching through an index from a database which is automatically compiled by "spiders" (computer-robot programs) – not people. The search engine tries to match your searched-for keywords with words in the text of selected web pages.

The amount of content that search engines search through varies from those which are small and specialist, to those covering over 90 percent of the index-able web.

Getting good results from search engines is just as much about your familiarity with the features and syntax of the search engine you are using, as it is about the size of the search engine’s index.

Good For: When you can be precise about what you are looking for.

Not Good For: When you need help with finding a path that leads through different subject areas that you may not have been aware of at the outset of your search.

The major search engines include

Google: http://www.google.com/

calltheweb (previously called "Fast Search"): http://www.calltheweb.com/

Altavista: http://www.altavista.com/

Google has the most comprehensive search engine database, but no single search engine is likely to find all possible information on a topic.

Meta-search engines

Also relevant here are meta-search engines, which can quickly skim-search several individual search engines at once (they usually reach about 10% of search results in any of the search engines they visit). This means you cannot benefit from using the more advanced search syntax of any one search engine. You are best sticking to simple searches, which use a single term or phrase.

SurfWax: http://www.surfwax.com/

Ixquick: http://www.ixquick.com/
There are dozens of search tools accessible on the Internet. This brief tour will introduce you to the basics of the tools available, but a deeper understanding will only come from practice and actually using the tools.
Information gateway-type resources

These may be called Internet catalogues, subject directories, virtual libraries or gateways. They specialise in resources from a particular field, and tend to be searchable as well as organised into a hierarchical format. Some of them work like a catalogue resource for a particular field, whilst others are catalogues of catalogues. They are always compiled by people (rather than indexed automatically) who organise information according to a classification system. This means you can expect the items that are listed to have been sifted and evaluated for their relevance and quality. Examples of gateway-type sites are:

ELDIS
The ELDIS gateway to Development Information serves as a central access point for resource guides, country profiles, news, jobs, and other resources.
http://www.eldis.org/

World Wide Web Virtual Library
The World Wide Web Virtual Library describes itself as “the oldest catalog of the Web, started by Tim Berners-Lee, the creator of the Web itself. Unlike commercial catalogs, it is run by a loose confederation of volunteers, who compile pages of key links for particular areas in which they are expert; even though it isn’t the biggest index of the Web, the VL pages are widely recognised as being amongst the highest-quality guides to particular sections of the Web”. The library can be browsed alphabetically or by category and is also searchable.
http://www.vlib.org/

SOSIG, Social Science Information Gateway
An educational and research service giving access to high-quality sources for social scientists. Information is arranged in subject sections, which can be browsed and searched.
http://www.sosig.ac.uk/

Specialised databases
There are many databases of information which are accessible by web users but not by the robots that compile the indices for search engines. This type of information forms what is known as the “invisible web”. It is not contained in conventional web pages, but is dynamically generated content which gets powered into web pages by databases when it is called for. It is called “invisible” because it is out of the reach of the “spiders” and their search tools. You may find links to this kind of content in subject directories, but on the whole you need to know where to access the databases themselves to find information within them. They are generally searchable using standard search boxes, and vary in how advanced and elaborate your search can be.

Good If: You know where to find one which deals with your area of interest.

Not Good If: You are searching more broadly than the remit of the database concerned.

Learning to use the tools appropriately

We are going to adopt a strategy, which will clarify your thinking about your topic, help to achieve good results and should save valuable ‘online’ time, too. This strategy works through the following 7 stages:

Stage 1. Unpacking the query
Ask yourself questions to make the query clearer. For example: If you are interested in information about migrant labourers, ask yourself relevant questions such as:
➤ Are there any states that are particularly relevant to migrants?
➤ Do I want to know about services available to migrants, legislation affecting them, organisations campaigning on behalf of them or general research in the area of migrant labourers?

Try putting your query into one sentence, e.g.
➤ Rehabilitating migrant labourers in Orissa.

Split your sentence into concepts:
➤ Concept 1: Rehabilitation
➤ Concept 2: Migrant labourers
➤ Concept 3: Orissa

Be aware of other terms that could also be used to describe the concepts. These may include different spellings and synonyms.
Stage 2. Phrasing your query: an introduction to search syntax

Search syntax is the method we use to link the concepts together appropriately for your search. Different search tools offer different options for refining searches, and may use different search syntax or languages. Some search engines allow you to refine your search by selecting from a number of natural language options such as “find all words,” “find any words” or “must not include”. Others need you to use either “search mathematics” or Boolean logic to refine your search. By learning and applying these basics, your search becomes considerably more powerful.

The basic principles are the same for most search engines, but they may use slightly different versions of the search syntax. When in doubt read the help page of the search tool you are using. Bear in mind that although most search facilities are not case sensitive, there are a number which are.

Many search engines by default ignore common words such as “the” “and” “in” etc. These are known as “stop words”.

