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# *RURAL DEVELOPMENT AND COMMUNICATION: A COMMUNITY MEDIA PROJECT IN UTTAR PRADESH (INDIA)*

**Presentata da:**    **Silvia Gaiani**

**Coordinatore Dottorato**                           **Relatore**
**Prof.  Andrea Segrè**                          **Prof.  Andrea Segrè**

                                        **Correlatore**
                                        **Prof.  Roberto  Grandi**

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**Abbreviations & Description**

| | |
|---|---|
| ASCI | Advertising Standards Council of India |
| ATMA | Agricultural Technology Management Agency |
| BDO | Block Development Office |
| BIRD | Bankers Institute of Rural Development |
| BJP | Bharatiya Janata Party |
| BPL | Below Poverty Line |
| CBFC | Central Board for Film Certification |
| CSC | Communication for Social Change |
| DM | District Magistrate |
| DPAP | Drought-Prone Areas Programme |
| EAS | Employment Assurance Scheme |
| FAC | Farmer Advisory Committee |
| FAO | Food Agriculture Organization of the United Nations |
| FCI | Food Corporation of India |
| FIAC | Farm Information and Advisory Centres |
| G2C | Government to Citizen |
| G2G | Government to Government |
| GDP | Gross Domestic Product |
| GoI | Government of India |
| GoUP | Government of Uttar Pradesh |
| GSDP | Gross State Domestic Product |
| HYV | High-Yielding Varieties |
| IAMAI | Internet & Mobile Association of India |
| ICT | Information and Communication Technology |
| IMR | Infant Mortality Rate |
| IRDP | Integrated Rural Development Programme |
| IRDP | Integrated Rural Development Programme |
| ISPs | Internet Service Providers |
| IT | Information Technology |
| ITES | Information Technology Enterprise Solutions |
| JRY | Jahwar Rozghar Yojna |
| MDGs | Millenium Development Goals |
| MMR | Maternal Mortality Ratio |
| MP | Madhya Pradesh State |
| NABARD | National Bank for Agriculture and Rural Development |
| NGO | Non-governmental Organization |

| | |
|---|---|
| NSSO | National Sample Survey Organisation |
| OBCs | Other Backward Castes |
| PAU | Punjab Agricultural University |
| PDS | Public Distribution System |
| PSC | Project Support Communication |
| PWD | Public Works Department |
| RTO | Regional Transmission Organizations |
| SC | Scheduled Castes |
| ST | Scheduled Tribes |
| T&V | Training & Visit system of extension (World Bank) |
| TRAI | Telecommunications Regulatory Authority of India |
| UNDP | United Nations Development Programme |
| UNESCO | United Nations Educational, Scientific and Cultural Organization |
| U.P. | Uttar Pradesh |
| U.P.KVIB | Uttar Pradesh Khadi and Village Industries Board |

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## PART II

*Community Rural Newspaper (English Version)*
**Annex 3 -** *Evaluation Questionnaire for the Audience of the Community Internet Centre (English Version)*

# INTRODUCTION

*"How can one define India? There is no one language, there is no one culture. There is no one religion, there is no one way of life. There is absolutely no way one could draw a line around it and say, 'This is India' or, 'This is what it means to be Indian.'"* (Arundhati Roy[1])

It couldn't be said better. At first, when you arrive in India, you are hit by a whirlwind of India's charm, its people so full of life and friendliness, the beauty of the bright-eyed children and young people, the dignity of the women dressed in colorful saris, the impeccably dressed men in Kurta or more western style jackets, the streets teeming with rickshaws, bicycles, cars, cows and people. Then, after the first enthusiasm, you experience a kind of cultural shock.

India lives in both the past and the present. India is a snake with its head in the 21st Century and it's tail in the 17th century.

It is a country of contrasts where the "privileged" use luxury, air-conditioned trains with tinted windows and curtains while the poor work for a precarious existence, where camels share the roads with BMWs and women in a full burka walk past teenagers in blue jeans.

India is not a paradise. Poverty remains a harsh fact of life for over 40% of the Indian population: malnourished children, uneducated women and homes without access to clean water or waste disposal are too common a sight and one of the most confronting aspects of this country. Fending off beggars is an integral part of daily life for the Western traveller and coping with the pleading eyes can be heartbreaking.

But India can also be an enchanting, inspiring, thrilling, confusing, captivating, challenging, confronting and beautifully kaleidoscopic country.

With more than 1 billion people spread throughout the diverse States, India hosts a multitude of ethnic assemblages, social standings, castes and out-castes. The people combined with their deep rooted culture are the spirit and flavour of this intoxicating cocktail. Indian people are curious, friendly, and wanting to strike up a conversation at every

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1 Arundhati Roy, "The Cost of Living", Essay, Modern Library, 1999.

opportunity. The concept of personal space - very dear to our European upbringing - is virtually unknown here because it is common for locals to jostle, touch, or even shove as you walk along.

Despite increasing Western influence, India still retains a huge historical heritage and preserves some of the world's most beautiful monuments and temples.

The area where I carried on my PhD research is Uttar Pradesh, the largest and poorest State of India.

Uttar Pradesh is like a microcosms inside India: it is a substantial regional society within India, occupying a large part of the fertile Indo-Gangetic plain, with a population of 162 million, accounting for 16.4 per cent of the entire country's population.

It is normally referred to as India's "political heartland" or "the rainbow land" where the multi-hued Indian Culture has blossomed from times immemorial.

Due to its peculiar characteristics and to the fact that it lags behind other parts of the country in terms of well being and social progress, Uttar Pradesh is often seen as a case study of development.

It is estimated that 31.15% of Uttar Pradesh's population is living below the poverty line and that almost 80% of the poor is concentrated in the rural areas.

Precisely the rural villages around the capital Lucknow were the setting of my research: to investigate the role of communication and in particular to evaluate the impact of a community media project on the rural development of two villages were the main arguments at the center of my thesis.

## Context and Research Questions

After some introductive chapters, whose function is to provide a comprehensive framework – both theoretical and practical - of the current rural development policies and of the media situation in India and Uttar Pradesh, my dissertation presents the findings of the pilot project entitled *"Enhancing development support to rural masses through community media activity"*, launched in 2005 by the Department of Mass Communication and Journalism of the Faculty of

Arts of the University of Lucknow and by the local NGO Bharosa with the financial support of the Delhi University Grants Commission.

The project scope was to involve rural people and farmers from two villages of the district of Lucknow (namely Kumhrava and Barhi Gaghi) in a three-year participatory community media project.

In Kumhrava a community rural newspaper was conceived, written and published.

In Barhi Gaghi a multipurpose community internet centre was established and informative activities were carried out. Basically two different media (the "traditional" newspaper and the "innovative" internet) were used in a participatory way with the aim to achieve an over-all rural development of the selected areas.

The final goals of the project were to empower underprivileged rural villagers to use media to research, collect, analyse data, document and disseminate information to their communities on current issues like agriculture, education, commerce and governmental schemes. Rural villagers were supposed to become innovators for the benefit of their local communities and the improvement of their living conditions.

This study represents an attempt to provide answers to three main research questions:

*1) What defines a meaningful community media practice?*

*2) Do community media & technology practices contribute to empower communities?*

*3) Is the community media sector sustainable, effective and viable in the Indian rural context?*

The answers to these questions were searched by combining theoretical assumptions – mainly derived from reports and books - with extensive research on the field which included face-to-face interviews, questionnaire-based analysis on people' awareness and response to media use and training.

The management of the project was under the supervision of the staff of the Department of Mass Communication and Journalism (who was responsible for the ex-ante baseline survey, the development of contextually relevant community media applications, the training of local villagers and the ex post evaluation) and the local NGO Bharosa (who was responsible of some activities on the field).

The two initiatives were carried on simultaneously therefore the planning and the coordination of the different activities, as well as the

evaluation, required extensive preparation, accurate care and well-timed actions.

Community media projects like this one have been rarely carried out in India because the country has no proper community media tradition: therefore the development of the project has been a challenge for the all stakeholders involved.

As far as my role as researcher was concerned, my work consisted in following - and partially organizing - the different phases of the project, mainly the training of local people and the elaboration of the evaluation methodology.

I personally created the questionnaire which was distributed to the villagers at the end of the activities and helped the staff to elaborate an analyses of the project outcomes. I kept field notes during all my visits to the rural villages.

## Data sources and Methodology

In order to draw upon a comprehensive range of information, the study makes use of a variety of resources and methods. Preliminary data – those contained principally in the first chapters - have been gathered from census data, local land records, reports and books, government's sites, and newspapers. Original data have instead been gathered and produced during the project, using different methodologies.

### Preliminary data
*- Census data*
Census data provide useful information at the village level and, more generally, about the land and population in India and its States. Census data were used to categorise the research villages within the rural-to-urban continuum on the basis of land use and occupational characteristics. The Indian census takes place every 10 years. The census figures mostly used in this study are from 1991 and 2001, and occasionally from 1981.

However, to rely exclusively on the census was not enough. Census data on land use in particular can be inaccurate and confusing and they might contains errors in enumeration as well as inconsistencies in the application of definitions of variables.

- *Local land records*

Data on crop patterns and on use and ownership of land at the village level were used to supplement the village description and to sketch the context.

- *Reports and books*

Some background information about rural development in India were derived from books and governmental publications, as they provide a historical perspective. Reports from the World Bank, UNDP, FAO and UNESCO have been vastly used, since they are updated and contain important data and investigations. PhD and MA theses available in Delhi have also been used in combination with several books accessible only Lucknow's libraries because written by local researchers. These sources have been used to depict the local situations and to describe the villages and surrounding areas.

- *Governmental sites*

They have been accessed in order to acquire official data (even though some of the documents reported in the sites were in Hindi). The most used ones were the sites of the Planning Commission of India, of the Ministry of Rural Development and of the Ministry of Information and Broadcasting.

- *Newspapers*

Articles from various newspapers (above all from the *Times of India*) have been collected throughout the research period. This was a way to keep track of important events, policy measures, conflicts, environmental issues, and political developments.

Unfortunately – up to now (February 2008) - there is very little information available in English on community media practice in India and particularly in Uttar Pradesh.

Although quite a number of media projects for development have been launched, some of them lack the evaluation part or provide little information on the links between media and the social determinants of rural development, like involvement, inclusion and participation.

The gathering and the critical selection of data have therefore been complex and time extensive.

**Original data**
They have been collected through different methodologies which combined qualitative and quantitative data:
- *A Baseline Survey Methodology*
A baseline survey was employed in order to have a comprehensive picture of the socio-economic conditions of the two villages. Quantitative data (number of inhabitants, of households, of infrastructures) were gathered together with qualitative data (for example the quality of current information at disposal of rural villagers to meet their needs).
Part of the quantitative data were collected through the Census of India 2001 and part through a simplified version of the "village development index" (VDEVELOP).
100 household surveys (50 in Barhi Gaghi and 50 in Kumhrava) were also carried out in order to understand household composition, income, religion, language, media use and information sources of the local villagers.
- *A Field work Methodology*
During the field work a qualitative ethnographic action research approach was used.
Participant observation, the keeping of fieldnotes, face-to-face interviews and group discussions were central aspects of this method. Supplemented by questionnaire surveys, content analysis and information sharing exercises, we selected, mixed and matched the approaches depending on the research needs which in turn was dependent on the needs of the project and its development.
- *A Training Methodology*
During the training period a kind of social constructivism approach was used. Learning was viewed as a social process occurring through interaction and reflection with the others.
- *An Evaluation Methodology*
The evaluation was carried out by the staff on free voluntary base and I personally gave my contribution by elaborating and writing the questionnaire that was distributed to the villagers at the end of the project. The questionnaire implied multiple choice answers and was divided in three main sections (the first one regarding content issues, the second one regarding the general level of satisfaction of the users

and the third one regarding benefits and negative aspects of receving more information).

Both the primary and the original data are meant to provide an overview of the interdisciplinary nature of this research; they are all linked to one another with the aim to contextualize and explain the participatory approach to community media used in the project.

**Structure of the thesis**

This thesis consists of an introduction, six chapters and a conclusion.
It is basically made up of two parts: the first four chapters introduce India, its rural development policies, the state of communication and Uttar Pradesh. The last two chapters provide a theoretical framework of communication for rural development and present the community media project I followed.
In details:

The current section introduces the topic of the dissertation, formulates the research questions, identifies the most important data sources and outlines the methodologies applied to the study.

Chapter 1 presents a preamble on development in India and focuses on the country's economic high growth, despite low development. The chapter intends to investigate whether communication, connectivity and participation might provide a response to the Indian developmental challenges.

Chapter 2 reviews the current rural development policies in India: after investigating the significance of rurality in India and providing a glimpse into Indian villages, the chapter identifies the causes for backwardness of rural areas (among which the lack of information is one of the principal ones) and reports about Governmental and NGOs rural initiatives for poverty alleviation.

Chapter 3 provides a framework of the state of the art of communication in rural India. It focuses on the differences between use and penetration of mass media in urban and rural India and analyses the possible impact of community media on local development.

Chapter 4 presents Uttar Pradesh, the State where the project was launched and completed.
An analysis of the social indicators and of the macro-economic trends, as well as of the state of agriculture and rural development is portrayed. The focus is on U.P. Rural Development Institutions, projects and policies and on the role that communication plays in rural development in this State.

Chapter 5 provides a theoretical framework on communication for development: the assumptions are based on FAO's publications: some criteria for media selection and for the planning of communication activities are suggested. The chapter constitutes the

theoretical background at the base of the community media described in the following chapter.

Chapter 6 presents the findings of the pilot project entitled *"Enhancing development support to rural masses through community media activity"*, launched in 2005 by the Department of Mass Communication and Journalism of the Faculty of Arts of the University of Lucknow and by the local NGO Bharosa. The chapter illustrates my role in the project, the methodologies used, the different phases, outcomes and limitations of the project.

*A conclusion, which attempts to summarise the findings of the study and reflect on the three research questions, constitutes the last part of the thesis.*

**Glossary of Terms**

*Bahujan Samaj Party* Political party of Mayawati Kumari, the Chief Minister of Uttar Pradesh

*Bharat Nirman* Governmental plan for action in rural infrastructure

*Bharatiya Janata Party* Indian Popular Party, which is a major centre-right Indian political party

*Bigha* A measure of land equivalent to two thirds of an acre

*Brahmin* The highest caste group, landowners in the region (priests)

*Casbah* A road-side village or peri-urban settlement

*Chamar* Traditionally leather workers and thus considered polluting, classified as SC

*Charvah* An attached labourer who looks after cattle

*Crore* A unit in the Indian numbering system, equal to 100 lakh or 10 million

*Dalit* The political term for a member of a SC, formerly known as 'untouchable' or '*harijan*'

*Dharkar* A low caste group (basket weavers)

*Doordarshan* The national television network

*Garibi Hatao* Rural development in Hindi

*Gram Panchayat* The lowest tier of the *Panchayat*

*Gram Panchayat* Village council of elected representatives

*Gram Pradhan* Elected representative of a *panchayat* (a village and its surrounding land)

*Gram Sevak* Key government official from the block development office

*Harijan* Gandhi's term for the 'untouchable' castes or *dalits*, also the local term used in Koraon

*Indira Awaas Yojana* Governmental programme which aims at helping rural people below poverty-line belonging to SCs/STs

*Jajmani* A caste-based system of exchange whereby landlords and higher caste villagers pay service

*Jatav* A sub-caste within *Dalits*

*Kharanjas* Brick roads

*Kharif* The main agricultural season (June–Nov) during which paddy is cultivated

*Kisani* The name given to the regular payments made between clients and patrons

*Lacs (or Lakh)* An Indian term for the number 100,000
*Mandi* A government mandated market-yard where farmers sell their crops
*Meths* Informal, village-based labour gang leaders
*Munadi* Traditional drum beaten to draw people's attention to any announcement to the village
*Nyaya Panchayat* System of dispute resolution at village level
*Panchayat Samiti* Block Advisory Committee (in tribal areas)
*Panchayat* The third (local) tier of government, strengthened through the 73rd Constitutional
*Patel* A middle-high caste group, landowners in the region
*Patwari* Government official responsible for land records
*Pradhaan Mantri Gram Sadak Yojana* Governmental programme which aims to provide connectivity to all unconnected habitations with a population of more than 1000
*Pukka Road* Brick roads
*Rojgar Yojana* Scheme for the educated unemployed youth
*Rupee (Rs.)* Official Indian currency. 1 Rs. is equal to 0,0163013 euro
*Samajwadi Party* Socialist Party which describes itself as a democratic socialist and anti-English language party
*Sarpanch* Head of a *Panchayat,* Village Chief
*Sarva Shiksha Abhiyan* School education programme
*Swaranjayanti Gram Swarozgar Yojana* which aims at establishing a large number of micro-enterprises in the rural areas
*Swarnajayanti Grameen Swarojgar Yojana* Governmental programme which is designed to provide assistance to Self Help Groups
*Tehsil* The smallest administrative unit of the government for law and revenue collection
*Tola* Hamlet
*Tripura Panchayat* Election of office bearers
*Vidhan Parishad* The Upper House of the Parliament in U.P.
*Vidhan Sabha* The Lower House of the Parliament in U.P.
*Yadav* One of several lower-middle class groups who migrated from central Bihar in 1970s
*Zaminder* Landlord contracted to raise tax (derived from 'tenants' or peasants) for the British.
*Zilla Parishad* The highest tier of the *Panchayat*

# PART I

## CHAPTER I

## A PREMISE ON INDIAN DEVELOPMENT

*"...Development is a process that should not divide but unite. I am confident that India will become a developed nation by 2020. Come, let us strive together to turn this resolve into reality."*

*Dr Manmohan Singh, Indian Prime Minister*

### 1.1 India 2008: High Growth, Low Development

"…*India is a poor country that is rapidly becoming wealthier*".
These words pronounced by India's Prime Minister Singh[2] summarise the recent shift of the country towards a dynamism, rarely associated with India in the past.
Over the last two decades, India has moved away from its former dirigiste model (where the State was the principal driver of the economy and the economy itself was closed to the rest of the world) and has become a market-based system.
Its economy is experiencing at moment an average annual growth rate of around 6% per annum which is quite impressive if compared to the performance of Indian economy during the last thirty years when the average growth logged 3.5% per annum.
By 2012 it is expected to generate 70 million new jobs, reduce unemployment to less than 5%, lower poverty by 10%, and promote an inclusive growth[3].

2 India's fourteenth Prime Minister, Dr. Manmohan Singh is rightly acclaimed as a thinker and a scholar. The sentence which I reported was pronounced by him in May 2006 during a meeting with President George Bush in New Delhi.
3 Prevision reported in the Governmental Eleventh Five Year Plan (2007-2012).

India's ascending trajectory is marked by rising foreign exchange reserves, reduced inflation rates, global recognition of technological competence, energy of 540 million youth, umbilical connectivities of 20 million people of Indian origin abroad, and the interest shown by developed countries to invest in Indian engineers and scientists, all this driving the Indian economy to become one of the largest in the world.

Despite these impressive achievements and the consistent efforts by the State to make the centralized planning more people oriented and people centric, the growth pattern is not uniform and the meaning of "development" is not the same for all sections of Indian society.

Development through large-scale industrialization, urbanization and modernization, designed to alleviate poverty and debt seems to have ironically helped elite and urban sections of India with residual impact on rural populations.

Economic plans adopted to propel India's development in industry and agriculture have been found increasingly capital, technology and energy intensive, environmentally exacting and positively assisting capitalist merchants, industrialists, rich farmers and the technical and administrative bureaucracy.

If on one hand development actions have exponentially increased India's industrial production, on the other they have generated forms of poverty through devastating the livelihood base of a large number of subsistence communities.

350 million people[4] - nearly 35% of the country's population - continue to live in poverty.

For them development has remained unattainable.

In 2008, almost sixty-one years after independence, people continue to struggle within the violence of deprivation and powerlessness, burdened by the dilemmas of everyday existence.

It is not a case if India is ranked ranks 128 out of 177 countries in the last Human Development Index released by the United Nations Development Programme (UNDP) in 2007.

This index looks beyond GDP to a broader definition of well-being and seeks to capture the three dimensions of human development: quality of life (measured by life expectancy at birth), education (measured by

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4 www.economywatch.com/indianeconomy/poverty-in-india.html

adult literacy and enrolment in primary, secondary and tertiary education) and GDP per capita measured in U.S. dollars at Purchasing Power Parity (PPP)[5].

While there has been progress – especially in the eradication of some endemic diseases – India's low score on human development indicators is alarming. The infant mortality rate is 57 deaths per one thousand live births; the maternal mortality rate is 301 per one hundred thousand live births; life expectancy at birth for Indians is between 60 and 61 years, adult literacy is as low as 57.2% and the GDP per capita is $3,100.

Both in terms of per capita incomes and socio-economic markers, India is characterized by a strong regional disparity which has gone up since the 1960s.

Geographically, the forward group of States (Andhra Pradesh, Gujarat, Haryana, Karnataka, Kerala, Maharashtra, Punjab and Tamil Nadu) fall in the Western and Southern parts of the country, account for 40.4% of the population of the country and are contiguous except for Punjab and Haryana which are separated by Rajasthan from the rest of the States in this group.

The group of backward States (Assam, Bihar, Madhya Pradesh, Orissa, Rajasthan, Uttar Pradesh and West Bengal) are in the Eastern and Northern parts of the country, account for as much as 55.17% of the population of the country and are geographically contiguous.

Table 1 below presents the map of the Poverty Headcount Index of India –which reports the proportion of the population with a standard of living below the poverty line - and the trend in percentage share of poor in the two groups of States individually and collectively.

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5Each year since 1990, the Human Development Report (HDR) of the UNDP publishes the Human Development Index (HDI).

*Table 1: An overview of poverty in India according to States*
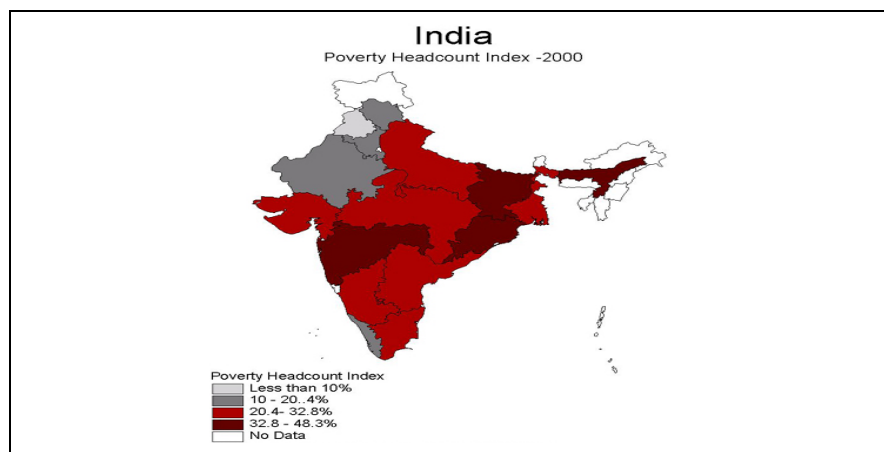


| States | 1983-84 | 1987-88 | 1993-94 | 1999-2001 |
|---|---|---|---|---|
| Forward  Group | | | | |
| Andhra Pradesh | 5.10 | 5.22 | 4.81 | 4.57 |
| Gujarat | 3.65 | 3.98 | 3.28 | 2.61 |
| Haryana | 0.92 | 0.83 | 1.37 | 0.67 |
| Karnataka | 4.64 | 5.17 | 4.88 | 4.01 |
| Kerala | 3.31 | 2.88 | 2.39 | 1.58 |
| Maharashtra | 9.01 | 9.65 | 9.53 | 8.76 |
| Punjab | 0.89 | 0.82 | 0.78 | 0.56 |
| Tamil Nadu | 8.05 | 7.53 | 6.31 | 5.01 |
| Total for forward States | | | | |
| | 35.57 | 36.08 | 33.35 | 27.77 |
| Backward  Group | | | | |
| Assam | 2.41 | 2.47 | 3.01 | 3.63 |
| Bihar | 14.31 | 13.71 | 15.40 | 16.36 |
| Madhya Pradesh | 8.61 | 8.61 | 9.32 | 11.47 |
| Orissa | 5.62 | 5.40 | 5.01 | 6.50 |
| Rajasthan | 3.93 | 4.65 | 4.01 | 3.14 |
| Uttar Pradesh | 17.24 | 17.47 | 18.87 | 20.36 |
| West Bengal | 9.87 | 9.24 | 7.95 | 8.20 |
| Total for Backward States | | | | |
| | 61.99 | 61.55 | 63.57 | 69.66 |

*Source: Planning Commission, Govt of India and "Poverty in India. A Regional Perspective",*
*World Bank Working Paper 2003*

The table indicates that the share of the poor in the seven backward States – except West Bengal[6] - has gone up significantly. Now they account for about 70% of the country's poor.

Spatial disparity in development has encouraged migration toward developed states and regions and has contributed to the widening of the gap between urban and rural India.

Therefore, despite its continuous progress, India is challenged.


## 1.2 The Developmental Challenge of Rural India

The main Indian developmental challenges concern not only the human development front, but also education, health care, the removal of barriers to trade and investment[7], and, in particular, the urban-rural divide.

Data collected by the National Sample Survey Organisation[8] (NSSO) show that the average per capita expenditure in rural India during 2000-01 amounted to Rs.499.90, nearly the half of the corresponding figure of Rs.914.57 for an urban dweller.

In 2003 rural literacy rate was 49.21% while urban literacy rate was 70.06%; life expectancy at birth in rural areas was 58 years, while in urban India it was 64.9 years.

Nowadays only 30.54% of rural households have electricity, compared to 75.78% of the urban households and only 18.7% of the rural people have access to piped water while 70.1% of urban dwellers have access.

The bias of the state in favour of urban areas is also evident from the per capita expenditure on basic services. According to the estimate of the Eleventh Finance Commission, per capita expenditure on basic services in rural areas during 2001-2002 was Rs.24, but in urban areas it was Rs.49. Rural India contributes 27% to the GDP, but gets back only 5%, which is less than one-fifth of its contribution.

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6 West Bengal's exceptional experience was due to the fast growth in agricultural production and the associated rural prosperity.

7 This last aspect is particularly challenging, as India has a high fiscal deficit, currently around 11 percent of GDP, constraining any new spending. India's new leaders will need to make some difficult decisions about how to reduce the cost burden of the government and free up the necessary funds for its social agenda.

8 National Sample Survey Organisation Report, 1998, 5th round.

Abusalef Shariff [9]and others, in an article in the Economic and Political Weekly[10] have shown that while the share of expenditure on urban poverty alleviation programmes in the total budgetary allocation by the Central government declined from 1% to 0.8% during the period between 1990-91 and 2000-01, the per capita expenditure for urban poor increased from Rs.11 to Rs.28 during the same period. But for the rural poor, the per capita expenditure it is just one-eighth of this.

While it is almost impossible to bring rural-urban disparity to an end, it is possible to reduce the disparity to a tolerable level. It may be recalled that Gandhi emphasised on rural growth and pleaded for village *swaraj* (self-government). He wanted the engine of India's development to start rolling down from the villages.

Apart from taking steps to increase human development facilities in the villages, such as health and education, and develop appropriate infrastructure such as roads and marketing facilities, there is the need for generating employment and improving the living conditions of the villagers.

Since rural development essentially encompasses a multi-disciplinary approach, there should be an in-built mechanism to involve people's representation in the conceptualization, planning, and management of rural development programmes.

It seems that the real developmental challenge in India is about finding the right balance between the imperatives of industrial development and the compelling need to help the rural sector realize its own potential by using the gains of modern science and technology. India stands at a turning point and has the potential to bring rural areas into the mainstream of economic development.


## 1.3 Connectivity, Communication, Participation: a Response to Development?

When I first confronted myself with the causes of the rural backwardness - at the preliminary stage of this PhD thesis - I

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9 Abusalef Shariff is the principal economist and head of the Human Development Programme Area in India.
10 "Liberalisation with a human face", Economic and Political Weekly, Delhi, March 1, 2002.

discovered that the lack of connectivity - intended in its broader sense - has been a major factor in perpetuating economic and social divides in the past.

I started therefore my research from the assumption that if it is true that there are numerous opportunities in the rural areas, then connectivity and improved communication might multiply them.

The research on the field gave me further evidence of this first hypothesis. From the general baseline survey conducted in the villages previous to the launch of the project, it emerged that people of the rural areas lack both generic and specific information on matters relating to farm operations, markets, governmental schemes, health, education.

In a general sense it could be affirmed that villages lack connectivity, which instead might provide economic opportunities to all segments of people in urgent need. When I use the term "connectivity" I refer to four connectivities in particular:

- physical connectivity (roads and transport);
- electronic connectivity (telecom and high bandwidth fiber optic cables);
- knowledge connectivity (education and training);
- economic connectivity (micro-credit and marketing of products).

Villagers have basic information needs but often the absence of connectivity prevents them from being informed about the most elemental data.

But if the situation is as such, is the simple provision of communication, technology and infrastructures enough to achieve a paradigm shift and to transform poor and unskilled rural workers into empowered people, endowed with the possibility to decide what is best for them?

With such a question in my mind, I followed and organized the activities of the project and tried to focus on "participation" and its companion concepts of "sustainability" and "empowerment", thinking to find a proper answer in their application. In fact, as White (1996) writes, "no respectable project can be funded without provision for participation because participation is a process by which people, especially disadvantaged people, influence decisions that affect them".

However, my general feeling was that connectivity, communication, empowerment, sustainability and participation were still not enough to

achieve rural development. Luckily, I found the answer to my many questions at the end of the project.

My reflections and findings are exposed in the conclusion.

# CHAPTER II

# RURAL DEVELOPMENT IN INDIA

*"...India is poor because the villages of India are poor. India will be rich if the villages of India are rich."*

*Jawaharlal Nehru, first Prime Minister of India*

*2.1 What is Rural India?*

The concept of rurality is the subject of long-standing debate and controversy: until now there is not one universally accepted definition of "rural". To some, "rural" is a subjective state of mind and to others it is an objective quantitative measure.

The Organisation for Economic Co-operation and Development (OECD), in an attempt to define rurality, has identified three main criteria:
- population density and the size of human settlements (typically rural areas have low population density and small, scattered human settlements);
- land use and the predominance of agriculture and forestry (limited area covered by buildings);
- "traditional" social structures and community identity and heritage issues.

In the case of India the most suitable definition is the one given by Omkar Goswami.[11] He writes that:

"*Rural India is a huge, heterogeneous entity that many of us know little of. Consequently, we often think it as a vast tract of woefully poor people, who labour under the scorching sun with rude ploughs and*

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11 Omkar Goswami is consultant to the World Bank, the IMF, the Asian Development Bank and the OECD and the founder of CERG Advisory that specialises in corporate consulting and economic advisory services.

*emaciated bullocks. But rural India includes hundreds of millions of people, living very different lives".*

One in 10 people on earth live in rural India. 74.27 % of India's population lives in rural India, while 25.73 % lives in urban India[12]. According to the Census of 2001, in India there are 28 States, 7 Union Territories, 593 districts, 384 urban agglomerations, 5161 towns, 27 million-plus cities and 35 million-plus urban agglomerations and 638,365 villages, some of which are uninhabited.

*Table 1: Administrative divisions of India*

| Census Data 2001 >> India At a Glance >> Administrative Divisions | |
|---|---|
| No. of States | 28 |
| No. of Union Territories | 7 |
| No. of Districts | 593 |
| No. of Sub-districts | 5,463 |
| No. of CD Blocks | 3,799 |
| No. of Urban Agglomerations / Towns | 4,378 |
| No. of Urban Agglomerations | 384 |
| No. of Towns | 5,161 |
| No. of Inhabited Villages | 593,731 |
| No. of Uninhabited Villages | 44,656 |

*Source:http://demotemp257.nic.in/httpdoc/Census_Data_2001/India_at_Glance/admn.html*

The Census of India 2001 has defined a village as:

*"A cluster of houses with a local name. It may be made up of the chief area of habitation and the surrounding area falling within certain demarcated boundaries. Hamlets or scattered farm houses within such areas are assigned to definite villages".*

The Indian village may be in general constituted by a group of independent holdings, or it may be in one sense a unit, a share held by

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12 Census of India 2001.

the resident owners who form the 'village community.' Or again it may be a group of lands which has been almost accidentally formed, the real area of 'collective ownership' (as far as the term is applicable) being something much larger than a village.

In any case, the constitution may differ.

States with more than 40,000 villages are Rajasthan, Uttar Pradesh, Bihar, West Bengal, Orissa, Madhya Pradesh and Maharashtra. The average population in an Indian village is 1,161 and 91,555 villages have population sizes less than 200.

Rural villages provide 27% of Indian GDP; they are dependent on agriculture for much of their sustenance, even though agriculture is growing at negligible rate of around 3.5%[13]. Drought is a common occurrence across much of India. As a result, villagers, for the most part, remain a poor lot - the per capita income of India's villages is perhaps no more than Rs 12-18,000 (202,346- 303,519 euro) per annum, as compared to the national average of Rs 25,000 (421,554 euro[14]).

Poor living conditions and absence of economic opportunities today are the main problems in the villages. Lack of basic facilities like electricity, drinking water, telephone, roads, good schools and colleges demonstrate that opportunities available to villagers are not dramatically different from what they were many years ago. This is causing migrant streams of petty farmers and unskilled labour from rural areas to large cities, giving birth to the phenomenon of the "megalopolitisation" of India.[15]

Cities like Mumbai, Madras, Delhi and Ahmedabad are coalescing to form a vast urban region wherein boundaries of individual cities overlap each other.

Rapid urbanisation has led to increased stress on the urban system and at the same time the migration of people from rural areas is changing the very nature of India. Less visible than the heated consumerism or western habits changing India, the consequences may be more profound and, for a country weaned on the virtues of village life, more wrenching.

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13 Census of India 2001.
14 1 INR = 0,0168622 EUR - 1 EUR = 59,3044 INR
15 Misra, R.P, "Million Cities of India" (Vol. 2) New Delhi, Sustainable Development Foundation, 1998.

There is an urgent need to workout policies and strategies to stop migration from villages by involving various stakeholders from Government, NGOs, village councils and civil society groups.

Studies have shown that the rural villages with better infrastructure support of transport/roads, education, health and communication have a low migration rate.

If India as a nation has to progress, there is little doubt that India's villages need to be empowered by providing services and infrastructures while preserving, at the same time, the moral values, the cultural forms and the ground roots that characterize Indian rural areas.


## 2.2 The Village Dimension in India

Viewed from a distance, an Indian village may appear deceptively simple: a cluster of mud-plastered walls shaded by a few trees, set among a stretch of green fields, with a few people slowly coming or going, oxcarts creaking, cattle lowing, and birds singing - all present an image of harmonious simplicity. Indian city dwellers often refer nostalgically to "simple village life."

Social scientists of the past wrote of Indian villages as virtually self-sufficient communities with few ties to the outside world.

In actuality, Indian village life is far from simple.

Each village is connected through a variety of crucial horizontal linkages with other villages and with urban areas both near and far. Most villages are characterized by a multiplicity of economic, caste, kinship, occupational, and even religious groups linked vertically within each settlement.

Factionalism is a typical feature of village politics. In one of the first of the modern anthropological studies of Indian village life, anthropologist Oscar Lewis called this complexity "rural cosmopolitanism."

Throughout most of India, village dwellings are built very close to one another in a nucleated settlement, with small lanes for passage of people and sometimes carts. Village fields surround the settlement and are generally within easy walking distance. In hilly tracts of Central, Eastern, and far Northern India, dwellings are more spread out, reflecting the nature of the topography. In the wet states of West

Bengal and Kerala, houses are more dispersed; in some parts of Kerala, they are constructed in continuous lines, with divisions between villages not obvious to visitors.

In Northern and Central India, neighbourhood boundaries can be vague.

The houses of Dalits ("the untouchables") are generally located in separate neighbourhoods or on the outskirts of the nucleated settlement, but there are seldom distinct Dalit hamlets. By contrast, in the south, where socioeconomic contrasts and caste pollution observances tend to be stronger than in the north, Brahman homes may be set apart from those of non-Brahmans, and Dalit hamlets are set at a little distance from the homes of other castes.

The number of castes resident in a single village can vary widely, from one to more than forty. Typically, a village is dominated by one or a very few castes that essentially control the village land and on whose patronage members of weaker groups must rely. In the village of about 1,100 population near Delhi studied by Lewis in the 1950s, the Jat caste (the largest cultivating caste in north-western India) comprised 60 % of the residents and owned all of the village land, including the house sites.

In many areas of the south, Brahmans are major landowners, along with some other relatively high-ranking castes. Generally, land, prosperity, and power go together.

In some regions, landowners refrain from using plows themselves but hire tenant farmers and labourers to do this work. In other regions, landowners till the soil with the aid of labourers, usually resident in the same village. Fellow villagers typically include representatives of various service and artisan castes to supply the needs of the villagers - priests, carpenters, blacksmiths, barbers, weavers, potters, oil pressers, leatherworkers, sweepers, water bearers, toddy-tapers, and so on. Artisanry in pottery, wood, cloth, metal, and leather, although diminishing, continues in many contemporary Indian villages as it did in centuries past. Village religious observances and weddings are occasions for members of various castes to provide customary ritual goods and services in order for the events to proceed according to proper tradition.

Aside from caste-associated occupations, villages often include people who practice non-traditional occupations. For example,

Brahmans or Thakurs may be shopkeepers, teachers, truckers, or clerks, in addition to their caste-associated occupations of priest and farmer. In villages near urban areas, an increasing number of people commute to the cities to take up jobs, and many migrate. Some migrants leave their families in the village and go to the cities to work for months at a time. Many people from Kerala, as well as other regions, have temporarily migrated to the Persian Gulf states for employment and send remittances back to their village families, to which they will eventually return.

At slack seasons, village life can appear to be sleepy, but usually villages are humming with activity. The work ethic is strong, with little time out for relaxation, except for numerous divinely sanctioned festivals and rite-of-passage celebrations. Residents are quick to judge each other, and improper work or social habits receive strong criticism. Villagers feel a sense of village pride and honour, and the reputation of a village depends upon the behaviour of all of its residents.

### 2.2.1 The Village Community

Villagers manifest a deep loyalty to their village, identifying themselves to strangers as residents of a particular village, harking back to family residence in the village that typically extends into the distant past. A family rooted in a particular village does not easily move to another, and even people who have lived in a city for a generation or two refer to their ancestral village as "our village."

Villagers share use of common village facilities - the village pond (known in India as a tank), grazing grounds, temples and shrines, cremation grounds, schools, sitting spaces under large shade trees, wells, and wastelands. Perhaps equally important, fellow villagers share knowledge of their common origin and of each other's secrets, often going back generations. Interdependence in rural life provides a sense of unity among residents of a village.
A great many observances emphasize village unity.

Typically, each village recognizes a deity as village protector, and villagers unite in regular worship of this deity, considered essential

to village prosperity. They may cooperate in constructing temples and shrines important to the village as a whole. Hindu festivals such as Holi, Dipavali (Diwali), and Durga Puja bring villagers together.

People of all castes within a village address each other by kinship terms, reflecting the fictive kinship relationships recognized within each settlement.

In the North, where village exogamy is important, the concept of a village as a significant unit is clear. When the all-male groom's party arrives from another village, residents of the bride's village in North India treat the visitors with the appropriate behaviour due to them as bride-takers - men greet them with ostentatious respect, while women cover their faces and sing bawdy songs at them.

A woman born in a village is known as a daughter of the village while an in-married bride is considered a daughter-in-law of the village. In her conjugal home in North India, a bride is often known by the name of her natal village; for example, Sanchiwali (woman from Sanchi). A man who chooses to live in his wife's natal village - usually for reasons of land inheritance - is known by the name of his birth village, such as Sankheriwala (man from Sankheri).

The solidarity of a village is always riven by conflicts, rivalries, and factionalism. Villagers commonly view gains as possible only at the expense of neighbours. Further, the increased involvement of villagers with the wider economic and political world outside the village via travel, work, education, and television, the expanding government influence in rural areas and the increased pressure on land and resources as village populations grow seem to have resulted in increased factionalism and competitiveness in many parts of rural India.

### 2.2.2 Caste and Class in Rural India

Within Indian culture, whether in the North or the South, Hindu or Muslim, urban or village, virtually all things, people, and groups of people are ranked according to various essential qualities. Although India is a political democracy, in daily life there is little advocacy of or adherence to notions of equality.

Caste-based interaction have occurred for centuries and still continue to do so, more in the countryside than in urban settings and more in the realms of kinship and marriage than in less personal interactions.

Castes are ranked, named, endogamous (in-marrying) groups, membership in which is achieved by birth. There are thousands of castes and subcastes in India; each caste is part of a locally based system of interdependence with other groups, involving occupational specialization, and is linked in complex ways with networks that stretch across regions and throughout the nation.

Many castes are traditionally associated with an occupation, such as high-ranking Brahmans; middle-ranking farmer and artisan groups, such as potters, barbers, and carpenters; and very low-ranking "untouchable" leatherworkers, butchers, launderers, and latrine cleaners. There is some correlation between ritual rank on the caste hierarchy and economic prosperity. Members of higher-ranking castes tend, on the whole, to be more prosperous than members of lower-ranking castes. Many lower-caste people live in conditions of great poverty and social disadvantage.