Search mathematics

This refers to common mathematical symbols as a way of refining searches:

Use + (plus sign) in front of each term which must appear in your search results. For example, if you are looking for information about how the price of coffee is impacting on coffee pickers’ wages

\[ +\text{coffee} +\text{pickers} +\text{price} +\text{wages} \]

will make sure that the results all include all the terms: price, coffee, pickers wages – not coffee shops, cotton pickers, or Price Waterhouse accountants’ wages.

Use - (minus sign) in front of every term, which must not appear in your search result. Using the same example as above, you could enter

\[ +\text{coffee} -\text{cup} -\text{cotton} \]

Use ” ” (quotation marks) around words you want to mark as a phrase. For example,

“coffee pickers”

“somali refugees”

“emperor penguins”

Use the wildcard * (asterisk) for truncation. For example if you want to search for education, educators, educate etc., enter

educ*

Boolean logic

Some search engines use the Boolean operators “AND,” “OR” and “NOT” for the refining of searches. Boolean operators should generally be written in capital letters.

Use AND to require that more than one term appears in all search results. For example entering

emperor AND penguin

will find pages with both terms.

Use OR if you want all your search results to include either term (or both).

This can be useful if there are alternate spellings (e.g. “organization” and “organisation” or synonyms (brinjal, aubergine) for terms. To find all pages that contain the word “brinjal” or the word “aubergine” (or both), enter

brinjal OR aubergine

Use NOT to exclude terms you don’t want to appear in your search results.9

For example, if you are looking for information about “elephant ivory” rather than ivory-coloured paint you could enter

ivory NOT colour

Some search engines also allow the use of the “proximity operator” NEAR as well as the three Boolean operators.
Where a search for

   south AND africa

may lead you to a page with “south” at the top and “africa” at the bottom, entering

   south NEAR africa

will ensure that the terms appear close to one another. Not all search tools allow this - check the help page of the search engine you are using.

**Stage 6. If at first you don’t succeed – try again!**

Don’t feel downhearted when your tool of choice doesn’t lead you to your prize results. Becoming a skilled information gatherer on the Internet is about retracing your steps and looking for turnings you may have missed, or re-phrasing or even re-thinking your search query altogether. You will quickly become skilled in adapting your queries for the tool you are using.

**Stage 7. Evaluating search results**

“Think before you click”

The culture of “editorial control” which seeks to set standards in the print world, is often absent on the web. Whilst it is the freedom of the web which makes it so rich and rewarding to us as information gatherers, it is that same freedom which must alert us to the need for questioning the accuracy and validity of everything we find.

This takes us onto the next part of the search strategy:

Looking intelligently at the URLs in the results that the search tool finds will enable you to make more relevant selections from the list, making the search altogether more efficient.

We need to start by understanding the anatomy of a URL (Uniform Resource Locator):


   http:// The kind of protocol: in this case hypertext transfer protocol

   www. Indicates the World Wide Web

   hrw.org The domain name of the web site press/2003/02/powell20303.htm Shows the location, or “pathway” to the page. This page is inside a folder called 02 which is inside a folder called 2003 which inside a folder called press. That folder is inside the folder www.hrw.orgA “/” is used to separate different levels of information storage (folders) in the web site.

   /powell20303.htm The page’s computer file name.

   htm The file extension showing what type of file it is – this one is htm (hypertext mark-up language).

   What’s in a URL?

**Domain types**

The domain that a web site uses can indicate the appropriateness of the content for your search.

   ➤ Government sites: look for .go, .gov, .mil
   ➤ Educational sites: look for .edu, .ac
   ➤ Non-profit organisations: look for .org

So if you are looking for the voices of dissidents in Indonesia, you are unlikely to reach the heart of your query from pages with a URL that uses a .gov or .mil domain. But those pages may still contain relevant peripheral information for you.

The domain may also contain a country code indicating where the web site content is drawn from and/or which language(s) you can expect the content to appear in. If the same site seems to appear in several different results, look for the one which has the most appropriate country code for your language needs.

**Publishing source**

The publishing source of a page is often named in the URL, either in the domain or in the pathway (folder). Ask yourself the questions:

   ➤ Have you heard of this source already? Is it reputable?
   ➤ Does it fit with the name of the web site? Does it need to?
   ➤ Does the URL have a personal name woven into the domain of a commercial (Internet Service Provider) ISP or other provider of web hosting (like aol.com or
geocities.com), following a tilde ( ~ ), a percent sign ( % ), or the words "users," or "member"?

This is usually an indication that the page is a personal (self-published) page and you should investigate the author carefully, as there is no publisher or domain owner vouching for the information in the page.

Building up a personalised well-structured bank of links

Each successful search should make a contribution to your subsequent searches. By using the Bookmarks or Favorites feature of your browser, you can collect intelligence and benefit the next time around.

All Internet browsers have a version of this feature, with very similar functionality. It gives you the opportunity to record the URL of any page you view. On visiting a page which you think may be valuable for future use, you simply choose "Add..." from the relevant menu bar in your browser. The URL is added to a list and is usually presented on that list as a page name (which you can edit if you choose).