According to the Rig Veda, sacred texts that date back to oral traditions of more than 3,000 years ago, progenitors of the four ranked *varna* groups sprang from various parts of the body of the primordial man, which Brahma created from clay. Each group had a function in sustaining the life of society - the social body. Brahmans, or priests, were created from the mouth. They were to provide for the intellectual and spiritual needs of the community. Kshatriyas, warriors and rulers, were derived from the arms. Their role was to rule and to protect others. Vaishyas - landowners and merchants - sprang from the thighs, and were entrusted with the care of commerce and agriculture. Shudras--artisans and servants - came from the feet. Their task was to perform all manual labour.

Later conceptualized was a fifth category, "Untouchable" menials, relegated to carrying out very menial and polluting work related to bodily decay and dirt.

Since 1935 "Untouchables" have been known as Scheduled Castes, referring to their listing on government rosters, or schedules. They are also often called by Mohandas Karamchand (Mahatma) Gandhi's term Harijans, or "Children of God." Although the term *Untouchable* appears in literature produced by these low-ranking castes, in the

1990s, many politically conscious members of these groups prefer to refer to themselves as Dalit, a Hindi word meaning oppressed or downtrodden. According to the 2001 census, there are 138 million Scheduled Caste members in India, approximately 16% of the total population.

90 % of Dalits lives in rural areas and more than 50 % of them work as landless agricultural laborers.

State and national governments have attempted to secure more just distribution of land by creating land ceilings and abolishing absentee landlordism, but evasive tactics by landowners have successfully prevented more than minimal redistribution of land to tenant farmers and labourers.

In Indian villages, caste and class affiliations overlap. According to anthropologist Miriam Sharma, *"...Large landholders who employ hired labour are overwhelmingly from the upper castes, while the agricultural workers themselves come from the ranks of the lowest--predominantly Untouchable--castes.*[16]*"*

She also points out that household-labour-using proprietors come from the ranks of the middle agricultural castes. Distribution of other resources and access to political control follow the same pattern of caste-cum-class distinctions.

Despite modernization, the caste system continues to operate, but changes are occurring.

The *jajman system* (consisting in the performance of various tasks from members of low castes for their patrons) is slowly disappearing. The growth of urbanization (an estimated 30 % of the population now lives in cities) is having a far-reaching effect on caste practices, not only in cities but in villages: restrictions on interactions with other castes are becoming more relaxed and access to employment often occurs through intra-caste connections. Several growing Hindu sects draw members from many castes and regions, and communication between cities and villages is expanding dramatically.

As new occupations open up in urban areas, the correlation of caste with occupation is declining.

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16 Sharma M., "Anthropology and Colonialism in Asia and Oceania", The Journal of Asian Studies, Vol. 59, No. 2, May, 2000.

**BOX 1 - Untouchability in rural India**

Despite many strong social, cultural and political movements aimed at improving the status of dalits, and several laws to protect their rights, untouchability is widely prevalent in rural India, in several clearly visible and subtle ways.
A recent study conducted by ActionAid [17] in 2006, in 565 villages of 11 States (Punjab, Uttar Pradesh, Bihar, Madhya Pradesh and Chhattisgarh, Rajasthan, Maharashtra, Orissa, Andhra Pradesh, Karnataka, Kerala and Tamil Nadu), shows that:
In 73% of the villages, dalits cannot enter non-dalit homes.
In 70% of the villages, dalits cannot eat with non-dalits.
In 64% of the villages, dalits cannot enter common temples.
In 53% of the villages, dalit women suffer ill-treatment at the hands of non-dalit women.

The study also found that in 37% of villages, dalits were denied wage employment in agriculture; in around 25% of villages, they received lower wages than non-dalit workers. Dalit workers were excluded from housing construction in around a third of the villages; and in 46% of the villages they were not allowed to sell to milk cooperatives. In 32% of the villages they were denied access to irrigation facilities; in nearly 21% of villages they were denied access to common property resources. Untouchability is no longer a major political issue. While atrocities against dalits are highlighted in the media and taken up by political parties, everyday discrimination against dalits is often simply accepted as an aspect of Indian reality that will not change easily or soon.

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17 "Untouchability in Rural India", ActionAid Report, Sage Publications, New Delhi, 2006.

### 2.2.3 Panchayati Raj: Village Local Government

Traditionally, villages often recognize a headman and listen with respect to the decisions of the *Panchayat* , an ancient form of local government composed of important men - five (panch) elders - from the village's major castes, who have the power to levy fines and exclude transgressors from village social life.

Village Panchayats have a long history in India. They represent a system of governance prevalent in ancient India. Gandhiji had aptly remarked that independence must begin at the bottom: every village ought to be a republic or panchayat with the authority and resources to realize the potential for economic and social development of the village.

Gandhiji's views found articulation in Article 40 of the Constitution. It enjoins that `*the States shall take steps to organize village panchayats with such powers and authority as may be necessary to enable them to function as units of self-government'*.

However, it is not until 1992, with the 73rd Constitutional Amendment Act, 1992 that Panchayati Raj Institutions (PRIs) are conferred Constitutional status.

The Constitution provides for devolution of powers and responsibilities upon panchayats at appropriate levels and envisages the establishment of a democratic decentralized development process through people's participation in decision-making, implementation and delivery.

Panchayati Raj Act underlines the village self-governance, where the people in the form of an organisation think, decide and act for their collective interest. The self-reliance means that every village must produce according to its capacity and try to increase its capacity, which can be achieved in following ways:
- by identifying economic and human resources of the Panchayat area,
- by estimating the capacity of these resource,
- by making decision for utilizing these resources,
- by formulating and implementing plans,

In present-day, States have initiated action to devolve administrative and financial powers and resources to PRIs to enable them to discharge their Constitutional role. It is expected that once the process of devolution is effectively operationalised, resources from the

Central and State Governments meant for programmes falling within the jurisdiction of the PRIs would directly get allocated to them.

It is however observed that a number of Ministries of Central Government have not taken – so far- any concrete steps to integrate PRIs in their strategy of planning and implementation of various programmes, which essentially fall in their jurisdiction. At best the Ministries issue general directions for involvement of panchayats in their programmes without suggesting concrete modalities or institutional arrangements with specified roles for them consistent with their jurisdictional status.


## 2.3 Land Tenure and Land Reform

India is a land of small farms; about 19 % fell in the one-to-two hectare range, 16 % in the two-to-four hectare range, and 11 % in the four-to-ten hectare range. Only 4 % of the working farms encompassed ten or more hectares.[18]Factors influencing this range include soils, topography, rainfall, rural population density, and thoroughness of land redistribution programs.

Many factors - historical, political, economic, and demographic - have affected the development of the prevailing land-tenure status. Independent India inherited a structure of landholding that was characterized by heavy concentration of cultivable areas in the hands of relatively large absentee landowners (*zamindars*), by the excessive fragmentation of small landholdings and by the lack of any generalized system of documentary evidence of landownership or tenancy.

From one generation to the next, there was a tendency for an original family holding to be progressively subdivided; this phenomenon resulted in many landholdings that were too small to provide a livelihood for a family. Borrowing money against land was almost inevitable and frequently resulted in the loss of land to a local moneylender or large landowner, further widening the gap between large and small landholders. Moreover, inasmuch as landowners and moneylenders tended to belong to higher castes and petty owners and

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18 Besley T. and Burgess R., "Land reform, poverty reduction and growth: evidence from India", Working Paper, London School of Economics, 1998.

tenants to lower castes, land tenure had strong social as well as economic impact

By the early 1970s, after extensive legislation, large absentee landowners had, for all practical purposes, been eliminated; their rights had been acquired by the state in exchange for compensation in cash and government bonds. More than 20 million former zamindar-system tenants had acquired occupancy rights to the land they tilled.

Whereas previously the landlord collected rent from his tenants and passed on a portion of it as land revenue to the government, starting in the early 1970s, the state collected the rent directly from cultivators who, in effect, had become renters from the state.

Large landowners were divested not only of their cultivated land but also of ownership of forests, lakes, and barren lands. They were also stripped of various other economic rights, such as collection of taxes on sales of immovable property within their jurisdiction and collection of money for grazing privileges on uncultivated lands and use of river water. These rights also were taken over by state governments in return for compensation.

By 1980 more than 6 million hectares of waste, fallow, and other categories of unused land had been vested in state governments and, in turn, distributed to landless agricultural workers.

Now matters concerning the ownership, acquisition, distribution, and taxation of land are, by provision of the constitution, under the jurisdiction of the States, which has initiated a computerisation of land records in all districts of the country except those where land records are not maintained.

At the moment there is relatively little evidence from secondary data on trends of landlessness in rural India. Those studies which have been undertaken have often come to conflicting conclusions regarding this issue[19]; landlessness is rising in some areas, and declining in others.

Landlessness at the village level has a whole range of causes, and impoverishment is only one of these: other causes include changes in household structure, population growth, migration, and occupational change.

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19 See for example, Raj (1976) and Vyas (1979).

## 2.4 Agriculture

Although in decline, the agricultural sector accounts for 30% of India's GDP and employs over 60% of the workforce.

The Green Revolution of the late 1960s and early 1970s has modernised agriculture and raised productivity levels. The introduction of new equipment, farm technology and better fertilisers led to high yielding varieties and a remarkable increase in the production of crops such as wheat and rice. However, the growth was uneven across regions and widened income differentials between rich and poor farmers[20].

The liberalisation of the economy in the 1990s and the growing importation of agricultural and related products from international markets has impacted negatively on the primary sector by lowering the prices of its products.

Despite reforms, agricultural growth remained moderate at an average of less than 3% for 1992 to 2001. Food grain production increased by only 2.4% over the same period[21].

Production levels increased by a mere 2.1% for rice and 2.7% for wheat between 1991 and 2002, compared to 5.1% and 5.8% respectively in the 1980s.

Other food crops also witnessed a deterioration in production growth compared to earlier decades.

Recently there has been a sharp increase in the rural unemployment rate and a slow down in the inter-sectoral shift of workers from agriculture to high profit industrial and tertiary activities.

Agriculture and low productive non-farm activities have come under serious stress, sharing limited income among larger number of workers. One reason for the slower growth rate may be the liberalisation of input prices; another factor may be the decline in public sector investment in agriculture from Rs1.8bn in 1980 to Rs1.1bn in 1993.

An analysis of the population census in India confirms that the rural economy is experiencing a process of diversification. At the moment

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20 http://www.itd.org/issues/india2.htm
21 Statistical Pocket Book of India.

there is a steady increase in the share of non-farm sector in employment[22].

According to 55th of National Sample Survey (NSSO, 2001), agricultural labour households constitute nearly 32.2 % of the total rural households.

In village studies, the household is the most frequently used level of analysis. It is the *"lowest level unit within which individuals are collectively organised[23]"*.

In India the proportion of agricultural labour households increased from 30.3% in 1993-94 to 32.2% in 1999-2000. While that of cultivating (self-employed) households declined from 37.8% in 1993-94 to 32.7 % in 1999-2000.

Nearly 62.6% of the rural households belonged to less than Rs. 470 monthly per capita expenditure class. Nearly 4.6% rural households reported that none in the family was having any work, 27.7% reported that only one male member was usually working, while 27.8% households indicated that one male and one female member were usually employed.

According to the Census of India (2001), there are nearly 127 million cultivators, 107.5 million agricultural labourers and 6 million other farm workers engaged in livestock, forestry and plantations. Of the total agricultural labourers, 38% are female and 61.9% male workers. Also among livestock, forestry and plantation workers, 78.3% are male workers and 21.7% female workers. About 99.2% of agricultural workers are reported to be unorganized and unprotected.

22 Kundu A. "Changing Agrarian System and Rural Urban Linkages in India in the context of social viability", http:/fao.org/es/ESA/Roa/pdf/6_Social /Social Viability_India.pdf
23 Census of India 2001: "A household is an entity of people living in the same house or room who have all eaten meals from the same kitchen at least four times per week during most of the past one year".

*Table 2: Population and Agricultural Workers (in millions)*

| Year | Rural populations | Cultivators | Agricultural labourers | Other workers | Total rural |
|------|------|------|------|------|------|
| 1951 | 298.6 | 69.9 | 27.3 | 42.8 | 140 |
| 1961 | 360.3 | 99.6 | 31.5 | 56.6 | 188.7 |
| 1981 | 523.9 | 92.5 | 55.5 | 96.6 | 244.6 |
| 1991 | 628.7 | 110.7 | 74.6 | 128.8 | 314.1 |
| 2001 | 741.7 | 127.6 | 107.5 | 167.4 | 402.5 |

*Source: Registrar General of India, New Delhi, 2001.*

The Census data clearly bear out the fact that Indian agriculture is dominated by basically subsistence farmers. They provide mainly for self consumption.

However, some of these farmers have to sell their produce immediately after harvest at low prices and buy the same products later at high prices.

There are large disparities among India's states and territories in agricultural performance, only some of which can be attributed to differences in climate or initial endowments of infrastructure such as irrigation.

Realizing the importance of agricultural production for economic development, the central government plays an active role in all aspects of agricultural development.

Planning is centralized, and plan priorities, policies, and resource allocations are decided at the central level. Food and price policy also are decided by the central government. Thus, although agriculture is constitutionally the responsibility of the States rather than the central government, the latter plays a key role in formulating policy and providing financial resources for agriculture.

In order to achieve long-term national stability and growth in India it is necessary to address agricultural productivity. Achieving agricultural productivity means tackling the constraints faced by farmers in the current rural context of inadequate irrigation facilities, fragmented land holdings, low technology application, increasing input costs, and high levels of debts incurred by farmers and owed to rural moneylenders.
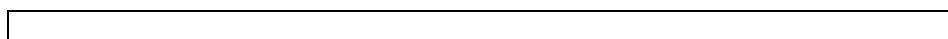
**BOX 2 - The Green Revolution**

The term "Green Revolution" is applied to the period from 1967 to 1978. The introduction of high-yielding varieties of seeds and the increased use of fertilizers and irrigation provided the increase in production needed to make India self-sufficient in food grains.The program was started with the help of the Rockefeller Foundation and was based on high-yielding varieties of wheat, rice, and other grains that had been developed in Mexico and in the Philippines.

Three were the basic elements of the Green Revolution:
(1) Continued expansion of farming areas;
(2) Double-cropping existing farmland (nstead of one crop season per year, the decision was made to have two crop seasons per year)
(3) Usage of seeds with improved genetics.

Of the high-yielding seeds, wheat produced the best results.
By 1980, almost 75% of the total cropped area under wheat was sown with high-yielding varieties.
For rice the comparable figure was 45%. In the 1980s, the area under high-yielding varieties continued to increase, but the rate of growth overall was slower.
The Eighth Five-Year Plan (1992-1997) aimed at making high-yielding varieties available to the whole country and developing more productive strains of other crops.
        Despite all this, the Green Revolution cannot be considered to be a 100 percent success.
It created wide regional and interstate disparities, since it was implemented only in areas with assured supplies of water and the means to control it, large inputs of fertilizers, and adequate farm credit. These inputs were easily available in at least parts of the states of Punjab, Haryana, and western Uttar Pradesh; thus, yields increased most in these states. In other states, such as Andhra Pradesh and Tamil Nadu, in areas where these inputs were not assured, the results were limited or negligible.
The Green Revolution also increased income disparities: higher income growth and reduced incidence of poverty were found in the states where yields increased the most and lower income growth and little change in the incidence of poverty in other states.

## 2.5 Occupational Change in Rural Areas

In general, it seems to be the case that villages which continue to have a predominantly agrarian base tend to be more reliant on traditional labour relationships than those which have experienced more occupational diversification, and greater market integration. But it is difficult to single out a specific cause for observed changes in labour relationships. In addition, it is important to realize that "decline" is not the same as "demise".

In some cases, the traditional farm servant arrangement has been replaced by the so-called "right of first call", whereby the workers first check in at their patron's house to see if there is any work available, before seeking employment elsewhere. Thus village studies indicate that "traditional" labour relationships is no longer rigid or static.

As another manifestation of the "depatronization" of labor relations, Gough[24] observes a movement away over time from in-kind payments in rural India. More specifically, attached labourers receive now income in cash, and are less likely to be given clothing and life cycle rites goods.

Epstein[25] reports on the movement of entrepreneurs to the tertiary sector; cafes, shops, and cattle trading posts, cane crushers, and rice mills have emerged where they had not existed before.

Moreover, the new labour market and self-employment opportunities tend to be rather caste

heterogeneous, thus compensating at least in part, for the contraction in the market for traditional labour services. Additionally a growing scarcity of land and natural resources in the countryside as a result of population growth, over-exploitation of land and water and the rapid marginalisation of craft based occupations, along with poor state of basic services including health, education, communications and health, have steadily led to large flows of population from rural to urban areas.

Seasonal and circular migration of labour for employment has become one of the most durable components of the livelihood strategies of people living in rural areas.

Migration is not just a strategy used by the very poor during times of crisis for survival and coping, but has increasingly become an accumulative option for the poor and non poor alike: i.e. migration is being undertaken to improve the economic position of the household.

The Indian government has concentrated its investment in cities to the neglect of rural areas.

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24 Gough, K. "Rural Society in Southeast India", Cambridge University Press, 1987.
25 Epstein S, "Village Voices", Sage Publications, 1998.

Most government expenditure at the village level is allocated to microeconomic interventions to help individual villagers and not to the macro-economy of the village as a whole.

Efforts have been made to improve employment generation opportunities within villages, but these tend to be in low paying employment. There may be a need to reorient policy toward tackling poverty at the village level rather tackling the poverty of individual villagers. There is inadequate policy orientation to promote non agricultural employment in villages at a larger scale.[5]

Although millions of poor labourers are on the move for a large part of the year, policy is ill-equipped to deal with this phenomenon. As a result, migrants do not have entitlements to livelihood support systems or formal welfare systems.[34]

Rural and urban populations are viewed as static and interdependencies are not recognised and policy makers concerned about urban explosions have discouraged urban migration.


## 2.6 Causes for Backwardness of Rural Areas

The main causes for backwardeness of rural areas are:

**1) Poverty:** India still has more than 220 million rural poor of whom 34.7% live below the poverty line of $1 a day and 79.9% below the poverty line of $2 a day. India's poorest people include mainly members of scheduled castes, since the scheduled groups have historically faced discrimination.

Poverty, which is mainly concentrated in three states (Bihar, Uttar Pradesh, and Madhya Pradesh) deprives people of the capability to live decent and healthy lives and of the opportunities to develop their potential to the maximum.

*Table 3: Poverty indicators*

| Poverty Indicators | |
|---|---|
| Number of rural poor (million) (approximate) | 222.0 |
| Poor as % of total rural population, 2000 | 30.2 |
| Population living below US$1 a day (%), 1990-2002 | 34.7 |
| Population living below US$2 a day (%), 1990-2002 | 79.9 |
| Population living below the national poverty line (%), 1990-2001 | 28.6 |
| Poverty gap ratio (%) | 8.2 |
| Share of poorest 20% in national income or consumption,(%), 1999-2000 | 8.9 |

To the rural poor, deprivation is both economic and social, which in turn is the direct result of exploitation and lack of opportunities. The condition of life for the rural poor is characterized by malnutrition, illiteracy, sufferings from diseases and long-term health problems, inadequate shelter and unhygienic conditions, high infant mortality, oppression of women, and social treatment devoid of human dignity.

Poverty and malnutrition are in particular strictly connected. The labor productivity of the poor is currently impaired by nutrition problems, including "hidden hunger" in the form of micronutrient deficiencies. Agricultural research and production programs should focus on addressing these deficiencies through supplementation, fortification of foods (including complementary foods), and attention to making low-cost foods that are rich in micronutrients. Rationed food subsidies are often poorly targeted, and corruption prevents much of the food from reaching the intended beneficiaries.

The dependence of 53 % of India's rural poor on subsidized food is only between 5 and 10 % of their total cereal consumption — too little to make much difference in their food security. The costs associated with public distribution of food are also often unnecessarily high.

The table below shows the incidence of malnutrition in the rural areas on children under 5 and the percentage of undernourished population.

*Table 4: Nutrition in rural India*

| Nutrition in rural India | |
|---|---|
| Malnutrition prevalence, weight for age (% of children under 5), 1998 | 46.7 |
| Malnutrition prevalence, height for age (% of children under 5), 1998 | 44.9 |
| Prevalence of undernourishment (% of population), 2002: | 21.0 |
| Daily calorie supply per capita, 2000-2002 | 2,420.0 |

As India aspires to become a developed country, with its own position in the comity of nations, poverty removal should become the utmost challenge. State governments are important participants in antipoverty programs. The constitution assigns responsibility to the states in a number of matters, including ownership, redistribution, improvement, and taxation of land. The central government tries to establish programs and norms among the States and Union Territories, but implementation has often remained at the lower bureaucratic levels. Though there are a number of programmes even now officially "operational", it will be impossible to sustain economic development in the country if India doesn't cut the vicious circle of poverty.

**2) Slow Down in Agricultural and Rural Non-Farm Growth**: this is mainly due to the poor composition of public expenditures, the over-regulation of domestic agricultural trade which has increased costs, price risks and uncertainty, undermining the sector's competitiveness, the government interventions in labour, land, and credit markets and an inequitable allocation of water.
In addition, existing irrigation infrastructure has rapidly deteriorated as operations and maintenance is given lower priority.

**3) Indebtedness**: the burden of indebtedness in rural India is great, and falls mainly on the households of rural working people. The exploitation of this group in the credit market is one of the most pervasive and persistent features of rural life in India, and despite major structural changes in credit institutions and forms of rural credit in the

post-Independence period, the famous statement, that "*the Indian peasant is born in debt, lives in debt and bequeaths debt,*" still remains true for the great majority of working households in the countryside.

Rural households need credit for a variety of reasons. They need it to meet short-term requirements for working capital and for long-term investment in agriculture and other income-bearing activities. Agricultural and non-agricultural activity in rural areas are typically seasonal, and households need credit to smooth out seasonal fluctuations in earnings and expenditure. Rural households, particularly those vulnerable to what appear to others to be minor shocks with respect to income and expenditure, need credit as an insurance against risk. In a society that has no free, compulsory and universal education or health care, and very few general social security programmes, rural households need credit for different types of consumption. These include expenditure on food, housing, health and education.

**4) Unemployment:** there are no reliable estimates of the real magnitude of unemployment and disguised unemployment in rural India- the official statistics of a 9.1% rate of unemployment is probably a statistical fiction - but some estimates put the real proportion as high as half the working-age population. And this appears very credible. In India's villages - even a few tens of kilometres from the national capital – there is a number of young people desperate to secure the dignity and respect that a job or productive work brings.

In the organised sector, since 1997-98, employment has actually declined. Total annual employment generation in the country has more than halved, even as we celebrate the economic miracle of a sustained 7 per cent-plus growth rate.

But India is, today, increasingly a grotesque illustration of the fact that wealth and great destitution can not only coexist, but can simultaneously and immensely expand.

**5) Lack of education:** due to various social and economic problems India's education program continues to be undercut. Of the biggest victims of the educational system are those living in rural areas. Allocation of government funds and the conditions of the destitute rural schools contribute to the low quality of education by rural children. Caste and geography also play a role in a child's access to education,

international agencies and researchers report. School fees, which can range from 100-200 rupees (or 2-4 euro) per month in rural areas, added onto the costs of books and possibly uniforms, can be costly for impoverished families with several children.

Consequently many children living in rural areas receive a level of education which is very poor.

50 % of children leave school early: some leave because of lack of interest; most leave so that they can work in the fields, where the hours are long and the pay is low. A large % of the dropouts are females. Forced by their parents, most girls perform chores and tend the family at home. These are some of the reasons why 60 % of all females in India are illiterate, a figure much higher than those of males.

As these children grow into adults, many are still illiterate by the age of forty. These uneducated adults are also reluctant to send their own children to school because of their failure in the education system. This in turn creates a problem for the next generation.

**6) Lack of health facilities:** primary health care is delivered to the rural population through a network of over 150,000 primary health centers (PHCs) and sub-centres, but the reality is that the system is badly broken. Despite considerable financial investment in the PHCs by the government, most of these centers are not meeting even the basic needs of the population. Inadequate infrastructure, absence of physicians, and lack of accountability have turned these centers into ineffective institutions.

**7) Poor infrastructure development in villages:** rural infrastructure is barely visible beyond those villages that are close to rural towns; interior villages still wait for electricity, and their muddy roads get washed away with each heavy rain.

After having neglected it since Independence, the government has at last woken up to the imperative need for improving infrastructure, such as power, transport, communication, etc. But there is no evidence of urgency in adopting liberal policies, which would bring in the private sector to complement and supplement state effort.

Poor infrastructure in rural India leads to lack of services because service providers find it difficult and expensive to provide service. Here the word "services" includes everything, from government services to

market making, education, healthcare, entertainment etc. Lack of services leads directly or indirectly to low incomes and therefore to the low ability to pay for services and consequently to poor infrastructure.

**8) Low bureaucratic accountability and inefficient use of public funds:** despite large expenditures in rural development, a highly centralized bureaucracy with low accountability and inefficient use of public funds limit their impact on poverty. In 1992, India amended its Constitution to create democratically elected rural local governments bringing governance down to the villages. However, the transfer of authority, funds, and functionaries to these local bodies is progressing slowly, in part due to political vested interests. The poor are not empowered to contribute to shaping public programs or to hold local governments accountable. A fairer and more efficient allocation of resources would be to invest in rural infrastructure and agricultural extension services, rather than subsidies.

### 2.6.1 Lack of Information in Rural Villages

Traditional methods of dissemination of information still persist in the villages and are slow moving and time consuming. Not only that, there is a loss of information due to the involvement of large numbers of intermediaries in the process.
Generally government officials and NGOs are the main sources of information for villagers[26]. More than 50% of information comes to the villagers by way of the Sarpanch[27] of the Panchayat or through the Gram Sabha[28].
The Gram Sabha is conducted every month and villagers are asked to attend. The Sarpanch reveals information about different government schemes.

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26 International Journal of Rural Studies (IJRS) vol. 14 no. 1 April 2007 ISSN 1023–2001 www.ivcs.org.uk/IJRS Article 5 Page 1 of 5.
27 A sarpanch is a democratically elected head of a village level statutory institution of local self-Government called the Gram (village) Panchayat in India.
28 It is an assembly of adult members of the village, who manages the affairs in accordance with traditions and customs. The final rules say the Gram Sabhas shall be convened by the Gram Panchayat, which is a bigger entity.

Apart from this, the Block Development Officer visits the village and provides information about different activities taken up by the Government and of how villagers could benefit by them.

The main problem in this model is that it is time consuming and less information is actually communicated. Also some villagers feel that they don't need some kinds of information so they do not want to attend the meetings.

Sometimes it happens that the village leader (school teacher, unemployed youth, government officials etc.) gets information from both government and non-government organizations and does not want to reveal the full information because he desires to preserve his social prestige and expects the villagers to come to him for information. Sometimes it could be that the villager does not interpret the information correctly and the information get biased. That biased information is then spread throughout the village.

In this model the villagers get reliable information but the transaction cost involved in this model is pretty high.

*Figure 1: The system of information spread in rural villages*
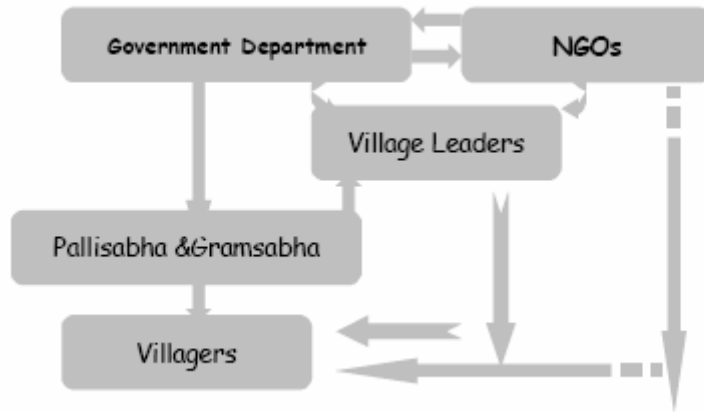


Some recent studies have shown that for higher caste people, business
men and village middlemen, the information need is high and the
availability of information also high.
For lower class business men, small and marginal farmers, SHGs[29] and
school students, information
need is high but information availability is low. For unemployed village
youth, village touts etc. the
information need is low but the information availability is very high.

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29 Self Help Groups have been initiated by NGOs. These groups encourage the community to
participate and thus become self sustaining. There are many success stories of Self Help Groups
in India particularly in the state of Andhra Pradesh.

*Figure 2: Information need vs information availability*

|  |  | HIGH | LOW |
|---|---|---|---|
| INFORMATION AVAILABILITY | HIGH | Higher Caste business community<br>Higher class business community<br>Village middle man/Traders | Unemployed village youth<br>Village tout<br>Village school master and govt. employees |
|  | LOW | Lower caste business community<br>Lower class business community<br>Small and marginal farmers<br>Head of the household (Old and illiterate)<br>SHGs<br>School students | Landless labourers<br>Lower caste women |

INFORMATION NEED

All types of information is readily accessed by the higher classes and by higher caste people. Due to their high literacy level and higher influence in the village, these people get information earlier than

the lower classes and lower caste people. These higher classes and higher caste people act as a source of information to the lower classes and lower caste people. In this process of information flow, some information get lost. In a rural set up, these higher caste and higher class people do not always give out one hundred percent information.

As most of the households are from the lower class, accurate information and real time information is a major problem. Sometimes it happens that the higher castes and the higher classes hide some information because they do not want others to get full information; they want them to always depend upon the higher classes.

It is therefore essential that real time information should be supplied to the lower castes and classes and it should be supplied at their door steps so that they can take the right decisions at the right time.

**The Loss of Information:** if we analyze the decision-making process, we will find that the passive information-seeker is always

the active decision-maker. Generally the head of the household is the decision maker. The head of the household may be a 50 year old man who never goes any where to get information from any source but rather waits for the information to come to him. He then makes decision based solely on that information. Generally the active information seekers are the young members of the household who go to different sources to get information.

Village leaders get information from three different sources like government officials, NGOs and private agencies.

As many village leaders are illiterate, they sometimes cannot receive full information. Thus in the process of flow of information, information gets lost at every step. By the time information reaches the passive information seeker, most of it has got lost and become biased. So the decision maker frequently takes wrong decisions on that basis.

*Figure 3: Information seekers and information loss*
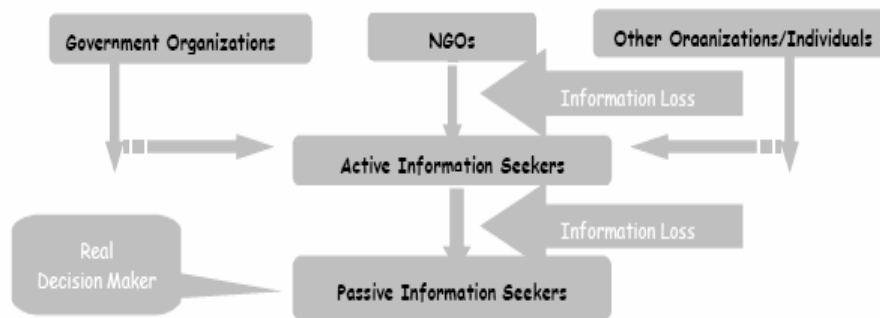


**The Lack of Information – the middleman's reign:** in most cases, the villagers have ample resources of land, animals and forest and they are also skilled artisans and blacksmiths with expertise in some special skills such as mat-making. They have the ability to produce more products than the current ones. The only problem is that they are not aware of the markets for their products.

Sometimes a lack of market leads to under production of these special products. For that, these illiterate villagers are highly dependent on middlemen. These middlemen purchase their products at extremely low

prices for the producers have very little bargaining power and sell them at very high prices in the urban markets.

Most of the time, the farmer can not understand what the agricultural officer is talking about. Psychologically, the farmer feels that the agricultural officer is less reliable. The farmer frequently stays away from the pallisabha and gram sabha, partly because of the social structure of marginal farmers and partly because of heavy work load.

For the illiterate farmer, TV and newspapers have less value as someone else has to interpret the subject matter.

As agriculture is time-specific, most of the time the farmers get the right information at the wrong time because the information gets delayed. The farmer gets the right information about pest attacks and their remedy but the information gets delayed and the whole crop gets infested and damaged by the time he gets the information. The farmer develops a common perception that whatever information he receives is wrong and biased.


## 2.7 Governmental Rural Development Policies for Poverty Alleviation

Rural poverty alleviation through economic and social development is high on the state agenda of India. It could be affirmed that development programs started already after 1947, in the post independence period, when the Government of India committed itself to bring about a rapid and sustainable improvement of rural areas through various programmes.

Since then, several development models have been experimented with. These range from state-driven import substitution to market-driven export promotion models, from agriculture focused to infrastructure focused models and from the trickle-down approach to directly focused programmes. Several other policies, such as effective land reform, development of irrigation and drainage systems, subsidized inputs and credit facilities, human resources development and primary education and health care services have constituted the basic premises upon which all the plans and blue-prints of development were built.

Initially main thrust for development was laid on agriculture industry, communication, education, health and allied sectors but later on it was realized that accelerated development could be provided only if governmental efforts were adequately supplemented by direct and indirect involvement of people at the grass root level.

Accordingly, on 31st March 1952, an organization known as Community Projects Administration was set up under the Planning Commission to administer the programmes relating to community development.

The community development programme inaugurated on October 2, 1952. It represented the first organised attempt at rural development.

The programme focused on all round development of rural areas and it touched upon nearly all facets of rural life. It emphasized on higher agricultural production along with establishment of rural cottage and small-scale industries. The programme underwent many changes and was handled by different Ministries.

Within a decade, the entire country was covered by the community development program, operating in over 5,000 community development blocks, staffed with development professionals and technicians.

Holdcroft[30] (1984) provided a critical assessment of the positive and negative aspects of the program.

He concluded that while the program was successful in providing basic developmental needs to people in rural areas, the underlying goal of social and economic amelioration of rural life was not accomplished.

Poverty and food scarcity were not reduced, rather they became more widespread; disparities of wealth between large farmers and peasants increased; the program was not accepted by and did not reach the poor, and became a top-down bureaucratic empire that ignored agricultural production.

The view most often expressed for the poor performance of the program was that political leaders did not understand either the complexity of the problem or the time required to transform traditional rural societies. In short, both aspects of rural poverty - low productivity

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30 Holdcroft, L. "The Rise and Fall of Community Development in Developing countries", Michigan University Press, 1984.

and unjust distribution of wealth and resources - were not significantly changed by the community development program (Holdcroft, 1984).

The failure of the community development program shifted the focus of planning and development in the 1970s toward Integrated Rural Development (IRDPs), which promoted popular participation in the mobilization and use of local resources. These strategies regarded the underutilized "free labour" of the people as an important input for sharing the process and cost of development activities, which in turn, also ensured the "ownership" of the projects by the people. As a result, a number of programs were initiated to address the problems of neglected segments of rural society, namely landless agricultural labourers, scheduled castes, native tribes and backward classes.

In October 1974, the Department of Rural Development came into existence as a part of Ministry of Food and Agriculture. On 18th August 1979, the Department of Rural Development was elevated to the status of Ministry of Rural Reconstruction, and was renamed, after various phases, Ministry of Rural Development in 1999.

The Ministry consists of the following three Departments:

- Department of Rural Development (which implements schemes for generation of self employment and wage employment, provision of housing and minor irrigation assets to rural poor, social assistance to the destitute and rural roads).

- Department of Land Resources (which implements schemes to increase the bio-mass production by developing wastelands in the country and also provides the support services and other quality inputs such as land reforms, betterment of revenue system and land records).

- Department of Drinking Water Supply (which implements the provision of drinking water and the extension of sanitation facilities to the rural poor. The major programmes of the Drinking Water Supply Department are The Swajaldhara, the Accelerated Rural Water Supply Programme (ARWSP) and the Total Sanitation Programme).

The Ministry has been acting as a catalyst effecting the change in rural areas through the implementation of wide spectrum of programmes which are aimed at poverty alleviation, employment generation, infrastructure development and social security .Its work concentrates on five elements of social and economic infrastructure, critical to the quality of life in rural areas; health, education, drinking water, housing

and roads. Strong thrust has been given to social security programmes for providing assistance to the poor families. The Ministry has undertaken development of wastelands, desert and drought prone areas and land reforms in the country. Assistance and encouragement to voluntary agencies and training of functionaries of rural development forms part of the emphasis on accelerated rural development. It also promotes the decentralization of powers to strengthen the Panchayat Raj Institutions.

The Constitutional (73rd) Amendment, Act 1992 has placed enormous responsibility on the Panchayati Raj Institutions to formulate and execute various programmes of economic development and social justice, and a number of Centrally Sponsored Schemes are being implemented through Panchayats.

On 25th December 2002 a major initiative, the 'Swajal Dhara' Program aiming at empowering the Panchayats to formulate, implement, operate and maintain Drinking Water Projects has been launched.

The programmes for poverty alleviation have a women's component to ensure flow of adequate funds to this section. Thus, women Members and Chairpersons of Panchayats, who are basically new entrants in Panchayats, have to acquire the required skill and be given appropriate orientation to assume their rightful roles as leaders and decision makers.

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**BOX 3 - Rural Development in India: Chronological highlights**

1952 Community Development Programme launched (October)
1958 Three-tier structure of local self-governing bodies (*Panchayati Raj*) launched (October)
1969 Rural Electrification Corporation set up
1970-71 Drought Prone Areas Programme started (December)
1971 A Joint Consultative Council on Community Development and *Panchayati Raj* constituted (December)
1971-72 Crash Scheme for Rural Employment introduced
1972-73 Pilot Intensive Rural Employment Project (PIREP) launched. Accelerated Rural Water Supply Programme started
1977 Food for Work Programme started (April)
1977-78 Desert Development Programme started (April)
1978-79 Integrated Rural Development Programme launched
1984 NREP and RLEGP merged into one single rural employment programme to be known as Jawahar Rozgar Yojana (JRY)

1985-86 Indira Awaas Yojana started
1988-89 Million Wells Scheme started
1992 The Parliament passed the Constitutional 73rd Amendment Act to grant
constitutional status to the Panchayati Raj institutions (December)
1993 Employment Assurance Scheme implemented (October)
1995 National Social Assistance Programme (NSAP) launched (August)
1999 Jawahar Gram Samriddhi launched (1 April), Swarnajayanti Gram Swarozgar
Yojana launched (1 April), Innovative Stream for Rural Housing and Habitat
Development Scheme launched (1 April)

*Source:* Kaushik (2005c: 328).

### 2.7.1 Rural Development Initiatives in the Union Budget 2007-08

India's Budget 2007-08, introduced by Finance Minister P
Chidambaram in Parliament on February 28, 2007, claims to be aimed
at "faster and more inclusive growth". Accordingly, increased outlays
have been made for rural infrastructure programmes, social sector
programmes and under various heads for agriculture. These
programmes are mainly implemented through government's District
Rural Development Agency (DRDA), a professional agency capable of
managing the anti-poverty programmes of the Ministry of Rural
Development. It coordinates with the line department, the Panchayati
Raj Institutions, the banks and other financial institutions, resources
required for poverty reduction effort in the district. It shall be their
endeavour and objective to secure inter-sectoral and inter-departmental
coordination and cooperation for reducing poverty. The governmental
initiative are briefly presented as follows:

**1) Bharat Nirman**: to unlock the potential of rural India the
Government has launched a time bound business plan named Bharat
Nirman in 2005-06 to be implemented from 2005-2009. Six
components included under the Bharat Nirman are irrigation, drinking
water, electrification, roads, housing and rural telephone.
Physical targets under the each of the components have been firmed up
and they are as under.

*Table 5: Bharat Nirman scheme*

| Component | Targets to be achieved by Year 2009 |
|---|---|
| Irrigation | To create 10 million hectare of additional irrigation capacity. |
| Roads | To provide all weather road to every habitation over a 1000 population and above (500 in hilly and tribal areas): remaining 66,802 habitations to be covered. |
| Electricity | To provide electricity to remaining 1,25,000 villages and to 23 million households. |
| Housing | To construct 60 lakh houses |
| Drinking Water | To provide drinking water to 55,067 uncovered habitations by 2009.All habitations with failed sources and water quality problems will be covered |
| Telecommunication connectivity | To connect remaining 66,822 villages with telephone by 2007. |

Allocation for the Bharat Nirman programme for upgrading rural infrastructure has gone up by 31.6% from Rs 18,696 crore to Rs 24,603 crore. In the two years since Bharat Nirman was launched, around 12,198 km of rural roads have been completed, 783,000 rural houses have been constructed, and 914,000 houses are under construction. Some 19,758 villages have been covered so far under the Rajiv Gandhi Grameen Vidyutikaran Yojana, and 15,054 villages have been provided with a telephone against the target of 20,000 villages.

**2) Sarva Shiksha Abhiyan (SSA):** School education has been given primacy with an increase in allocation of 35%, from Rs 17,133 crore to Rs 23,142 crore. Of this, Rs 10,671 crore will be for the SSA. Teachers' training institutions are to be strengthened with an increase in budget from Rs 162 crore to Rs 450 crore. Around 200,000 more teachers will be appointed in 2008, and 500,000 more classrooms constructed.

**3) The midday meal scheme** gets Rs 7,324 crore. Children in upper primary classes in 3,427 educationally backward blocks will also be covered. The transfer to Prarambhik Shiksha Kosh will increase from Rs 8,746 crore to Rs 10,393 crore. To increase access to secondary education, the outlay has been doubled from Rs 1,837 crore to Rs 3,794 crore.

**4) Means-cum-merit scholarships:** The SSA has increased the enrolment rate in schools to 96%, but the dropout rate continues to be high. To address this, a National Means-cum-Merit Scholarship will be introduced. The selection of students will be through a national test for students who have passed Class VIII. Each student will be given Rs 6,000 per year, and 100,000 scholarships will be awarded every year. A corpus fund of Rs 750 crore will be created this year, and augmented by a similar amount annually over the next three years.

**5) Drinking water and sanitation:** Some 55,512 habitations and 34,000 schools have been provided drinking water till December 2006, under the Rajiv Gandhi Drinking Water Mission. More ambitious targets have been set for 2007-08 to deal with both non-coverage and slippage. Out of 1.43 million rural habitations in the country, 1.40 million habitations have now access to safe drinking water. Special efforts are being made for ensuring sustainability of the facilities provided under the
Accelerated Rural Water Supply Programme by initiating action to institutionalise community based rural water supply programme. Allocation for the Mission has been enhanced from Rs 4,680 crore in 2006-07 to Rs 5,850 crore in 2007-08. For the Total Sanitation Campaign, the allocation has gone up from Rs 720 crore to Rs 954 crore.

**6) National Rural Health Mission (NRHM):** All districts had to complete preparation of their District Health Action Plans by March 2007. There is to be a major emphasis on mother and child care and on prevention and treatment of communicable diseases. Convergence is sought to be achieved among various programmes such as immunisation, antenatal care, nutrition and sanitation through Monthly Health Days (MHD) organised at anganwadi centres. So far, 320,000 Associated Social Health Activists (ASHAs) have been recruited and more than 200,000 have been given orientation training. Already 90,000 link workers have been selected by the states. AYUSH (alternative) systems are being mainstreamed into the health delivery system at all levels. Allocation for the National Rural Health Mission (NRHM) has been increased from Rs 8,207 crore to Rs 9,947 crore.

**7) HIV/AIDS:** NACP-III (third National AIDS Control Programme) will start in 2007-08, to target high-risk groups. Access to condoms is to be expanded and universal access to blood screening and safe blood is to be ensured. More hospitals are to provide treatment to prevent transmission of HIV/AIDS from mother to child. Provision for the AIDS control programme will be Rs 969 crore.

**8) Polio:** the polio-eradication strategy is to be revised since the outbreak of polio in Uttar Pradesh last year was a setback. Thus the number of polio rounds will be increased and the monovalent vaccine introduced with intensive coverage in 20 high-risk districts of Uttar Pradesh and 10 districts of Bihar. The programme has been integrated into the NRHM. ASHAs and anganwadi workers will visit every household and track down every child for the immunisation programme. To achieve the goal of eliminating polio, a provision of Rs 1,290 crore has been made for 2007-08.

**9) National Rural Employment Guarantee Scheme (NREGS):** it is now the single wage employment programme being implemented at the district/block level throughout the country with focus on areas suffering from endemic labour exodus. The objective of the EAS is to provide gainful employment in manual work to all needy able bodied adults in rural areas during the lean agricultural season and the creation of community, social and economic assets for sustained employment and development. The EAS would be open to all adult rural poor. A maximum of two adults per family would be provided wage employment, subject to availability of funds. Allocation for the NREGS is Rs 12,000 crore, but since it is a demand-driven scheme the budget will be supplemented as required. The scheme has been expanded to cover 330 districts. An additional amount of Rs 2,800 crore has been provided for the Sampoorna Gramin Rozgar Yojana in districts not covered by the NREGS.

**10) Swaranjayanti Gram Swarozgar Yojana (SGSY):** it aims at establishing a large number of micro-enterprises in the rural areas. Persons assisted under this programme will be known as Swarozgaris and not beneficiaries. A significant aspect of SGSY is that every family assisted under this programme will be brought above the poverty-line

in three years and as such the programme aims at creating substantial additional incomes for the rural poor. It is proposed to cover 30 per cent of the rural poor in each block in the next five years.

**11) Indira Awaas Yojana** aims at helping rural people below poverty-line belonging to SCs/STs, freed bonded labourers and non-SC/ST categories in construction of dwelling units and upgradation of existing unserviceable kutcha houses by providing grant-in aid. From 1995-96, the IAY benefits have been extended to widows or next-of kin of defence personnel killed in action.
Benefits have also been extended to ex-servicemen and retired members of the paramilitary forces as long as they fulfil the normal eligibility conditions of Indira Awaas Yojana. Three percent of funds are reserved for the disabled persons living below the poverty-line in rural areas.

**12) Scheduled castes and scheduled tribes (SC/STs):** Allocation of Rs 3,271 crore has been made for schemes benefiting only SCs and STs, and Rs 17,691 crore for schemes with at least 20% of benefits earmarked for SCs and STs.

**13) Agriculture:** taking into account all the significant factors that affect growth, the 11th Five Year Plan has assessed that agriculture is at the base of rural development and that it needs to growth at 4% per annum. The main factors expected to contribute to the growth are increased investment (2.5%) and higher area under fruits and vegetables (1.0%), with greater use of fertilisers and other inputs contributing the rest. The most significant factor will need to be public investment, including on filling yield gaps. This requires that public investment increases at a minimum of 12% per annum in real terms from its 2006-07 level. This is, however, only a necessary condition and longer-run issues should be addressed; the National Bank for Agriculture and Rural Development (NABARD) has been asked to augment its resources for refinancing rural credit cooperatives and the Insurance for rural landless households (a scheme called the Aam Admi Bima Yojana) is to be introduced to provide death and disability insurance cover to rural landless households.

The Ministry lays great emphasis on monitoring and evaluation of rural infrastructure development programmes in general and poverty alleviation and employment generation schemes in particular.

The comprehensive system of monitoring and evaluation includes various mechanisms such as Progress Reports, Financial Returns, Audit Reports, Intensive inspections by officers of both Central government and the State governments, Area Officers Scheme, Review by various Committees, namely Parliament Committees as well as Standing Parliamentary Committee and Concurrent Evaluation Reports and impact research studies of the programmes of the Ministry.

The Monitoring Division has introduced a high tech review system through the Video-conference as an instrument to monitor the implementation of the programmes. A Home Page regarding the details of programmes of the Ministry has been put on internet so that transparency is ensured to the programmes.

The State governments have been directed to constitute Vigilance and Monitoring Committees at the district, block and village levels to monitor the implementation of the programmes. A schedule of inspection prescribing minimum field visits for each functionary at the supervisory level from the

State government to the block is drawn up and strictly adhered to. Review Committee at Central/State/District/Block and Village level undertake detailed review of the overall performance of the rural development programmes.

## 2.8 Rural Development Initiatives by the Corporate Sector and NGOs

The corporate sector has not lagged behind in contributing its bit for achieving rural development in India. Some of the current initiatives in this regard are e-Choupal by ITC, Rural BPOs by Lason India and Byrraju Foundation, GramIT by Byrraju Foundation etc. Similarly, numerous NGOs are giving a significant contribution to  rural development in the country. Notable amongst these are MV Foundation (abolition of child labour), Naandi Foundation (education for girl child), Basix India (micro-finance), Byrraju Foundation (rural transformation), Sanghamitra (education) etc.

Once again, the underlying principle is formulation of suitable policy and pursuing it for successful implementation.

The national government's economic policy is favouring privatization in recognition of the important role of the private sector in the nation's economic development. A number of economic measures were taken to encourage private sector participation in development programs.

At the international level, export and import policies were liberalized to attract foreign investment.

As a result, several multi-national companies and western countries began investing in India.

However, private sector involvement in agriculture has been small and sporadic compared with the manufacturing sector.


## 2.9 Communication in Rural Development Programs

In the Union Budget Plan 2007-08, as well as in the more comprehensive Eleventh Five Year Plan (2007-12), the improvement of communication infrastructure and the use of Information and Communication Technology (ICT) are emphasised as factors contributing to rural development.

A faster and more inclusive growth can in fact be reached by increasing:

- **the rural telephony** (6. 90% of the villages have already been provided with Village Public Telephone (VPT), under Bharat Nirman

programme. A focused programme to provide VPTs in 66,822 uncovered villages has been undertaken).

- the rural tele-density compared with urban through private sector and **mobile telephone** expansions (the number of wireless telephone connections has doubled in the past two years, to about 150 million, and Indians are signing up for mobile-phone service at an extraordinary five million new wireless connections a month. The Ministry of Telecom has set a target for India to have mobile coverage for 85% of the country—from about 30% today—by 2008.);

- the **Internet connectivity** for text, data and image communications and larger and speedy connectivity through wireless technology and on fibre optic cables both in urban and rural areas.

Over the past few years several initiatives have helped demonstrate the potential to use ICT in working towards developmental goals such as poverty alleviation, access to education and health services and gender inequalities.

Poverty alleviation programs have leveraged ICT to increase opportunities for wage employment and micro-entrepreneurship. Use of technology has also helped raise the magnitude and reduce the vulnerability of returns earned by small producers from the economic activities by providing timely access to relevant information (e.g. details about the best prevailing prices for farmers, location of fish shoals for fishermen, weather reports etc.) ICT in particular can play a role in bridging gender disparities by directly benefiting the women who use technology as well as by improving the delivery of services for fishermen, weather reports, etc.

A **National e-Governance Plan** (NeGP) has been launched. E-Governance has been identified as a priority item and NeGP seeks to create the right governance and institutional mechanisms, set up the core infrastructure and policies and implement a number of Mission Mode Projects at the Center, State and Integrated Service levels to create a citizen-centric and business-centric environment for governance.

The emphasis has been to ensure integrated access to government services and to provide services at the doorstep with substantial rural outreach and improved reliability.

The main components of the NeGP are:

- **State Wide Area Network (SWAN)** which involves 29 States and 6 UTs and is envisaged to connect all the State Headquarters up to the block level with a minimum bandwidth capacity of 2 Mbps per link.

- **Common Service Centres (CSCs)** which is an ICT-enabled Service Delivery outlet providing a range of services to the people in the village/town in which it is located. The CSC Scheme would be a bottom-up model for delivery of content and services like e-governance, education, entertainment, telemedicine, agriculture etc. The CSC scheme envisages the establishment of 100,000 rural CSCs and another 10,000 semi-urban/ urban CSCs in a honeycomb pattern covering all the 600,000+ villages in the country, i.e., one village surrounded by six villages. This proposal would imply that each village would have a CSC either within its area or in the adjoining village. All CSCs would be broadband and Internet-enabled, primarily through wireless connectivity and are expected to give a boost to development by helping to bridge the digital divide.

India's prosperity lies in the well being of the rural population. As a nation, India should accord suitable priority for all sectors of rural development as highlighted in this chapter.

Well articulated policy after due discussions with the agencies responsible for its implementation, needs to be converted into workable programs.

The first strategic decision should be to raise the level of public investment in agriculture and in rural India. This move would also help unleash private sector investment, which complements public investment. The strategy should be to contain and target subsidies and plow the savings back into agriculture as investment.

The connection of India's villages to information and communications technology is another important aspect. The private sector can be the key driving force, and many corporate giants have already entered rural areas with a view to expanding business. But public policy should facilitate these investments in rural areas by removing controls on private investment as well as by offering tax concessions for investing in rural areas, in order to improve poor communities' access to education, market information for farmers and other small businesses, and service information.

Community participation should also be ensured. Community participation in constructing and maintaining rural infrastructure is

crucial for the efficient operation of financial incentives and the establishment of a legal framework. The typical top-down approach followed so far in public investments will not give the desired results.

# APPENDIX 1

**The Eleventh Five Year Plan (2007-2012) at a Glance**

The economy and the development of India are based on five-year plans, developed, executed and monitored by the Planning Commission. The transition from a traditional and subsistence economy of the 50s to a modern, industrial and knowledge economy has largely been the outcome of such plan exercises spanning a total of ten five-year plans and a few annual plans. Planning is far more than a mere allocation of resources among competing uses: it prescribes a direction towards which the economy is sought to be moved with a view to attaining pre-determined goals and objectives. And given the federal character of our polity, it is the combined effort of both Union and State governments towards achieving plan objectives.

The First Five Year Plan was launched in April 1951. Currently, the 11th Five Year Plan(2007-2012), is underway. It aims at putting the economy on a sustainable growth trajectory with a growth rate of approximately 10% by the end of the Plan period. The revised outlay is of Rs 36.44 trillion (US$ 910 billion).

The plan should seek to reduce disparities across regions and communities by ensuring access to infrastructures as well as health and education services to all.

The main features of the Eleventh Plan are:

**- Income & Poverty** • Accelerate growth rate of GDP from 8% to 10% in order to double per capita income by 2016-17

• Increase agricultural GDP growth rate to 4% per year to ensure a broader spread of benefits

• Create 70 million new work opportunities.

• Reduce educated unemployment to below 5%.

• Raise real wage rate of unskilled workers by 20 %.

• Reduce the headcount ratio of consumption poverty by 10 %age points.

**Education** • Reduce dropout rates of children from elementary school from 52.2% in 2003-04 to 20% by 2011-12.

• Develop minimum standards of educational attainment in elementary school, and by regular testing monitor effectiveness of education to ensure quality.

• Increase literacy rate for persons of age 7 years or more to 85%.

• Lower gender gap in literacy to 10 %age points.

• Increase the %age of each cohort going to higher education from the present 10% to 15% by the end of the 11th Plan.

**Health** • Reduce infant mortality rate (IMR) to 28 and maternal mortality ratio (MMR) to 1 per 1000 live births.

• Reduce Total Fertility Rate to 2.1.

• Provide clean drinking water for all by 2009 and ensure that there are no slip-backs by the end of the 11th Plan.

• Reduce malnutrition among children of age group 0-3 to half its present level.

• Reduce anemia among women and girls by 50% by the end of the 11th Plan.

**Women and Children** • Raise the sex ratio for age group 0-6 to 935 by 2011-12 and to 950 by 2016-17.

• Ensure that at least 33 % of the direct and indirect beneficiaries of all government schemes are women and girl children.

• Ensure that all children enjoy a safe childhood, without any compulsion to work.

**Infrastructure** • Ensure electricity connection to all villages and BPL households by 2009 and round-the-clock power by the end of the Plan.
• Ensure all-weather road connection to all habitation with population 1000 and above (500 in hilly and tribal areas) by 2009, and ensure coverage of all significant habitation by 2015.
• Connect every village by telephone by November 2007 and provide broadband connectivity to all villages by 2012.
• Provide homestead sites to all by 2012 and step up the pace of house construction for rural poor to cover all the poor by 2016-17.
**Environment** • Increase forest and tree cover by 5 %age points.
• Attain WHO standards of air quality in all major cities by 2011-12.
• Treat all urban waste water by 2011-12 to clean river waters.
• Increase energy efficiency by 20 %age points by 2016-17

*Source: Planning Commission of India, 2007.*

# CHAPTER III

## *COMMUNICATION IN RURAL INDIA*

*"...The true function of media is to educate the public mind, not to stock it with wanted and unwanted impressions".*

*M. K. Gandhi*

In order to understand and analyse the role of media in development - with a particular focus on the Indian rural areas - it is first necessary to delineate the current media scenario in India: being aware of the penetration of newspapers, TV, radio and ICTs as well as of the recent legal reforms which have marked the proliferation of more communication channels, might help to comprehend the state of information in such a controversial country.

The diffusion of media started recently in India but it's overwhelming how quickly changes have occured over the last few years.

In such a framework, the present chapter intends to be a supportive tool for the understanding of the complex Indian media panorama: after a short introduction on the historical evolution of the media in the country, traditional and modern means of communication are presented in terms of diffusion and impact with a deep focus on their influence in the rural areas and a glimpse into the potentialities of the use of community media for development.

Gathering relevant data on the diffusion of media has not been an easy task: I constantly had to face the problem of  inaccessible, out of date, inconsistent data, or a combination of all of these.

Most of the information presented in this chapter come from reports of the Ministry of Information and Broadcasting and from articles of the *Times of India*, one of the most read newspapers of the country.

The flow of information - despite the existence of laws in favour of the freedom of editing and broadcasting - is still much in the hand of the Government and the recent statistics about the state of media in the country are not always updated. Moreover, the fact that each media has

its own regulatory authority makes the panorama fragmented: the press is monitored by the Press Council of India, telecommunications are regulated by TRAI (Telecommunications Regulatory Authority of India), cinema by the CBFC (Central Board for Film Certification), advertising by the ASCI (Advertising Standards Council of India), broadcasting media, though operating under the AIR Code and the Cable Television Networks (Regulation) Act (1995), do not have similar regulatory or monitoring bodies.

The result is a vast array of recommendations, norms and principles guiding media operations and the basis of media information functioning.

The final section of the chapter is dedicated to an overview of the state of the art of community media in India. Although generally considered an outstanding example of participative means of communication which could be effective in responding to development objectives and community service requirements, community media projects in India remain isolated initiatives, struggling to receive legitimacy and recognition from the State; this is one of the many reasons that convinced me to focus my research on an initiative launched in Uttar Pradesh and based on the use of community newspapers and ICTs in the rural areas around Lucknow, the capital town.

Addressing, monitoring and evaluating the proceeding and the impacts of such an innovative project for the rural areas of this State was a challenging task. The project and its outcomes will be presented and analysed in chapter 6.


## 3.1 A Historical Evolution of Mass Media in India

Prior to 1947, the year of India's independence from the British rulers, media couldn't really develop.

Newspapers were not permitted the freedom of writing, radio was under the control of the Government, television had not even been conceived - although Britain had a well established television and radio network at home - black and white cinema was unaware of developments in colour techniques in the West and mass media did not

progress in any systematic, planned directions to assist the country anyway.

The advent of independence in 1947 removed the shackles of the colonial era and a new horizon breathed in all aspects of country life.

The media of mass communication also rose to the occasion. There was a tremendous progress in the field of print and the broadcast media, the rate of literacy rose and more people came in contact with one another in urban as well as in rural areas.

Most of the law restricitions or controlling the activities of journalists and writers were either suspended or withdrawn.

Freedom of speech and expression (including thereby the freedom of the press) was guaranteed by the Constitution as a fundamental right (Article 19A). The Constitution also granted freedom of movement, right to profession and property and also to held meetings and social gatherings.

All this contributed to the diffusion of mass media.

Since the Indian Constitution recognizes 15 provincial and regional languages, equal opportunities were available to all of them for instituting newspapers and periodicals in their respective regions for their proliferation and development, even though Hindi (spoken by 40% of the population) and English remained the dominat languages.

In 1976, thirty years after independence, India had 13, 320 newspapers: in the same period 155 radio stations were working, broadcasting in several foreign languages, national and regional languages.

Television arrived in India in 1959: UNESCO, the Usa, West Germany, Yugoslavia and Japan helped India in establishing, extending and programming of the television network.

Reported below are the most important historical key features of the media development in India.

**1960s- 1990s:** Government efforts at using radio and TV for development communication met with varying degrees of success. Major projects included rural radio forums for agricultural development (1967), *SITE*[31] (75-76), the *Kheda project*[32] (1976-1989) and the 1995

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31 SITE (Satellite Instructional Television Experiment) was designed to test whether satellite based television services could play a role in the socio-economic development. Using a U.S.

*GRAMSAT* experiment using radio for training of women panchayat (local village level governance) members. These large-scale projects were meant to meet core development needs.

**1981-1985:** Rapid increase in the number of TV transmitters from 21 to over 400, and a corresponding commercialisation of Indian television by the mid-80s.

**1984-85:** India's first major pro-social soap opera *Hum Log* (We the People) was launched. The much-studied 156-episode, 17-month series promoted issues such as family planning and education for the girl child. This coincided with the rise of the middle class as a dominant force in the country, with an increase in film-based entertainment programming, private sponsorship and consumerism.

**1985-90:** *Doordarshan,* the national television network*,* outpaced radio and print media as the first choice for advertising, hiking its ad rates thrice between 1985 and 1988. By 1987, there were at least 40 serials on air. A media boom saw an increase in the number of publications and a preponderance of TV and cinema-based reporting.

**1990:** The Government of India initiated an economic reform process, heralding an era of privatisation and liberalisation. The *Prasar Bharati Act* was passed, delinking broadcasting from direct Government control. The act was notified only in 1997.

**February 1991:** The Gulf war created an unprecedented demand for cable television among Indian viewers wanting to follow the CNN coverage of the war. The demand for cable television continued after the war ends.

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ATS-6 satellite and up-link centers at Ahmedabad and Delhi, television programs were beamed down for about 4 hours a day to about 2,400 villages in 6 states. The programs dealt mainly with in- and out-of-school education, agricultural issues, planning and national integration.
32 The Kheda project was an exceptional example of the combining of modern technologies with a participatory approach to communication. The project employed traditional cultural expressions of a rural community in the creation of its audiovisual programmes, while using modern evaluation techniques for its programme planning.

**May 1991:** Satellite television was launched in the form of the Hong-Kong based Star TV with its 39-nation footprint. Star TV transformed the face of Indian television, with its multiple channels and aggressive market-driven entertainment programming. Other private channels follow such as *Zee TV*, *Sony TV*, *Sun,* and *Gemini*. *Doordarshan*'s revenues were fast depleted.

**February 1995:** A landmark Supreme Court judgement ruling declared that " airwaves are a public property". They have to be controlled and regulated by a public authority in the interest of the public and to prevent the invasion of their rights. The judgement outlines autonomy for Prasar Bharati and opens broadcasting to private players.

**1996:** A Broadcasting Bill is drafted which is an apex legislation on broadcasting. The Bill subsumed the *Prasar Bharati Act* of 1990 by spelling out autonomy for the Broadcasting Authority of India (to replace the role of the Ministry of Information and Broadcasting) to regulate public and
private broadcasting. The Bill also layed down guidelines for granting licenses to satellite, terrestrial and cable broadcasters to establish and operate radio and TV channels to the "highest techno-commercially acceptable bidder."

**August 1998:** the *Prasar Bharati Act* was passed by the Lower House of Parliament, with an amendment that the Broadcasting Authority would be overseen by a 32-member parliamentary committee.

**2000**: The approval of the *Convergence Bill* generated considerable expectations in the public domain, but soon frittered away into cynicism: the objective of the Convergence Bill was to establish a new "converged" regulatory framework to promote and develop the communications sector (including broadcasting, telecommunications and "multimedia") in an environment of increasing convergence of technologies, services and service providers.
The Convergence Bill proposed to repeal and replace existing sector laws, including:
- the *Indian Telegraph Act, 1885*;
- the *Indian Wireless Telegraphy Act, 1933;*

- the *Cable Television Networks Regulation Act, 1995;*
- the *Telecom Regulatory Authority of India Act, 1997.*
The main objectives of the Convergence Bill were to facilitate the development of a national communications infrastructure, in order to provide a wide choice of services to consumer, to establish a regulatory framework that addressed the convergence of technologies, to define the powers and roles of a single regulatory and licensing authority for broadcasting, telecommunications and multimedia and to establish a basis for codes and standards for broadcasting content.

**2006**: The new *Broadcasting Services Regulation Bill* is passed: it gives sweeping draconian powers to the Government to effectively pre-censor and cripple media organizations, thus violating - if abused - the fundamental right of free speech. The Broadcasting Services Regulation Bill provides that the Government may at any time direct the licensing authority (Broadcasting Regulatory Authority of India) to suspend or revoke a broadcasting service's license, if the service is "considered prejudicial to public order, communal harmony or security of the state."

From such a framework, it is easy to recognize how the media scenario has changed in the last years.
The economic boom of the country (whose GDP growth recovered to an estimated 8.5% growth in 2005/06), and the political reforms (which have introduced the privatization of
telecommunications since 1994) have contributed to a proliferation of means and programs of communication.
Better roads and transport, ameliorated infrastructures, the world-wide web and computerised operation have made news-gathering and transmission easier than ever. More competition and more options to the consumer seems to be good news for everybody concerned.
Seldom there has been a more vibrant, promising and confusing scene as in recent years.
Hundreds of television channels have come up to provide viewers options they never had before.
FM radio stations in select cities appear to have done a reasonably successful job of re-defining entertainment. Better films are being made

than ever before and short films, documentaries and even regional films, thanks to TV, are increasingly making their mark.

India is the only country in the world where, at the same time, newspaper readership and internet penetration are on the rise.

Tele-density in the country was 2% in 1999 but jumped to 9.5% in 2006. There were just about 50 TV channels in 1996 but the number is close to 300 in 2006. India is the second largest television market in the world after the United States.

Wireless subscriber base stood at 62 million in August 2005 and is projected to reach 200 million by 2007. India adds thousands of new cell phone subscribers every day.

The possibilities, therefore, look immense for expansion of the market for goods and services. With the economy growing at a faster pace and the country becoming demographically younger, it is scarcely surprising that the Indian media are undergoing a period of renewal.


## 3.2 India Media Index: Urban vs Rural

Today Indian mass media comprises over 300 TV channels, 50,000 newspapers and magazines,
around 300 radio stations, a thousand feature films in 18 languages made every year, and a plethora of print, electronic, digital and telecommunications media.

According to the latest FICCI-Price-Waterhouse Cooper Report (2007)[33], the Indian media and entertainment industry is worth over two hundred billion dollars and is projected to grow at the rate of 18-20% per annum.

A quick overview of the present Indian media scenario indicates:[34]


- **Radio** having the maximum population reach (97.3%) followed by television (425 million).
81 in 1000 people own a radio.

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33 www.diplomatie.gouv.fr/fr/IMG/pdf/KevalKumar.pdf
34 The following data have been provided by the Ministry of Information and Broadcasting

- The unmatched reach of *Doordarshan* – the public **television** broadcaster of India - (350 million), especially in rural areas, despite the rapid increases in satellite television reach (70 million).
61 in 1000 people own a television. 50 out of every 100 Indian women watch TV or listen to the radio regularly.
- The very low reach of **print media** due to a literacy rate of 64% for men and 39% for women, characterised by an almost exclusively urban, educated readership profile. There are 31 newspapers per 1000 people in India. Average hours a week an Indian spends reading a newspaper/magazine: 2.1.
- The low access to **telephones** (13 per 1000 inhabitants) and email.
- The flagging fortunes of **traditional and folk media**, street theatre. 15 out of every 100 Indian women watch a movie at a theatre once a month.
- An emerging role of **ICTs**.

The scenario varies from State to State and from urban to rural areas.
Press reach has stabilized in urban India at 45% while in rural India it is at 19%[35].
Terrestrial TV has the widest reach among all media in rural India with a huge 41.9% of the population watching TV at least once a week: in urban areas the percentage reaches a huge 81.4%.
Radio has a share of 24.6%, followed by newspapers, which have a 17.3% penetration.
Cinema and Cable TV have roughly an 8% share each while the internet has an insignificant penetration level.

In spite of the rapid technological advancements in communications, which might convey an image of India as a global interconnected country, the country carries a great disparity between media users.
India's society is still strong characterized by a social divide among classes that is also reflected in the unpair media reachness to those strata of the populations which are more in need of information. Many people still believe in the caste system and treat others based on their caste. These problems lead to a more closed off climate where media and ICTs can not flourish as greatly.

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35 http://www.nri-worldwide.com/cgi-local/ts.pl?action=fetch&area=statisticsofindia

The social divide is made sharper by the predominat use of English in the media programming. Today India has about 350 million people who use English as a second language, but in a population of one billion, they are not a majority, and the chasm between India's English-speaking elite and the rest of India has been hitherto great and unbridgeable. Despite the fact that there are 15 national languages recognized by the Indian Government and that only one-third of the population is able to read, English alone accounts for roughly 40% of all Indian editing, thanks partly no doubt to textbook consumption and Government printing.

To the social and linguistic divide, it be should added the digital divide between urban and rural areas.

Access to media and technology in rural areas is constrained by low infrastructure parameters like electricity and telephone lines.

Rural India consists of about 127 million households of which only 54% comes in contact with any of the conventional media, like press, TV, satellite, radio or cinema. That means roughly 238 million are waiting to be tapped by the conventional media.

The following data shows that rural communities still rely to a large extent on traditional means of communication which do not adequately satisfy their information needs.

*Table 1: Access to sources of information and communications for the rural poor in India (per cent)*

| Source | Personal ownership | Shared/communal | Not available |
|---|---|---|---|
| Radio | 77.3% | 22.3% | - |
| Television | 9.3% | 84.0% | 6.6% |
| Telephone | 15% | 85% | 5% |
| Fax | 11.3% | 80% | 8.7% |
| Newspapers/print | - | 12% | 88% |
| Computer/internet | | | |

*Source: Rao, S.S., "Knowledge management in India's rural community projects", Online Information 2002 Proceedings, Learned Information, Oxford, pp.29-38.*

It could be affirmed that conveying information to the less developed strata of the population is not a priority of the Government. The shift of India from a state directed economy to one based on the market has

resulted in a shift of communication priorities from a pro-development to a pro-market focus.

The accent today is on state support for the infrastructures of globalization (e.g. the software economy, ICT development, the media industries) and on the harmonization of the Indian communication policies environment with externally generated global requirements. Consequently there is little support for media practises or institutions that are not pro-market oriented.

Moreover both media and governance in India suffer from serious problems, which at times, even feed into each other.

Suspension of civil liberties, excessive militarisation, communal assertions and homogenising tendencies have too often spelled doom for Indian democracy and freedom of expression.

### 3.2.1 Print Media in Rural India

> **Nowadays *India has the largest number of daily newspapers in the world (5364) published in over 100 languages. Their combined circulation has increased from 20 million (1990) to 32 million (2005).***
> ***One Indian newspaper – The Times of India – ranks 10th among the top-selling newspapers in the world (all other nine newspapers are Asian).***
> ***Cost of press advertising has increased by 906% since 1985.***
> ***The press accounts for 66% of total media ad revenue.***
> ***One out of every two publications is either in Hindi or in English.***
> ***70 % of the country's newspaper circulation is controlled by 7 families or groups.***
> ***Rural newspapers are increasing in number.***

Given national literacy rates as low as 51%, the very limited reach of newspapers and magazines, and the distinctly urban educated readership profile, the role of print media has been defined more in terms of information dissemination and advocacy.

Leading dailies have over the last few years dropped their special sections devoted to development and health. The low literacy rates and high production costs have also stymied the possibilities of smaller alternative publications that could potentially reflect the concerns of the development sector. Indian publishers are making an aggressive push to increase newspapers' circulation in rural villages:

the urban press markets are in fact stagnating and advertising has been mostly taken away by TV channels.

Thanks to increasing distribution centers, improved road network, and the hiring stringers to send news from very local centers for separate district pages, rural India is developing the newspaper reading habit.

While *panchayats* remain the main subscribers (they receive newspapers because the Government foots the bill) there has been a discernible increase in subscriptions from rural households as well (even though the price of a rural daily newspaper is normally high - around RS 3[36]). Most of the subscribers are village *dhabas*, teashops, Government employees, students, local businessmen, and traders who mostly read information on *mandi,* the state market .

Rural newspapers have brought about a cultural revolution, made possible by a complex of factors: growing literacy, improved communications, increased purchasing power, and increased information aspirations in a population that already gets some news from radio and television.

Anyway, it is still not clear if rural newspapers are achieving good outcomes on the development front.

If the big city press is obsessed with celebrities, the rural press is obsessed with crime, usually petty crime, which finds an inordinately amount of space in the local pages. The considered view is that while newspapers are anxious to be local and to be read, they have no sense of how to use their forum to provide purposeful coverage and they are too much focused on local/regional news.

Moreover, while men of the rural villages have proved to read the newspaper for crime news and gossip, normally women have a low access to news: whatever little news they get, they get them from radio and television.

Despite this, some outstanding examples of rural newspapers, whose content is based on development issues, can be recognized:

- "*Grassroots*" published in English and Hindi by a non-profit trust of the Press Institute of India (PII): it is a monthly selection of rural reportage from a wide range of local and community newspapers from different part of the country. Though the space given to human development is limited and sporadic in individual newspapers, a

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36 RS 56 are equal to 1 euro.

month's selection in "*Grassroots*" provide model of coverage of urgent rural issues that need to be brought to public attention. Regional training workshops are organized to sensitize local journalists and teach the special skills in making rural reportage. A considerable number of mainstream newspapers are now using *"Grassroots*" as a source of rural news features.

- *"Janavani"* (People's Voice) launched in Orissa in January 2007. During the last three months of publication, the social daily has highlighted the issues and problems of the rural poor, dalits (the untouchables) and adivasis (indigenous people) in villages in Orissa. The survey on coverage of development issues focus on five major themes - social development and poverty alleviation, women and development, child rights, dalits and tribal/indigenous people and human rights. Priced at RS 1, the four-page daily's aim is to establish its presence across the 50,000-odd villages in Orissa, though it only has a 50% presence so far.

### 3.2.2 Television in Rural India

*65 million of the 170 million households in the country own televisions. Of this, 17 million homes have cable connections.*
*40 % of Indian homes in towns below 100,000 population are connected to cable TV. Doordarshan, the state channel, has a population reach of 330 million. Satellite channels reach a population of 70 million. Number of programme hours increased from 1500 per month to 25,000 in the last 10 years. 50.8% of TV programme content is entertainment, followed by 13.3% of news and 9.6% education.*

Indian television system is one of the most extensive systems in the world. Terrestrial broadcasting, which has been the sole preserve of the Government, provides television coverage to over 90% of India's 900 million people. The total television viewership of 415 million is amongst the world's highest.

*Table 2: Tv penetration in India*

|                    | 1998       | 2004        | 2005        |
|--------------------|------------|-------------|-------------|
| Television sets    | 70 million | 105 million | 119 million |
| Cable connections  | 25 million | 52 million  | 62 million  |

*Source: New York Times, February 2007, CII-KPMG Report*

Television was introduced as late as in 1959 and the broadcasts started from Delhi.
The Government had been reluctant to invest in television until then because it was felt that a poor country like India could not afford the medium. Television had to prove its role in the development process before it could gain a foot-hold in the country.
At the beginning programs were broadcasted twice a week for an hour a day on such topics as community health, citizens duties and rights, traffic and road sense.

In 1961 the broadcasts were expanded to include a school educational television project. In time, Indian films and programs consisting of compilation of musicals from Indian films joined the program line-up as the first entertainment programs. A limited number of old U.S. and British shows were also telecasted sporadically.

In these early years television, like radio, was considered a facilitator of the development process and its introduction was justified by the role it was asked to play in social and economic development.

Television was institutionalized as an arm of the Government, since the Government was the chief architect of political, economic and social development in the country.

In 1976, the Government constituted *Doordarshan*, the national television network, as a separate Department under the Ministry of Information and Broadcasting.

*Doordarshan* was set up as an attached office under the Ministry of Information and Broadcasting - a half-way house between a public corporation and a Government department. In practice, however, *Doordarshan* operated much like a Government department, at least as far as critical issues of policy planning and financial decision-making were concerned.

International satellite television was introduced in India by CNN through its coverage of the Gulf War in 1991. Three months later Hong Kong based StarTV (now owned by Rupert Murdoch's News Corp.) started broadcasting five channels into India using the ASIASAT-1 satellite. Taking advantage of the growth of the satellite television audience, a number of Indian satellite based television services were launched between 1991 and 1994, prominent among them ZeeTV, the first Hindi satellite channel.

By the end of 1994 there were 12 satellite based channels available in India, all of them using a handful of different satellites.

The proliferation of channels has put great pressure on the Indian television programming industry. With Indian audiences clearly preferring locally produced program over foreign programs, the new television services are spending heavily on the development of indigenous programs. The number of hours of television programming produced in India has increased 500% from 1991 to 2005 and is expected to grow at an ever faster rate until the year 2010.

In a bid to give themselves a halo of social responsibility, some channels broadcast programmes with a veneer of public interest: edutainment soap like *Hum Log* that incorporate socially relevant themes such as women's education and empowerment, interactive talk shows on whether smoking should be banned, and open forums with

Government representatives responding to audience queries on human rights abuses or consumer rights are getting more and famous.

Until fairly recently, most of the 75% of Indian rural population were isolated from external media influence. As these villages modernize and gain access to services once thought to be limited to an urban environment, basic human needs began to change. Television, once though as a luxury, has in the past 10-15 years become a necessity.

Television arrived in the rural villages in the mid-1980s and its initial novelty has since worn off.

Indian villages have suddenly been propelled into electronic information age. The communities that used to be defined by their own oral traditions and stories are now being partially structured and reorganized by the medium of television.

Family and community bonds are being replaced by national and international corporate structures through advertising and other means. The rapid increase in the consumption of goods and services marks a new stage in the development and evolution of village India.

40% of all Indian are under the age of 15 and it is the group, in urban as well as in rural areas, that watches television the most. Village children and teenagers are exposed to a variety of TV programs and advertising. This influence is mostly noticeable in their approach to clothes, their concepts of beauty and their commitment to modern lifestyles.

The older generations have a different view of television as it relates to consumerism in the village. The majority of the older villagers argue that television is having a negative impact on the young people.

The influence of television on rural life is witnessed in many aspects:

-*politically*: traditionally one's social standing was determined by heredity and economic influence. The traditional elite monopolized information and dispensed it selectively. This information was often important not only economically but politically as well. Today, television has ensured that information is no longer filtered down by the elite but villagers of all strata of the community have access to the same information. This has resulted in the younger, less powerful villagers challenging the authority and position of the traditional elite.

-*economically*: though a class structures has always existed in the rural villages, today the accumulation of consumer products including

television has created a new class climate. If in the past ownership of the land, access to water and the ability to hire labour were important indicators of one's economic standing in the village community, today the ownership of consumer products is a significant contributor to one's class position.

Television has contributed to expanding the entrepreneurial class, by equally informing viewers about markets and methods.

-*socially*: television acts as a catalyst bringing together men and women of all ages on a regular basis in close proximity for an extended period of time. Such closeness has created new types of relationships among people of different ages and genders. One does not have to be literate or educated to watch TV.

-*linguistic hegemony*: India is considered one of the most diverse nations in the world. It has more than 15 official languages and hundreds of dialects. Television - just as the film industry - has opted for Hindi as the dominant language. Moreover, with the introduction of satellite television, Hindi and English are the predominant languages on the air.

- *migration*: television encourages migration out of the villages to regional urban environment. Most villagers who migrate to big cities like Mumbai or Pune, do it for achieving a better life. Especially in Western India, migration of young males (18-35) from the villages is the norm.

According to data of the Ministry of Information, there are an estimated 22 million television sets in rural India. In terms of access to television in their homes that means 122 million or 18% of the total estimated rural population of 684 million are now able to do so.

The number of TV homes has been growing at the rate of 3-4 million per year. Taking these figures into account, it is now estimated that the total TV homes in India stand at 55 million.

A look at the market variations in rural TV ownership reveals some interesting features. For instance, the striking differences across the states surveyed. In some of the Northern States such as Punjab, Haryana and Himachal Pradesh over 40% of the rural population have access to TV at home. Eastern States like West Bengal, Orissa and Bihar - which are the poorest - report a penetration of under 15%. Analysing the data for growth in satellite television in rural India, it

was found that while television ownership may be decided by economic prosperity, going for a cable connection was dictated by two added conditions: an interest in language programming and the viability of cable operation in the area. It emerged, only a tiny 2-3% of the overall rural population watch satellite television at home. Change, however, was breezing in on the tailcoats of channels with Tamil, Telugu and Kannada programming. It was found that the availability of long hours of film-based programmes had motivated a sizeable number of rural homes in these language regions to acquire a cable connection.

Though television started in India as a limited developmental tool orchestrated by the Government, the medium today has blossomed into one of the largest competitive industries in the world.

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**BOX 1 – A Famous Experiment of Rural TV for Development**

The Indian Satellie Instructional TV Experiment (SITE), conducted more than thirty years ago in 1975-6, is still probably the largest communications experiment of modern times. SITE was a totally indigenous collaborative project conducted by several Ministries of the Government of India.

For the first time ever, a satellite transmitted programmes directly to TV sites in remote rural villages, with great success. Four hours of locally made programming were transmitted daily on agriculture, health, family planning, nutrition and education.

The project was undertaken to help shape a development support national TV system for India that would be equally available both to urban dwellers and rural viewers. The programmes were to provide non formal education in agriculture and health to village communities: formal education for primary school children and teachers and, by promoting Indian culture, to create a sense of unity and belonging among the nation's different linguistic groups. So the aim was to find out how to design a TV system for both economic and politcal ends. The space agency hoped that SITE would provide general guidelines on programme content, TV forms, organizational structures, hardware, costs and project management systems for rural development.