At its simplest, this is an easy-to-reference address list of your favourite pages. But with a little more attention, the list can become a valuable personalised resource bank – your very own information gateway. By making thoughtful use of the filing tools – folders and subfolders, you can organise your references into a logical system that makes swift work out of finding pages.

One site which provides an exhaustive list of government sites of interest to knowledge centres is http://www.karmayog.org/govtschemes/.
Offline sources of information are plenty. Offline sources could be

- Traditional media
  - print (newspapers and magazines),
  - electronic (radio and television) and
  - folk media (drama, folk songs, etc.).
- Subject matter experts

Newspapers and journals are good sources of information for announcements of different job vacancies, schemes, ideas and projects. In addition, journals often provide case studies of successful projects in detail. Radio and television are often used by the government for making public announcements such as on immunizations campaigns, disaster warnings, and relief for people affected by disasters and information for family members.

Subject matter experts such as agricultural and allied sciences, education and other fields are available in many institutions and organizations. Many of these experts are open to providing their expertise to communities who require their help. Many organisations have successfully been able to set-up ‘ask the expert’ services in their telecentres. More information on how to do this is provided in the next chapter.

Indigenous knowledge (IK) refers to the unique, traditional, local knowledge existing within and developed around the specific conditions of women and men indigenous to a particular geographic area (Grenier 1998). Such knowledge systems are cumulative, representing generations of experience, and trial and error experiments.

IK is stored in peoples’ memories and activities and it’s expressed in the form of stories, songs, folklore, proverbs, dances myths, cultural values, beliefs, rituals, community laws, local language and taxonomy, agricultural practices, equipment, materials, plant species, and animal breeds. IK is shared and communicated orally, by specific examples and through culture. Indigenous forms of communication and organization are vital to local-level decision-making process and to the preservation, development and spread of IK.

IK and ITK

Indigenous knowledge (IK) is not confined to tribal groups or the original inhabitants of an area. It is not even confined to rural people. Rather, any community possesses indigenous knowledge — rural and urban, settled and nomadic, original inhabitants and migrants. Other names for indigenous knowledge (or closely related concepts) are “local knowledge,” “indigenous technical knowledge” and “traditional knowledge.”

Indigenous technological knowledge (ITK) is of a practical nature, concerned with operationalised local thinking in such fields as agriculture, fisheries, health, horticulture, and forestry.

To understand indigenous practices, one must have knowledge and understanding of the concepts on which they are based (both content and context). This is
Using Information within your Community

particularly relevant in cases where intervention or improvement of indigenous practices in changing ecological and economic scenarios is aimed at social sustainability.

Indigenous Vs Scientific knowledge

Indigenous knowledge is often contrasted with “scientific,” “western,” “international,” or “modern” knowledge - the knowledge developed by universities, research institutions and private firms using a formal scientific approach. Because indigenous knowledge changes over time, it is sometimes difficult to decide whether a technology or practice indeed is indigenous or adopted from outside, or a blend of local and introduced components. For a development project, however, it does not matter whether a practice is really indigenous or already mixed up with introduced knowledge. What is important is that instead of looking only for technologies and solutions from outside the community, we first look at what is in the community. We then use whichever knowledge is found to be effective. It suggests that IK and scientific knowledge need to fuse in terms of knowledge, practice and internationally accessible knowledge pool.

Importance of indigenous knowledge

Indigenous knowledge has two powerful advantages over outside knowledge- it has little or no cost and is readily available (Kothari 1995). Indigenous knowledge systems and technologies are found to be socially desirable, economically affordable, sustainable and involve minimum risk to rural farmers and producers, and above all, they are widely believed to conserve resources. There are situations in which modern science is not appropriate, and use of simpler technologies and procedures are required. Thus IK provides basis for problem solving strategies for local communities, especially the poor.

IK and Extension

Identifying, documenting and incorporating IK in agricultural extension organisation is essential to achieve sustainable agricultural development. IK systems provide a frame of reference for strengthening agricultural extension programmes and this led to reorganisation of interventions made by extension personnel. The participatory technologies that are developed through IK integration will 1) provide diversified technological options, which enable farmers to choose using their own decision-making systems; 2) originate from the farmers’ own knowledge and 3) use diversified sources in active participation of research minded farmers’ (Rajasekharan, 1993).

Extension strategy should now focus on improving current benchmark of IK practices. The strategy should also concentrate on facilitate skills to build capacity of producers of innovations to formulate questions, which they use to engage specialists or to utilise information systems.

Documentation and Dissemination of IK

IK is predominantly tacit or embedded in the practices and experiences. It is commonly exchanged through personal communication and demonstration: From master to apprentice, from parents to children, from neighbor to neighbor etc. World Bank states that IK systems are ‘at risk of becoming extinct’. Unless IK is properly documented, analyses and disseminated, there is a risk that within one generation the knowledge could be lost forever. Databases and resource centres would help to exchange IK from one community to another and promote integration of IK into the development process. The process of exchange of IK comprises of the following steps:

- Identification of IK can at times prove difficult. It may be embedded in a mix of technologies or in cultural values, rendering them unrecognizable at
TYPES OF INDIGENOUS KNOWLEDGE

IK is more than just technologies and practices. It includes:

➢ **Information**
  ➢ Trees and plants that grow well together.
  ➢ Indicator plants (plants that show the soil salinity or that are known to flower at the beginning of the rains).