Programmes were videotaped for six States in 4 languages at the specially set up studios in Delhi, Cuttack and Hyderabad. List of the topics were specifies by the respective ministries: i.e the Agriculture Ministry specified the agriculture topics, the Ministry of Education specified the topics for the primary school broadcast and so on.

The satellite was NASA responsability: ISRO handled all hardware ground system for trnasmission and reception. ISRO was also responsable for village TV receiver design, deployment and mantainance. Each SITE state goverment was responsable for electrifying the building which housed the TV set, paying the electricity bills and appointing a paid caretaker to switch the TV set on and lock it up at the end of the day. Day to day coordination of specific operations across Ministries was handled by setting up groups of working-level people.

Four hours of programmes were transmitted daily during the SITE year. A typical weekday consisted of 22 minutes of morning school programmes: one utility item, one entertaining item, and one information item. In the first month of SITE only 70% of sets were operational because of unexpected violent monsoon winds and floods that cut off approach roads. The situationn improved rapidly and by the fourth month 94% of sets were in operation.

The average audience was composed of about 300 people per set (30% children, 50% adults, 20% adult females). The small farmers and landless labourers formed the greater part of the audience. After the novelty wore off, attendance decreased and farmers came only a week to watch drama, because they already new most of the information fromother sources. TV viewing increased contact with the village-level extension agent. The need for more than one community receiver was felt in big villages. Level of improvements wer high after a year. There were significant gains in knowledge of preventive health measures, of varieties of animal breeds, but there was general no gains in general agricultural knowledge partly because techniques varies from State to State.

In general the magnitude of gains was greater for lower castes, for illiterates, for females, for low income groups and for those who reported regular TV viewing. Children exposed to TV in the school showed increases in their language development.

The aim was not to achieve some hypothetical state of development after villagers had been exposed to TV for a year: no one wondered whether such measures as the improvement of teachng methods, could ever lead to changes in the unequal distribution of wealth, power and privilege, which is at the root of the development problem. Unwittingly, the glamorous media may have helped distract attention from the need for more basic economic changes in the opportunities available for the have-nots.

### 3.2.3 Radio in Rural India

*There are 104 million radio households in the country, and approximately 111 million radio setsRadio covers 98.5% of the country's population and 91% of the country's geographical area.*

*There are a total of 186 radio broadcasting centers (March 2005). There are 148 medium wave transmitters, 51 short wave transmitters and 94 VHF/FM transmitters.*

*Radio broadcasting is done in 24 languages and 146 dialects. Listening hours per week in 1991 as compared to 1995 are: regular (6-7 days) 54.1 and 49.3 hours; frequent (3-5 days) 23.2 and 27.3 hours; occasional (1-2 days) 14.8 and 15.7 hour.*

Radio is still the basic media for mass communication in a developing country like India with a penetration of 98.5%, according to recent

surveys. Radio as a medium has grown by 691%, and is the fastest growing in India, besides the Internet.

The Government has indicated that its long-term plan is to have 150 FM stations across 40 cities; besides Mumbai, private FM is also present in Bangalore, Indore, Lucknow, Ahmedabad, Pune, Delhi, Chennai and Kolkata.

Research has shown that radio offers effective penetration into certain demographics like the youth and working men; the latter, in particular, are upwardly mobile high spenders and light consumers of other media like TV and print. Besides, radio is the only medium, besides outdoor, which uses a consumer's "dead time" during a commute or another activity, and offers the added advantage of interactivity.

Radio plays an important role. It can reach communities who live in areas with no phones and no electricity. And it reaches people who can't read or write. Even in very poor communities, radio penetration is vast.

Private radio is a relative newcomer to India's broadcasting scene. Since they were sanctioned in 2000, India's private radio stations are only allowed to broadcast entertainment and not news and information programmes. So music-based FM stations have proliferated in India's cities. But only public All India Radio (AIR) was permitted to broadcast news on the radio. However, in late 2002 the Government gave the go-ahead to educational institutions to set up their own low-power FM stations.

Some efforts have been made to use radio for social change, as in the case of the state-supported radio rural forums for agricultural communication in the 1960s, or to promote adult literacy in the 1980s. More recently NGOs have helped broadcast programmes on women and legal rights, emergency contraception and teleserials advocating girls' education.

Rural radio are generally perceived as a force for good, providing both education and entertainment where these might otherwise not exist.

A key need in India is for local broadcasting that reflects issues of concern to the community.

In this regard, some communication experts believe that an increased and accelerated commercialisation of radio will eventually drive down the costs of FM radio sets, thus facilitating local radio. The increasing

devolution of political power initiated through the 73rd and 74th Amendment to the Constitution in 1988-89 has also set a climate conducive for the empowerment of communities and local governance. A key area requiring attention, therefore, is advocacy for community radio and the provision of training to NGOs and communities to use this medium for articulating their concerns, as one Bangalore-based NGO is currently doing.

Two outstanding examples of rural radio are the following ones:

- **Panchayat Vani** (People's Voice): it's an innovative community-based radio programme recently broadcasted on All India Radio (AIR) Darbhanga, which has been spreading awareness about the functioning of panchayati raj institutions in Muzaffarpur, Madhubani and Khagaria districts of Bihar. In villages across nine Indian States listeners are getting hooked on to radio shows featuring women sarpanches and journalists fighting social and economic inequities through panchayati raj institutions. In the process, listeners are spurred on to participate in local institutions of self-governance themselves.

- **Mana Radio**: it's a community radio station run by members of the women's Self Help Groups (SHG) in Orvakal village, Kurnool district, Andhra Pradesh. The SHG members actively involved in running the station are all from rural poor families, mostly d alits and minorities. Many of these women are minimally educated and have had no media production exposure whatsoever. They, however, are now capable of producing varied radio content. The women hope that the radio will help them better deal with the issues facing them and in spreading awareness.


### 3.2.4 Traditional Theatre in Rural India

Traditional folk media forms, once a favourite for communication efforts, are today precariously placed. Some agencies and NGOs continue to use street theatre, magic, puppetry, traditional folk dances and melas (fairs) especially in rural areas. Some of these efforts are hugely successful in awareness creation, social mobilisation and in facilitating interpersonal communication. However, the absence of funding and technical support, their inherent fluid structure and the difficulty in monitoring and evaluation have rendered them near-relics

in today's environment. So much so that a Bangalore-based NGO, while using such traditional folk forms, also feels compelled to address the basic survival needs of folk artistes such as provision of basic wages, training, pensions and other schemes.

### 3.2.5 Telecommunications in Rural India

*Telephones main lines in use: 49. 75 million (2005)*
*Telephones main lines in use density: 45 telephones- main lines in use per 1000 people*
*Telephones mobile cellular: 166.1 million (2006) Number of urban public call offices (PCOs) from 338 to 400,000*
*Number of rural telephones from nil to 2,400,000*
*There are 23,406 telephone exchanges, 21,260,000 lines and 17, 800, 000 telephone connections (March 1998)*
*62855 villages have been provided with public telephones in 2005. 18.5 million additional lines are planned by the year 2010; private operators are to provide 5.2 million of these lines.*

Telecommunications have played a critical role in shaping India's march towards progress and the importance they hold for the future of India cannot be overstated.

Telecommunication Services were introduced in India soon after their invention in late 19th century by the British, not for meeting any socio-economic objectives but with the purpose of meeting the requirements of the Government in matter of defense, law and order, general administration and revenue collection.

The national investment in telecom in the first six five-year Plans since 1950 hovered between 1.4 and 2.7 % of the Gross Domestic Product (GDP). Only after 1985 did things start looking up for telecom, with the investments jumping up to 3.6 % of GDP in the Seventh Plan (1985-90) and 11.9 % in the Eighth Plan (1992-97). The Eleventh Five Year Plan (2007-2013) has a plan of 13 % of GDP to be invested on the Telecommunications Infrastructure.

Telephone traffic in rural areas is mainly confined to villages that are close by or to villages within the same telecom center itself.

DOT (Department of Telecommunications) along with C-DOT (Center for Department of Telematics) has till date provided telephone

connections to about 0.2 million villages and a lot still needs to be done because new rural economic development requires a reliable infrastructure of enhanced telecommunications. The DOT has various policy plans for the rural Telecom sector according to regions (like the **North East Region Plan** for North Eastern States that are located on a mountainous terrain and are in most need of proper communication facilities) and programs (like the **Tribal Sub-Plan** which should provide telephone facilities practically on demand in tribal and rural areas).

Rural residents deserve an equal opportunity to participate in the national economy and determine their own destiny. Particular emphasis should be given to the role of telecommunications technology in enabling rural citizens to integrate effectively in the Indian economy and then the new Global Economy.

To such regard, the Government intends to link the country's huge rural population, as well as its own district offices, to the telecoms network. Only about 27% of India's 1bn people live in cities; the rest live in more than 600,000 villages. At present, the telecoms network connects only about 4,500 towns and cities and 65,000 villages. To address this issue, the Ministry of Communications and Information Technology has developed Vision 2010 to guide the telecoms sector.

The ten-point plan, released in December 2006, sets out a number of goals focusing on "connecting the unconnected parts of the country", in the words of the communications and IT minister, Dayanidhi Maran. These include having 500m mobile phone subscriptions, having 85% of the country covered by a mobile network; having a mobile penetration rate of 90%; and having 80m mobile connections in rural areas by 2010. To this end, the Ministry plans to make available mobile handsets costing just Rs1,000 (US$25) by early 2008. The mobile industry players are eyeing rural India as their new area of opportunity.

Although a huge market in the urban segment remains tapped, most of the cellular operators have turned towards rural India to broaden their base and reach. So the real growth is expected from this geography in near future.

### 3.2.6 The Internet

*India is now in the 4th place in terms of Internet users.*
*The percentage penetration is still low but has increased significantly from 0.1% in 1998 to 4.5% in 2005.*
*The growing popularity of cybercafés has been playing a big role in fuelling Internet development in India.*
*Low cost of broadband has also helped increase Internet usage.*
*E-commerce and high demand for ".in" domain registrations are also factors for the increase in online users.*
*The ".in" domain registrations surpassed 150,000.*
*The Internet population is expected to grow to 100 million by 2007.*
*There are 60 milion Internet subscribers (2005).*

*"Information is critical to the social and economic activities that comprise the development process. Internet, as a means of sharing information, is not simply a connection between people, but a link in the chain of the development process itself."* [Hudson 1995]

Internet adoption is growing in India. According to the *Internet & Mobile Association of India* (IAMAI) the low cost of broadband has helped increase Internet usage.

E-commerce and high demand for ".in" domain registrations are also factors for the increase in online users. The ".in" domain registrations surpassed 150,000.

Broadband policy and other initiatives by the IT and Telecom Ministry encourage increased adoption. A monthly broadband subscription costs as little as 199 rupees (US $4.50).

A second factor is the IT Telecom Ministry initiative to make computers available for purchase under 10,000 rupees (US $226). In addition to working with hardware manufacturers to remove the financial barrier for households in India, the organization continues to push development of language fonts to remove language and localization of content issues.

According to IAMAI, a trade association representing the online content and advertising, e-commerce and mobile content and advertising industry, Indians go online for a number of activities including e-mail and IM (98%); job search (51%); banking (32%); bill payment (18%); stock trading (15%); and matrimonial search (15%).

PC penetration in rural India is as low as 0.58% (Asia is at 3.31% and world average is at 8.42%).

The cost of computers is still beyond the purchasing power of majority of individuals.

Internet is usually available only in urban centres, where most Internet Service Providers (ISPs) have their market.

Accessibility is also hindered by language barriers - information resources invariably require an ability to understand English - a lack of suitable content and applications in local languages.

The telecom spread of basic services to rural areas is not complete. Financing of the telecom sector has been traditionally through central Government owned companies. Bharat Sanchar Nigam Lmited (BSNL) and Videsh Sanchar Nigam Limited (VSNL) held a monopoly until March 2003. They provided services like basic telephone lines, telex and leased lines but now private companies (Hutchinson and Reliance Infocomm) dominate the market of value added services like internet mobile and international long distance.

Village Public Telephones cover 80 % of rural villages. Village people have little opportunity to connect to Internet, so they are uninformed of the socio-economic benefits that connectivity might bring. Also, due to the quasi-absence of demonstration projects in some countries, very limited information is available to assess and to advocate the impact of Information and Communication Technologies for development.

Recognising that access to information and information technologies play a key role in development, especially given the constraints of the mass media, groups of non-profit documentation centers in the country have developed communications systems such as *Indialink* and *Dianet* that are focussed solely on development issues. By providing connectivity to grassroots NGOs and emphasising the documentation and information from within the country, these efforts have facilitated greater grassroots involvement in development and South-South dialogue. However, the extremely low access to internet – there are a mere 90,000 internet subscribers in the country, bringing the density to below decimal points – is a key aspect. A World Bank funded project for National Agricultural Technology envisages a similar democratisation through the establishment of "information kiosks" in rural areas. The proposed project sees the expansion of

public pay-phone offices that have mushroomed all over the country, including rural areas, into centers with computers for the inputting and accessing of data relevant to rural populations.

Some of the immediate and discernible advantages that improved telecommunications in rural areas would bring are:

-Reducing rural-to-urban migration by providing potential for improved employment and livelihood in rural areas through small business and microenterprise development.

-Enabling immediate access to assistance during civil emergencies and natural disasters.

-Improving access to health extension services. For example, telemedicine services, including remote diagnosis and treatment advice.

- Increasing access to up-to-date market and price information, greatly reducing the opportunity cost of transactions for farmers and rural-based traders.

- Aiding education services, including distance learning.

- Accountability, transparency, and efficiency of Government operations can be increased through information systems developed in rural areas.

The final solution for providing service to rural areas in India requires a delicate blend of appropriate technological choices in combination with management and financing mechanisms, initiated at the Governmental level, to support the development of rural providers.

Community Computer and Internet kiosks have emerged as the preferred medium for bringing the benefits of the information and communication technologies (ICTs) to rural communities in developing countries. These kiosks are being used to deliver a host of services such as education, health care, agriculture, e-Government, and communication (email, voice mail). The National E-Governance Action Plan of the Government of India has placed great emphasis on these kiosks as the main vehicle for delivering e-Government services in rural areas.

Over the past few years, a large number of such rural kiosks have been established in many States across the country. It is estimated that over 600 rural kiosks are functioning in Tamil Nadu alone.

Most of these are run by individual self-employed entrepreneurs and NGOs; but now women self-help groups are also coming forward to run them. The kiosks are mostly operated on a fee-per-service

commercial business model. They have developed partnerships with the public and private agencies for delivering their services.

These kiosks are increasingly being seen as the most suitable medium for bridging the urban-rural digital divide by bringing some benefits to the hitherto unserved rural population.

However, recent worldwide research on their diffusion has shown that they may be reaching only the socially, economically and educationally better off sections within their communities. They may not be effectively reaching the socially and economically disadvantaged sections and women. Researches carried out in Tamil Nadu reveals that though the technology itself is considered gender-neutral, women in the households often lack independence, the decision making power and financial resources to make use of the kiosk services fully.

Thus, unintentionally, they may be creating a new digital divide within these communities and also leaving women behind in the information age.

Another attribute of the kiosks that affects their diffusion is the perception that the technology is complex and therefore only the educated people can understand and use it. The very image of a computer which they can use only with the help of an external operator is too complex for them.

Moreover in most cases, the kiosk operators personally contact the households within the village to tell them about the kiosk. The mass media has also been used to create awareness, but only sporadically. However, the interpersonal communication by the operators has been limited mainly to those households that belong to the relatively higher socioeconomic strata within the village. The main reason for this is the perception among the operators that only these users can afford to pay for the services. The locations of these kiosks are in areas where the upper strata households live. Though this has been done to make the kiosks financially viable by attracting the relatively higher income households, the SC/ST households find it difficult to come and use them as these are located far away from their habitations.

More and more e-Government services are available through the kiosks, which save time and costs, in terms of a reduced number of visits to the Government offices and less corruption, to the users. The same logic applies to other services such as for agriculture, health care, education, communication, etc.

A related aspect is to design and deliver appropriate and localised content through the kiosks. At present, the content provided is mostly standardised content available from the web. Serious efforts need to be made to make the content relevant and localised to attract a larger number of users. It is especially true for women, for whom the relevant content available at present is severely limited.

It is imperative that any benefits of ICTs are shared equitably by all sections of society. As kiosks become more and more ubiquitous in our countryside, it is important not to exclude large strata of the population from their benefits.

*3.3 The Correlation between Media and Development in India*

The previous analysis has provided a picture of the Indian media penetration, mainly focused on the rural areas.

Although some initiatives have successfully been carried on in the rural context, it is evident that private and Governmental budgets - as a consequence of globalisation and liberalization - are more focused on "infotainment" and less on satisfying the demands of rural areas for development.

Media might help in bridging gaps, in innovating the existing social equilibrium and in fighting against socio-economic problems towards a knowledge-based society. But concrete development can only be achieved thorough more inclusive practises in which people –and not exclusively media - can be agents of their own changes; access without inclusiveness is like information without communication.

Davis (2006) observes that *"…even if we are presently unable to measure and determine objectively media's influence within societies, it's clear that development can't take place without information and a legal framework that facilitates the circulation of news and ideas"*.

In order to foster development through media, the Government of India should:

**- develop a regulatory framework – up to now absent- that defines public service broadcasting to include not only state-owned media but all non-commercial broadcasting**. This would empower non-profit institutions such as community organisations, universities, local

bodies and NGOs to participate in development communication. This was suggested in a privately drafted, more holistic, alternative to the current *Broadcasting Bill*, the *Prasar Sewa Bill*, which was drawn up by a group of communication and media experts in 1995. This draft bill suggests that there should be three streams of broadcasting – public service broadcasting funded by the State, market-driven satellite broadcasting including cable, terrestrial and satellite services, and community service broadcasting by autonomous citizens groups, universities, trusts and NGOs to make more programmes reflecting local realities. However, the draft bill has not been taken into consideration;

**- develop better, need based media stories and programmes;**
**- decentralise the provision of training for communities to enable local broadcasting and community media.** Putting communication resources in the hands of the community is a sine qua non for participatory communication;
**- sensitisation and training of media professionals** from print, radio and television (the broadcast media are often excluded from such efforts) in social development issues;
**- strengthening linkages between media trends and communication investments of development organisations.**

Small autonomous media, like for example the community media, which are designed by and for the communities, have to struggle to receive legitimacy by the Government. In many cases, such initiatives – which are mainly promoted by NGOs and imply a bottom-up approach to communication - remain isolated projects, struggling at periphery of a contrasting and often iniquitous media landscape.
If in fact the Supreme Court Judgement[37] of 1995 has endorsed that 'airwaves are public property', in the practical realm lines between public and privately remain conveniently blurred and community media can't find a proper position.
Moreover, community broadcasting licenses are still rare in India.
While the crux of the problem in several instances might lie with a reluctant state, civil society needs to get its act together; priority

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37 In February 1995, India's Supreme Court held the Government's broadcasting monopoly unconstitutional and "totally inadequate [for the] broadcasting media."

should be given in issuing programmes especially intended for the developing rural regions that are backwards in terms of various socio-economic indicators. This is also based on the fact that the least developed regions and communities of the country are also least served by media.

If the denial of information aggravates the poverty gap, information without communication could be dead wood. Producers of information need to be able to communicate it in a manner they believe appropriate; the usual pattern of delivering information should be reviewed by conveying positive messages and directly encouraging people to support development projects.

A participatory media approach does not deny the necessity for the continuation of some the functions performed by private or Governmental media, but there is a belief that media could and should do more for development. Advocates of participatory media believe that through involvement in the process of communications itself, development can be progressed.

### 3.4 Community Media: is Local Focal?

Media, when placed in the hands of the community, might become the machinery through which participation in the socio-political sphere is achieved.

Community media determine an exchange of views and news by the communities for the communities, which is not restricted to the single transmission of information from one source to another.

*"...Community media are adaptations of media for use by the community, for whatever purposes the community decides. They are media to which members of the community have access, for information, education, entertainment, when they want access. They are media in which the community participates as planner, producer and performer."[38]*

Community-based media are media of, for and by the community. While they may not have the reach of mainstream media, they certainly have more depth and interaction because of their inherently participative character. In many cases, the community members are both producers and participants. Consequently, the media technology used is also appropriately targeted by and for the community. These factors enable substantial scope for sustained feedback.

Community media, according to Kevin Howley[39] (2002), are distinguished from their commercial and public service counterparts in three fundamental ways.

First, community media provide local populations with access to the instruments of media production and distribution. They are an exciting source of social innovation and practical 'joined up' outcomes. They reach out to people and communities at risk of exclusion and disadvantage and they enable people to become media producers, to reinforce knowledge, dialogue and cultural expression at neighborhood and community level.

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38 Rensburg, R. "Community development: essential contribution or paternalistic communication?" Dialogus on line, 1994 available at www.unisa.ac.za/dept/kom/d11radio accessed on 1st of December 2007.
39 Howley, K. "Community Media : People, Places, and Communication Technologies", Cambridge University Press, 2005.

Second, the organizational culture of community media stresses volunteerism over professionalism and promotes participatory governance and decision-making.

Third, and perhaps most significantly, community media reject market-oriented approaches to communicative practices and are philosophically committed to nurturing mutually supportive, collaborative, and enduring communal relations (Devine, 1991).

In sum, community media play a vital, though largely unacknowledged role in preserving democratic forms of communication, defending local cultural autonomy, promoting civil society and rebuilding a sense of community.

Media theorist Robert McChesney (1997) highlights the implications of media for democracy on national and international levels.

*"... the manner by which the media system is structured, controlled and subsidized is of central political importance. Control over the means of communication is an integral aspect of political and economic power..."*

Mainstream media are mostly owned and controlled by powerful and influential elites that routinely have access to such media. As a consequence, some groups are marginalized and disempowered by their treatment in the mainstream media, treatment against which they generally have no remedy.

Significantly, community media represent strategic alliances between social, cultural and political groups mounting and organizing resistance to the hegemony of dominant media institutions and practices.

Community media publicize messages that are very often omitted from mainstream media coverage. In this way they reduce the debilitating effects of political systems that cater to well-heeled special interests by enhancing the capacity of local communities to organize themselves and participate in political processes.

Community media may contribute to:

- reduce the digital divide (as well as rural-urban, wealth and gender divides) at individual, group and community levels
- give a voice to the voiceless (at household, community, national,

regional and global levels). For example, communication processes can give rural women a voice to advocate changes in policies, attitudes and social behavior or customs that negatively affect them

- foster and facilitate community decision-making and action and empower them to take control of local development processes

- empower communities that should take charge of all aspects of media initiatives, including deciding priority applications, content, training, technical management and even financing

- ensure that media serve the purposes of local communities. Through appropriation, communities select and transform the technologies and content to fit their needs, rather than reflect the interests of external groups.

Equally important, as a forum for local arts and cultural organizations, community media support and encourage local cultural production. In the face of the homogenizing influence of national media industries and the encroachment of cultural forms produced and distributed by transnational corporations, community media provide a measure of local cultural autonomy in an increasingly privatized, global media environment (e.g. music radios based on foreign music).

In this way, community media play an important cultural role by encouraging dialogue between diverse components of a community (this process is integral to community social structure) and by promoting local appropriation of media. This happens in various ways - through news and information programs, talkback, request shows etc. In such a way, local media both produce and maintain the culture of a community (Ewart 2000).

"*When I think about local appropriation of media, I think of it in terms of how people appropriate the tools of communication to express and share ideas that would otherwise go unnoticed by their peers, families, communities and societies. Community radio, home grown web sites, participatory video, locally produced newsletters, etc. are great examples of this.* " [40] (Don Richardson, 2001)

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40 Richardson D., contribution to the FAO e-forum "The appropriation of traditional and new media for development - Whose reality counts", December 2001.

*3.4.1 State of the Art of Community Media in India*

Beyond reform of media organizations and media production techniques, access and participation have a wide implication; if people have access to communications media, they can use them to request further information and convey their views to others.
The simple acquisition of information, of problem-solving and communicative skills can be extremly useful for rural population, who are often deprived of basic information.
       Most educational programmes which do not focus on rural concerns but which apply the 'transfer of information' mode have contributed to rural disruption and to the increase of individual passivity in relation to rural environment.
In India, for example, rural life has changed little for the better in recent years, because of the imbalance between the cities and the countryside and the lack of infrastructures and information that could empower farmers' condition.
Rural workers have no voice, and, as a consequence, they are very often passive, fatalistic, ignorant and superstitious. Normally the villages of India are reduced to being hapless consumers of media that is irrelevant to them.
       In such a framework, community media might play a significant role and that's why they are getting more and more adopted in many development programmes committed to the empowerment of rural populations in India.
Such programmes might imply the use of one or more media, according to the need of the target populations and the budget at disposal, and the training of local communities carried out by communication experts.
The following sections briefly introduce the state of the art of community media in India.

- **Community radio in India:** in November 2006[41] an act has been passed according to which registered non-profit organizations can apply for a license to operate a Community Radio Station (CRS): the Telecom Regulatory Authority of India (TRAI) has recommended

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41 http://southasia.oneworld.net/article/view/142618/1/2285

news, current affairs and community and local information at the centre of community radio programs*:* political and electoral news are not allowed, but besides that, community radio stations can cover everything else.

The new policy has not only opened up community radio to NGOs, self-help groups and other community-based organizations, but has also allowed them to become self-supporting through limited ad-revenue. As a consequence there have been several universities (Anna University in Tamil Nadu, Indira Gandhi National Open University) across India which have not only evinced interest, but introduced community radio as a part of their media pedagogy. At the same time, several development NGOs at the grass roots level have initiated or facilitated endeavours which demonstrate community participation in radio.

Of course, there is much more to a CRS than just having a license; there is the operational part that includes 'what' to broadcast, and then there is the non-operational part, which includes project planning, execution, and sustenance. Each one of these has sub-assignments like community-institutional or vice-versa partnership, management, funding, training, and so forth. All these at the end should converge into a policy document agreeable to all those involved in the community radio projects.

**- Community Video:** in some communities, participatory videos are shown to spar reflection and discussion, itself part of a participatory process, rather than as a simple instructional tool. The principle is simple. Basic training and equipment are provided, and a number of participatory sessions are run to explore village problems and possible solutions to them. This enables people to articulate their stories in their own way. Experience suggests that the various individual and group communication skills developed for video are very close to leadership skills and can strengthen local organizational capacity.

In India the most outstanding projects based on community video are: the *SEWA* (Self Employed Women's Association) project in Ahmedabad, which has been training poor and illiterate women in the production and use of video as a tool for empowerment, as an integral part of their activities since 1984, and the *Lok Jumbish* education

project in Western Rajasthan, for rural village children who are not able to attend school classes.

**- Community newspapers:** they are in the vernacular language, free of cost and have immediate relevance to the local communities. Editorially the focus is on the local geographical community issues concerning a reader in his immediate surroundings and women's issues. The attempt is to supply readers with information on municipal, Government, agriculture, nutrition, NGO's and other organizations' projects and programs. Members of the community or neighborhood might use space in these newspapers for personal purposes. Classifieds are inserted at very cheap rates or even free of cost: advertisements are frequent and they are from small local suppliers like tutors, bakeries, dry cleaners, auto-mechanics, plumbers and other independent suppliers.

In South India, community newspapers are weekly or fortnightly. *The Adyar Times* and the *Anna Nagar Times* are the best-known examples of successful community newspapers. The papers are free with an average of 16 pages, and almost 50 per cent of each paper contains basic information for daily rural activities.

In the North, particularly in the national capital region of Delhi, there are several free community newspapers - weekly, fortnightly, or monthly like *Samvada.*

In a very recent experiment, children from Haiderpur and Lal Quan - two slums of Delhi - have taken initiative to launch their newspapers and raise issues of local concern. These children, trained in newspaper reporting in a workshop conducted by two outstanding Indian journalists,[42] have conceived a hand-written, 8-columns newspaper with main lead story, interviews, anchor story and pictures. Even though they live in impoverished conditions with little educational and social opportunities, they are determined to establish 'credibility' of their media in the community. They hope it would soon be able to influence the decision makers so as to ensure better facilities for their community.

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42 Gandhi Smriti and Darshan Samiti.

**- Community Traditional Drama, Dance, Song and Story telling:** they are still considered in many ways the focal opportunities for 'knowledge exchange'; they are normally associated to social occasions, local festivals, family gathering and religious ceremonies.

Thus, it is not surprising that in many Asian countries like India, theatre groups can be hired to do shows that carry specific messages. However, this tends to focus on getting a message out rather than on an empowerment agenda.

An interesting example of the use of tradition for empowerment is found in the combination of 'yatra' in India (an extended journey, passing through many places) with traditional media (and even video) as a means to promote ideas within a wide area. An example was the *Save Narmada campaign* that organised a yatra of 6,000 people to tour the area, which was joined by a total of eight theatre groups to performed specially written plays. Reportedly, the arrival of the yatra was a potent empowerment tool, for both participants and the local communities. The campaign also made extensive use of media coverage.

**- ICT Community Media:** despite many positive aspects, like the ICTs enabled opportunities for two-way and horizontal communication and for opening up new communication channels for rural communities, there are a limited number of cases of community-driven ICT initiatives or projects mainly due to:

- scarce visibility and coverage of grassroots/community-driven ICT initiatives (they are not always officially documented or publicised, even more so if they are not donor-driven)
- many community-based ICT projects are still in a pilot phase and so far few evaluations have been undertaken (the lack of M&E and impact assessment is disquieting)
- the emphasis is more often on providing access than on innovative ways of applying ICTs to the specific information needs of communities and local groups
- target groups/beneficiaries are hard to identify (even when the project sets out with good intentions to involve a broad community representation, the reality is that in most of the cases only select groups are involved and these tend to be the more advantaged ones)

- there is a lack of local participation in the creation of content and selection of ICTs tools
- there is a profusion of information centers where computers, or other ICTs, are available but where a lack of awareness, ICT skills, and literacy hinder the process of local appropriation.

"*At the local level, ICT can be used to alleviate poverty both directly and indirectly. Here, ICT often follows existing opportunities. For instance, the farmer who uses ICT to get information about prices is already buying and selling from the market; the technology simply allows to diversify his or her activities - the farmer can now choose to sell to one or another market instead of being forced to accept the middle-man's offer, for example. Local opportunities may be aggregated to create scale to 'feed' a larger national market*" [43]

There is still much to be done before local communities and groups, especially poor ones, can begin to realise significant livelihood improvements from the new ICTs. However, the potential exists and can be furthered by focusing on equitable access and meaningful use of ICTs to improve livelihoods, quality of education and healthcare, and to advance community economic growth.[12] Access without local capacity and skills for purposeful and meaningful use of ICTs, and decisive control by local groups and communities over ICT resources and applications, will most likely have little impact.

In India Telecenters, or "Information Kiosks", represent a good example of shared information and communication facilities that provide communities with telephone, fax and Internet services as well as access to equipment such as cassette and video players, photocopiers and computers. They are intended to make ICTs accessible to communities, and/or the intermediary organizations that provide services to these communities, many of which often are remote and lack connectivity.

Among experiments with the use of ICTs for local rural communities, the most well known are:

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43 G. Accascina, "Information Technology and Poverty Alleviation", FAO First Consultation on Agricultural Information Management, 2000.

- **TARAhaat.com** [44]: it is a project whose goal it is to bring Information and Marketing Services using e-business to rural India. Under the Development Alternatives Group[45], TARAhaat acts as a social enterprise to promote effective e-commerce through access, content, and fulfillment. TARAhaat provides access to a variety of information resources (health, nutrition, agriculture, sustainable livelihoods, market prices, etc.) and to a wide-range of market-based opportunities in the local language and in an incredibly user-friendly format (also accessible for low-literates). Users are able to buy seeds, machinery, spare parts, and even household items. TARAhaat puts a special focus on responding to the people's needs, making the network highly participatory and responsive.

- **Gyandoot Project**[46] (in Madhya Pradesh): it is a unique form of Government to Citizen (G2C) e-commerce activity being performed in Central India wherein the local elected governing council is enabling over half a million rural tribal citizens affordable access to various Government and market related needs using state-of-the-art Information Technology. Gyandoot is an Intranet that is community-based, cost-effective, and financially self-reliant. The people have full control of running, developing and supporting the network on a sustainable basis. They also take charge of their own knowledge and transfer of technology needs. By using the information kiosks and the Internet service rural villagers are able to check market prices for various commodities, send applications for income verification, caste and domicile certificates, as well as requests for land demarcation and details on loans taken. The villagers are willing to spend 5 Rupees (10 cents) to use the services of the Information kiosks because it allows them to get reliable market.

- **Akashganga** (meaning 'The Milky Way'): it is an MS DOS based computer system[47], which offers an information-kiosk service. The service also offers the Dairy Information Services Kiosk, which proposes a multitude of animal husbandry related services, besides

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44 www.tarahaat.com/about.htm
45 It is a non-profit organization established in 1983 whose aim is to create large scale sustainable livelihoods.
46 www.gyandoot.net
47 MS-DOS or "Microsoft Disk Operating System" or is an operating system commercialized by Microsoft.

maintaining databases and offering Internet connectivity to the Dairy Cooperative Society. The Dairy Cooperative Society is a farmer-owned, grass-roots level unit in the co-operative structure. All the farmers (members) of the DCS congregate twice a day at its premises to sell milk. Before *Akashganga*, all the milk collection activities were performed manually and due to the climatic conditions, milk would often get spoiled, as producers had to wait in long queues. The simple technology used in this product has enabled the timely collection of milk and thus, generated higher profits for the producer.

## 3.5 Evaluation of Community Media Projects

It can be affirmed that there is no one single model for local communication initiatives that can be applied universally, but that each situation requires an approach to the development of projects tailored to local needs, which take account of local lives and environments.

The ways in which people use technologies such as radio and the Internet are defined in large part by their local everyday lives, the social, political, economic and cultural environment in which they live, and by the ways in which they appropriate these technologies (Slater and Tacchi 2003).

It is also recognised that projects imposed from the outside are less likely to tap into existing communication networks and that a lack of understanding of and engagement with the local social, cultural, economic and political milieu will not bode well for community media projects that seek to bring about change (e.g. giving greater access to civil society, reducing poverty, improving information and communication flows).

With this in mind, my research approach - which will be extensively presented in chapter 6 - is designed not simply to research a community media project, but to gain a level of understanding of the local context and thus, to assist in project design, ongoing evaluation and monitoring and in a continual cycle of research and project development.

In effect it seeks to overcome any separation between research and project development, placing the evaluation of project work at the centre of project practice, making that evaluation at the same time both

more relevant and more useable. Evaluation according to me is not simply about measuring predetermined impacts - it is about awareness and adaptability.

Thus, I developed a methodological approach based on the combination of quantitative and qualitative data and of various research approaches according to the different phases of the projects

The project, the methodological approach and the outcomes will be presented in chapter 6.

# CHAPTER IV

# UTTAR PRADESH (U.P.): A STATE IN NEED OF DEVELOPMENT?

*"I had been to other countries - in Europe, Asia and the Middle East - but none of them had provided even half as much variety, or so much to see and experience and remember, as this one State in northern India. You can travel from one end of Australia to the other, but everywhere on that vast continent you will find that people dress in the same way, eat the same kind of food, listen to the same music. This colorless uniformity is apparent in many other countries of the world, both East and West. But Uttar Pradesh is a world in itself."*

*Ruskin Bond (India's best-loved children's author)*

Uttar Pradesh (U.P.) is considered by the Indians "the rainbow land" where the multi-hued Indian Culture has blossomed from times immemorial.

Blessed with a variety of geographical land and many cultural diversities, Uttar Pradesh, has been the area of activity of Hindu mystical heroes like Rama, Krishna, Buddha and of Mahatma Gandhi: dotted with various holy shrines and pilgrim places, full of joyous festivals, it plays an important role in the politics, education, culture, industry, agriculture and tourism of India.

Garlanded by the Ganga and Yamuna, the two pious rivers of Indian mythology, Uttar Pradesh is surrounded by Bihar in the East, Madhya Pradesh in the South, Rajasthan, Delhi, Himachal Pradesh and Haryana in the West and Uttaranchal in the North; since it touches Nepal in the North, Uttar Pradesh assumes strategic importance for Indian defence.

*Figure 1: Uttar Pradesh's location*

Area wise it is the fourth largest State of India. In sheer magnitude it is half of the area of France, three times of Portugal, four times of Ireland, seven times of Switzerland and ten times of Belgium.

Uttar Pradesh is the most populous State of India; one-sixth of India's population lives in U.P., i.e. more than 175 million people. Only five countries of the world – namely China, the United States, Indonesia, Brazil and India itself - have populations larger than that of U.P. (and if the population growth rate in the State continues at the current rate, in 30 years, U.P.'s population will most probably reach 340 million, which was the number of the total population of India after partition in 1947).

By most of the social key indicators, such as health and education[48], Uttar Pradesh is the most backward regions in India: it has high levels of poverty combined with low levels of social and economic development. Its rapidly expanding population makes it more difficult

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48 The per capita government expenditure in Uttar Pradesh on education and health was in 2007 around 23% less than the corresponding figures for South Indian States.

for development gains to be felt in the State, although poverty levels have been slowly decreasing over the years (in 1973-74, about 57 % of U.P.'s population lived below poverty line and by 2003-04 this had decreased to 40 %).

Among the reasons commonly put forward to explain this poor State performance are poor infrastructure, low public expenditure and a diffuse corruption.

In a study, *Uttar Pradesh: The Burden of Inertia* published in *India Development: Selected Regional Perspectives* and edited by Jean Dreze and Amartya Sen; in 1997, economists Jean Dreze and Haris Gazdar advance two more reasons for its backwardness: the apathy of the State and the failure of civil society to challenge oppressive patterns of caste, class and gender relations.

A strong cast separation - Uttar Pradesh is the core State of the 'Hindi Heartland', where the upper castes are much more numerous than in other Indian States -, the rural-urban divide, the backward condition of women – often deprived of basic rights - are factors limiting the growth and progress of U.P.

I first visited Uttar Pradesh in December 2006: although I had heard stories and seen the pictures of this region, none of it prepared me for its intensity.

My first days in U.P. had a tendency to chase me back into my hotel after a few hours, simply overwhelmed: U.P. is a land of chaos, pollution, extreme poverty and hot daily temperatures.

Most nights had power blackouts, so the narrow streets of Lucknow, where I used to stay the first time for 2 weeks and the second one for more than 2 months- were full of sleeping bodies and cattle, illuminated only by the flicker of candles in windowsills and rubbish fires in the road; an eerie aura.

As time passed by, my impressions of U.P. evolved drastically. I started to get acquainted to the daily buzz, I had time to visit Varanasi - one of Hinduism's holiest sites - and Agra, represented by the Majestic Taj Mahal – as well as the countryside around Lucknow.

But what made me definitely fell in love with U.P. was the people: professors and students I met at the Department of Journalism and Mass Communication of the University in Lucknow, professors at the Indian Institute of Management, rural people I interviewed for the

scope of my research. I was completely overwhelmed by their politeness, their commitment to being helpful and their smiling faces.

I think people was the reason that made my stay and my work enjoyable and enriching.

As far as the data reported in this chapter are concerned, it has been a hard task to find appropriate and reliable information: even though most of the data come from the State Development Report, drafted by the Planning Commission of India and representing the most important official document of the State, most of the detailed information I needed were in Hindi.

The site itself of the Department of Rural Development displays nearly all documents in Hindi, which made my data gathering more complex and time extensive.

Therefore I am particularly grateful to Dr. Mukul Srivastava from the Department of Journalism and Mass Communication of the University in Lucknow for the time he spent with me and for all the help he provided. He has translated most of the documents and helped my research with good hints and precious advice.

## 4.1 Politics

*Figure 2: Facts, numbers and a map of Uttar Pradesh*

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|---|---|
| **Uttar Pradesh: facts and numbers**<br><br>**Coordinates**: 26°51′N 80°55′E26.85, 80.91<br>**Time zone:** IST (UTC+5:30)<br>**Area:** 238,566km²<br><br>**Capital:** Lucknow<br>**Largest city:** Kanpur<br>**Districts:** 70<br>**Population:** 186,755,000<br>**Density**: 783/km² (2,028/sqmi)<br><br>**Languages:** Hindi, Urdu<br>**Governor:** T. V. Rajeswar<br>**Chief Minister:** Mayawati<br>**Legislature** (seats): Bicameral (404 + 108) |  |
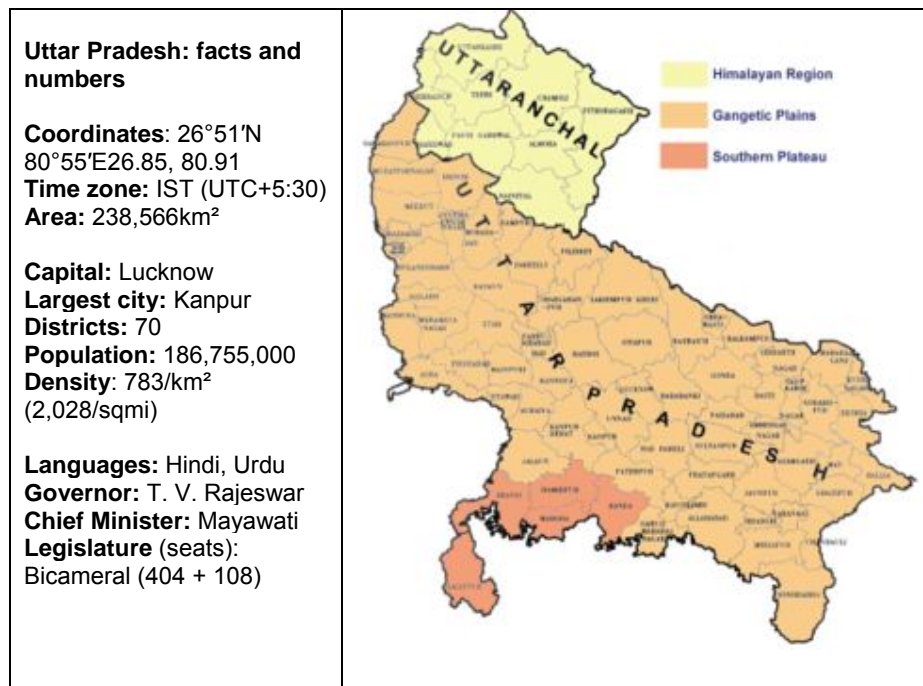
Uttar Pradesh is called the heart of Indian political body; in this State, events that changed and revolutionized the course of the political history of the whole country have taken place.

The people of U.P. have always contributed to the fullest of their might right from the First War of Independence in 1857, till the achievement of freedom in 1947: that's why U.P. has long been considered the political barometer of India, having its politics a long-term impact at the national level.

From the legislative point of view, U.P. Government is constituted by a Governor and a bicameral Legislature.

The executive power of the State is vested in the Governor and it is exercised by him either directly or through officers subordinate to him according to the constitutional provisions. The Governor is appointed

by the President of India, has to be a citizen of India and must be older than 35.

The term of the Governor is five years from the date he assumes office, but he can hold office even after the expiry of his term till the assumption of his successor. He cannot hold any office for profit and can use his official residence without payment of any rent.

The Governor cannot also be a member of either of the two Houses of Parliament or any House of the Legislature.

The Lower House of the Parliament is called *Vidhan Sabha*; it includes 404 members nominated by the Governor whose main businesses are to enact laws, grant money for Government expenditure and exercise control over the activities of the Government through debates and raising matters of urgent public importance.

The Upper House, *Vidhan Parishad*, has 108 members, 12 of whom are nominated by the Governor. No bill can become a law unless passed by both the Houses.

The State has also a High Court at Allahabad with its bench at Lucknow.

There is a Council of Ministers headed by the Chief Minister to aid and advise the Governor in conduct of the business of the Government. The Chief Minister is appointed by the Governor who also appoints other ministers on the advice of the Chief Minister.

The Council of Ministers is collectively responsible to the *Vidhan Sabha*.

In the 2007 Uttar Pradesh Elections, the *Bahujan Samaj Party*[49] of Mayawati Kumari achieved unexpected majority status leading to her emergence as the Chief Minister of Uttar Pradesh.

49 The Bahujan Samaj Party is a National Political Party in India with socialist leanings. It was formed to chiefly represent Dalits, who are thought by some to be at the bottom of the Indian caste system, and claims to be inspired by the philosophy of Ambedkar. The BSP was founded by the high-profile charismatic leader Kanshi Ram in 1984. The party's political symbol is an elephant. In the 13th Lok Sabha (1999-2004) it had 14 (out of 545) members and currently in the 14th Lok Sabha has 19. The party has its main base in Uttar Pradesh , where it has formed government several times. Mayawati is the President of the Party and has been so for many years. The deep and mutual hostility between the BSP and the Samajwadi Party – the other leading State party in Uttar Pradesh, whose support is mainly obtained from the OBC, has led the BSP into allying itself many times with its erstwhile ideological enemies, the BJP. Currently the party sU.P.ports a Congress led alliance called the United Progressive U.P.A in the Indian Government. On 11th May 2007 the State Assembly Election results made BSP the

This was the first time since 1991 that a single party gained absolute majority, the last two decades having been dominated by various coalitions among the *Samajwadi Party*[50], *Bharatiya Janata Party*[51], and the *Bahujan Samaj Party*.

The BSP won in 2007 thanks to the amalgamation of Brahmin votes into the *Dalit* dominated party, as opposed to the decades-old trend of exploiting deep-rooted caste divisions in the State between Dalits, Upper Castes, Muslims and different OBC (Other Backward Classes) groups, which tend to vote in blocks.

Mayawati, having won 206 seats, became Chief Minister for the fourth time along with her 19 cabinet rank ministers. Former Chief Minister Mulayam Singh Yadav's party SP stood second in State with 97 seats.

Mayawati[52], who herself is a *Jatav,* a sub-caste within *Dalits*, has been often accused to use caste as a mobilizer, building on a social and political revolution 50 years in the making.

Often referred to as a "whimsical tyrant ruler", she has also been accused of using public money - which should be going into development work of the masses - for the development of her image, for immortalizing her name in the U.P. politics, for raising her image of *dalit* icon.

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single majority party since 1991. After 15 years of hung assembly, BSP has won a clear majority in India's most populated State U.P.

50 Samajwadi Party (Socialist Party) describes itself as a democratic socialist and anti-English language party. It was founded on October 4, 1992. It is one of the several parties that emerged when the Janata Dal (People's Party), India's primary opposition party prior to the BJP, was fragmented into several regional parties. Samajwadi Party is led by Mulayam Singh Yadav, the former Chief Minister of the Indian State of Uttar Pradesh.

51 The Bharatiya Janata Party [BJP] (Indian Popular Party), created in 1980, is a major centre-right Indian political party. It projects itself as a champion of the socio-religious cultural values of the country's majority, conservative social policies, self reliance, strong enconomic growth, foreign policy driven by strong nationalist agenda, and strong national defense. Since its inception, the BJP has projected itself as a prime alternative to the existing family based politics of the Indian National Congress.

52 Mayawati has been active in politics for well over two decades. Well educated, Mayawati holds multiple degrees including a B.A., a degree in education and a law degree. She worked as a teacher in Delhi for several years. She owes her political career to her mentor Kanshi Ram, the founder of the BSP. She was Chief Minister of Uttar Pradesh thrice. On the first occasion, she was Chief Minister from 3 June 1995 - 18 October 1995, then from 21 March 1997 - 20 September 1997 and from 3 May 2002-29 August 2003. When she became Chief Minister, Mayawati was the first Dalit woman to hold that high office in India.

The media has often lampooned Mayawati for her imperious style, luxurious living, extravagant spending, and as a politician who would ally with any party to get to political power.

Having tasted blood with her *Dalit*-Brahmin-Muslim political alliance, securing a majority in the U.P. assembly, she has gone ahead in an aggressive bid to keep her party's caste alliance together.

Addressing her maiden press conference after being sworn in as the chief minister, she said, "We would welcome any move by the central government to provide reservations to the minorities and the economically-weaker sections from the Upper castes.[53]"

Her government is supposed to work for the development of these weaker sections, a corruption free U.P., a socially just government, and an economic development of the State.

She now has 5 years to govern one of India's most complex States where law and order have become a huge problem.


### 4.1.1 Administrative Divisions and Districts

The past boundaries of the State came into existence with the reorganization of the States on a linguistic basis in 1956, after the independence from the British dominance[54].

Uttar Pradesh State now consists of 70 districts, which are grouped into 17 divisions: Agra, Azamgarh, Allahabad, Bijnor, Kanpur, Ghaziabad, Gorakhpur, Chitrakoot, Jhansi, Devipatan, Faizabad, Bahraich, Bareilly, Basti, Mirzapur, Moradabad, Mathura, Meerut, Lucknow, Varanasi, Sultanpur, Farrukhabad, Vrindavan, and Saharanpur.

The largest district in terms of area is Lakhimpur Kheri. The largest district in terms of population is Allahabad followed by Kanpur Nagar (Census 2001).

A district is an administrative division of an Indian state or territory. The majority of districts are named after their administrative centre. Some are referred to by two names, a traditional one and one that uses

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53 www.thehindubusinessline.com/2007/08/16/stories/2007081650260700.htm
54 It was in the Uttar Pradesh (the period between 1857-58) that the first struggle for liberation from the British yoke was unleashed.

the name of the town that is the headquarters. Since most of the districts are named after a town, the word "district" is appended to distinguish between the town and the district.

Each district is under the administrative charge of a district officer who is also called the District Magistrate or Deputy Commissioner. The District Officer is fully responsible for the law and order in his district and has extensive administrative, police and revenue powers. Besides maintaining revenue records, he has also to look after works relating to planning and development and land reforms.

In a percentage-wise distribution of districts ranked on the basis of a composite index of socio-economic and demographic indicators, none of U.P.'s districts fell in the best Indian ranking of 0-100, while over 90 % of districts in Kerala and Tamil Nadu fell into this ranking. There are five divisions in the rankings, and about 83 % of U.P.'s districts were in the lowest two levels, with over 55 % falling in the lowest category. Of the major States, only Rajasthan and Bihar had a larger percentage of districts (72 % and 93 % respectively) in the lowest ranking category.

*Table 1: Structure of U.P. administrative division*



*Source: http://www.u.p.gov.nic.in*
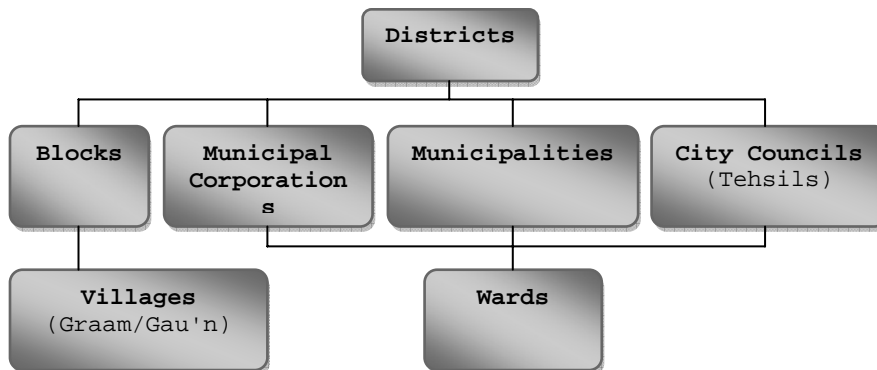
As can be deducted from the above figure, local Governance in U.P - as in all other States of India - is divided into urban and rural local governance.

Large urban areas are governed by municipal corporations, often simply called corporations.

The area under the corporation is further divided into wards. Individual wards or collections of wards within a corporation sometimes have their own administrative body known as ward committees.

Smaller urban areas are governed by municipal councils or municipal boards, which are often referred to as municipalities. Municipalities are also divided into wards, which may be grouped together into ward councils. One or more corporations are elected to represent each ward.

Rural governance in India is based on the Panchayati Raj system: Panchayati Raj is the assembly (*yat*) of five (*panch*) wise and respected elders chosen and accepted by the village community. Traditionally, these assemblies settled disputes between individuals and villages.

For administrative and fiscal purposes, U.P, is further divided into 294 tehsils [55] and 907 community blocks. In total there are 112,803 inhabited villages, 710 statutory towns and 43 census towns. Nearly 19 % of Indian inhabited villages are in U.P.

Districts are the basic units for implementation of all schemes whether funded by the Centre or the State Government. It is imperative that funds received in the districts for development works are monitored and the District Administration held responsible for proper utilization of the funds made available. This can become possible if there is a proper monitoring of the funds released and expenditure incurred by various departments and construction agencies.

With the successful completion of Treasury computerization in the State, it is now possible to have scheme wise details of funds released and expenditure incurred at the District level every month.

At *http//koshvani.up.nic.in*, one can access all relevant information regarding receipts and expenditure. Important thing is the proper use of this information by the District officials.

If the focus of Governmental efforts is to shift from expenditure (which in several cases may just mean release of funds from one

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55 The term derives from the Urdu language. Generally, a tehsil consists of a city or town that serves as its headquarters, possibly additional towns, and a number of villages. As an entity of local government, it exercises certain fiscal and administrative power over the villages and municipalities within its jurisdiction. It is the ultimate executive agency for land records and related administrative matters. Its chief official is called the tehsildar or talukdar.

account head to another or from one agency to another and not really completion of the 'intended work') to outcomes wherein focus is not only on physical completion of work but also the quality of service delivery in the post-completion phase, then it is imperative that officers at the District and State level are trained to monitor works accordingly.

A typical district receives funds from following sources:
• Under District Plan through the State Budget
• Under State Plan through the State Budget
• Under Centrally Sponsored Schemes through the State Budget
• Directly into Bank Accounts from Government of India under Centrally Sponsored Schemes
• Through transfers under the award of Twelfth Finance Commission through the State Budget
• Through transfers under the award of State Finance Commission through the State Budget

An analysis of development expenditure reveals that during 2005-06, a sum of Rs.24765.31 crore was available in the districts.

## 4.2 Western, Central and Eastern Uttar Pradesh: Intrastate Variations

On the basis of natural geographic considerations and cultural differences, U.P., which occupies 7.3% of the total India's area, is divided geographically into 5 distinct zones namely: Hill, Western U.P.[56], Central U.P., Eastern U.P.[57], and Bundelkhand (Southern).[58] Within these regions there are wide variations.
In 2000, there were 49.5 million inhabitants in Western U.P. and 52.7 million in Eastern U.P.; the land area of Western U.P. was 82,191 sq. km., slightly smaller than the 85,844 sq. km that comprised Eastern U.P.

56 Western U.P. is made up of 26 districts.
57 Eastern U.P. is made up of 27 districts.
58 In 2001 in response to the long term movement of the hilly region for the creation of a separate hill State, U.P. was bifurcated and a new State, Uttaranchal, comprising 13 districts of the hilly region, was created (Mawdsley, 2003).

The population density varies from a high of 614 in the Eastern region to a low of 116 in the Hill region. Percent of urban population is the highest in the Western region (26%) and the lowest in the Eastern region (12%).

The total literacy rate is the highest in the Hill region (60%) with 76% for males and 43% for females; the Eastern region has the lowest literacy rate of 39%, with a male literacy rate of 55% and a female literacy rate of only 21%.

*Table 2: Regional Differences in Uttar Pradesh*

| 1991 Census | REGIONS | | | | | |
|---|---|---|---|---|---|---|
| | UP | Hill | Western | Central | Eastern | Bundel-khand |
| Area (in sq.kms) | 294,411 | 51,124 | 82,191 | 45,834 | 85,844 | 29,418 |
| Total Population (000s) | 139,112 | 5,926 | 49,547 | 24,189 | 52,721 | 6,730 |
| Density (per sq. km) | 473 | 116 | 603 | 528 | 614 | 229 |
| Number of villages | 112,568 | 15,117 | 28,008 | 15,504 | 49,434 | 4,505 |
| Number of towns | 704 | 62 | 318 | 103 | 169 | 52 |
| Percent urban population | 19.8 | 21.7 | 26.4 | 23.7 | 11.6 | 21.3 |
| Total literacy rate | 40.9 | 59.6 | 42.0 | 42.5 | 38.6 | 42.3 |
| Female literacy rate | 25.3 | 42.9 | 30.3 | 28.3 | 20.9 | 23.9 |
| Sex ratio | 879 | 955 | 841 | 855 | 924 | 846 |

*Source: http://www.policyproject.com/pubs/countryreports/IND_u.p._pp.pdf*

Schedule Caste population to total U.P. population in 2001 was 21 %, and this proportion was slightly higher in the East (20.7 %) than in the West (18.6%).[39]

In 2000, residents of Western U.P. consumed about 18% more electricity than those in the East, as per capita consumption in the West was almost 207 kwh, while in the East, consumers used about 169 kwh, less than the average 185 kwh per capita in all of U.P.

In 2000, almost 90% of villages in the West were electrified, as opposed to less than 80% in the East and 79 % in the entire State.

The number of post offices per 100,000 people was 13.1 in the East and 9.8 in the West and similarly, there were 0.8 telegraph offices per

100,000 people in the East, while there were 0.4 such offices serving the same number of people in the West.

At the same time though, the number of telephones (per 100,000 people) was about 50% higher in the West than in the East, as there were 1520 telephones (100,000 people) in the West, while there were only 778 in the East serving the same number of people.

Metal road length under Public Works Department per 1000 sq km was slightly higher in the West than in the East, at 422 km versus 410 km, but both the East and West had more roads of this type than the national average of 370 km per 1000 sq. km.

The credit deposit ratio and number of scheduled commercial banks (per 1000 people) were roughly the same in 1998-99. The main differences in terms of credit facilities between East and West was seen in the number of cooperative agricultural marketing centres, as there were 3.1 (per 1000 people) in the West in 1999-2000, while there were only 1.8 in the East.

Inter-State disparities in U.P. have been studied in a number of contexts, like for example in the distribution of income (Pant 2004), in the rural-urban areas (Mishra & Parikh, 1997), in the human development indicators (Dholakia 2003).

What has generally emerged is that U.P. is a State made up of two different realities; a rich and more developed West and a poor and badly administered East. The differences in infrastructures are persistent and neither Planning Commission Funds nor Governmental sponsored schemes have so far been successful in solving such regional disparities.

## 4.3 Social Indicators of Uttar Pradesh

Almost all social indicators of the State show that the State stands on 13th or 14th position among the 15 major States.

Bihar and in some cases Orissa, are the only two States which lag behind U.P. in terms of social development indicators like medical facilities, teacher-pupil ratio in primary schools, birth rate, death rate, infant mortality rate, literacy, per capita income, electrification of villages, per capita power consumption etc. Uttar Pradesh is often seen

as a case study of development in a region of India that currently lag behind other parts of the country in terms of well being and social progress.


### 4.3.1 Health

Of the 15 major States in India, Uttar Pradesh has the highest maternal mortality ratio (MMR), the highest fertility rate, the second-highest infant mortality rate (IMR) and one of the lowest female to male ratios. In 1999, U.P.'s public expenditure on health as a percentage of GSDP[59] was 0.7, the same level of spending as in 1981. India as a whole spends only 0.89% of its GDP on health, as compared to 3% spent by developing countries.

In 1998, the MMR in U.P. was 707 (per 100,000 births), well above the national average of 407-This is an improvement from the 1982-86 maternal mortality rate in the State, which was 931 (per 100,000 births), but the reduction of maternal mortality was greater in other States, such as Orissa, where MMR decreased by almost half, to 367 in 1998, from 778 in 1982-86 (UNDP, 1997). Rajasthan and Madhya Pradesh also suffer from high maternal mortality rates, as theirs were 670 and 498 respectively in 1998. In Kerala and Tamil Nadu, the MMRs in 1998 were significantly lower, at 198 and 79 respectively.[60]

Children between the ages of 12 to 23 months in U.P. are roughly four times less likely to have been fully vaccinated than children in Kerala, Maharashtra and Tamil Nadu.[61]

Vaccination rates in 1998-99 were 21% in U.P., 79% in Kerala and 78% in both Maharashtra and Tamil Nadu. Within the major States, only children in Bihar and Rajasthan, where vaccination rates were about 11% and 16%, were less likely to be vaccinated than in U.P. (NFHS I & II).

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59 Gross State Domestic Product

60 For comparison, the average maternal mortality ratio for high-income OECD countries was 12 (per 100,000) in 1995, and for developing countries the average was 463 (per 100,000) (HDR, 2003).

61 Children are fully vaccinated if they have received BCG, Measles and three doses of DPT and Polio vaccines.

The infant mortality rate (IMR) in U.P. is among the highest in India, at 82 deaths per 1000 live births in 2000, while the average IMR in the country was 66 (per 1000 live births). The IMR in U.P. was higher in rural areas, at 86, than in urban areas, at 62.

In 2001, fertility rates in India were highest in U.P., at a level of 4.7, while the national average was 3.2. Of the 15 major States, Bihar had the second-highest fertility rates, at 4.5 and Kerala and Tamil Nadu had the lowest fertility rates, at 1.8 and 2, respectively.

Average life expectancy in U.P. in 1996-2001 was 61.2 years for males and 61.1 years for females. In only two other major States – Bihar and Orissa—was the female life expectancy lower than the male life expectancy. In Kerala, females could expect to live 4.3 years longer than males (75 years compared to 70.7 years). Typically, life expectancy for females is higher than for males.

Along with a lower life expectancy for women, another indicator of gender disparity in the State is the low sex ratio. In 2001, there were 898 females per 1000 males, as against the national average of 933 females per 1000 males. India's sex ratio is among the lowest in the world and U.P.'s sex ratio in this context is strikingly low.
Some researchers[62], attribute the low sex ratio in U.P. to female disadvantage of survival from birth until the mid-thirties. In 1991, the female death rate in the age group of 0-4 years was 16% higher than the male death rate. Typically, female children in this age group have an advantage over males and the link between parental neglect of female children and their high mortality rates has been well documented in this region. High fertility rates, coupled with high maternal mortality rates negatively affect chances of female survival during child-bearing years and these factors taken together affect female life expectancy and in turn, the sex ratio, which reflects tangible anti-female discrimination in U.P.

### 4.3.2 Education

Uttar Pradesh does not fare much better in terms of education than it does in health.

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62 Dreze and Gazdar, 1998.

Merely 57% of the population of U.P. was literate in 2001 (RGI, 2001). Of the 15 major States, only Bihar's literacy rate was lower than U.P.'s, at about 47.5%.

Even though the State has made investments over the years in all sectors of education and has achieved some success, the female literacy situation remains dismal. Only one out of four in the 7+ age group. was able to read and write in 2001. This figure goes down to 19% for rural areas, 11% for the scheduled castes, 8% for scheduled castes in rural areas, and 8% for the entire rural population in the most educationally backward districts.

One other notable feature of the Uttar Pradesh education system is the persistence of high levels of illiteracy in the younger age group. Within that age group., illiteracy was endemic in the rural areas. In the late 1990s, the incidence of illiteracy in the 10-14 age was as high as 32% for rural males and 61% for rural females, and more than two-thirds of all rural girls in the 12-14 age never went to school.

The problems of education system are exacting. Due to public apathy the schools are in disarray. While privately run schools (including those run by Christian missionaries) are functional, they are beyond the reach of ordinary people.

To find a solution to illiteracy problems, the State Government has taken steps to make education more available to the population. International agencies like the World Bank and some local NGOs have launched special programs to raise participation.

As a result, some progress in adult education has been made and the census of 2001 indicates a male literacy rate of 70.23% and a female literacy rate of 42.98%. The differential between female and male literacy is still very high.

At the level of higher education and technical education, Uttar Pradesh has several universities and other institutions, among which are Bundelkhand University, M.J.P Rohilkhand University, Lucknow University, Allahabad University, Dayalbagh Educational Institute, Uttar Pradesh Technical University, the prestigious Indian Institute of Technology Kanpur, Indian Institute of Management Lucknow, Banaras Hindu University, Indian Institute of Information Technology Allahabad, National Institute of Technology Allahabad, the world famous Asian Academy of Film & Television and several other polytechnics, engineering institutes and industrial training centers.

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**Box 1 - Health and Education for the Poor**

A World Bank study of villages in U.P. and Bihar revealed that health problems emerged as one of the most common causes of persistent poverty. Illness of the breadwinner or other members of the family not only reduced their daily incomes but also led them to indebtedness and even loss of assets as treatment from government services was simply not available.
Nearly all the informants said that transport costs to government centres was too high when outcomes were so uncertain. Medical staff assigned to public health centres are usually absent, and therefore a trip to the centre results in waste of transport money. The quality of care was not mentioned as an issue; if care is generally unavailable, its quality is hardly relevant. Even when primary health care staff are on site, they only give prescriptions, as they do not have medicines on hand. Poor patients then must visit the market and incur a second transport expense.
A similar study of the schools showed that in most places either teachers were absent, or teaching was being conducted by proxy teachers who were hired by the regular teachers on very low wages.

*Source: Saxena (2002)*

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## 4.4 Macro-economic Trend

U.P. has witnessed rapid industrialization in the recent past, particularly after the launch of policies of economic liberalization in the country. As of March 1996, there were 1,661 medium and large industrial undertakings and 296,338 small industrial units employing 1.83 million persons. The per capita State domestic product was estimated at Rs 7,263 in 1997-98, and there has been some decline in poverty in the State.

Yet nearly 40% of the total population lives below the poverty line. Uttar Pradesh's Gross State Domestic Product for 2004 was $339.5 billion by PPP and $80.9 billion by Nominal.

Uttar Pradesh is the second largest economy in India after Maharashtra.

The industrialization pattern in the State is highly skewed with the Western region of the State accounting for most of the industries.

The main industries in the State are cement, vegetable oils, textiles, cotton yarn, sugar, jute, and carpet. The sectoral break-up of the State's

GSDP in 2002-03 was 32% from agriculture, 22% from industry, of which merely 11% came from manufacturing, and 41% from services.
This is a chart of trend of Gross State Domestic Product of Uttar Pradesh at market prices estimated by Ministry of Statistics and Programme Implementation with figures in millions of Indian Rupees.

*Table 3: Gross State Domestic Product in Rupees*

| Year | GSDP |
| --- | --- |
| 1980 | 155,540 |
| 1985 | 277,480 |
| 1990 | 555,060 |
| 1995 | 1,062,490 |
| 2000 | 1,730,680 |

*Source: www.unsystem.org/SCN/archives/india/ch06.htm*

Economy is in certain ways hindered by the poor condition of infrastructures.
In 2004, U.P. had a total of 248,481 km. of roads, of which 67% were surfaced. This is a dramatic increase in the proportion of surfaced to unsurfaced roads in 1998, which was about 44%.
At the same time though, the total road network in U.P. actually decreased by 11% between 1998 and 2004 and the increase in surfaced roads between those years was about 6%. Of the 15 major States, Haryana had the highest proportion of surfaced roads.
Electricity consumption per capita in U.P. in 2002-03 was only 175.80 kWh, which was almost 80% less than the per capita consumption in Punjab of 837 kWh (Indian Infrastructure, 2003).
In terms of water and sanitation, about 33% of households in U.P. had access to toilet facilities in 1997, while the India average was 49%. About 62% of households had access to safe drinking water, the same as the all-India average.


**4.5 Agriculture**

Uttar Pradesh is a very fertile region and this partly due to the regions of the Indo-Gangetic plain it occupies, and partly to irrigation measures such as the Ganga Canal: agriculture is consequently the major economic activity[63].

During the Green Revolution[64] the area of Western U.P., which is richer in natural resources and possess good physical and institutional infrastructure, was a natural entry point for the high-yielding varieties of wheat seeds, whose introduction in India preceded those of rice.

The spectacular growth in agricultural production in Western U.P. during the Green Revolution period is attributed to several natural and man-made factors.

Among the natural factors, (Roul, 2001) the following ones can be traced:

1) nature's bounty in fertile alluvial soil of the Indo-Gangetic river systems of Northern India;

2) geographical and geomorphologic advantage of perennial Himalayan rivers amenable for multipurpose dams;

3) topographical advantage to lay canal systems and road networks at considerably lower costs as against those in peninsular India.

The man-made factors, on the other hand, included:

1) consolidation of landholdings[65];

2) assured irrigation[66];

63 The fertile Gangetic plain in U.P. is characterized by alluvial soil and is intensively cultivated. The perennial Ganga and Yamuna Rivers, rising from the Himalayas, flow roughly parallel to each other through the State until they join in Allahabad, in the South East. The plain is also watered by the major tributaries of the Ganga and Yamuna, namely the Ramganga, Gomti, Ghagra, Saryu and Gandale (Pant, 2003).

64The Indian Green Revolution refers to the introduction of high-yielding varieties of seeds after 1965 as well as the increased use of fertilizers and irrigation, which provided the increase in production needed to make India self-sufficient in food grains. The program was started with the help of the United States-based Rockefeller Foundation and was based on high-yielding varieties of wheat, rice, and other grains that had been developed in Mexico and in the Philippines. Of the high-yielding seeds, wheat produced the best results. Production of coarse grains -the staple diet of the poor -and pulses -the main source of protein -lagged behind, resulting in reduced per capita availability.

65 With this, private investment for digging tubewells was made viable. With cheap electricity from hydroelectric projects, as well as diesel-powered wells, U.P. could irrigate 60 % of its net cropped area using tube wells.

3) rural electrification and of cheap power to agriculture[67];
4) agricultural research and extension network[68];
5) less exploitative agrarian structure.


Between 1962-65 and 1970-73, the introduction of the new technology in the irrigated, wheat-producing North -West region of Western U.P. had an intense impact on wheat production in this region and consequently, at the all-India level.

At the India-wide level, wheat yield increased from 811 kg/ha in 1962-65 (pre HYV introduction) to 1322 kg/ha by 1970-73 (post HYV introduction) and wheat output rose from 10.9 million tons to 24.3 million tons within the same time period.

In 1972-73, U.P.'s production of wheat made U.P. 28% of the county's wheat output, while

Punjab contributed 22% and Haryana 9% to India's wheat output. Combined, the three States provided 59% of India's wheat. The annual compound rates of yield growth, with the introduction of the new seed technology in Punjab, Haryana and U.P. during this period were higher than the national average, at 4.2%, 3.3% and 1.8%, respectively.

The increase in U.P. in terms of growth of yield and output was, as mentioned above, a result of spreading of new technology to the Western part of the State (Bhalla and Singh, 2001).

The most dramatic change in agricultural growth in India was registered in the 1992-95.

The compound growth rate of yield/ha for all-India increased from 1.8% per annum to 3.1% per annum, and the compound growth rate of output for all-India increased from 2.4% to 3.4% per annum. During this time, the rice and wheat technology spread further eastward and a major breakthrough in oilseed technology spread southward, resulting

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66  In the mid-1960s, Punjab had already achieved 64.3 % of irrigation of gross cropped area as against the 19.9 % for all India. By 1983-84, Punjab had 90 % of gross cropped area under assured irrigation (Chadha, 1986).

67 In the mid-1960's, the per capita power consumption in Punjab was 98.3 kWh as against the all-India consumption of 61.4 kWh. By 1975, all villages in Punjab were electrified.

68 The Punjab Agricultural University (PAU) played a critical role in this area. Researchers at the university modified and further developed the Mexican dwarf wheat varieties and the Philippine high yielding rice varieties to suit local conditions and requirements. Since 1963, PAU has released 38 high yielding varieties of wheat and 19 varieties of rice.

in a change in cropping patterns from low-value coarse cereals towards the higher-value oilseeds.

Since 1972-73, U.P. has increased the land area under wheat production by roughly 37%.

Along with its status of top producer of wheat in India, U.P. is the second-largest producer of rice in the country, between West Bengal and Punjab, which are the first and third largest producers. In 2001-02, U.P. produced 13.4% of the country's rice, or 12.5 million tons, with a yield of 2120 kg/ha in an area of about 5.9 million hectares.

In 1991, 73% of the U.P. population was engaged in agriculture and 46% of the State income was accounted by agriculture. The production of food grains has increased from 14.5 million metric tons in 1960-61 to 42.5 million tons in 1997 showing an average annual growth rate of 3%, which is much higher than the population growth rate.

Still now (2007) – even if the agricultural growth is approaching stagnation - U.P. is retaining its pre-eminent position in the country as a food-surplus State: the main agricultural crops are wheat, rice, sugarcane, pulses and vegetables.

Lakhimpur Kheri is the largest sugar producing district in the country. It is also home to 78% of national livestock population. The chart below – which I personally elaborated from the U.P. State Development Report- shows the national share of major food commodities from Uttar Pradesh.

*Table 4: National Share Of Major Food Commodities From Uttar Pradesh*

| Commodity | National Share |
|-----------|----------------|
| Potato | 47% |
| Sugarcane | 45% |
| Wheat | 38% |
| Groundnut | 34% |
| Molasses | 34% |
| Sugar | 30% |
| Tobacco | 20% |

*Source: http://www.u.p.gov.nic.in*

As explained before, currently agriculture is undergoing a period of stagnation.

The average annual growth in agriculture was of 2.7% during the Sixth, Seventh and Eighth Five Year Plans.

In the last two Five Year Plans (1997-2002 and 2002-2007) there has been a unique stagnation: the dependence of the U.P. economy on agriculture on the one hand, and the poor performance of agriculture on the other, is thus a matter of concern for the State development.


### 4.5.1 Investment in Agriculture and Allied Sector

At all India levels, the present actual investment in the agriculture sector is only 1.3% of the total Gross Domestic Product (GDP). Position is not much better at the State level either.

As shown in *Table 5* below, the percentage expenditure in Agriculture & Allied sector has declined over the Plan period from a high of about 29% during Second Five Year Plan and the Annual Plans of 1966-69 to a low of 5.47% during Sixth Five Year Plan and about 8.6% during Tenth Plan.

*Table 5: Trend of investment in agriculture at 1993-94 prices (Rs. Crore)*

| YEAR | TOTAL | PERCENTAGE OF PUBLIC EXPENDITURE | PERCENTAGE OF PRIVATE EXPENDITURE | INVESTEMENT IN AGRiCULTURE AS % OF GDP |
|------|-------|----------------------------------|-----------------------------------|----------------------------------------|
| 1994-5 | 14,969 | 33 | 67 | 1.6 |
| 1997-98 | 15,942 | 25 | 75 | 1.4 |
| 2000-2001 | 16,906 | 23.2 | 76.8 | 1.3 |
| 2002-2003 | 18,657 | 24.3 | 75.7 | 1.3 |

*Source: http://planning.u.p.nic.in/articles/Note_on_Farm_Sector.pdf*

In the case of Uttar Pradesh, gross capital formation in Agriculture at current prices in the year 2000-01 was Rs.16, 906 crore of which 23.2% was Public investment and 76.8b% Private investment. Gross capital formation in agriculture in Uttar Pradesh in 2000-01 was just 13.71 percent of gross capital formation in the State.

Private investment in the State in agriculture and allied sector is considerably lower than the all India figures.

Public Sector investment in agriculture mainly consists of investment in irrigation projects (90%) while expenditure on soil and water conservation etc. are included as capital formation under Public Administration. With the adoption of new strategies for agricultural growth and diversification of agriculture from traditional crop cultivation to horticulture - which would require more investments on cold storage, rural roads, communication, marketing network and facilities, warehouses – these data need to be taken into account while determining 'capital formation for agriculture' instead of 'capital formation in agriculture'.

Expeditious development of Agriculture and Allied sectors such as Animal Husbandry, Dairy, Horticulture, Fisheries is one of the main goal of the State Government.

During 2005-06 a sum of Rs.2769.14 crore was spent in this sector. This includes expenditure in irrigation, agriculture and allied sectors and the National Horticulture Mission. It does not include the power subsidy given by the State Government to agriculturists and

fertilizer subsidy given by Government of India. The natural outcome of this expenditure should be increase in crop yield, crop productivity, income of farmers, efficiency of irrigation facilities etc.

Concerned State Authorities would do well to examine the outcomes on aforesaid lines ratherthan funds spent under schemes.


### 4.5.2 Size of Holdings

The average size of holdings is continually declining in the State. As per latest available information, 75.4% holdings are of less than one hectare and are marginal farmers. The average size of 90% of small and marginal farmers is about 0.55 hectares.


### 4.5.3 Indebtedness of Farmers

The data released by NSSO[69] provide useful insights regarding indebtedness of farmers in the country as a whole as well as Uttar Pradesh. In U.P. - in 2005 - out of 17.16 million farmer households, 6.92 million (40.3%) were reported to be indebted while for the country as a whole, 48.6% (43.42 million) of 89.35 million farmer households were reported to be indebted.

Estimated prevalence of indebtedness among farmer households was highest in Andhra Pradesh (82%) followed by Tamil Nadu (74.5%) and Punjab (65.4%).

In U.P., households with one hectare or less land accounted for 74% of all farmer households and about 39% of them were indebted.

At all India level, more than 50% of indebted farmer households had taken loan for the purpose of capital or current expenditure in farm business. Such loans accounted for 584 rupees out of every 1000 rupees of outstanding loan.

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69 The National Sample Survey Organisation (NSSO) carries out socio-economic surveys in India. "Indebtedness of Rural Households", 2005 available at http://mospi.nic.in/mospi_nsso_rept_pubn.htm

In Uttar Pradesh indebted farmer households which had taken loan for the purpose of capital or current expenditure in farm business accounted for 609 rupees out of every 1000 rupees of outstanding loan. Marriage and ceremonies accounted for 118 rupees per 1000 rupees of outstanding loans of farmer households in Uttar Pradesh.

Banks (51%) followed by moneylenders (19%) were the most important source of loan in terms of percentage of outstanding loan amounts in Uttar Pradesh while for the country as a whole, the corresponding figures were 36% and 26% respectively.

Average outstanding loan per farmer household is highest in the State of Punjab (Rs.118495) followed by Kerala (Rs.100832), Haryana (Rs.23555), Andhra Pradesh (Rs.12760) and Tamil Nadu (Rs.11023). Average outstanding loan per farmer household in Uttar Pradesh is Rs.6706.

### 4.5.4 Agriculture Credit

About 90% farmers in the State are small and marginal farmers. The out reach of credit institutions, whether commercial banks or cooperative institutions is very low. Out of 2 crore farmers in the State, the actual coverage of farmers would be less than 20%.

Details of agricultural credit provided in the State in the last three years has been indicated in the Table below.

*Table 6: Agricultural Credit in Uttar Pradesh*

|  | 2002-03 | 2003-04 | 2004-05 |
|---|---|---|---|
| Agriculture loan (Rs. in crore) | 3880.44 | 4110.84 | 5295.51 |
| Kisan Credit Card (in lakh) | 32.00 | 27.20 | 23.62 |

*Source:http://planning.u.p.nic.in/articles/Note_on_Farm_Sector.pdf*

It may be noted that the agricultural credit in the country by Cooperative banks, Commercial banks, RRBs and other agencies increased from Rs.69560 crore during 2002-03 to Rs.86980 crore during 2003-04 and was projected to touch Rs.104500 crore in 2004-05. Thus, despite the State contributing about 13% in the agricultural

gross domestic product of the country in 2002-03 and about 20% of the total food grain production in the country, agricultural loan disbursed in the State was only 5.58% of total agricultural loans disbursed in the country during 2002-03, 4.72% in 2003-04 and 5.06% in 2004-05.

There are 7479 Cooperative Societies functioning at Nyaya Panchayat level[70] in the State and they constitute the main point of interface between the farmer and the Cooperative Society for disbursement of short-term, long-term agricultural loans, provide HYV seeds, pesticides, fertilizers, improved agricultural implements etc.
There are 50 District Cooperative Banks which have 124 branches. However, data reveals that there is virtual stagnation in the functioning of the Cooperative Societies in the State.
During 2002-03, these disbursed Rs.1249.38 crore as short-term agricultural loan to the farmers and this came down to Rs.1243.12 crore in 2003-04. Like wise the figures for long term agricultural loans declined from Rs.716.51 crore in 2002-03 to Rs.711.04 crore in 2003-04.
It is also being seen that earlier Cooperative sector was meeting 65-70% of the agricultural credit needs and the rest by the commercial banks. But now the role has been reversed and presently commercial banks are making available 70% of agricultural credit and only 30% by the Cooperative banks.
The average loan being provided to farmers in the State is only to the tune of Rs.2000/hectare which is clearly insufficient for meeting the input cost of HYV seeds, fertilizers, pesticides etc. Thus, it can be safely asserted that the agricultural sector in the State is under-financed. Further, an examination of the role of cooperative societies reveals that while earlier they were providing nearly 75% of the credit, their disbursement has come down to about 30%. Data released by NSSO further reveals that cooperative societies which used to play and still play such a key role in disbursement of agricultural credit and other agri-inputs, do not serve more than 13% of farmer households in Uttar Pradesh.
NSSO data reveal that in U.P. only 20% of farmer households included a member of a cooperative society and just 13% had availed themselves of services from a cooperative while at all India level, about 29% of

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70 A Nyaya Panchayat is a system of dispute resolution at village level in India.

farmer households included a member of a cooperative society and 19% had availed themselves of services from a cooperative. Most of these households availed themselves of either credit facilities or services related to seeds or fertilizers.

### 4.5.5 Presence of Farming Cooperatives

Despite the obvious advantages and a record of successes in other parts of the world, the concept of cooperative farming has never really taken off in India.

Milk cooperatives are present in many parts of the country and a few cooperatives have also had success in other fields like agricultural credit, sale of fertiliser, sugar production, and handloom. But in the core area of farming there has been no successful cooperative movement in U.P.

While quite a number of service cooperatives have been set up to arrange for marketing of produce, provide credit, and sell inputs like seeds, the transition to joint farming has not taken place on a large scale.

In parts of Uttar Pradesh and Madhya Pradesh, degraded or non-cultivated lands have been made available by the government to special groups of *dalits*, labourers or displaced people. The initiative and motive for joint farming was imposed by the government, and the effort was both expensive and unrewarding.

Government-sponsored cooperatives have become synonymous with corruption. The cooperation department is totally out of sync with its lofty objectives. Setting up a cooperative has become, for many, a way of merely getting hold of government benefits, and 'transaction costs' are involved in completing formalities.