➢ **Practices and technologies**
  ➢ Seed treatment and storage methods.
  ➢ Bone-setting methods.
  ➢ Disease treatments.

➢ **Beliefs**
  ➢ Beliefs can play a fundamental role in a people's livelihood and in maintaining their health and the environment.
  ➢ Holy forests are protected for religious reasons. They also may maintain a vital watershed.
  ➢ Religious festivals can be an important source of food for people who otherwise have little to eat.

➢ **Tools**
  ➢ Equipment for planting and harvesting.
  ➢ Cooking pots and implements.

➢ **Materials**
  ➢ Housing construction materials.
  ➢ Materials for basketry and other craft industries.

➢ **Experimentation**
  ➢ Farmers’ integration of new tree species into existing farming systems.
  ➢ Healers’ tests of new plant medicines.

➢ **Biological resources**
  ➢ Animal breeds.
  ➢ Local crop and tree species.

➢ **Human resources**
  ➢ Specialists such as healers and blacksmiths.

➢ **Education**
  ➢ Traditional instruction methods.
  ➢ Apprenticeships.
  ➢ Learning through observation.

➢ **Communication**
  ➢ Stories and messages carved on palm leaves.
  ➢ Folk media.

➢ **Experimentation**
  ➢ Farmers’ integration of new tree species into existing farming systems.

Instances of Indigenous knowledge

Dadu goes on his morning walk to the temple.

- He tells an injured Mukesh how to apply a tourniquet.
- He recites a poem to kids he meets.
- Warns Dudhiya about a cow disease.
- Speaks to Ramlal about crop prospects.
- At the temple, he discusses the dates for his son’s wedding with the priest.

Local organizations such as kinship group, councils of elders, or groups that share and exchange labour.
Using Information within your Community

first glance to the external observer (technical and social analyses may, therefore, be required to identify IK);

- Analysis of IK for scientific background and relevance (to solving problems), reliability, functionality (how well does it work?), effectiveness and transferability;

- Recording and Documentation is a major challenge because of the tacit nature of IK (it is typically exchanged through personal communication from master to apprentice, from parent to child, etc.). In some cases, modern tools could be used, while in other circumstances it may be appropriate to rely on more traditional methods (e.g., taped narration, drawings);

- Storage in retrievable repositories: Storage is not limited to text document or electronic format; it could include tapes, films, story telling, gene banks, etc. It includes categorization, indexing, relating to other information making it accessible. This involves electronically stored and indexed abstracts, directories of experts or applications.

- Transfer of IK goes beyond merely conveying the knowledge to the recipient; it also includes the testing of the knowledge in the new environment.

- Dissemination to a wider community adds the developmental dimension to the exchange of knowledge and could promote a wider and deeper impact of the knowledge transfer.

Documentation and networking efforts

A growing number of formally established indigenous knowledge resource centres are being established worldwide with an objective to provide an instrument for exchange of information; platform for debate on concept of IK. The Internet is extensively used to share IK for purpose of development activities and extension. The following describe major resources.

The Centre for Indigenous Knowledge in Agriculture and Rural Development (CIKARD) of Iowa State University. CIKARD is the foremost research and knowledge collection organisation in this field, and frequently publishes in the Indigenous Knowledge Development Monitor. This organisation focuses its efforts on ‘preserving and using the local knowledge of farmers and other rural people around the globe.’ It acts as a global clearinghouse for collecting, documenting, and disseminating information on indigenous knowledge of agriculture, natural resource management, and rural development. In addition it formulates agricultural and natural resource management policies and designs technical assistance programs based on indigenous knowledge.

The Centre for International Research and Advisory Network (CIRAN). This organisation hosts pages for the Indigenous Knowledge and Development Monitor, online version. In addition, CIRAN hosts the ‘Indigenous Knowledge Homepage’. This is a site that searches indexes and makes available all relevant information on the Internet pertaining to indigenous knowledge, including papers, journals, mailing lists and Usenet groups.

The World Bank Indigenous Knowledge Database aims to ‘increase and improve the available information on indigenous knowledge, its collection and classification’ as well its application. It seeks to facilitate better adaptation of global knowledge to local conditions, to design activities to better serve the country needs and to share IK through ‘South-to-South’ exchange. The Internet site goes on to list 50 documents detailing indigenous practices and asks for further contributions, comments and criticisms. (http://www.worldbank.org/)

The International Development Research Centre. (IDRC). The mandate of IDRC is to ‘help researchers and communities in the developing world find solutions to their social, economic, and environmental problems.
IDRC connects people, institutions, and ideas to ensure that the results of the research it supports and the knowledge that research generates, are shared equitably among all its partners, North and South. IDRC and its collaborative networks offer access to huge amount of information IK.