### 4.5.6 Agriculture Extension

The term agricultural extension generally refers to the application of scientific research and new knowledge to agricultural practices through

farmer education. The field of extension now encompasses a wider range of communication and learning activities organised for rural people by professionals from different disciplines, including agriculture, health, and business studies.

The main extension agency is the State Agriculture Department. There is a separate Extension Directorate within the Agriculture Department. Department of Horticulture, Soil and Water Conservation and Watershed Development also have some extension workers.

In the 1980s, the State implemented the World Bank funded Training & Visit system of extension. With external support drying up, the State began to dilute the rigour of T&V system and the 90s witnessed many States experimenting with new extension approaches.

Currently, a number of organizations are providing extension services. These include State Agriculture Universities; Commodity Boards (Spices, rubber, tea, coconut, coffee etc.); non-governmental organizations; agri-business companies dealing with seed, fertilizer, pesticides, farm machinery; media firms etc.

Since 1998, the Agricultural Technology Management Agency (ATMA) has been implemented in 28 districts of 7 States as part of a World Bank funded National Agriculture Technology Project. The Project provided for pilot testing the following innovations:

– Establishment of ATMA as an autonomous agency at district level and below for technology dissemination

– Moving towards integrated extension delivery

– Adopting bottom-up planning procedures for setting the research extension agenda

– Making technology dissemination farmer driven and farmer accountable

– Addressing gender concerns in agriculture

– Increasing use of information technology for effective dissemination

Programme interventions are based on a strategic research and extension plan prepared in a participatory mode.

Farm Information and Advisory Centres (FIAC) are created at the Block level to act as the operational arm of ATMA. A Block Technology Team, comprising technical personnel at the block level and a Farmer Advisory Committee (FACs) comprising all key

stakeholders and farmer representatives are also constituted at the Block level.

Experience so far suggests that the integrated implementation of field activities is workable but depends considerably on the State Government's commitment to internalize and practice these new concepts. Further, internalization of diversification and intensification of different farming systems by ATMA is absolutely essential.

BTT and FACs need to play a more active role in preparation of Block Action Plans and involve NGOs in forming farmer groups. It has also been seen that integrated package of exposure visit, training and demonstration results in better technology adoption. The obvious advantages of this system is the flexibility to quickly respond to training and information needs of farmers, availability of a reasonably good untied operational budget and participation of farmers through FACs. However, the project suffered from weak process documentation and internal Monitoring & Evaluation system. Utilization of IT facility and progress in implementation of adaptive research through State Agriculture Universities and KVKs has not been up to the mark.

Another innovation in agriculture extension is Agri clinics-agri-business centres.

The main aim of the scheme is to provide accountable extension services to farmers through technically trained agricultural graduates at the village level. The programme is financed through bank loans and Government of India provides 25% of the cost as subsidy. It is proposed to establish 5000 agri-clinics to provide testing facilities, diagnostic and control services and other consultancies on a fee-for service basis.

The programme has attracted nearly 16000 agri-graduates. 57 institutions are involved in this massive training programme. By end of 2002, 2853 graduates had completed or were undergoing training and 235 agri-entrepreneurs had started agri-clinics or agri-business centres undertaking a variety of agri-entrepreneurial activities in different parts of the country. There is urgent need to revitalize agricultural extension in the State and incorporate lessons learnt from State's own experience in running U.P. Sodic Land Reclamation Project and U.P.DASP apart from those of other States such as Kerala, Rajasthan, Maharashtra, Punjab Agriculture University and agencies like ITC.

In general, it can be affirmed that there is a need for a more comprehensive approach comprising a series of well coordinated steps that can break the current stagnation of agriculture.

In order to attain and sustain higher levels of growth in its agriculture, the Government of U.P. has identified the following areas as the main sectors in need of intervention and more public investments:
- Irrigation;
- Increased agricultural research and development;
- Capacity expansion in U.P.'s agricultural universities;
- Diversification of crops;
- Revamping of the agricultural extension system to assist farmers in adopting new technologies;
- Rural infrastructure and promotion of agro-based industries

Moreover some other factors needs to be addressed like the lack of proper and adequate marketing and storing facilities, less employment in agriculture due to an increasing number of different more remunerative economic sectors (the average income for agricultural workers is Rs 30-50 for men and women during the season), insufficient agro-processing units.

Apart from growth potentials, agriculture – as it is today- has little or no potential of employment generation in this state (the share of manufacturing sector has gone up from 7% to 8% and the share of services from 15% to 19%).

### 4.5.7 Western & Eastern Uttar Pradesh: Differences in Agriculture

The regional differences within U.P. no doubt play a role in the wide interstate disparities that have persisted between U.P. and its Green Revolution neighbours.

Although Eastern and Western U.P. are both part of the same Gangetic plain, the two regions are distinct from one another.

Eastern U.P. is flood prone, less developed than the West, and experiences periodic occurrences of droughts. It has higher amounts of rainfall than its Western counterpart, and in many areas lacks the capacity to cope with excess water via drainage systems.

In 1999-00, less than 1% was affected by floods in the West, while 8.5% was affected in the East. The frequent flooding in Eastern U.P. can be largely attributed to deforestation in the U.P. per catchment areas, leading to soil erosion and riverbed silting (Sharma and Poleman, 1993). Water logging in these areas during rainy season affects sowing and crop yields (Pant, 2003).

While the East receives higher levels of rainfall than the West, as described above, the Western region has been able to rely on, to a much greater extent than in the East, on irrigation in the form of canal networks and the development of its groundwater resources.

Not only can flooding, which is seen more in the Eastern region, damage and/or destroy crops and waterlog swathes of land, but this problem makes it more difficult for farmers to effectively use fertilizers, as floods can easily wash away an application of fertilizers, leaving a farmer and his land without the benefits of his investment of this input. This can lessen the incentive for farmers to invest in fertilizers.

Additionally, fertilizers that are washed off the land can lead to contamination of rivers and water sources, creating a host of environmental problems. Fertilizer consumption has been traditionally higher in the West than in the East, and over time, the gap, which was quite narrow in 1965-66, has been widening.

Historically, one of the greatest advantages that Western U.P. had over Eastern U.P. was public investment in canal irrigation. In the 19th Century, the West received large amounts of public investment for irrigation, while the East received very little.

Between 1830 and 1880, the Eastern Yamuna, Lower Ganga and Agra canals were constructed in Western U.P., allowing for larger tracts of land to be irrigated than via the traditional wells, ponds and tanks. As human and animal labour was freed up from more labour-intensive forms of irrigation, such as the Persian wheel, cultivators were able to produce crops more efficiently and work the land more intensively by engaging in multiple cropping, which allowed more crops to be produced without necessarily increasing the area under production. This resulted in greater levels of economic activity in the West than in the East, which was visible in the forms of better-developed markets and roads (Sharma and Poleman, 1993).

Over time, Eastern U.P. has made strides to help narrow the gap with its Western counterpart.

At the beginning of the Green Revolution, the Eastern and Western region had roughly the same amount of irrigated area, but the difference between them was that over 90% of land under irrigation in the East was watered from wells, ponds and tanks, while over 50% of land under irrigation in the West received water via canal irrigation (Sharma and Poleman, 1993).

Over time, not only has the net irrigated area as a percentage of net cropped area grown to a greater extent in the West than in the East, but the growth in tube well irrigated area as a percentage of net cropped area has also been greater in the Western region than in the Eastern region.

Another difference between Eastern and Western U.P. can be identified in different systems of landholdings, and although land reforms have been put in place, Eastern U.P. still has a higher share of marginal land holdings.

Under British rule, the Zamindari system[71] of tenancy in Eastern U.P. estranged cultivators from the land, as it further stratified rural society into layers of tenants, subtenants and renter landlords.

In Western U.P., the Bhaichara system allowed for peasant proprietorship, which gave tenants a greater incentive to invest in land and improve productivity, as is reflected by changes in cropping patterns, increases in yield and capital accumulation (Stokes, 1978).

In 1960-61, marginal land holdings (<1 hectare) made up over 52% of land holdings in Western U.P. in about 11% of operational agricultural area. At the same time in Eastern U.P., 62% of land holdings were marginal, and they were contained in about 19% of agricultural area.

By 1980-81, the share of marginal holdings had increased in the West to 62% in about 20% of agricultural area, and in the East marginal holdings increased to 79% in 34% of agricultural area. In 1995-96, the proportion of marginal holdings U.P.-wide was about 75% and they operated in about one third of the State's operational agricultural area (CMIE, 2004).

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71 Zamindari or the Zamindari System was employed by the Mughals to collect taxes from peasants. The practice was continued under British rule. After independence, however, the system was abolished in India and East Pakistan (present-day Bangladesh), but is still current in Pakistan.

Dreze and Gazdar[72] point out that in the Eastern and Central regions of U.P., more so than in the Western region, land is predominantly owned by high-ranking castes.

Female participation in the labour force is lacking throughout the State and the class and caste system are resilient, even in relation to the rest of northern India. The gap between landowning castes and the dispossessed is sizeable throughout the State and this, combined with U.P.'s patriarchal nature, continue the pattern of uneven development.


## 4.6 The State of Rural Villages in Uttar Pradesh

The typical U.P. village is on average characterized by:
• About 800 families and 3,000 people
• Most men have no jobs.
• Children do not have a good role model.
• After high school most young men and women leave the village to a nearby metropolitan town in search of jobs.
• Only 30% of the people own the lands
• The other 70% work as day labourers
• Villager is trying to earn Rs 50.00 per day ($ 1.25)
• Caste system still very present
• Households Electrified: 26 %
•Telephone penetration: 12 %
• Bank Accounts: 10 %

A typical U.P. village has a resident population of around one thousand. While the layout of one village is different from another, the following description might be representative of a vast majority.

Most villages are small and dense, with huts on either side of narrow lanes. Open drainage usually runs along those lanes, often clogged and infested with mosquitoes. Except for those belonging to "Upper castes," homes are usually placed close to each other, especially when the government builds housing for the poor.

Landlords have their ancestral homes consisting of several rooms, one of which is set aside for storing grain and supplies. Often, prominent families of the Upper castes live next to a courtyard and a

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72 Dreze, J., & Gazdar, H. (1997). Uttar Pradesh: The Burden of Inertia. In J. Dreze & A. Sen (Eds.), Indian Development: Selected Regional Perspectives (pp. 33-128), New York, Oxford University Press.

temple, which is usually set aside for those same Upper castes. "Lower castes" worship at a separate temple, a small decorated room with an idol, in another section of the village or elsewhere. Most villages have an open well or a bore-well, and separate times are set for Upper and lower castes to fetch water.

Most villages have lower and upper castes living in separate sections. People belonging to Scheduled Castes (SC)[73] and Scheduled Tribes (ST) are required to live in an area designated for them. Those belonging to "Most Backward Classes," "Backward Classes" and "Other Backward Classes"[74] -- as they are officially categorized -- usually live in the same area where "Other Classes (Upper Castes)" live, but they do not mix with even lower castes.

When the government builds homes for lower castes, it ensures this caste separation. In many instances, the government sets U.P. housing colonies exclusively for Scheduled Castes and Tribes, and hence, an entire new village might consist of families belonging to only those castes. The rural poor live in huts and government-supplied "houses" that are no more than 150-200 sq. ft. in floor area. Huts are usually constructed from mud blocks, roofs are thatched and the floors are covered with a mud and cow-dung paste that serves as a disinfectant.

*Figure 3: Picture of a rural huts in Jhansi district*

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73 Scheduled castes (SCs) and scheduled tribes (STs, Adivasi) are Indian communities who owing to their large numbers are accorded special status by the Constitution of India. These communities were considered "outcastes", and were excluded from the Chaturvarna system that was the descriptive social superstructure of Hindu society in the Indian subcontinent for thousands of years. These communities had traditionally been relegated to the most menial labour with no possibility of upward mobility, and subject to extensive social disadvantage and exclusion, in comparison to the wider community. Lacking opportunities for educational, social and economic growth, they could not integrate with rest of the society. The scheduled-caste peoples are also known as Dalits; scheduled-tribe people are also referred to as Adivasis.

74 The Other Backward Classes (or OBCs) in India are a group of citizens other than the Scheduled Castes and the Scheduled Tribes as may be specified by the Central Government in their lists. The list presented by the commission is dynamic (castes and communities can be added or removed) and will change from time to time depending on Social, Educational and Economic factors. The Constitution of India recognizes the need to extend positive discrimination to this section. For example, the OBCs are entitled to 27% reservations in public sector employment and higher education. In the constitution, OBCs are described as "socially and educationally backward classes", and government is enjoined to ensure their social and educational development.

Houses supplied by the government are constructed with cement blocks or bricks, the floor is cement, and the roof is made of concrete or asbestos. Usually there is only one room in the house, but in some cases a half-wall may be built to separate out the kitchen.

These houses do not have their own toilets, but common toilets are made available at some distance at one corner of the village for several families to share. More often than not, these toilets do not function nor are they maintained, doors are broken or absent, and there is limited or no access to water close by.

Government-supplied houses are around 190 sq. ft. in floor area which works out to 38 sq. ft. of floor space per person -- only slightly more space than a full-size bed. Every house has two small windows, but they are not sufficient to permit cross ventilation or cooking smoke to escape freely. Those who have domestic animals such as cows or goats usually keep them inside their houses during the night.

Larger villages might have a school, a *panchayat* [75](local governing body) office and a small gathering room for meetings. One or two huts might also serve as a shop-cum-residence, selling sweets and small household supplies. A somewhat levelled area might serve as a playground for children. There are no vegetable or flower gardens in

75 Started by Rajiv Gandhi, constitutional amendment, a village panchayat has economic, constitutional and community powers to govern the village, collect taxes and administer programs and projects in the village. 98% of India is now under panchayat raj
A "Gram Sabha" consists of all the eligible voters in the village and they elect the Panchayat council and its leader. A panchayat leader or the "sarpanch" is all that is needed.

the village, and farms are generally outside on adjacent land owned by landlords or a small number of people who might have been allocated government land for cultivation.

The village organisation of society offers many facilities for rural administration, for repression of crime, and gradually for bringing about attention to simple systems of sanitation. The village system also enables the agrarian districts to dispense with a poor law. Each village will secure its infirm and pauper inhabitants at least from starvation, without the intervention of any poor-rate machinery.

Villages are connected one to another by paved or unpaved narrow roads. One paved road (often not well maintained) connects several villages to a rural town nearby where the government has set up a primary health centre to serve 25,000 people or more.

*Figure 4: Picture of a typical rural road (on the way from Varanasi to Lucknow)*

These towns have many shops that cater to the daily needs of people living in the villages nearby.

Many of the rural poor work the fields in agriculture and are employed by the few landowners who reside in their villages. Several others pursue caste-associated occupations -- priests, carpenters, blacksmiths, barbers, weavers, potters, oil-pressers, leatherworkers, sweepers and so on.

Lately, with increased economic activity in nearby towns, many commute outside their villages every day to work as drivers, construction labourers, packers and in other industrial jobs.

Some migrate to cities for months, leaving their families behind. But despite the increasing demand in cities for labour met by rural migration, and the income generated by such employment, the living

conditions for most rural people remain far from what can be called "acceptable."

The opening up of the village economy has irrevocably altered rural livelihoods in U.P. villages. Structural change has occurred primarily due to the expansion of the village economy and its increased linkages to the external economy.

The three main sources of exogenous structural change, which have had most impact on the village economies, are the increased penetration of the free market and subsequent erosion of morally based modes of exchange and the influx of consumer goods; government intervention, in particular land reform; and technology, mainly in agriculture. The other notable source of livelihood change has been an increase in the population as resources are continually sub-divided between generations. Structural change has opened up previously economically isolated villages, in a project of modernization, presenting agents with increased opportunities, within the village and outside, through migration, cash cropping and improved farming techniques.

Simultaneously it has increased potential vulnerability, through increased competition, increased capital investments, dependence on the sale of goods with fluctuating market prices, increased dowries and changes to the moral economy. Structural change can therefore exacerbate the poverty gap, whilst additionally providing a route to economic emancipation.

**4.7 Rural Poverty in Uttar Pradesh and its Measures**

Development in U.P. began in the 1940s and escalated during the post independence era in the 1950s, with the introduction of planned development (Pandey, 1998).

The State has been operating on the assumption that the development of U.P. reserve of natural resources would lead to all round development of the state and thereby also alter the conditions of the marginalized and the poor. However, more than five decades later, in 2007, U.P. still has a very large population of poor.
50% of the State's population that live below the poverty line has lower incomes than the average income of the population below the poverty line nationally and the proportion of India's poor living in U.P. has risen from 17 percent in 1983 to over 20 percent in 1999-00.

Poverty, in India, has been defined by the Planning Commission in terms of the level of per capita consumer expenditure sufficient to provide an average daily intake of 2400 calories per person in rural areas and 2100 calories per person in urban areas, plus a minimal allocation for basic non-food items. In this definition focus is on material deprivation and poverty has been defined in terms of incomes or level of consumption.
But poverty is also the result of low level of assets, coupled with low returns.
The poor have very few assets beyond their own labour, which is inevitably spent in tedious, back-breaking, low paid work. They often possess little or no land and also tend to lack education, skills and good health. In addition, the poor have limited access to such public assets as community infrastructure, basic services and government schemes. It is seen that rural poverty is becoming increasingly concentrated among households whose primary source of income is casual labour, both in agriculture as well as the rural non-farm sector.
Based on 2001-02 prices, a household with an annual income of below Rs.19984 per annum in rural areas and Rs.25546 in urban areas are deemed to be living below the poverty line in Uttar Pradesh.

As in other parts of India, land is the most crucial asset for the rural poor. It has been seen that poverty falls as land ownership rises.

However, over the years, per capita availability of land has been declining in U.P. It stood at a meagre 0.10 hectare in 2001-02. The average size of land holdings in the State in 1995-96 was only 0.86 hectare, with nearly three fourth holdings falling below one hectare. In fact, by 1999-00, nearly half of the rural population (62% of the poor) owned less than a half hectare of land, far less than needed to provide for a family's subsistence needs

If the State does not succeed at this critical stage in the war against poverty, then U.P. will further slip on the growth path vìs a vìs other States and, maybe, irrevocably. A proper poverty alleviation strategy should include the following steps:

*- Revival of Agriculture:* agriculture is the largest sector in the State's economy with its share being the highest both in the State income as well as in employment. 66% of workers still remain in agriculture & animal husbandry sector as per 2001 figures while only 6% are engaged in manufacturing and 28% in others sector. However, about 27% agricultural workers have practically no work.

The average income per worker in agriculture sector is only Rs.6912 while it is Rs.21464 for workers involved in manufacturing and Rs.27347 for workers involved in other activities.

Further, contribution of agriculture in State income has declined from 58.4% in 1971 to 42.4% in 1991 and has further declined to 31.8% at current prices as per quick estimates of 2002-03.

Keeping in view the large number of workers employed in the sector, it is imperative that steps must be taken to revive agriculture and allied activities sector in the State if poverty alleviation is to be attained on a sustainable basis. Steps need to be taken whereby there is significant increase in the profitability of agricultural operations. As stated above, a large number of holdings are of less than half hectare. Through the traditional crop mix of food crops, it is difficult to make agriculture very profitable. Cultivation of cash crops, vegetables, medicinal plants etc. may be more profitable for marginal farmers. Similarly, cultivation of bio-diesel plants like jetropha on wastelands need to be promoted. Strategy should be to maximize income of the farmer from his meagre land holding.

*- Rural infrastructure:* State Government will also need to step up investment in rural infrastructure. A good road network in rural areas, efficient and cost-effective irrigation system, rural electrification and improvement in per capita energy consumption apart from upgrading of marketing infrastructure are some of the critical areas wherein prompt action is required. Likewise, there is urgent need to improve health delivery system, improve quality of education and provide access to safe drinking water and sanitation to all rural households. Both Central and State Government have initiated action in this regard and it is hoped that in the next 4-5 years there would be significant improvement and upgradation of rural infrastructure.

*- Wage Employment:* since a large proportion of the rural poor are unemployed or underemployed, it is imperative that the Poverty Alleviation Strategy focuses on providing wage employment to the needy. Sampoorna Gramin Rojgar Yojana (SGRY), Food for Work scheme seek to provide 100 days employment to poor people. The Employment Guarantee Act would further step up investment in this sector. De-silting of ponds, watershed development, creation of permanent community assets are some of the permissible activities under these schemes.

*- Self Employment:* in order to enable poor households to come out of poverty trap on a sustainable basis, it is essential that avenues of self employment are opened up for them. Swarnajayanti Grameen Swarojgar Yojana (SGSY) is designed to achieve this goal by providing assistance to Self Help Groups.

Experience suggests that poverty alleviation strategy can be effective only if measures are simultaneously taken on several fronts with a view to increase the income of the poor families. This cannot be achieved through a single scheme or intervention. This approach would require provision of wage employment to members of a BPL household, inclusion of a member in the Self Help Group. so as to promote self-employment and assistance under other schemes of different

departments so as to increase their income. This could involve help for rural backyard poultry, improvement in nutritional status /supplementary income through production of vegetables in kitchen garden, cultivation of jetropha, developing bamboo groves (in eastern U.P. and Terai regions) as insurance for meeting urgent social, consumption or health needs, animal husbandry etc.

However, the poverty alleviation strategy cannot succeed if there is no growth. Revival of agriculture and manufacturing will provide additional opportunities to the poor to better their lot. Investment in rural infrastructure is expected to kick start the rural economy.

Improved quality of education and health delivery system can contribute towards improving the skill base and health status of the rural poor, who, to a large extent, are dependent on their labour for earning enough to make both ends meet.

Efficient and effective implementation of safety net programmes along with disbursement of relief during natural calamities are hoped to improve the ability of the poor to withstand shocks and recover quickly.

## 4.8 Uttar Pradesh Rural Development Institutions, Projects and Policies

Development of rural areas has been at the core of planning process in the country and also in the State.

Rural Development is a broad, inclusive term which takes in its ambit socio-economic and political development of the rural areas. It includes measures to strengthen the democratic fabric of society through the Panchayati Raj Institutions and to provide the vast rural multitude 'voice and choice' apart from measures to develop the rural infrastructure, increase the income of rural households and delivery systems pertaining to education, health and safety net mechanisms.

Poverty alleviation is a key component of rural development.

Each Indian State has independent agenda of investments and some domains like rural development, education, urbanisation, industrialisation, law and order are completely subject to the state's different departments, institutions and organizations which are in charge of giving concrete application to the recommendations.

*Garibi Hatao* or rural development has been at the centre stage of the Five Year Plans since the Fifth Five Year Plan.

In 2005-06, the State Government spent Rs.3201.51 crore on various rural development schemes.

Altogether 25 out of 70 districts in the State received over Rs.50 crore for rural development schemes during the last financial year (2006).

The District and State Authorities should try and examine the impact of this expenditure in terms of lifting people above the poverty line and increase in rural income.

### 4.8.1 Panchayati Raj Institutions (PRI)

*Panchayati Raj* is a system of governance. It has 3 levels: village, block and district. The 3 Tiers in the PRI are: *Zilla Parishad* the highest tier, *Panchayat Samiti*/ Block Advisory Committee (in tribal areas) the middle tier and *Gram Panchayat*/ADC Villages (in tribal areas) the lowest tier.

Elections are being held at regular intervals of five years for all three tiers.

The *panchayats* receive funds from three sources:
- local body grants, as recommended by the Central Finance Commission,
- funds for implementation of centrally-sponsored schemes,
- funds released by the State Governments on the recommendations of the State Finance Commissions.

State Government is also taking steps to ensure timely release of grants received on Uttar Pradesh is likely to receive Rs.2928 crore between 2005-10 for rural PRIs and Rs. 517 crore for urban PRIs the recommendations of the Twelfth Finance Commission to PRIs.

State Government is committed to transferring funds, functions and functionaries to the PRIs as per the constitutional mandate.

From 1994 onwards the State Government has been delegating different powers and responsibilities with the 3-tires of the *Panchayati Raj Institution*. The Panchayat (Administration) Rules 1994 and the *Tripura Panchayat* (Election of office bearers) Rules 1994 have been framed for effective decentralization of development activities and determination of the responsibilities of *Panchayat* functionaries.

Powers and responsibilities delegated to *Panchayats* involve:
- the preparation of plan for economic development and social justice.
- the implementation of schemes for economic development and social justice in relation to 29 subjects given in Eleventh Schedule of the Constitution.
- to levy, collect and appropriate taxes, duties, tolls and fees.

**4.8.2 Uttar Pradesh Departments and Boards**

In Uttar Pradesh, five are the main Governmental departments concerned with rural development: the Department of Rural Development, the Department of Panchayati Raj, the Department of Health and Family Welfare, the Department of Agriculture and the Department of Information Technology. In addition, a set of different boards which sometimes cooperate and sometimes overlap, try to foster a better management of the rural natural and human resources.

1) The **Department of Rural Development**[76] in U.P. is implementing a number of programs aimed at the sustainable development of rural areas with a focus on disadvantaged sections.

A strategic pro-poor policy, which is also part of both the 10th Five Year Plan and the 11th Five Year Plan, has been adopted under which the rural poor are treated as a net resource with their own ideas and experiences in tune with the local conditions. A number of new initiatives have been launched in the last two years.

Keeping in mind that rural roads are vital to economic growth and poverty alleviation in rural areas, in 2000 the Department of Rural Development launched a major initiative – the **Pradhaan Mantri Gram Sadak Yojana** (PMGSY) - with the aim of providing connectivity to all unconnected habitations with a population of more than 1000 by the year 2003 and similar such villages with a population of 500 by the year 2007. It is an initiative sponsored entirely by the Government of U.P. PMGSY seeks to provide road connectivity to all 1000+ habitations in the next three years.

To meet the shortage of houses in rural areas the Government launched also a comprehensive plan for rural housing, envisaging the construction of houses and up-gradation of unserviceable houses.

The Action plan is being implemented in various programs such as the **Indira Awaas Yojana** (which is designed to provide houses to the people below the poverty line for free – the programme has been successful but the problem of housing in U.P. is often subject to

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76 rd.up.nic.in

corruption), Innovative Schemes for Rural Houses, Rural Building Centers.

Another important initiative is the **Total Sanitation Campaign** aimed at making the country 'open defecation free' by the end of Eleventh Plan. All seventy districts of the State have been covered under this programme. Gains made in providing access to safe drinking water are sought to be consolidated by addressing the issue of source and system sustainability apart from addressing problem of water quality. Efforts are also being made to improve the efficiency of canal system in the State through diligent use of State's own resources as well as External Funding.

Schemes to electrify all villages of the State in the next three years have recently been approved by Government of India under the **Rajiv Gandhi Rural Electrification Programme**. The Rashtriya Sam Vikas Yojana also seeks to address the issue of regional disparity in selected districts of the country.

The **Integrated Rural Development programme** (IRDP) aims to reduce poverty by creating self-employment opportunities for a target group of beneficiaries below the poverty line. The programme is funded by state and central government: 50% of those assisted should belong to scheduled castes and 40% should be women (the income eligibility criterion is complex and leads to considerably arbitrariness). Studies in the state have found out that at least 30-40% of the beneficiaries are generally non poor.

2) The Department of Rural Development works in close collaboration with the **U.P. Irrigation Department**[77] which selects areas for intervention and improvement in the poverty-stricken areas of the Ghaghra-Gomti Basin. Its main objectives are:
- to increase productivity of water through: effective allocation of water resources amongst sectors by integrated and environmentally-sustainable river basin planning, development and management process, including conjunctive use of surface and ground water.
- to increase and sustain agriculture productivity through: technically appropriate irrigation and drainage operations, enabling institutional, policy and legislative reforms, substantial user participation, modernize

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[77] www.irrigation.up..nic.in

irrigation and drainage infrastructure and improving linkage between agriculture and water sectors.

- to improve the living standard of rural poor through: enhanced farm incomes arising from agricultural intensification and diversification, creation of enabling environment for improved access to clean drinking water, sanitation and hydro-power, sustainable management of wet-lands and improved equity in access to water.

At the moment there are three types of projects under construction/completion by the U.P. Irrigation Department:

- Major & medium projects: like for example the **Kishau Dam Project** which, once finished, will provide 1.015 maf of irrigation water and 500 maf of drinking water to the State. The estimated cost is 34.55 crores.

- Minor Irrigation projects: like **Jarauli Pump Canal Project** whose aim is to feed Lower Ganga canal system to feed the tail end in Fatehpur Distt. This project irrigates 64495 hectares of cultivable land and extra 39748 hectares is the target to be achieved. The estimated cost is 4792 Lakhs.

- Flood projects: Uttar Pradesh has 294-36 lac hectares land out of which 73.36 hectares is flood prone area.


3) An important contribute, in matter of rural development, is also given by the **Uttar Pradesh Khadi and Village Industries Board (U.P.KVIB)**[78], a State Government owned organization, which is charged with the mission of effecting rural industrialization in the State of U.P. through the development of Cottage and Village Industries with a view to create employment opportunities in rural areas.

The Board envisages bringing about rural industrialization by:

- creating opportunities of self-employment,
- imparting training,
- using traditional artisan skills,
- developing appropriate technology, products and processes and devising effective marketing strategies to market the output.

The Board has adopted a holistic approach to effectively carry out these tasks by identifying and selecting potential entrepreneurs, providing

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78 www.up.kvib.com

them training, making available finance resources on easy terms, guiding them to establish their ventures

The board has 10 village industries training centers to conduct business management training and different trade training like - cutting & tailoring, fashion designing, candle making, fruit preservation at district level.

4) The **Uttar Pradesh State Agricultural Marketing Board**[79] is another agency that acts as a liaison between the Market Committees and the Government of U.P. for the development of agricultural marketing in the State. The important functions of the Board regard the grading and standardization of agricultural produce, the general improvement of the regulation of marketing in the state, propaganda and publicity on matters relating to regulated marketing of agricultural produce, giving aid to financially weak (or needy) market committees in the form of loans and grants, to arrange for safety insurance on the life of farmers, to organize seminars, workshops or exhibitions on subject relating to agricultural marketing.

For every mandi area, one *mandi samiti* is established.

Main duties and responsibilities of *mandi samiti* are as given below:
- to ensure impartial behaviour between farmers and traders
- to categorize saleable agricultural produces & to sell the produces by auction
- to get weighing of the produces as per metric scale & to pay for the produces immediately
- to gather information regarding market prices & other useful trends & to publicize them
- to ensure the availability of the necessary stuff in mandi areas
- to play the role of negotiator in case of disputes between farmers and traders and to resolve their problem
- to get land acquisition, to prepare the map for construction works to prepare the accounts for income/expenditure for mandi area construction works.

5) The **Bankers Institute of Rural Development (BIRD)**, based in Lucknow, is a premier institute for providing training, research and

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79 www.up.mandiparishad.in

consultancy services in the field of agriculture and rural development banking in India. The institute was established in 1983 by National Bank for Agriculture and Rural Development **(NABARD)**, the apex development bank supporting agriculture and rural development in India.

In 1992, BIRD was reconstituted as a Society (under the Indian Societies Registration Act, 1860), promoted and funded by NABARD. Since then, BIRD made significant strides and carved out a niche for itself in the training map of India. It is widely known in Banking, Government and NGO sectors for the quality of its product and services. The institute offers custom designed training solutions for banks, government agencies, NGOs and other institutions connected with agriculture and rural development banking to address the new challenges concerning the sector.

Regional programs in U.P. are also sponsored by multilateral donor agencies such as the World Bank, the Asian Development Bank, the Organisation of Petroleum Exporting Countries and the European Community. In general the aid ranges from 20.96% to 33.41% of the Five Year Plans.

During the Tenth Year Plan (2002-2007) the main ongoing projects sponsored by external agencies in U.P. were:

- **Uttar Pradesh Sodic Land Reclamation Project**: seeks to increase agricultural productivity by reclaiming sodic lands in 10 districts of the State. Active community participation and well-coordinated government interventions are critical aspects in the project approach: moreover the rehabilitation and maintenance of main drain components will improve the drain network which will have positive environmental impacts. The total cost of the project is Rs 1.469 crore.

- **Uttar Pradesh Health System Development Project**: intends to develop a health project through the delivery of effective services, stemming from policy reform, institutional and human development resources in addition to investments in health services. The main components of the project are: developing a strategic management capacity, through formulation and review of health system performance and pursuing policy reforms and improving the quality of clinical practice in public health. The total cost of the project Rs 648 crore and the total duration is intended to be of five years.

- **Uttar Pradesh Diversified Agriculture Support Project***: it intends to increase the agricultural productivity, to promote private sector development and to improve rural infrastructures. The main components of the projects are supporting the technology development and rural infrastructures development by improving rural roads in the project area, rural markets and market information collection and dissemination system. The total cost of the project is Rs 699 crore and the duration is 3 years.

- **Uttar Pradesh Rural Water Supply and Environmental Sanitation Project**: the main object of the project is to deliver sustainable health benefits to the rural population by improving water supply and sanitation services which will increase rural incomes through time saving and income opportunities for women. The total cost of the project is Rs 123 and the duration is of 6 years. The scheme envisages the following important features: use of appropriate technology (based on feasibility studies, consultation and agreements with the communities), group formation by NGOs (selection of NGOs is based on the criteria that they have to be local).

The State Government is also taking steps to involve the Private sector in rural development. Rural Growth centres are proposed to be set up in the State and a sum of Rs.100 crore has been earmarked in the State budget for the current year 2007. Private sector and voluntary sector can play a very effective role in dissemination of knowledge and providing backward and forward linkages necessary for making any economic activity viable.

State Government is taking steps to ease regulations which are curbing free enterprise in rural areas. All curbs which stunt growth of rural entrepreneurship must be identified and removed. These should cover all sectors such as agriculture, horticulture, agri-marketing, fisheries, dairy, cooperatives etc.

Further, health sector is another area where there is tremendous scope for public-private partnership. Health Insurance schemes such as the one launched in Karnataka covering 21 lakh farmers registered with Karnataka State Co-operative Societies for surgical treatment wherein farmers pay Rs.90 per year and are covered for all surgical treatments for Rs.2 lakh per year. They receive cashless treatment at 90 network hospitals with free out patient consultation and hospitals offer standard

subsidized tariffs for all surgeries. Such a scheme would go a long way in reducing chances of poor falling back below the poverty line due to indebtedness.

The three-tier Panchayati Raj system has a crucial role in rural development and implementation of poverty alleviation programmes. Tension between the voluntary sector and PRIs has to be resolved and greater transparency in the functioning of all agencies – government, PRIs, NGOs and private sector – is essential for proper, efficient and effective utilization of scarce resources. All U.P. inhabitants have to come together and work as a team for realizing the goal of rural development and poverty alleviation.


## 4.9 Communication: a Way to Rural Development in U.P.?

Rural development is the real challenge for Indian States like U.P. where large sections of people reside in villages and smaller towns; even though –as reported before – many projects have been undertook and more money is being invested, satisfying reults in rural development are yet to come.

People in the villages of U.P. – as results from some interviews conducted by the Indian Institute of Technology- show a general discontent about Governmental programs and relative budget expenditures and they are often not aware of the outcomes of the projects carried out in the areas where they live.

The last reported episode of discontent regards a protest which started on November 13, 2007 in the busy market area of Kartal, an important small town. The pradhans of over a dozen gram panchayats, and several panchayat members and villagers sat on a relay hunger strike at the bus-stand protesting against the inadequate and incomplete development work of a bridge across a minor river called Pungri. Connecting U.P. to M.P., the bridge had been left incomplete since 1992.

As in this case, projects frequently fail or can bounce back without creating a significant impact: the main reasons for this are

ineffective public investments[80] being made in rural areas, the disparity in rural-urban infrastructure, (in terms of roads, power, transport and telecommunications) and the communication gaps, which happen because the human element has been ignored or overlooked during project planning.

While the first two issues required huge amounts of money to be invested, communication gaps could be more easily addressed.
Communications gaps can be identified along two directions: one functional, which links farmer's aspirations and assets with potentially useful policies and service provision which at the end fail to meet their expectations, and another geographical, where learning is not shared within and among neighbouring communities.
Communication gaps can hinder a project in various ways and can be of different kinds:
- Gaps between those carrying out development work and those to be affected by it. More specifically, this type of gap exists when a project is misunderstood or mistrusted by the local population, or when broader development activities such as family planning, health education, or general rural development fail to enlist support and participation.
- Gaps between development projects and government echelons. This type of gap can grow up when a long period of time elapses between project formulation and project implementation: the officials responsible for the original planning may have moved on to other assignments or ministries and their sponsors may not understand, or agree with the original objectives of the project.
- Gaps that occur in teaching, training or extension situations when no audio-visual aids are available or when attempts are being made to use audio-visual aids that are not entirely relevant to the situation.
Projects should be planned in co-operation with local people, communications specialists and sociologists. It goes without saying, of course, that the Government should also be closely involved.

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80 The most important threat to U.P. State economy comes from the financial management of the state government. U.P. is critically indebted and the debt is on the verge of becoming unsustainable. Average primary deficit as a percentage of GSDP is more than the difference between real growth and real interest rate. With such a high fidcal debt little is left for development expenditure. What's more, development programmes are treated by factional leaders as useful channels for the recruitment and reward of supporters.

The Government of U.P. has only recently started to use media and communication tools to reduce rural poverty. Empowering people with information and the right to information is a way to improve governance. The Government should give more autonomy to rural local bodies, should involve media and independent NGOs in the dissemination of information about policies and programmes of the government and get more committed to provide the necessary incentives for the spread of projects where communication is an asset, fostering at the same time IT based education, health care and agriculture and allied information in the rural areas.

The number of rural newspapers, rural broadcasting radio, ICT programs in the rural areas is growing. Their purpose is to initiate a dialogue among rural people, share information and also, give them an opportunity to voice their opinion. The matters in these communication tools range from local civic problems like conditions of the hand pumps and the *kharanjas* (brick roads), local social issues like dowry, intoxication, violence against women, and even murders and other crimes. Household tips, gardening tips and details of the latest research are the added features which are collected by the women themselves.

### 4.9.1 ICT for Rural Development in U.P.

In a special State level assessment on the use of ICT – the so called Networked Readiness Index Framework - U.P. has emerged, in 2003-04, as an "average achiever" in terms of ICT relative development and state's strengths and weaknesses with respect to ICT.

*Figure 5: Classification of the States according to the E-Readiness Composite Index*

| Categories | States |
|---|---|
| Leaders | Karnataka, Tamil Nadu, Andhra Pradesh, Maharashtra, Chandigarh |
| Aspiring Leaders | Kerala, Gujarat, Goa, Delhi, Punjab, Haryana |
| Expectants | West Bengal, Pondicherry, Madhya Pradesh |
| Average Achievers | Uttar Pradesh, Chattisgarh, Orissa, Sikkim, Himachal Pradesh, Rajasthan |
| Below Average Achievers | Mizoram, Jammu and Kashmir, Assam, Meghalaya, Uttaranchal, Jharkhand |
| Least Achievers | Lakshadweep, Manipur, Tripura, Arunachal Pradesh, Andaman & Nicobar Islands, Bihar, Daman & Diu, Dadra & Nagar Haveli, Nagaland |

*Source: http://www.mit.gov.in/download/EX_sum.PDF*

The framework is based on parameters that evaluate:
- the environment for ICT offered by each Indian State and the connected market, political/regulatory, infrastructure;
- the readiness of the community's key stakeholders to use ICT- individual readiness, business readiness, government readiness;
- the usage of ICT among these stakeholders (individual usage, business usage and government usage).

Since 2003-2004, even if there are not official data, the impression is that U.P. has made further progress in achieving e-Governance and in improving its ICT infrastructures.

Noida and Greater Noida – two cities in U.P. which are only 30 minutes away from New Delhi and very close to each other – are fast emerging as the largest IT hubs in India for RIM, BPO, Call Center and other related businesses. No wonder companies like Adobe, Intel, Microsoft have either set up their bases in Noida or Greater Noida, or are in process of doing so.

Uttar Pradesh, is one of the prime Indian States to have developed the use fo ICTs for a better rural services delivery: its mission is to take ICTs to every village, to every citizen, to every business and to transform the way Government works using ICT.

Since all districts and most block headquarters have fibre (since 2006, both government and private fiber should be available at all blocks), the need is primarily to connect the villages to the blocks, a distance usually less than 25km. For the 'last-mile', dial-up, cable/DSL and wireless technologies are all possible options.

The importance of eGovernance arises from the prolonged absence of self-sufficiency in rural areas, which has created an encompassing dependency of rural residents on locally elected officials and bureaucrats.

To achieve a better service delivery, recently the Government of U.P. has undertaken a number of initiatives aiming at creating an institutional framework for the development of IT industry[81]. A major step had been the creation of a Department of Information Technology which is meant to facilitate an efficient and effective delivery of government services and to proactively provide a system of spreading information on the Government schemes, planned developmental activities and status of current activities.