The Centre for World Indigenous Studies. This organisation is dedicated to wider understanding and appreciation of the ideas and knowledge of indigenous peoples and the social, economic and political realities of indigenous nations. It also operates the Fourth World Documentation Project (FWDP) whose aim is to present the online community with the greatest possible access to Fourth World documents and resources.

The MOST (Management of Social Transformations) Programme of UNESCO has created the Best Practices Database. On the basis of the four criteria for Best Practices, MOST is collecting information from all parts of the world about a variety of projects, policies and strategies related to the eradication of poverty and the reduction of social exclusion. At present, the MOST Database provides examples of Best Practices for policies and projects in Poverty Eradication, Social Exclusion/Integration, Women and Gender Equality, Homelessness and Housing, Economic Development, Community Participation and Urban Governance, and Crime Prevention. (http://www.unesco.org/most/index.html)

SRISTI- Society for Research and Initiatives for Sustainable Technologies and Institutions is a grassroots NGO working primarily in arid and semi-arid areas of Gujarat. SRISTI has developed a national network of NGOs, local communities, local government, scientists, State Administration and Forest Department working towards conservation of biological diversity and indigenous knowledge. SRISTI has initiated a global network of grassroots organisations and individuals via the “Honey Bee Network” which is operational in 71 countries to date. Through the Internet as well as otherwise, member organisations and individuals have contributed to the database on indigenous knowledge and provide information on developing resource management strategies, techniques for value addition and marketing etc. SRISTI believes that adding value to indigenous knowledge will help local communities co-exist with biodiversity resources by reducing primary extraction, generating long-term benefits, and thus enhancing sustainable use. SRISTI has developed a rich database of information on biodiversity as well associated indigenous knowledge, innovations and common property resource institutions. The database of indigenous knowledge and innovations contains thousands of uses of plants by farmers, pastoralists and others for crop protection, medicinal use, and veterinary disease control, among others.

In Sri Lanka, ECO - an independent institute is promoting a consortium of NGOs to work on eco-agriculture. This group includes representatives of government extension services, universities, banks as well as regional development authorities. A documentation of indigenous farming knowledge, including technical and spiritual practices, is in process and an astrological farming calendar is being compiled. - (Upawansa 1999)

GIAN (Gujarat Grassroots Innovations Augmentation Network) is a Not-For-Profit society. Its aim is to promote, organize and conduct programmes, schemes or activities to scout, document, augment innovations by small farmers, artisans, pastoralists etc., primarily in disadvantaged rural areas. IIM-Ahmadabad is providing institution building support to GIAN and SRISTI is providing access to its data base of innovations and also other logistical help.
Conclusion

Though IK gained importance in all the development activities internationally, certain critical issues need to be answered which are very fundamental to development of indigenous people. The important questions are - whose knowledge? for whom? and who will benefit? We should not fail to mention the methods of providing indigenous people access to the documented information. Unless these questions are answered, the current concern for IK will be rhetoric by the outsiders, for the outsiders.

For more information go to http://www.manage.gov.in/managelib/faculty/chary.htm and http://www.unesco.org/most/bpikpub.htm

Ethics of information collection and dissemination

The role of telecentre coordinators entails an inherent measure of power. This power is rooted in the coordinator’s ability to almost instantly locate, access, and retrieve information using resources located, quite literally, at his or her fingertips. Telecentre coordinators, as well as those who rely upon them to provide a wide array of information, must recognize and understand the responsibilities associated with this power. Even those who use information obtained in a responsible and ethical manner face continual struggles in a society in which the capabilities of technology often outpace full comprehension of its moral implications. Some issues related to ethics in Information Services

- Individual’s privacy vs. the public’s “right to know.”
- The extent to which a coordinator may have access to the community’s records, e-mail, SHG accounts, and other confidential information.
- Increased need for security of information content and systems to protect against terrorists.
- Using other people’s work (articles, etc.) as one’s own, especially by students.
SUMMARY

 retornar texto representación natural del documento.
Providing Information Services to Communities

This chapter focuses on helping the learner gain understanding of basic information that knowledge centres must possess, learn tools on how to engage the community in a meaningful ‘information flow dialogue’ and in general provide information-based services which will address the needs of the community.

By the end of this chapter, the learner will:

- Have a clear understanding of the basic list of information that a telecentre must possess.
- Understand the importance of establishing a feedback loop to measure the impact of the services provided.
- Have a clear understanding of the importance of indigenous and local knowledge and the need to take that to the rest of the world.
- Be aware of at least 2-3 methods by which local information may be published.
- Have a clear understanding of the personality traits and skills required to be an efficient ‘info-mediary’.
The previous chapters spoke in detail about the purpose of knowledge centres and the role of info-mediaries in communities. Sections were dedicated to understanding how to assess community information needs and then locate relevant information to meet those needs. We also dealt briefly with the importance of ethics in information services and delicate role that an info-mediator has to play in being both an information agent and a social advocate.

In this chapter we will focus on the importance of disseminating the information that has been collected from the outside world and publishing local information to the world at large.

**Defining your target audience**

In order to provide relevant information to the community your telecentre serves, it is important to understand what constitutes your community. Typically any village will have women and children, youth and the elderly, different kinds of occupational groups and different castes and religions. It is up to the knowledge centre coordinator to make sure that as many of these groups as possible, avail its facilities. Some such as the youth are generally the first to explore the telecentre and learn what it offers them. However, reaching women, the elderly and children is the hardest and this is where telecentre coordinators must put in extra effort. The starting point of a good programme for information communication, processing and sharing in the community is an accurate idea of the information seeking patterns of community members. It is important to understand the use of information by different groups in the community. Some of the elders in this group will be “experts” and rich sources of indigenous knowledge. It is very important not to regard the oral information system as separate or opposed to the print-based information system. A lot of the knowledge needed by the community will be found and taken (mined) from the oral information system.

Women play multiple roles in society. As a result, they find it difficult, as a group, to participate fully in information sharing activities. Most women work on the farms with men. When they return from farming, women have to prepare food for the family, and quite often fetch water and firewood. They look after young children and do other household chores. These multiple social roles leave women with little time to participate in the structured information and knowledge exchange activities of a telecentre. In some cases, women have additional problems because their activities outside the household are limited by husbands and by age-old customs. Women and girls may have to ask for permission to leave their own compound. It is assumed that ‘a good woman does not wander around aimlessly in public’. In some places, young unmarried women walking to an information centre alone risk abduction, rape, and other forms of harassment by men in the community.
Physical Access to the Knowledge Centre

As in any community, there are groups, which are marginalised on the basis of gender, caste, disability, etc. Therefore it is extremely important that special attention is paid to the needs of people who face particular barriers to access. Some examples are given below:

- People with physical disability: Design of ramps, rails, and low tables
- Visually challenged: Specialist text narration software, speech recognition software and Braille print in text material
- Illiterate people: Multi-media content
- People with hearing impairment: Easy-to-read documents and multi-media content

The community as a stakeholder

When we talk of information dissemination among communities for enabling and empowering them towards a better life we have to understand that we have create an environment where local people act and work with the knowledge centres in a way it becomes an integral part of the community. We need to generate their interest and involvement in the telecentre. This can be done through the following ways:

- Creating a sense of ownership with the knowledge centre
- Involving stakeholders with identifying needs, creating a basket of information and knowledge dissemination services catering to his interests
- Changing attitudes to bring about a change and overcoming fear resistance to change
- Overcoming fear resistance to change by continuous access and guided counseling towards a better informed society at large
- It is also important for us to understand that we don’t antagonize our stakeholders by overreaching and over committing on non viables or non deliverables. For this we need to ensure that we
Establishing a feedback loop

So far we have been able to establish that it is important to understand the needs of the community in order to meet them best and to engage the local populace in the activities of the telecentre. The question then is why is this necessary? This has two reasons:

- For the long-term sustainability of the centre
- In order to measure the efficacy of the services provided at the centre.

In this section, we will focus on the second point, i.e. measuring the efficacy of the services provided. Through a participatory process, we have created the model below which will help ensure that the community’s needs are well understood by the info-mediary and are therefore easily met.
Using Information within your Community

Validate information being passed onto community and coming from community on the basis of the following:

- **Priority**: in terms of community’s requirements and based on the time frame for achievability.
- **Accuracy**: the veracity of the information, i.e. does it actually work?
- **Validity**: well-grounded or justifiable, being at once relevant and meaningful; appropriate to the end in view.
- **Relevance of information to receiver**: for e.g. talking about growing medicinal plants as an alternative livelihood to school children might not be the best way of spreading awareness in the community.
- **Cost and resource appropriate**: Proposed ‘solutions’ must be put through the classic filter of “sasta, mazboot and tikoo”. Another question to ask is how many people the proposed ‘solution’ will impact.
- **Impact**: who and how will it impact?
- **Timeline**: is the time frame for delivery in keeping with the importance of the issue? For e.g. if mosquito borne diseases are a problem in the village, then the time frame for a solution cannot take more than a week to find and implement.
- **Documentation**: This is important from the point of view of a future work, to avoid repetition and increase accountability.
- **Up-to-date**: Many types of information become out-of-date from time to time. This is especially true for health and medicine related problems and technology. It is therefore of utmost importance that the latest (and wherever possible expert) help is sought.
- **Practicality of use**: ‘Solutions’ must also take into account the practicality of use. There is no point in thinking of a nuclear power plant to solve one village’s power situation.
- **Reliability of source**: The source must be verified especially in the case of Internet based information. This will ultimately affect the accuracy, validity, and practicality of the ‘solution’.
- **Appropriate language**: Any information that is text or audio based must be in the local language for the receiver to make the best use of it.
- **Translation related gaps**: There are often gaps in translation because many words and phrases cannot be literally translated. These must be taken into account.