Some of the most successful U.P. e-projects include :

**Lokvani** [82]– launched in 2004, it is one of the pioneering initiatives of e-governance in the State. A recipient of the Golden Icon award at the 9th National Conference of e-Governance in the service delivery category, the project gives citizens of urban and rural areas an

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81 IT Policy has been modified to incorporate special incentives for the IT industry, like preferential allotment of land, continuous power supply, 100% exemption from stamp duty, extended working hrs for women
82 Lokvani can be accessed on the Internet at www.sitapur.nic.in/lokvani (User Name: guest, Password: guest).

opportunity to interact with the government without coming to any government office.

Some of the services offered include online submission, monitoring and disposal of public grievances/complaints, online land records, information about various government schemes, application forms, developmental works/schemes/expenditures/beneficiaries, information about local employment opportunities in the district etc....

**Treasury Computerization**[83] - one of the few Government sector projects to have been certified by ISO, the treasury computerization in the State is one fine example of G2G (Government to Government) and G2C (Government to Citizen) interfaces. Benefiting more than six lakh pensioners of the state the software has been implemented in all 73 treasuries of the state, and provides information over IVRS and web. It is used potentially by the Government officials, planners, economists & researchers & provides relief to elder citizens-pensioners of the State. Some of the salient features of the software include remittance Accounting (CCL/DCL), pension Disbursement & Accounting, online Cheque Generation, etc...

**Bhulekh** [84] – the land records computerization in U.P. started as an application especially for farmers. The project has benefited government, banks, NGOs and all other stakeholders. Implemented in all the 305 tehsils of the state, the project has been instrumental in bridging the digital divide to a great extent. Computer generated copies of Record of Rights (RoR) are being distributed to farmers, land owners and other institutions from the Tehsil Computer Centre.

**Vahan**[85] – The state has already computerized the major activities (Registration, Tax Collection, Permits, etc) of 19 RTO (Regional Transmission Organizations) offices. The project will be extended to all the RTOs of the state in the next couple of years.

**Telemedicine**[86] – U.P. was among the first in the country to have started the telemedicine project. Sanjay Gandhi Post Graduate Institute of Medical Sciences and IIT Kanpur have successfully implemented the project in rural areas of the State.

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83 http://finance.up..nic.in/TreasManual/TMan/T-FHB-HEAD.htm
84 http://kannauj.nic.in/bhulekh.htm
85 archive.eci.gov.in/se2002/pollU.P.d/ac/states/s24/Acnstcand25.htm
86 www.onlinetelemedicine.com/HTML/about_otri/projects_north.htm

**Tarahaat**[87]- Another success story exists in Jhansi where women have been relying extensively on the internet to generate business inquiries from interested customers based worldwide in their handicrafts. They are able to use the Net to negotiate a fair pricing for their products without an intermediary; and also get repeat business from the buyers. Earlier these craftswomen were exploited by the middlemen who used to retain bulk of the sale proceeds from the crafts, giving the women a small share. Now they have started using the Internet for sourcing a new variety of crafts that they are unable to make and in which their buyers are interested. There has been an improvement in their living standards and lifestyle for the last over two years now.

**E-ditricts**[88] - The Government has decided to take U.P. e-district pilot project in six districts till August 2008 with the aim of improving services in at least 10 fields.

The services include issuance of certificates for proof of income, birth, death, caste and marriage and different types of pension, revenue related matters and other utility services. It also includes procuring identity cards, land revenue and pension records and services related to the public distribution system (PDS) and licences. The Government has decided in principle to provide 384 computers, which would be equipped with Internet connection.

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87 ruralinformatics.nic.in/files/4_12_0_229.pdf
88 www.egovonline.net

*Table 7: Services under the e-district project*

| S.No. | Service | S.No. | Service |
|---|---|---|---|
| **Selected Services under e-district project, U.P.** | | **6** | **Pensions** |
| **1** | **Police** | 6.1 | Old age |
| 1.1 | FIR Status | 6.2 | Widow |
| 1.2 | Character Verification | 6.3 | Handicap |
| **2** | **Certificates** | **7** | **Utilities** |
| 2.1 | Caste | 7.1 | House Tax |
| 2.2 | Income | 7.2 | Property Tax |
| 2.3 | Residence | 7.3 | Issuance of RTC (khatauni) |
| 2.4 | Birth | **8** | **Dues from land revenue perspective** |
| 2.5 | Death | 8.1 | Issue of CITATION |
| 2.6 | Handicap | 8.2 | Modifications in the RC |
| **3** | **Right to Information** | 8.3 | Generation of RC |
| 3.1 | RTI Applications for all departments | 8.4 | Tracking of RC |
| **4** | **Grievance** | **9** | **Electoral Services** |
| 4.1 | Limited to 10 Selected Services only | 9.1 | U.P. data on of electoral rolls |
| **5** | **Public Distribution System** | **10** | **Revenue Court Services** |
| 5.1 | Issuance of new ration cards | 10.1 | Case Listing |
| 5.2 | Surrender Certificate | 10.2 | Cause list generation |
| 5.3 | Modification in ration card | 10.3 | Progress tracking |
| 5.4 | Issuance of duplicate ration cards | 10.4 | Final issuance of order |
| | | **11** | **Employment Services NREGA, SGSY,PMRY** |

*Source: sitapur.nic.in/edist/data/UPeD%20AsIs%20Report%20-%20Ghaziabad.pdf*

There are numerous other projects like Property and Land Registry System, GIS based Planning Atlas, Online Counselling for U.P. Technical University, Results on Web, Nagar Nigam computerization, File Monitoring System and web based MPR, which are providing better services to the citizens and MIS for the administrators and policy makers.

The major achievements of such e-Governance initiatives have been the development of an IT culture in government functioning, a quicker and

faster delivery of services to the people, a change in mindset and an increase in transparency in government procedures.

It has to be kept in mind that a project, in order to be sustainable, must be based on a strong business model; a program may touch marginalized sections and/or add maximum value but at the same time, it is important to ensure that the project is not transitory and for a short period of time.

Policy planners should further implement the use of ICTs by:

- empowering and including marginalized sections through evolution of networked states/provinces.

- sustainable/scalable/profitable rural development initiatives

- match potential of Indian states for IT application with actual level of applications in the state with assistance from the Central government.

- developing a domestic market for IT applications to reduce vulnerability from the external environment.

- increasing awareness of potential benefits of ICT in rural development.

The IT roadmap for enhancing e-Governance penetration in rural areas is ready with projects that will give a boost to the IT infrastructure in U.P. like State Wide Area Network, State Data Centre, Centre for Excellence, etc, and with projects that will extend the fruits of ITES (Information Technology Enterprise Solutions) to people of far-flung and remote areas of the state like Community Service Centres, Citizen Information Kiosks, etc...

The hope is that ICT will help to manage rural India's social, political and administrative challenges and become a viable technology for the provision of health, education and other social services.

An additional expectation is that ICT will improve access to the large underserved market that rural U.P. people represent. Indeed, there are clear signs of empowerment as well. State governments and NGOs have been stressing the benefits of ICTs endlessly. Yet, ICTs are not the proverbial silver bullets that can be used to get rid of corruption, poverty and inequality.

**APPENDIX 1**

## Economic profile of U.P.

| | |
|---|---|
| POPULATION (2001 census) | 166197921 |
| MALES | 565369 |
| FEMALES | 632552 |
| SEX RATIO (females/1000 males) | 898 |
| DENSITY OF POPULATION (Persons/ Square Km) | 689 |
| URBAN POPULATION % | 20.78 |
| LITERACY RATE (census 2001) in % | 57.36 |
| MALE LITERACY in % | 68.8 |
| MALE LITERATE in numbers | 48901413 |
| FEMALE LITERACY in % | 42.2 |
| FEMALE LITERATE in numbers | 26817871 |
| BIRTH RATE (PER 1000) (2002)P | 31.6 |
| DEATH RATE (PER 1000) | 9.7 |
| NSDP at current prices (2002-2003)* Rs Crores | 170424 Rs Crores *(2002-2003) |
| PER CAPITA NSDP (2002-03) at current prices Rs State Domestic Product (2002-03) | 9895 Rs *(2002-2003) Rs. 612670 mln. |

**Power**

| | |
|---|---|
| Installed Capacity (96-97) : | 5,575 MW |
| Production : | 2,282 crore KWH |
| Consumption : | 2,667 crore KWH |
| Per capita consumption : | 209 KWH |
| No. of electrified villages : | 87,891 |

**Telecommunication**

| | |
|---|---|
| Number of phones | 5,75,867 |
| People per phone | 241.4 |
| Phone services | DOT, HFC Bezeq |
| Cellular services | U.P.(East): Airtel, Koshika; U.P.(West): Escotel, Koshika |
| Radio paging | IXL, Modi Tel |

**Railways**

| | |
|---|---|
| Railway track length | 8,901 km |

*Source: Directorate of Economics & Statistics of respective State Governments (As on March 26, 2004), Ministry of Health and Family Welfare, Govt. of India*

# APPENDIX 2

## U.P. Budget 2007-2008

The size of the budget has gone up from Rs. 82,849.96 crore in 2006-07 to Rs. 1,00,911.41 crore in 2007-08. Thus there is an increase of 22 per cent.

An expenditure of more than Rs. 10,000 crore is estimated for infrastructure development in the rural areas.

A target of linking 1000 villages with the roads has been set for the rural areas. To achieve this target 3200 kms long pucca link roads would be constructed. An arrangement of Rs. 800 crore has been made for the purpose.

• An arrangement of Rs. 400 crore has been made for the reconstruction of the link roads and small bridges in the Dr. Ambedkar villages and also for the saturation of such villages selected earlier.

• Rs. 377 crore earmarked for the electrification of the villages under the Dr. Ambedkar Gram Sabha Vikas Yojana.

• An arrangement of Rs. 50 crore has been made for the electrification of the tube-wells in the rural areas. From this amount almost 20,000 tube-wells would be energized.

New hand-pumps would be installed in the rural areas under the Rural Drinking Water Scheme during the year 2007-08 and old hand pumps would be re-bored. An arrangement of Rs. 460 crore has been made under this head

Rs. 40 crore earmarked for the construction of under ground drainage system in the rural areas.

• A provision Rs. 160 crore made under the Indira Awas Yojana.

• An amount of Rs. 200 crore proposed under the Scheduled Caste Housing Scheme.

**For the Farmers**
A strategy of extensive reform will be adopted to revolutionise the agriculture sector of the State.

A proposal of Rs. 1,647 crore has been made for agriculture projects. Out of it, Rs. 490 crore earmarked for new projects.

'Kisan Hit Yojna' is being introduced for treatment of *usar*, *banjar* and *beehar* land belonging to dalit and backward people so that their lands could become fertile and their productivity increased. Under it, a target of re-claming 07 lakh hectare land in all the districts has been set for the 11th Five Year Plan. An arrangement of Rs. 106 crore has been made for this purpose in the budget.

A provision of Rs. 86 crore made for encouraging the use of bio-chemicals in farming and for controlling insects and diseases of the crops. The farmers belonging to SC/ST category and the marginal farmers will be specially benefited by the scheme.
New schemes of Rs.100 crore included in the budget to encourage enhanced production of various crops.

Rs. 47 crore arranged for 'Mrida Swasthya Sudhar Yojna'.

Rs. 36 crore arranged for Certified Seeds Production Scheme.

Rs. 15 crore earmarked for State Cooperative Federation for the storage of chemical fertilizers.

**Rural Development**
Opportunities of self-employment will be provided under the Dr. Ambedkar Special Employment Scheme in the rural areas. An arrangement of Rs. 20 crore made for this purpose.

By the end of 11th Five Year Plan, the National Rural Employment Guarantee Scheme would be implemented in all the districts of the State. An arrangement of Rs. 200 crore as state-share has been made.
The 'Sampooran Gramin Gram Yojna' would be implemented in 31 districts and arrangement of Rs. 190 crore proposed.
An arrangement of Rs. 96 crore made under the 'Swarn Jyanti Swarozgar Yojna'.

**Panchayti Raj**
Decision taken to free the State from nature's call in open air by the year 2012.
The grant admissible for the construction of private latrines in the rural areas increased from Rs. 1200 to Rs. 1500.

**Cooperatives**
A target of Rs. 2,280 crore set for the distribution of short-term crop loan through the Cooperative Banks. A target of distribution of Rs. 1,100 crore set for Kharif crop.
A distribution target of 30.50 lakh of fertilisers set under the fertiliser's distribution scheme. A target of 13.33 lakh. set for Kharif crop.
An arrangement of Rs. 67 crore made under the 'Byaj U.P.adan Yojna' so that the farmers could get crop loan at the rate of six per cent.

**PART II**

**CHAPTER V**

**COMMUNICATION FOR RURAL DEVELOPMENT: A THEORETICAL FRAMEWORK**

*"…The main problem we encounter is their lack of a holistic, integrated, multi-disciplinary and inter-sectoral approach in analyzing communication problems as well as in designing and planning communication strategies in support of the rural development objectives "*

*Ronny Adhikarya*[89]

**5.1 The Link between Communication and Development**

Knowledge and information are essential for people to successfully respond to the opportunities and challenges of social, economic and technological changes. But to be useful, knowledge and information must be effectively communicated to people.

Communication for development commonly refers to the application of communication strategies and principles in the developing world, where more than 850 million people are nowadays excluded from a wide range of information and knowledge.

It derives from theories of development and social change and has its origins in post-war international aid programs to countries in Latin America, Asia and Africa that were struggling with factors hindering their progress like poverty, illiteracy, poor health and a lack of economic, political and social infrastructures.

As a matter of fact, after the last remains of European empires in Africa and Asia crumbled in the 1950s and 1960s, a dominant question in policy and academic quarters was how to address the

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89 Senior Training Officer at the Knowledge Networks and Distance Learning Division (WBIKL) of the World Bank.

abysmal disparities between the "developed" and "underdeveloped" worlds.

The prospects that large parts of the post-colonial world could eventually catch-up and resemble Western countries was at the center of development theories; the process by which"Third World[90] societies" could become more like Western developed societies as measured in terms of political system, economic growth, and educational levels (Inkeles & Smith 1974) was  therefore present in all development programs.

In that historical period, development was synonymous with political democracy, rising levels of productivity and industrialization, high literacy rates, longer life expectancy, and the like.

The implicit assumption was that there existed only one form of development as expressed in "developed" countries and consequently the "underdeveloped" societies needed to replicate it.

Since then, numerous studies have provided diverse definitions of development communication. Definitions reflect different scientific premises of researchers as well as interests and political agendas of a myriad of international organizations, NGOs and foundations in the development field.

Recent definitions state that the ultimate goal of development communication is to raise the quality of life of populations, including increase income and well-being, eradicate social injustice, promote land reform and freedom of speech and establish community centres for leisure and entertainment (Melkote 1991).

The current aim of development communication is to remove constraints for a more equal and participatory society.

Although a multiplicity of theories and concepts emerged during the past fifty years, studies and interventions have fundamentally offered two different diagnoses and answers to the problem of underdevelopment. While one position has argued that the

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90 The term "Third World" came into use during the 1960s (it was coined by the economist/demographer Alfred Sauvy in 1952) to distinguish the rest of the world from the two Cold War power blocks of the capitalist West (United States and Europe) and the Communist East (Soviet Union, eastern Europe and China). These were the First and Second worlds, respectively; the rest was the Third World. In recent times, terms like "underdeveloped countries", "less developed countries", "countries in a process of development" or "newly developed countries" are generally preferred.

problem was largely due to lack of information among populations, the other one suggested that power inequality was the underlying problem. Because the diagnoses were different, recommendations were different, too.

Running the risk of overgeneralization, it could be said that theories and intervention approaches fell in different camps on the following points:
- Cultural vs. environmental explanations for underdevelopment
- Psychological vs. socio-political theories and interventions
- Attitudinal and behaviour models vs. structural and social models
- Individual vs. community-centred interventions development
- Hierarchical and sender-oriented vs. horizontal and participatory communication models
- Active vs. passive conceptions of audiences and populations
- Participation as means vs. participation as end approaches

These divergences are explored in the examination of theories and approaches below.


*5.1.1 An Overview of Communication for Development Theories*

Behaviour change models have been for a long time the dominant paradigm in the field of development communication. Different theories and strategies shared the premise that problems of development were basically rooted in lack of knowledge and that, consequently, interventions needed to provide people with information to change behaviour.

The early generation of development communication studies was dominated by modernization theory. This theory suggested that cultural and information deficits lie underneath development problems, and therefore could not be resolved only through economic assistance (such as the Marshall Plan in post-war Europe). Instead, the difficulties in "Third World" countries were at least partially related to the existence of a traditional culture that inhibited development.

"Third World" countries lacked the necessary culture to move into a modern stage. Culture was viewed as the blockage that prevented the adoption of modern attitudes and behaviour.

McClelland (1961) and Hagen (1962), for example, understood that personalities determined social structure. Traditional personalities, characterized by authoritarianism, low self-esteem, and resistance to innovation, were diametrically different from modern personalities and, consequently, anti-development.

These studies best illustrated one of modernization's central tenets: ideas are the independent variable that explains specific outcomes.

Based on this diagnosis, development communication proposed that changes in ideas would result in transformations in behaviour. The underlying premise, originated in classic sociological theories, was that there is a necessary fitness between a "modern" culture and economic and political development. The low rate of agricultural output, the high rate of fertility and mortality, or the low rates of literacy found in the underdeveloped world were explained by the persistence of traditional values and attitudes that prevented modernization. The goal was, therefore, to instil modern values and information through the transfer of media technology and the adoption of innovations and culture originated in the developed world.

The Western model of development was upheld as the model to be emulated worldwide.

Because the problem of underdeveloped regions was believed to be an information problem, communication was presented as the instrument that would solve it.

As theorized by Daniel Lerner (1958) and Wilbur Schramm (1964), communication basically meant the transmission of information. Exposure to mass media was one of the factors among others (e.g. urbanization, literacy) that could bring about modern attitudes.

This knowledge-transfer model defined the field for years to come. Both Lerner's and Schramm's analyses and recommendations had a clear pro-media, pro-innovation, and pro-persuasion focus. The emphasis was put on media-centred persuasion activities that could improve literacy and, in turn, allow populations to break free from traditionalism.

**Communication was understood as a linear, unidirectional process in which senders send information through media channels to receivers.**

Consequently, development communication was equated with the massive introduction of media technologies to promote modernization, and the widespread adoption of the mass media (newspapers, radio, cinemas, and later television) was seen as pivotal for the effectiveness of communication interventions.

The media were both channels and indicators of modernization: they would serve as the agents of diffusion of modern culture and also suggested the degree of modernization of society.

The emphasis on the diffusion of media technologies meant that modernization could be measured and quantified in terms of media penetration. The numbers of television and radio sets and newspaper consumption were accepted as indicators of modern attitudes (Lerner 1958, Inkeles & Smith 1974).

Statistics produced by the United Nations Educational, Scientific and Cultural Organization (UNESCO) showing the penetration of newspapers, radio and television sets became proxy of development.

Researchers found that in countries where people were more exposed to modern media, more favourable attitudes towards modernization and development were to be found.

Based on these findings, national governments and specialists agreed to champion the media as instruments for the dissemination of modern ideas that would improve agriculture, health, education, and politics.

The so-called "small" media such as publications, posters and leaflets were also recommended as crucial to the success of what became known as Development Support Communication, that is, the creation of the human environment necessary for a development program to succeed (Agunga 1997).

The "diffusion of innovations" theory elaborated by Everett Rogers (1962, 1983) became one of the most influential modernization theories. Rogers' model ruled development communication for decades and became the blueprint for communication activities in development. Rogers' intention was to understand the adoption of new behaviours. The premise was that innovations diffuse over time according to individuals' stages.

Having reviewed over 500 empirical studies in the early 1960s, Rogers posited five stages through which an individual passes in the adoption of innovations: awareness, knowledge and interest, decision, trial, and adoption/rejection.

Populations were divided in different groups according to their propensity to incorporate innovations and timing in actually adopting them. Rogers proposed that early adopters act as models to emulate and generate a climate of acceptance and an appetite for change, and those who are slow to adopt are laggards. This latter category was assumed to describe the vast majority of the population in the "Third World".

According to Rogers, the subculture of the peasantry offered important psychological constraints on the incorporation of innovations and, consequently, development.

His view on development reflected the transmission bias also found in Lerner and Schramm: development communications entailed a "process by which an idea is transferred from a source to a receiver with the intent to change his behaviour. Usually the source wants to alter the receiver's knowledge of some idea, create or change his attitude toward the idea, or persuade him to adopt the idea as part of his regular behaviour" (Rogers 1962).

Rogers and subsequent diffusion studies concluded that the media had a great importance in increasing awareness but that interpersonal communication and personal sources were crucial in making decisions to adopt innovations.

This revision incorporated insights from the opinion leader theory (Katz and Lazarsfeld 1955) according to which there are two steps in information flow: from the media to opinion leaders, and from leaders to the masses. Media audiences rely on the opinions of members of their social networks rather solely or mainly on the mass media.

In contrast to powerful media effects models that suggested a direct relation between the mass media and the masses, Katz and Lazarsfeld found that interpersonal relations were crucial in channelling and shaping opinion. This insight was incorporated in diffusion studies, which proposed that both exposure to mass media and face-to-face interaction were necessary to induce effective change. The effectiveness of field workers in transmitting information in

agricultural development projects also suggested the importance of interpersonal networks in disseminating innovations (Hornik 1988). Consequently, a triadic model of communication was recommended that included change agents, beneficiaries and communicators.

Confirming Lerner's and Schramm's ideas, another important finding of diffusion research was that what motivates change is not economics but communication and culture.

This is what studies on how farmers adopted new methods showed. Such studies were particularly influential because a substantial amount of early efforts targeted agricultural development in the "Third World" (Rogers 1983). Other applications targeted literacy programs and health issues, mainly family planning and nutrition.

In the mid-1970s, main representatives of modernization/diffusion theories considered it necessary to review some basic premises (Rogers 1976, 1983).

In a widely quoted article, Rogers admitted "the passing of the dominant paradigm."

Schramm and Rogers recognized that early views had individualistic and psychological biases. It was necessary to be sensitive to the specific socio-cultural environment in which communication took place, an issue that was neglected in early analyses.

Other positions suggested that the traditional model needed to integrate a process orientation that was not only focussed on the results of intervention but also paid attention to content and address the cognitive dimensions (not just behaviour).

Many of these observations were integrated into the diffusion approach.

By the mid-1970s, Rogers' definition of communication showed important changes that partially responded to criticisms.

Development was theorized as a participatory process of social change intended to bring social and material advancement. Communication was no longer focussed on persuasion (transmission of information between individuals and groups), but was understood as a "**process by which participants create and share information with one another in order to reach a mutual understanding**" (Rogers 1976).

Participatory theories criticized the modernization paradigm on the grounds that it promoted a top-down, ethnocentric and paternalistic

view of development. They argued that the diffusion model proposed a conception of development associated with a Western vision of progress.

After decades of interventions, the failure to address poverty and other structural problems in the "Third World" needed to be explained on the faulty theoretical premises of the programs.

Any intervention that was focused on improving messages to better reach individuals or only change behaviour was, by definition, unable to implement social change.

Development theories also criticized traditional approaches for having been designed and executed in the capital cities by local elites with guidance and direction from foreign specialists. Local people were not involved in preparing and incrementing development interventions. Interventions basically conceived of local residents as passive receivers of decisions made outside of their communities, and in many cases, instrumented ill-conceived plans to achieve development.

Because programs came from outside villages, communities felt that innovations did not belong to them but to the government and thus expected the latter to fix things went they went wrong.

Experts learnt that development was not restricted to just building roads, piping water, and distributing electricity. Nor was it limited to efforts to increase farm yields nor switching farmers over to cash crops. Many of the agricultural projects failed because farmers were reluctant to abandon their traditional ways for foreign and unknown methods.

The lack of local participation was viewed as responsible for the failure of different programs.

Participatory theories considered necessary a redefinition of development communication.

One set of definitions stated that it meant the systematic utilization of communication channels and techniques to increase people's participation in development and to inform, motivate, and train rural populations mainly at the grassroots. For others, development communication needed to be human rather than media-centred.

This implied the abandonment of the persuasion bias that development communication had inherited from propaganda theories and the adoption of a different understanding of communication.

Communication came to mean a process of creating and stimulating understanding as the basis for development rather than information transmission (Agunga1997).

Therefore, communication represents the articulation of social relations among people.

People should not be forced to adopt new practices no matter how beneficial they seem in the eyes of agencies and governments. Instead, people need to be encouraged to participate rather than adopt new practices based on information.

This understanding of communication was central to the ideas developed by Brazilian educator Paulo Freire (1970), whose writings and experiences became an influential strand in participatory communication.

Freire offered the concept of liberating education that conceived communication as dialogue and participation. The goal of communication should be conscientization, which Freire defined as free dialogue that prioritized cultural identity, trust and commitment.

His approach has been called "dialogical pedagogy", defining equity in distribution and active grassroots participation as central principles. Communication should provide a sense of ownership to participants through sharing and reconstructing experiences.

He diagnosed the problems in the "Third World" as problems of communication, not information as persuasion theories proposed. Solutions, then, needed to have an understanding of communication that was not limited to the application of Western ideas.

Freire's model and participatory models in general proposed a human-centred approach that valued the importance of interpersonal channels of communication in decision-making processes at the community level. Studies in a variety of "Third World" rural settings found that marginal and illiterate groups preferred to communicate face-to-face rather than through mass media or other one-way sources of communication (Okunna 1995).

Community-based forms of communication such as songs, theatre, radio, video, and other activities that required group intervention needed to be promoted. More than mechanisms to disseminate information, they could provide opportunities to identify common problems and solution, to reflect upon community issues and mobilize resources.

The value of participatory media was not in being instruments of transmission but of
communication, that is, for exchanging views and involving members. Community media dealt with various subjects: literacy, health, safety, agricultural productivity, land ownership, gender, and religion.
There have been a number of paradigmatic examples.
In Latin America, miners' and peasants' radio in Bolivia, grassroots video in peasant and indigenous movements in Brazil, tape recorders in Guatemala, small-scale multimedia in Peru and other cases of low-powered media offered as concrete examples of participatory communication development (Beltrán 1993).
People, not agents or researchers, were central to community participation. It downplayed the role of expert and external knowledge while stressing the centrality of indigenous knowledge and aspirations in development.
**Communication was a horizontal process, diametrically different from the vertical model that placed knowledge in the domain of modern experts.**
Participatory communication identified encouraging participation, stimulating critical thinking, and stressing process, rather than specific outcomes associated with modernization and progress, as the main tasks of development communication (Altafin 1991). Participation needed to be present in all stages of development projects.

Nowadays community empowerment has become one of the main contributions of theories to development communication.
Certainly, participatory communication has not lacked critics. Even though vindicating some tenets of participatory theories, other positions argued that they were elaborated at a theoretical level and did not provide specific guidelines for interventions.

One problem in participatory models is that it is not always possible to involve communities when certain results are to be achieved. In some cases, such as epidemics and other public health crises, quick and top-down solutions are supposed to achieve more positive results.
Participation might be a good long-term strategy but has shortcomings when applied to short-term and urgent issues.

Another problem was that participation in all stages does not have similar relevance. It

is not clear what participation entailed. If decisions are made outside of the community and the latter is assigned the role of implementing and evaluating results, some positions argue, participation is limited to instances that depend on decisions previously made (McKee 1992).

An additional characteristic is that the focus on interpersonal relations underplay the potential of the mass media in promoting development as participation and process. Little attention is paid to the uses of mass media in participatory settings, an issue that is particularly relevant considering that populations, even in remote areas, are constantly exposed to commercial media messages that stand in opposition to the goals set by programs.

Moreover, people can be manipulated into participating. This would violate local autonomy and the possibility that members might not be interested in taking an active role.

Other critics, particularly in Asia, think that participatory models are premised on Western-styled ideas of democracy and participation that do not fit political cultures elsewhere.

Individualism rather than community and conflict rather than consensus lie at the heart of participatory models developed in the West.

Participation can also promote division, confusion, and disruption that do little to solve problems. It may privilege powerful and active members of the community at the expense of the community as a whole. Therefore, education and decision-making skills, rather than participation for its own sake, should be promoted.

Keeping in mind what has been stated before, participatory approaches, in order to be effective,  need to:
- Be sensitive to the potential convenience of short-term and rapid solutions
- Recognize that recommendations for participation could also be seen as foreign and manipulative by local communities (just like modernization theories)
- Translate participatory ideas into actual programs
- Be aware that the communities may be uninterested in spending time in democratic processes of decision-making and, instead, might prefer to invest their time on other activities
- Recognize that communities are not necessarily harmonious and that participation may actually deepen divisions.

Servaes (1996) admits that "*participation does not always entail cooperation nor consensus. It can often mean conflict and usually poses a threat to existent structures... Rigid and general strategies for participation are neither possible nor desirable.*"

To prevent some of these problems, it has been recently suggested that it is preferable that projects are to be carried out in communities where agencies already have linkages (McKee 1992).

Previous knowledge of problems and characteristics of a given community are fundamental to identify activities and define projects.

Development communication requires a long-term perspective that is usually missing among funding agencies and governments interested in getting quick results and knowing whether efforts pay off.


## 5.1.2 Recent Approaches in Communication for Development

Despite its multiple meanings, development communication remains a sort of umbrella term to designate research and interventions concerned with improving conditions among people struggling with economic, social political problems in the non-Western world.

Like development, communication has also undergone important transformations in the past five decades that reflected the ebbs and flows of intellectual and political debates as well as the changing fortunes of theoretical approaches. The changing communication approaches can be summerized as follows:

| The Changing Communication Approaches | |
| --- | --- |
| Traditional <br><br> • Vertical communication – from government/international agencies to people <br> • Unipolar communication systems <br> • Few information sources <br> • Easy to control – for good (accurate information to large numbers of people) and ill (government control) <br> • Send a message | New <br><br> • Horizontal communication – from people to people <br> • Communication networks <br> • Many information sources <br> • Difficult to control – for good (more debate, increased voice, increased trust) and ill (more complex, issues of accuracy) <br> • Ask a question |

The absence of a widespread consensus in defining development and communication conceptual ambiguity and confusion should not be surprising considering that different disciplines and theories have converged in the field of development communication.

There has been a confluence of overlapping traditions from a variety of disciplines that imported vocabularies that had little in common. For example, concepts such as "empowerment," "advocacy engagement of communities" and "collective community action" do not refer to fundamentally different ideas.

Despite the diversity of origins, however, it is remarkable that there has been a tendency towards having a more comprehensive understanding of *development communication.*

The historic gap between approaches has not been bridged but, certainly, there have been visible efforts to integrate dissimilar models and strategies.

Similarly, different approaches have gradually adopted an understanding of communication that is not reduced to the idea of information transmission, but includes the idea of process and exchange.

The idea of "communication as process" has gained centrality in approaches informed by both behaviour change and participatory models. Moemeka's (1994) words illustrate a widespread sentiment in the field:

*"Communication should be seen both an independent and dependent variable. It can and does affect situations, attitudes, and behaviour, and its content, context, direction, and flow are also affected by prevailing circumstances. More importantly, communication should be viewed as an integral part of development plans – a part whose major objective is to create systems, modes, and strategies that could provide opportunities for the people to have access to relevant channels, and to make use of these channels and the ensuing communication environment in improving the quality of their lives."*

Communication is understood as communities and individuals engaging in meaning-making.
It has become a horizontal, deinstitutionalized, multiple process in which senders and receivers have interchangeable roles, according to participatory theorist Jan Servaes (1996).

From a perspective rooted in behaviour change models, Kincaid (1998) has similarly argued that all participants are senders and receivers. The difference lies in the fact that whereas approaches largely informed by the dominant paradigm continue to think of communication as a process that contributes to behaviour change, participatory models are not primarily concerned with "behaviour" but with transforming social conditions.

Notwithstanding important persistent differences among theories and approaches, it is possible to identify several points of convergence that suggest possible directions in the field of development communication.

**- The need of political will**
One point of convergence is that political will is necessary in order to bring about change
(Hornik 1988). Development communication should not only be concerned with instrumenting specific outcomes as defined in the traditional paradigm, but also with the process by which communities become empowered to intervene and transform their environment.

Community empowerment should be the intended outcome of interventions. This requires coming up with a set of indicators that measure the impact of interventions in terms of empowerment.

Empowerment lacks a single definition, however it can refer to communities making decisions for themselves and acquiring knowledge (e.g. about health issues).

If development requires redressing power inequalities, then, it conceivably takes longer time than interventions that aim to change knowledge, attitudes and practices. The pressures for relatively quick results and short-term impact of interventions are better suited for a particular understanding of empowerment (and thus development communication) which is more aligned with behaviour change than participatory approaches. The slowness of policy and political changes required for more equal distribution of resources and decision-making, as advocated by participatory models, does not fit short-term expectations.

There continues to be a tension between approaches that are oriented to achieving results as measured in behavior change and those that prioritize the building of sustainable resources as the goal of programs.

**- A "tool-kit" conception of strategies**

Another important point of convergence is the presence of a "tool-kit" conception of approaches. Practitioners have realized that a multiplicity of strategies is needed to improve the quality of life of communities in developing countries. Rather than promoting specific theories and methodologies regardless of the problem at stake, there has been an emerging consensus that different techniques are appropriate in different contexts in order to deal with different problems and priorities. Theories and approaches are part of a "tool kit" that is used according to different diagnoses. There is the belief that the tools that are used to support behaviour change depend on the context in which the program is implemented, the priorities of funders, and the needs of the communities.

For example, family planning programs in Egypt have been a case of successful integration of different approaches (Wisensale & Khodair 1998). After the intervention, the use of contraceptives doubled and the birth-rate dropped from 39.8 to 27.5 percent in ten years.

The achievements of the program have been attributed to fact that the Information, Education & Communication Center of the State

Information Service used five tools, including the mass media, interpersonal communication and entertainment-education.

The participation of the government, health organizations and religious groups was also considered to be responsible for the success of the program.

There has been a growing sensitivity to the problems of the universal application of strategies that were successful in specific contexts. In countries where political and cultural factors limit participation and maintain hierarchical relationships, participatory approaches might be difficult to implement as they require a long-term and highly political process of transformation. This does not mean that participation should be abandoned as a desirable goal but that interventions that aim to mobilize communities necessarily adopt different characteristics in different circumstances.

**- Integration of "top-down" and "bottom-up" approaches**

Faced with different scenarios and choices, the growing consensus is that a multiple approach that combines "top-down" and "bottom-up" interventions.

Here it becomes evident that development communication has gone beyond transmission models focused on implementing behaviour changes through communication activities.

**- Integration of multimedia and interpersonal communication**

Much of the current thinking is that successful interventions combine media channels and interpersonal communication. Against arguments of powerful media effects that dominated development communication in the past, recent conclusions suggest that blending media and interpersonal channels is fundamental for effective interventions (Flay & Burton 1990, Hornik 1989).

The media are extremely important in raising awareness and knowledge about a given problem (Atkin & Wallack 1990). The media are able to expose large amounts of people to messages and generate conversation among audiences and others who were not exposed (Rogers 1998). But it would be wrong to assume that development mainly or only requires media channels. Because social learning and decision-making are not limited to considering media messages but listening and exchanging opinions with a number of different sources, as Bandura (1994) suggested, interventions cannot solely resort to the mass media. Although television, radio and other media are important in

disseminating messages, social networks are responsible for the diffusion of new ideas (Rogers and Kincaid 1981, Valente et al 1994).

**- Personal and environmental approaches should be integrated**

The revision of traditional health promotion strategies and then integration of social marketing and social mobilization are examples of the tendency to integrate personal and environmental approaches.

"*Communication for Social Change*" (CSC) is another example of recent efforts to integrate different theories and approaches in development communication (Rockefeller Foundation 1999). Whereas traditional interventions were based on behaviour-change models, CSC relies on participatory approaches in emphasizing the notion of dialogue as central to development. Development is conceived as involving work to "improve the lives of the politically and economically marginalized" (1998, 15). In contrast to the sender-receiver paradigm, it stresses the importance of horizontal communication, the role of people as agents of change, and the need for negotiating skills and partnership. Another important contribution of CSC is to call attention to the larger communication environment surrounding populations.

In contrast to behaviour change and participatory theories that, for different reasons, pay little if any attention to the wide organization of information and media resources, CSC calls attention to the relevance of ongoing policy and structural changes in providing new opportunities for communication interventions.

CSC offers a mixed evaluation. It recognizes that transformations open possibilities for community-based, decentralized forms of participation, but also admits that some characteristics of contemporary media are worrisome in terms of the potential for social change.

Unlike participatory theories, CSC stresses the need to define precise indicators to measure the impact of interventions. It is particularly sensitive to the expectations of funding agencies to find results of interventions, and to the needs of communities to provide feedback and actively intervene in projects.

Here accountability, a concept that is also fundamental in contemporary global democratic projects, is crucial to development efforts. Projects should be accountable to participants in order to improve and change interventions and involve those who are ultimately the intended

protagonists and beneficiaries. Because the intended goals are somewhat different from prevoius approaches, it is necessary to develop a different set of indicators that tell us whether changes are achieved. The goals are not only formulated in terms that could perfectly fit health promotion/social marketing/behavior change theories (e.g. elimination of HIV/AIDS, lower child and maternal mortality) but also in broader social terms such as eradicating poverty and violence, and increasing employment and gender equality. These goals express a more comprehensive understanding of development that is not limited to "better health and well-being" but is aware of the need to place traditional approaches in larger social and environmental contexts.

The concentration of information resources worldwide, the growing power of advertising in media systems and the intensification of inequalities that underlie the persistence of development problems require more than ever to examine structural-political factors.

Media systems have changed dramatically in the last decades. These changes, however, have been particularly revolutionary in the non-Western world as privatization and liberalization of media systems radically transformed the production, distribution, and availability of information resources.

The realization that communities should be the main actors of development communication may constitute a starting point for further integration. Likewise, efforts to  integrate theories and strategies that recognize that media campaigns are insufficient without community participation.

Community empowerment might be the ultimate goal to guarantee sustainable development and promote dialogue among different theories and traditions.

### 5.1.3 Communication for Development in International Agencies

The contribution in communication for development is notably translated in the efforts undertaken by theoreticians, researchers and communication professionals working in international agencies that

help to clarify the conceptual and methodological aspects of communication for development.

In such framework, it is impossible to underestimate the important advocacy work accomplished by the UN Agencies through the years[91].

As far as in the early 70s, UNDP (the UN's global development network) launched the concept of *project support communication* (PSC). Agencies such as FAO and UNICEF followed suit and established in time development support communication branches or units.

The intention was that operational communication components should be worked into programme and project documents and budgets. Yet, it soon became evident that the funding made available was not commensurate with the verbal commitments. In the initial stages of these programmes, too heavy an emphasis was placed on providing communication equipment and producing films and other educational materials without understanding their impact.

Later on awareness increased that oral cultures developed special perceptual and conceptual skills in people and that transition to a written culture required training in other such skills (Fuglesang, 1973). During the same period, conscientization was introduced as the essence in a process of communication with the poor. It was based on the idea that the poor were unable to conceptualise and express their real needs and that, therefore, they needed to be empowered.

Nowadays the UN agencies' (FAO, UNESCO, UNICEF, UNDP, etc.) activities in the field of communication for development have inspired developing countries' governments and have served as models for the integration of communication for development in their institutions and policies. This, has contributed to the validation of communication for development as a teaching and research discipline involving practitioners, academics and researchers.

All programmes and projects should foresee dedicated resources for their communication component and award the same importance given to the other sections.

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91 The same working definition of communication for development shall be guided by Article 6, UN General Assembly Resolution 51/172, which "stresses the need to support two-way communication systems that enable dialogue and that allow communities to speak out, express their aspirations and concerns and participate in the decisions that relate to their development."

Moreover communication for development, as a people-centred approach, might have the potential to accelerate the achievement of the time-bound and measurable Millenium Developemnt Goals[92] (MDGs) that stress the responsibilities of ownership, participation and public discourse to be successful.

The MDGs are based on global partnership, have unprecedented political support and are embraced at the highest levels by developed and developing countries, civil society, NGOs-- which have emphasized communication as a tool for mediation-- and major development institutions.

The role of communication is of utmost importance in meeting them.

*Table 1: UN International Development Goals by 2015*

| 1. Eradicate extreme poverty and hunger | Reduce by half the proportion of people living on less than a dollar a day |
|---|---|
| | Reduce by half the proportion of people who suffer from hunger |
| 2. Achieve universal primary education | Ensure that all boys and girls complete a full course of primary schooling |
| 3. Promote gender equality and empower women | Eliminate gender disparity in primary and secondary education preferably by 2005, and at all levels by 2015 |
| 4. Reduce child mortality | Reduce by two thirds the mortality rates for infants and children under five |
| 5. Improve maternal health | Reduce by three quarters the maternal mortality ratio |
| 6. Combat HIV/AIDS, malaria and other diseases | Halt and begin to reverse the spread of HIV/AIDS |
| | Halt and begin to reverse the incidence of malaria and other major diseases |

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92 The MDGs were developed in response to the UN Millennium Declaration of 2000 as a comprehensive and urgent development agenda for concerted action. The MDGs constitute a framework for focusing on the most compelling global development goals and incorporate time-bound, measurable and achievable targets and indicators to encourage stepped-up efforts by the international community in support of them.

| 7. | Ensure environmental sustainability | Integrate the principles of sustainable development into country policies and programmes reverse the loss of environmental resources |
|---|---|---|
| | | Reduce by half the proportion of people without sustainable access to safe drinking water |
| | | Achieve significant improvement in the lives of at least 100 million slum dwellers, by 2020 |
| 8. | Develop a global partnership for development | Open trading system, special needs of least developed countries (LDCs), debt, employment, access to medicines, ICTs |

*Source: http://www.fao.org/rdd/mdg_en.asp*

It is commonly thought that the efforts in achieving the MDGs can be significantly improved at the condition that a participatory communication structure is put in place together with the planning, implementation and assessment of development activities. It is now recognized that communication can root development programmes in local communities and increase their impact.