A glossary of terms is provided below to better understand the model on the previous page.

**Documentation**: This is important from the point of view of a future work, to avoid repetition and increase accountability.

**Up-to-date**: Many types of information become out-of-date from time to time. This is especially true for health and medicine related problems and technology. It is therefore of utmost importance that the latest (and wherever possible expert) help is sought.

**Practicality of use**: ‘Solutions’ must also take into account the practicality of use. There is no point in thinking of a nuclear power plant to solve one village’s power situation.

**Reliability of source**: The source must be verified especially in the case of Internet based information. This will ultimately affect the accuracy, validity, and practicality of the ‘solution’.

**Appropriate language**: Any information that is text or audio based must be in the local language for the receiver to make the best use of it.

**Translation related gaps**: There are often gaps in translation because many words and phrases cannot be literally translated. These must be taken into account.
Two-way communication flow in a knowledge centre

When we think of information services, the first thought that comes to our minds is that rural and under-served populations are largely information starved especially in relation to the larger world. While this is true to an extent, the reverse is also true. Very few people in urban areas and from privileged backgrounds are aware of the scale of knowledge and practices that exist in our country and that a significant portion resides in rural and so called backward communities. If one does not mine this information urgently, a large portion will be lost forever.

We have already dealt with the concept of indigenous knowledge in chapter 3. In this section, our focus will be to establish the need for two-way communication in the knowledge services system to increase efficacy of the services provided.
Methods of outreach in the community

Information Campaigns

The concept (idea) of campaigns refers to focused and intense information exchange around a specific issue, for a specified period of time. This type of communication helps to create the needed social climate for the development and adoption of new ideas on a particular topic. Information campaigns may be organized around topics, such as family planning and the use of contraceptives, HIV/AIDS awareness, equal rights for girls, tree planting, environmental awareness, and literacy, to mention a few examples. Campaigns may be also needed to support services being offered by some other agency or programme.

Training Workshops

Structured training activities in the form of short workshops and seminars are important for the rapid acquisition of knowledge and skills. For example, a group of small farmers can learn together how to grow tomatoes and other horticultural produce. Then they discuss how best to apply the ideas in their community. The small farmers can also carry out experiments (pilot projects) to test their learning. Experiments serve also to build confidence to enable the group to go beyond rote learning. Resource persons may be invited to participate from extension services, partner institutions, NGOs, donor agencies, government departments, educational institutions and farmers’ groups.

Field Visits

Throughout the country (and in neighbouring countries), other communities, NGOs, and government departments deal with problems similar to the ones the community is trying to address. A field visit to a nearby village can turn the community members into independent (self-reliant) knowledge seekers. Through the experience of a visit and exchange, they can look at what others have done, and decide which of the practices can be adapted in their community. The role of the knowledge centre is to first identify potential places for field visits. Then, if it seems a good idea, the workers will discuss the goals of such a visit with the community. If the place is far off, raising some funds may be needed. After a field visit, several things should be done:

- The participants in the field visit should make a detailed report of what they saw and share their views on what can be usefully adapted in their situation with the rest of the community. A discussion should follow and some form of a decision made on an action plan;

- If applicable, experiments (pilot projects) can once again be carried out on a small scale, in order to test the idea and its possible adaptation in the community. During the pilot project, it is possible to find out if there are potential problems that were not evident during the short field visit. The principle, in this type of activity, is to strengthen the community’s capacity building to evaluate and adapt knowledge from the outside to suit its own social situation and values. This action places knowledge and learning in the hands of ordinary men and women. Taking ownership of the knowledge empowers them and builds their self-confidence.
Community Newsletter

A newsletter serves to inform the community about what is going on and what is planned in information sharing and exchange activities. The newsletter could be issued every second month or more frequently when there is important news to share. We suggest that you choose a local name that means “news from the village”. Put copies of the newsletter on notice boards at the information centre and in other public places, including churches, mosques, and shops.

Internet Services

The most exciting tool for communicating information is the Internet. The Internet is a vast network of computers linked throughout the world through telephone lines or telecommunication satellites. It provides public access to large stores of information. As a communication tool, the Internet allows communities and individuals to do the following:

- Exchange messages through electronic mail for which they need an e-mail address;
- Search information on the Internet, using the world wide web (www);
- Put up their own information on the Internet, provided they have a web address or home page. A few examples of information which a community can put on the Internet include: the newsletter, products they produce and want to sell throughout the world, and tourist information to attract visitors to the community.

Expert Q&A service

The knowledge centre coordinator with the help of the parent NGO/organization can liaison with an academic institution or govt. body for support on expert help based on the community’s info needs. For example, tie-up with nearby agricultural colleges/universities and govt. extension centres, etc. Apart from a face to face interaction, email interaction, video conferencing and telephone based support could also be organized all depending on the capacity of the telecentre and the resources available to it and the organization it links with.

The most important facet of the two-way communication flow is to establish an inward flow of information from the community. This can be done through the following methods:

- Community meetings with a specific agenda of bringing up issues regarding the working of the community telecentre.
- Formal or informal surveys conducted by the staff of the knowledge centre among specific community groups to find out if their needs are getting addressed.
- Feedback register and / or drop box for anonymous suggestions, comments and complaints.
- Focussed group discussion with specific target groups.
- Village elders are a good resource to find out whether the knowledge centre is seen as efficacious or not. In addition, they are also in general the store houses of indigenous knowledge.
- PRA techniques.
Using Information within your Community

Information a Knowledge Centre must possess

The entire info-mediary skills module was developed in a participatory manner with the help of knowledge centre coordinators from across the length and breadth of India. The resonance in practically all workshops held was that each telecentre must have a basic list of information which is relevant across communities.

Given below is such a list that was prepared over three workshops:

- District government offices and officers
- Emergency Numbers such as local hospitals, fire brigade, police station, etc.
- Local job vacancies
- Village baseline data
- Government schemes
- Market prices about local crops
- Nearby institutions (education and health)
- Other NGOs and their activities
- Agri-related information (based on local crops and cropping patterns, allied occupational groups such as animal husbandry, pisciculture,
- Gram Panchayat contact details
- Banks and Post office.
- Basic rights / legal literacy.
- Vocational guidance.
- Transport related (bus route, timing, etc.)
- Village maps
- Tourism related.
- Basic health related info and first aid.
- Local volunteers.
- SHG related information.
- Indigenous skills and crafts.

Publishing Local Information

As mentioned in the earlier section, local information needs to be published to the world at large. This can be done by creating websites of one’s village. Several resources are available for learning how to design and launch a website. Two such are given below:

http://www.icthubknowledgebase.org.uk/helpgroupsplanwebsites

In terms of where you can upload your site, some options available are:

- Yahoo Geocities a free website which helps you build your own webpage.
  http://geocities.yahoo.com/gcp
- Open eNrich is a generic and yet easily customizable browser that acts as a gateway to a community’s own world of knowledge, communication and empowerment.
  http://enrich.nic.in/
- CDAC’s ECKO is a Community Information System (CIS) that helps in the establishment of a generic E-community in a geographically closed region.
  http://www.ncb.ernet.in/ecko
SUMMARY

➢ What constitutes your community? Typically any village will have women and children, youth and the elderly, different kinds of occupational groups and different castes and religions.

➢ Women play multiple roles in society. As a result, they find it difficult, as a group, to participate fully in information sharing activities.

➢ Some of the elders in this group will be “experts” and rich sources of indigenous knowledge.

➢ Be sure to have women represented on committees and staff, not as token members, but as full participants.

➢ It is important to engage the community for two reasons:
  o For the long-term sustainability of the centre
  o In order to measure the efficacy of the services provided at the centre.

➢ The information flow from the knowledge centre needs to be managed such that the centre becomes central to the life of the community. Some points that need reiterating:
  o Capturing Data\Information on local community needs
  o Adapting\Adjusting and content matching service delivery with community needs
  o Periodic reviews on Service Delivery based on feedback
  o Maintaining good relations within the community for integrating knowledge platform with community needs\life

➢ There needs to be a two-way flow of communication in the knowledge centre and activities need to be specifically designed to encourage both.

➢ There are several options available to publish local information on the Internet.

Glossary

➢ Target audience: The groups that one serves in the community.

EVALUATION

A. Question & Answers
a. Why is it important to define target audiences? Describe the different groups in your community and mention their needs according to you.

b. What are the methods by which marginalized groups can be made to access the centre?

c. What is the relevance of ‘information filters’? Describe the most important filters according to you.

d. Describe two each of ‘Outreach’ and ‘Inflow’ communication strategies and how you would use them in your knowledge centre.

B. Make a plan to disseminate information about key sanitation practices in your community.
Using Information within your Community

(Footnotes)

1 http://en.wikipedia.org/wiki/Poverty_in_India

2 Sharing Knowledge for Community Development and Transformation: A Handbook; Written by Kingo J. Mchombu; DLR International in Canada for the Oxfam Horn of Africa Capacity Building Programme, with support of Canadian International Development Agency (CIDA), August 2004

4 Benjamin Disraeli (1804 - 1881)

6 Adapted from: Sharing Knowledge for Community Development and Transformation: A Handbook; Written by Kingo J. Mchombu; DLR International in Canada for the Oxfam Horn of Africa Capacity Building Programme, with support of Canadian International Development Agency (CIDA), August 2004

7 http://www.worldbank.org/wbi/sourcebook/sba104.htm

8 Not all search engines permit wildcard truncation. Check the help page of the search tool you are using.

9 Some search engines use AND NOT instead of NOT. Check the help page of the search tool you are using.

10 This section has been taken from http://www.manage.gov.in/managelib/faculty/chary.htm

11 http://www2.sis.pitt.edu/~ethics/index.html