Communication for development should systematically be taken into account in programme and projects delivery at local, regional and national levels in development context, where the entrance point, even tough international, encompasses the regional and national levels in its dynamics.

## 5.2 Effective Communication in a Rural Context

In developing countries, where the population is largely rural and the agricultural sector plays a central role in the economy, agricultural and rural development is a priority weapon in the battle against poverty and food insecurity.

Agriculture is an information-intensive industry. The sector draws upon infinite sources of widely dispersed 'locally contextualized knowledge' and relies upon continuous flows of information from local, regional and world markets.

Lack of access to and inadequate dissemination of the information required to support agricultural and rural development activities are therefore restricting the ability of stakeholders to respond to market trends and make effective choices in terms of production and marketing strategies.

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**Box 1 - The Lack of Communication in Rural India**

In a country like India where 72% of the population lives in its 640,000 villages, agriculture is the only source of livelihood for a large majority of these people. While Indian agriculture progressed considerably since the days of Green Revolution, most of the farmers – each of whom own just about a hectare of land – remained poor. Because they are small, they do not have bargaining power when they buy farm inputs or sell their produce. Because they live in hinterlands, they do not have access to real-time information on prices and weather or news that impact their incomes. And because the agro-ecological and resource circumstance of each one is different from that of others, it is unviable for any market mechanism to bring them customized knowledge to improve their farm yields.

The infrastructure in rural India – physical, social and institutional – is also weak, compounding these problems even more.

While the organized market players find the aggregate size of rural Indian market very inviting, none venture to service the needs of the individual farmers directly, because it is not remunerative for each of them to do so. Some do attempt, but give up quickly as the customers do not find those offers attractive, because the complementary products from other players are not available at the same time. In fact, the only real option for most farmers is a local middleman, who offers them a complete solution – credit, inputs, market access – but appropriates larger profit for himself by blocking information flow and market signals because he is in a privileged position of being the sole source of information and the sole counterpart for transaction, thus perpetuating the poor living conditions.

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**Rural communication** is an interactive process in which information, knowledge and skills, relevant for development are exchanged between

farmers, extension/advisory services, information providers and researchers either personally or through media such as radio, print and more recently through the new Information and Communication Technologies (ICTs). In this process all actors may be innovators, intermediaries and receivers of information and knowledge at the same time.

The aim is to put rural people in a position to have the necessary information for informed decision-making and the relevant skills to improve their livelihoods. Communication in this context is therefore a non-linear process with the content of data or information.

In rural communication for development approaches, rural people are at the centre of any given development initiative and view planners, development workers, local authorities, farmers and rural people as "communication equals", equally committed to mutual understanding and concerted action.


### 5.2.1 Rural Communication vs Rural Information

It is appropriate to distinguish between communication and information.

Communication is a two-way process in which data and information are sent and received between two or more parties, each with an inherent knowledge and understanding about how the data and information is to be used and of each other (sender/receiver).

Information is basically data which is more or less a passive commodity with little inherent value unless it enriches one or more of its recipients, either in terms of knowledge or in some other material way.

From the agricultural and rural development perspective, communication is considered as a social process designed to bring together agricultural technicians and farmers in a two-way process where people are both senders and receivers of information and co-creators of knowledge.

Much of the work in Communication for rural development focuses on two main areas of application:

1) information, dissemination and motivation
2) training of field workers and rural producers.

Both areas assume as essential conditions participatory audience involvement.
The full potential of development can only be realized when knowledge and technologies are shared effectively and rural people involved in the process are motivated to achieve success.

Present-day farmers' information needs require to be addressed: they are not restricted to technical aspects of growing crops or rearing livestock, but include host of issues ranging from credit and insurance information to market intelligence.

*Figure 1 – Farmers' information needs*
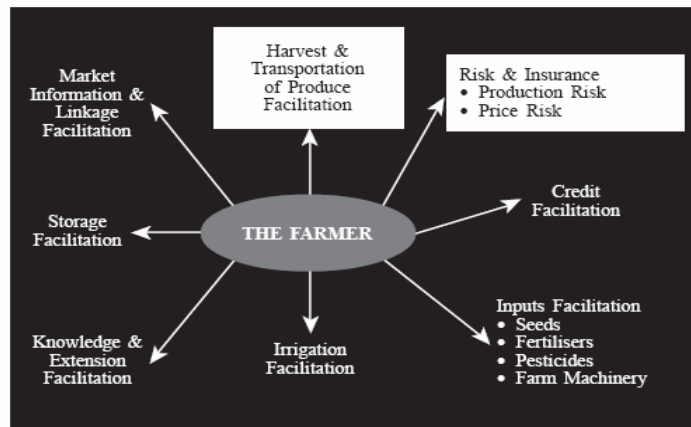


*Source: ITU (2004). Case study India: Enabling rural India with information and communication technology initiatives.*

A study[93] on the information needs of farmers across India established the following needs as central:
1. Farmers need to know:
- What to grow?
- When to grow?
- How to grow more? `
- How to store & preserve?
- When to sell?

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93 "Information Needs Study", Indian Agribusiness Systems Ltd, June 2001 to November 2001.

- Where to sell?
- What price to sell at?
2. Government policy and notices regarding agriculture.
3. Usage of fertilizers for higher productivity.
4. Crop Diseases, preventive measures and in case of disease curative measures.
5. Irrigation details like means, timing, and quantum. Information on water conservation through advanced irrigation technology like Raintip, Drip etc.
6. HYV seeds exact know how on usage in terms of selection, quantity sown per
hectare.
7. Education on what needs to be done at the pre-harvest stage and post-harvest stage to ensure productivity and quality with minimum losses.

Farmers who understand market trends and market opportunities have a better chance of succeeding than those who do not understand the same.
Checking where information goes, how and whether it is taken up and translated into real benefits for communities is required. The key problem is not a lack of information about technology options but failure to deliver it to the right people in the right form.
In the current rural development programs it would be necessary to:
- strengthen information networks to improve the co-ordination among information and knowledge providers
- have a better understanding of the contribution of local information intermediaries in developing poverty-focused and demand-oriented knowledge networks
- develop communications systems that can be maintained beyond individual project and funding cycles
- facilitate the transfer the local knowledge within and between similar communities
- awareness that radio, video and film may be more appropriate and accessible for target audiences.
Rural areas need special attention. Their communication infrastructure is usually thinner than in urban areas, the services fewer, commercially

less attractive and the clientele thinly distributed and less aware of the possibilities and opportunities.

The specific information/knowledge needs on agriculture, livestock, innovation, markets and alternative employment are absolute needs. Remote areas are particularly disadvantaged and may need continued subsidised support in communication infrastructure and services.

### 5.2.2 Challenges to Rural Communication

The situation concerning communication in rural areas of developing countries is characterized by:
- a dearth of information (absence of providers and of local communication content)
- conflicting messages (difficult to know what is relevant/correct information)
- a fragmented market for information with many individual clients or client groups
- relatively few clients scattered over a large area
- structural transformations leading to constantly changing channels and content and a lack of the necessary skills for communication
- a lack of well developed infrastructure and low levels of literacy and ICT skills.

In rural areas, communication needs and available channels are facing tremendous changes through structural transformations: subsistence oriented farming remains the basis for food security especially in disadvantaged areas, while there is a general shift to move intermediate farmers into market-oriented production.

Market-oriented farmers need to stay competitive in an increasingly global business environment. While agriculture remains the mainstay for rural people, information and skills for alternative livelihoods gain in importance, not only as an exit strategy, but also for the increasing division of labour.

Each groups of farmers has specific communication needs and capacities for innovation, management and finance. However, client/demand-oriented service provision for innovation, information,

qualification and local organizational development remains the key driver.

Ongoing decentralisation of government functions and services improve the prospects of local political decision making. These reform processes and their opportunities and consequences need to be communicated properly to rural people. Lobbying by organized groups, as a form of communication to politicians, becomes a necessary activity to voice rural interests. On the other side, efforts to close the information gap and, in particular, the digital divide in rural areas, have been supported by the wider availability and accessibility of communication technologies and infrastructures.


**5.3 A Framework for Successful Rural Communication in Development Projects**

The following framework, based on practical experiences of communication in rural areas and elaborated by FAO Division of Communication for Development, suggests six generic success factors based on a breakdown of the development components necessary for effective communication in rural areas. They are regarded as essential prerequisites for successful project design and implementation. Each of the success factors contains a rationale, an objective in the form of the ideal situation, information on the main actors, the challenges to be overcome and the outline of a development strategy.

*Figure 2- Framework for successful rural communication in development projects*
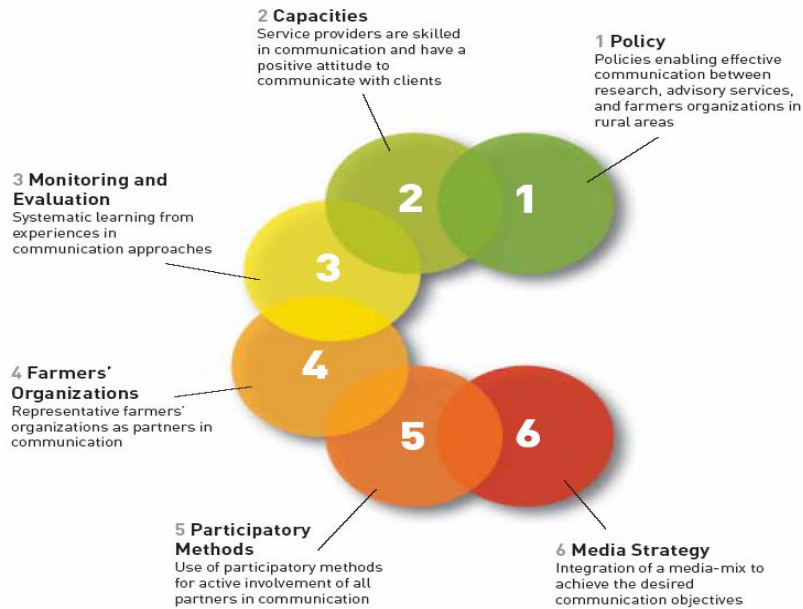


*Source: Effective Rural Communication For Developmen Report, Fao 2006*

**- Success Factor 1: POLICY**
**Policies enabling effective communication between research, advisory services, and farmers' organizations in rural areas.**

Policies set the rules, direction and frame for the development of rural communication, media and services. The legal environment can be enabling, regulatory or prescriptive. Policies define the relative importance and direction of rural development in general, the actors, their roles and capacities in communication, their potential forms of organization and the development of media, channels and infrastructure. An enabling policy environment for efficient rural communication needs to allow a market orientation in the provision of services, a pluralistic approach backed by suitable mandates with user representation, free flow of information and transparent quality standards of services.

The major policy stakeholders are:

- Ministries - to design and implement communication policies (Ministries of Communication, Infrastructure, Rural Development, Food and Agriculture, Science and Education)
- Media outlets - TV, radio, print, internet, either private, public or from the civil society
- Representatives of farmers' organizations – to collect and formulate the communication needs of their clients;
- Development organizations for policy advice and harmonisation of development interventions

If there are no institutional linkages between research, stakeholders and farmers, communication often breaks down. The first key steps are to identify the leading change agents and any potential allies (e.g. other donors), the involvement of the private sector, NGOs and community representatives.

Lobbying the government for policy reforms can often be a long and tedious process and it is imperative to use as many means and conduits as possible.

**- Success Factor 2: CAPACITIES**
**Research, advisory services and farmers have to consider each other as equal and important communication partners and they need to have a common language**.

There need to be channels that allow and demand interactive communication, an infrastructure that permits outreach including well developed communication skills of all partners that favour and support interaction. This must include the resources to enable sufficient institutional, technical, information and methodological capacities for effective interaction between all the stakeholders.

Training in communication for development needs to be included in preservice and in-service training courses. Specialists in this field of work need to be recruited and trained, particularly in advisory services, and need to be given the necessary resources to contribute to development programmes.

When training is given to input dealers giving extension advice in embedded services, emphasis must be placed on the communication issues as well as the technical content.

**- Success Factor 3: MONITORING AND EVALUATION (M&E)**

**Measuring the progress and outcome of interventions is vital in any development situation.**

This is needed not only to assess the effectiveness of the interventions but also to establish replicable working models and to steer the whole process. The key aspect is to ensure that the feedback mechanisms generate information and understanding that can be fed into any project whilst it is still being implemented. This style of approach, using participatory evaluation, also engages stakeholders in implementation and improves ownership. The lessons learned need to be captured in a form which ensures that they can be used in other development situations.

Performance of the system needs to be monitored, especially in terms of impact, i.e. more emphasis on the results of activities rather than the activities themselves.

Involving the key stakeholders through participatory impact assessments requires the joint setting of monitoring criteria and it encourages productive debate about cause and effect linkages and input/output relationships. Thus, it is possible to demonstrate accountability to donors and sponsors, as well as the rural communities themselves. Working in this way also allows for project planning to be based on experiences/results acquired so far. This closed feedback loop further encourages participation and commitment.

In many situations, monitoring is also a basis for transparency and openness by providing evidence or acting as a deterrent or by changing organizational culture.

Effective monitoring of projects also allows for the efficient allocation of resources to meet new challenges or changing situations. Evaluation of projects is usually an ex-post activity dependent on the quality of the data and information collected by the monitoring process. Judgement can then be made on the efficiency of resource utilisation. The approach can be extended to establish a basis for rating the quality of the approach compared to other approaches and styles of intervention (benchmarking). All the actors sign up to, and are involved in, the M&E process.

M&E can be an expensive process and a major challenge to be overcome is the misallocation of resources in M&E practises that cannot be used or interpreted. This leads to inefficiencies, frustration and hampers true progress.

In some societies or situations there is a misunderstanding of the role of M&E. It is often seen as a mere control activity with concomitant sanctions, often collecting irrelevant information and not making any positive contribution to the development activity. Creating a 'learning environment,' which is open to admitting mistakes, is a new and potentially threatening concept to many project implementers.

**- Success Factor 4: FARMERS' ORGANIZATIONS**
**Representative farmers' organizations as partners in communication.**
Rural regions are low density, heterogeneous and fragmented areas that are difficult to be served comprehensively by research and advisory services and even by the media – economies of scale play an important role for these services. The many individual small-scale farmers often lack the means and capacities to demand, organize or finance the information access and communication services they need for development.
Existing farmer organizations are often weak, i.e. not representative, badly managed, not transparent, fragmented, without a long term towards communication, with no sustainable degree of organization and self-finance. Often the members lack the technical skills to access information and advisory services.
The representative and legitimate organization of small-scale farmers in formal or informal groups makes them a viable partner for lobbying for services with (local) government institutions or private providers as well as for demanding quality information and knowledge that suits their real needs.
Farmers' organizations as partners may be cooperatives, associations, unions or extension groups - as common denominators they need to have a structure that ensures their representativity and a level of stability in membership. They may have purely commercial purposes or social objectives as well. Effective farmers' organizations need to be legitimate and representative and be represented, not only locally, but also on regional and even national levels.

**- Success Factor 5: PARTICIPATORY METHODS**
**Participatory methods are tools to involve partners with each other, meaning that they are themselves communication tools.**

Participation in the discussion, decision and planning of rural development requires effective communication. Participation and communication are essential elements for addressing the needs of the rural population, including those affected by poverty.

Participation should become part of the daily routine in planning, decision making and execution/implementation by all players/stakeholders in any type of activity.

Actors for effective participatory communication are individuals and institutions, including advisory services and research organizations, private advisory services, NGOs, local and central governments, farmer and rural people organizations, media companies, colleges and universities, training institutes. Development agencies can advise on proven models for participatory communication in various cultural contexts.

Strategies to improve participation in the communication process include:

- Assessing and understanding 1) levels and modes of existing participation of different stakeholders and their interfaces, 2) perception of participation, 3) different modes of communication.
- Adaptation of suitable methods to local situations with emphasis on giving voice to vulnerable groups.
- Raising awareness on and lobbying for participatory approaches in institutions, organizations and ministries along the knowledge chain (local and central level) and involving their representatives in well facilitated participatory events to give positive experience on benefits of participatory processes (learning by doing).
- Educational programmes at various levels which include inter-disciplinary and participatory exposure and practice in order to create the required openness and develop the necessary skills.
- Convincing decision-makers to introduce and support participatory approaches for communication by inclusion of such approaches in strategies, programmes and funding.


**- Success Factor 6: MEDIA STRATEGY**
**Integrating a mix of media in a strategic manner to achieve the desired objectives.**

Communication activities and media can help to empower farmers in this way. They make it possible to:
- overcome illiteracy barriers (by conveying ideas in an audio and visual form);
- illustrate new ideas and techniques more effectively, improving the impact of extension and training;
- compress time and space (a whole crop cycle can be shown in a short presentation and events and practices in distant locations can be transferred to other places);
- standardize technical information (by creating audio-visual materials to illustrate the best available advice to farmers throughout the extension and farmer training chain);
Media strategies and systems need to be designed so as to encourage ownership and use by all the major stakeholders. Equally the management skills and capacities of the main actors need to be developed through investment in technologies and training.
In most rural areas of developing countries people depend on media channels to get vital information for their livelihoods. Therefore the communication strategy will depend on appropriate media channels that are considered by rural audiences as trusted and reliable sources of information, that speak their language, that are easily accessible and that the information they deliver is relevant to the social context in which they live. All actors need the ability and opportunity to generate, receive, store, retrieve, transform and send information. In fact, managing the information resources of an organization is second only to the management of its human resources.
Appropriate technology packages could be developed and disseminated, and would probably be rapidly adopted because of the farmers' contribution in developing them.

*Figure 3: The sequence for media work*
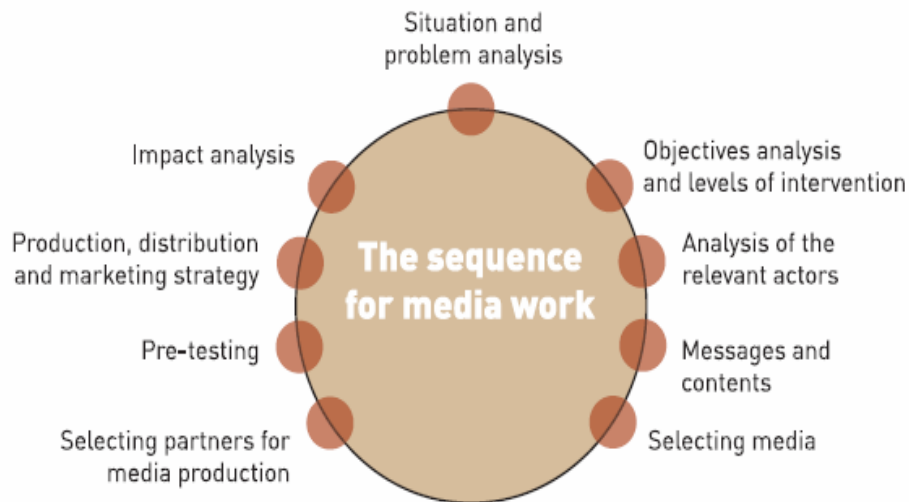
The success factors contained in this framework describe all necessary conditions, challenges, actors and strategies for coordinated interventions in improving the efficiency of rural communication in the broad sense.

In practice, projects and programs cannot work on all necessary success factors at the same time. They need to identify strategic entry points, while observing the other factors that may play a role. Work on such systemic success factors in the framework can even be shared in a coordinated way among several development agencies.

The following matrix can help to find these entry points. It can be used for developing a profile concerning the status of communication in rural areas in a given situation. The matrix is basically a qualitative checklist with the extremes of very unfavorable versus extremely favorable (positive) conditions and the reality is usually somewhere in between. If the conditions for a success factor are negative and if they can be influenced, this factor may be used as an entry point for interventions, or at least as a priority field of work. The positive conditions can also be used for the formulation of indicators in impact

monitoring. The self-assessment exercise may be conducted in small groups or workshops.

The results may also be displayed in a radar diagram with the success factors on policy, capacity, organization, M&E, participation and media strategies as axes. The list is only meant to be indicative and should be adapted to the specific circumstances.

*Table 2: Profile for rural communication*

| Unfavourable Conditions | Present Situation | | | | Desirable Conditions |
|---|---|---|---|---|---|
| | - - | - | + | ++ | |
| **POLICIES** — **Policies** restricting flow of technical information between: <br>> applied research <br>> government extension <br>> information providers and media <br>> private / NGO advisory services | | | | | Policies specifying clear mandates and obligations for sharing of information between organizations and institutions, both public and private |
| Overall **policies** (e.g. PRSP) generally neglecting: <br>> rural development <br>> rural information infrastructure <br>> special information needs in rural areas | | | | | Coherent policies for positive, balanced development of rural areas, including information infrastructure. |
| **DONORS** — **Donors:** No influence of development agencies or other stakeholders in policy formulation on: <br>> pluralism of communication services (state, private, NGO) <br>> freedom of information <br>> media infrastructure <br>> farmers' organizations | | | | | Constructive cooperation of concerned ministries with major stakeholders in negotiation and development of communication and media policy. Development of demand oriented strategies and policies. |
| **Donors:** Many isolated interventions by development agencies in: <br>> regulatory and investment strategies, <br>> capacity development of communication providers <br>> development of advisory services messages <br>> farmers' organizations <br>> infrastructural development | | | | | Harmonised and coordinated policy interventions of development agencies; providers and clients have common goal or vision, clear division of tasks, cooperation and communication on progress. |
| **EXTENSION** — **Extension:** No recognised or applied quality standards for: <br>> necessary capacities of advisory services/ information providers <br>> messages transferred through media and advisory services | | | | | Capable and recognised advisory and information service providers; messages and organizations are clear, following transparent and professional standards. |
| The content of **extension messages** and market information is decided: <br>> centrally <br>> only on technical basis <br>> by state or other non-farmer institutions and organizations | | | | | Rural communities are actively involved in the identification of communication contents, such as problems, search for solutions and development as a routine procedure. |
| **Extension messages:** Isolated technical information and extension campaigns, without testing and follow-up. | | | | | Use of a strategic mix of media in campaigns, geared to impact on a maximum number of farmers. |

# PROFILE FOR RURAL COMMUNICATION

| COMMUNICATION METHODOLOGIES AND CHANNELS | Unfavourable Conditions | Present Situation | | | | Desirable Conditions | COMMUNICATION METHODOLOGIES AND CHANNELS |
|---|---|---|---|---|---|---|---|
| | | -- | - | + | ++ | | |
| | No **capacity development** of communication service providers in:<br>> participatory methods<br>> media use<br>> communication methods<br>> adult education principles | | | | | Communication service providers (extension, advisory, information) use a broad range of qualification offers from professional education to in-service training. Advisory services use adult education methods as a standard approach. | |
| | **Communication channels:** the practice of communication between research, advisory/information services and farmers is:<br>> top-down and one-way flow of information and knowledge.<br>> actors in the AKIS are isolated from each other<br>> the providers are accountable only to external donors | | | | | Demand-oriented communication service providers, creating a positive learning environment. There are efficient mechanisms in place that allow feed-back and formulation of service demands by clientele; the providers are accountable for their services to the clientele. | |
| | **Communication providers:**<br>> have a hierarchical communication culture<br>> do not allow participation in decision making<br>> use one-way communication channels | | | | | Communication providers maintain two-way flow of information and participation for decision making as daily routine. They actively communicate with their clientele and the sources of information. | |
| | The **media strategies** in rural areas are:<br>> not differentiated to various target groups<br>> not context specific<br>> concentrate on one medium only<br>> not designed and implemented by media specialists | | | | | Coherent, strategic use of suitable media mixes (radio, pictures, film, voice, internet etc.) in campaigns, designed and partly implemented by media specialists. The target audiences are analysed and the content of the communication is adjusted to their needs. | |
| | Bureaucratic and administrative **M&E** mechanisms in interventions and media campaigns for:<br>> checking activities<br>> collecting data without consequences for management<br>> controlling personnel<br>> as internal information only | | | | | A comprehensive M&E system (baseline, activity, impact) is used for steering and managing interventions, thus improving transparency and communication. The M&E information is used for lobbying. | |
| **CLIENTS** | **Clientele:** the population in rural areas is:<br>> not or hardly organized<br>> mostly subsistence farmers,<br>> scattered over a large area,<br>> has none or few, representative farmer organizations | | | | | Most farmers are organized representatively in associations/cooperatives/unions etc. Their organizations have a mandate and capacities for playing an active role in AKIS and in lobbying. | **CLIENTS** |
| | **Farmers,** as clientele for communication providers, have:<br>> unclear or unrealistic demands for communication services<br>> no legitimate or representative voice for demanding communication services | | | | | Farmers are able to articulate well defined, representative and legitimate demands to communication service providers that can be fulfilled with the available means. | |

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*Source: Effective Rural Communication For Development Report, Fao 2006.*

**5.4 A Communication Strategy Design to promote Rural Development in current Development Programs**

A communication strategy can be defined as a well-planned series of actions aimed at achieving certain objectives through the use of communication methods, techniques and approaches.

From this definition it can be inferred that before starting to think about the communication strategy it is important to have in mind clear objectives. These objectives will assist in determining how to go about solving the problem. Objectives are the basis of the strategy.

Once the objectives are set, the available resources must be assessed.

The main elements of communication planning are the following:

**1. Situation Analysis and Communication Research:** no communication activities can be expected to succeed without a prior understanding of how the people to be affected by a project perceive their own problems and the development options being proposed, what they aspire to, how they obtain and exchange information, which media sources and interpersonal channels enjoy the most credibility, and so on.

**2. The institutional framework**: development communication is a field of activity that is a mixture of disciplines and there is no one organizational location for development communication that is valid for every situation. Ministries of Information certainly have the media infrastructures, but they do not always have appropriate staff for development communication, whereas the opposite may apply at the Ministry of Agriculture.

For large-scale development projects, it is often economically viable to set up a special communication unit which forms part of the project itself, for smaller projects which cannot justify the establishment of their own communication unit, the institutional framework will require more thought. It may be possible to group several projects in the same, or even in different sectors, if they are working with the same rural populations and create a communication unit that will work with them all.

**3. An inventory of communication resources:** drawing up an inventory of the available communication resources-- covering quantity. quality and impact-- is a fundamental part of communication planning. Where weaknesses are identified, an assessment is made of

the inputs required to bring the facilities up to the strength required to meet the development communication needs.

**4. The physical and technical environment:** the physical circumstances in which the communication activities are to function will have a strong influence on the plan. For example, if movement in a project area is severely restricted by the rainy season for several months a year, mass media such as radio will probably play a greater role than projected audio-visual aids in a group setting. The technical environment is equally important. For example, visual aids requiring a laboratory process that is not available in the country may be impractical. Or relatively sophisticated media for which there is no servicing available locally may cause complications. Such factors need to be weighed carefully in the balance of a communication plan.

**5. The type of communication required**: the communication plan will be influenced by the type of communication support that is to predominate in the project. It should be remembered that development communication encompasses various types of activity. These include communication for participatory planning, for mobilization, for facilitating project implementation, and for grassroot level training. These various media and the approaches in using them lend themselves differently to these activities.

Once the elements of communication planning have been acknowledged, the main features and steps of implementing communication activity are as follows:

**a.** Ideally, before a plan for a rural development project is finalized, there should be a **communication process for participatory planning** with people in the project area. This is supposed to lead to a mutual agreement on the action to be taken, broken down into a series of clearly defined stages.

**b**. Once development actions have been decided upon, **the various groups within society that have a role to play in realizing those actions will be identified**. These groups become target audiences; each will have a different role to play and will need to be reached with different messages and through different channels.

**c. Objectives are set for the attitude and behaviour necessary from each audience** to help the development initiative to succeed, (e.g. better understanding of and greater use of fertilizer by small farmers; or positive and active involvement of school teachers in talking about plant nutrition and fertilizer use with their pupils; or better informed and more active promotion of fertilizer use by community leaders, and so on).

**d. Audience analysis** carried out with techniques such as surveys and focus group discussions. The latter are discussions with groups that represent a typical target audience, for example rural women in the child bearing age, or rural health workers, or male subsistence farmers in a certain area where the farming conditions are similar.

**e. A communication plan for each target audience** is made, identifying the channels to be used, the materials to be produced, by whom, and when.

**f. Message design** i.e. deciding, on the basis of the audience research, how a message should be presented to that audience, talking into account the particular concerns and perceptions of that audience.

**g. The production of materials and their pre-testing**. Materials should always be produced in a draft form and tested with small groups of people who are representative of the target audience for which the material is being produced. This pre-testing, and modification of the materials if necessary, is often neglected, in part because it is assumed that it will take a long time-- which is not necessarily the case-- and in part because producers sometimes lack the humility to subject their work to possible criticism from their audience, and the flexibility to modify it or re-do it if the audience does not understand or appreciate it.

**h. Training of field agents** to use the materials and to back them up properly with good interpersonal communication.

**i. Implementation of the communication plan** through production and use of the materials.

**l. Ongoing monitoring and evaluation** in conjunction with the implementation. Even when pre-testing has been routinely carried out, continuous monitoring and evaluation may reveal that the communication activities are not having the desired effect, and that misunderstandings exist.

**m. The information resulting from the monitoring is fed back into the implementation.** In other words, message design and materials are revised, repeatedly if necessary, to reflect the needs being revealed by the ongoing monitoring and evaluation and until such time as the communication work is being generally appreciated and understood.

**n. A final, or "summative", evaluation** of the impact achieved, problems encountered, etc. is carried out at the end of each communication activity so that the lessons learned can be incorporated into the next activity.

*Figure 4: Steps for a Communication Sstrategy Design*
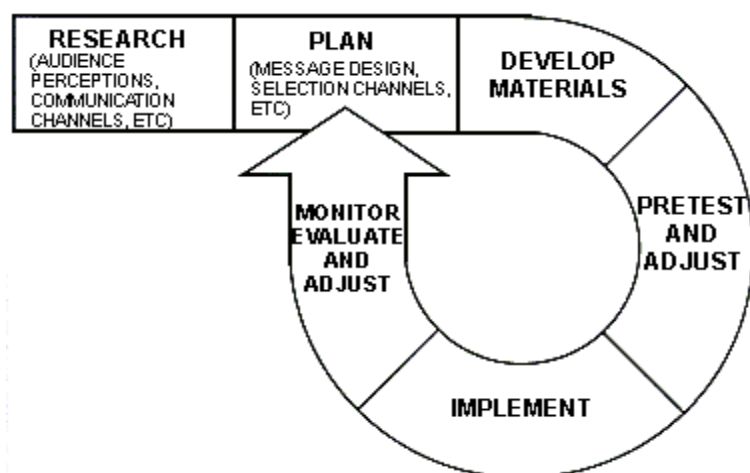


*Source: Fraser C., Sonia Restrepo-Estrada (1998): "Communicating for Development. Human Change for Survival", London, New York.*

*5.4.1 Selecting Communication Approaches and Modes to improve the spread of information*

Communication approaches are ways of using communication techniques, methods and media
to address specific issues in the most effective way. Selecting communication modes and
approaches is a very crucial stage in the Communication Strategy Design.

It is very important to note that the way in which communication materials, techniques and methods are used can have a great influence on the final results. Communication modes and approaches assist in determining which direction the communication should be focused on.

When planning communication strategies, many tend to take a very broad problem as a starting point (desertification, for example), and then to move right into planning communication activities (information sessions, awareness campaigns).The result is that the target is often missed and, despite all the activities undertaken, the problem remains untouched. To avoid situations of this kind, the analyses should start from the needs expressed by local communities and from the identification of  the communication objectives to achieve before undertaking specific activities.

In order to achieve effective communication, the focus should be on:

- **Material and communication needs**: development needs can be categorized broadly between material needs and communication needs. Any given development problem and attempt to resolve it will present needs relating to material resources and to the conditions to acquire and manage these. However, we will also find complementary needs which involve communication like sharing information, influencing policies, mediating conflicts, raising awareness, facilitating learning, supporting decision-making and collaborative action etc. Clearly, these two aspects should go hand in hand and be addressed in a systemic way by any research or development effort.

For example, in a community initiative aiming to manage collectively a forest, there may be material needs such as tools to cut wood, seeds to plant new trees, access to drinkable water, as well as needs related to

learning different techniques, or needs related to the setting up of a community forestry management mechanism.

Sometimes, needs will be identified not through direct answers from community members, but through an observation of the different practices in use or by comparing the answers or lack of answers of the different groups.

The identification of needs must be linked to the problem or to the goal identified previously and to the initiative to be carried out.

-**Communication objectives:** they are based on the communication needs of each specific group concerned by a specific problem or a set of research activities. These objectives are identified and then prioritised. The final choice of objectives may be made on the basis of the needs that are most urgent, or those most susceptible to action. They are then defined in terms of the action which need to occur for the objectives to be achieved.

Generally, in the context of natural resource management, the objectives are linked to one or several of these communication functions: raising awareness, sharing information, facilitating learning, supporting participation, decision-making and collaborative action, mediating conflicts, influencing the policy environment.

Communication objectives should be accompanied by other objectives aiming to:

- develop a management plan
- set up a community mechanism to monitor the plan
- learn specific techniques

It is important to have in mind a general objective that defines the final results to be accomplished, and that serves as the basis for the activities to be undertaken.

For example, it may be very difficult to tell, at the end of a communication strategy for improving soil fertility, whether "reduced desertification risk" has been achieved. It will be easier to ascertain whether the specific community groups with whom the communication facilitator worked understand the process of desertification as it takes place in their own setting, whether they are aware of appropriate protective measures, and have put one or more of these into practice.

But on the other hand, to be too specific may be as problematic as to be too general.

**- Communication activities:** the next stage is to regroup the different objectives and to consider the best way of achieving them. For each objective, the most appropriate modes of communication should be identified.

For example, if the aim of the rural project is to work closely with women on water use, in many settings, it may be better to arrange first for a global meeting with husbands and wives to explain the intention, discuss the problem and then arrange for working exclusively with groups of women, than trying to isolate women for participation in communication activities.

It is on the basis of such strategic considerations that communication activities are then identified and ranked by order of priority.

It is particularly important at this point to be realistic about the feasibility issues and not to compile an endless list of activities that is too ambitious.

## *5.4.2 Identifying Appropriate Communication Tools*

It is common to distinguish between the mass media (newspapers, radio, television), the traditional media (storytelling, theatres, songs), "group" media (video, photographs, posters) and new media (mobile, ICTs).

The media, and the different forms of interpersonal communication, are communication tools.

The expression "communication tools" here, it is to stress the instrumental nature of such media: their purpose in this case is not to disseminate information, but rather to support the process of communication.

In that perspective it is important to choose those communication tools which support two-way communication and are in relation with the objectives to be achieved and the people to be involved.

In selecting the appropriate communication tools, three essential criteria need to be considered:

**- Criterion 1**: **Community Use**. Whenever possible, it is better to rely on the communication tools already in use in the local community for exchanging information and points of view or the ones they are most

comfortable with: this should facilitate the realization of the set of actions decided to implement or experiment with, at the beginning of the planning process.For example, the goal may not consist in producing a video to explain a given technology to a community but to use it as a tool for community members to discuss their own experiences with it and share their learning.

- **Criterion 2**: **Cost.** It is important to consider the cost of using communication tools, the time needed to prepare the materials and the technical environment in which they are to be used (availability of electricity, appropriate premises, accessibility to participants, etc.).

- **Criterion 3**: **Kind Of Utilization.** Select communication tools in the light of the different kinds of utilization.

## 5.5 Media Selection in Rural Development

When considering which media to use in the communication strategy one should keep in mind the problem to be addressed and the stated communication objective.

If the aim is to increase people's participation on a certain activity discussion tools might be used. On the other hand, if the aim is to send a message alerting people on a straightforward topic, it might be decided to use the radio. Before taking a decision it is necessary to revisit the purpose, the situational context, the medium characteristics and the people profiles.

An interpersonal approach (person-to-person or group discussion) is very effective in addressing individual needs and allowing people to express their ideas directly. On the other hand interpersonal communication approaches can reach only a limited number of people and discussions can get monopolized by influential individuals or go in an undesired direction.

Indigenous traditional media (folk drama, theatre, story telling, songs, dance, etc.) belong to this group of approaches and have the great advantage of giving the driving seat to the community. Production of this sort is usually cheaper and allows a certain topic to be developed within the appropriate local context. The disadvantages are that it may reach only a limited number of people and that it may not be available when needed.

Modern media (video, radio, newspapers, booklets, posters, etc.) are very effective in generating interest and providing needed information. They can be divided into visual, audio (radio, cassettes) and print media (leaflets, books, etc.). Visual media (TV, video) have several advantages, namely clarity (explanations can be assisted by images), interest and retention (what you see stays longer than what you hear or read). Audio media (radio, cassettes) are a very good supporting and motivational medium, but it is difficult to sustain interest on longer programs.

Print media can be effective either in passing short straightforward messages (posters) or for treating issues in detail (booklets, books, etc.) however, they also require that people be able to read, which is a major obstacle in many areas.

All of the modern media are expensive, compared to the other types. Very often they are developed outside the cultural context of the communities they are meant to serve. Even their level of penetration is generally low, especially for television, and, partly for radio and newspapers.

No single medium is better than any other. Circumstances and the requirements of the development project dictate which should be used. Audience research concerning what media the people have access to and which enjoy credibility, and what is actually available or could be realistically established, greatly influence the choice. However, it should be remembered that a message arriving in a slightly different form and through different channels has the most impact in helping people towards behavioural change. Hence, multi-media approaches are usually the most effective.

In effect, any information received has to be absorbed and evaluated for its usefulness and appropriateness in the recipients' circumstances before they will act on it. Discussion is an essential element in this process.

The pros and cons of the use of various media in rural projects in developing countries are set out in the following section.

## *Television*

| PROS | CONS |
|---|---|
| - Prestigious and persuasive | - Tends to be monopolized by powerful interests because of its prestige.<br>- Not always available in all rural areas<br>- Expensive production/ reception<br>- Programme production for agriculture can be difficult<br>- Difficult to localize information for agriculture unless there are local TV stations, still rare in developing countries |

Although potentially powerful, television is not easy for agricultural and rural development in most developing countries.

Television is not used the way it could mostly because of the costs involved. In some countries where it is well-developed, community television can host debates and interventions, giving them the reach that working with small specific groups cannot have. But this is seldom the case.

In other countries, there is sometimes the possibility to connect with the producer of development programs and use television to illustrate the realization of a given community initiative, thus influencing other communities to embark on such a venture. But again, this is not very common.

There is a lot of potential though to use television in a participatory way by relying on community television viewing and discussion clubs. Experiences in India and Africa have been quite successful in using that tool. But costs have often made it unsustainable.

## *Radio*

| PROS | CONS |
|---|---|
| -Wide coverage and availability in rural areas<br>- Cheap production/reception<br>- Relatively simple program production<br>- It facilitates localized information | -Weak as a medium for training and education since it is audio only |

Excellent medium for motivation and for drawing attention to new ideas and techniques but weak for providing detailed knowledge and training. As everyone recognizes, rural radio is an especially appropriate tool for reaching large groups, or groups beyond the immediate vicinity. Many producers working with rural radio are aware of participatory communication and will steer clear of the conventional journalistic approach. For example, they will attempt to include discussion panels in their broadcasting and will do their best to make local voices heard.

There are two important provisos, however, for using radio successfully: first, it is important to enlist a producer (or the broadcast authorities) in the initiative and work with him/her in planning the entire communication process. This means an ongoing cooperative relationship, and not just occasional requests for help. Maintaining such a relationship is not always easy and requires constant attention. Secondly, it will be necessary to put together the funding needed to produce the spots or broadcasts (local FM stations often charge less than others), or to seek an exemption from the Ministry or agency responsible. For these reasons, radio is not used as widely as it could by communicators working with participatory approaches involving specific community groups. The use of rural radio should also be combined with field work to ensure that communication flows in both directions: in this case, radio can either follow and support a communication initiative being undertaken at the same time, or it can be made an integral part of that initiative as a means for allowing people to express themselves.

## *Video*

| PROS | CONS |
|---|---|
| -Highly persuasive<br>-Constantly improving technology is making it cheaper and more reliable<br>-Electronic image/ sound recording gives immediate playback and production flexibility<br>-Can be shown in daylight using battery powered equipment | - Multiplicity of standards/formats<br>-Requires talent, skill, and experience to produce good programmes<br>-Requires rather sophisticated repair and maintenance facilities<br>-It may call for quite large capital investment<br>-Colour quality mediocre |

Video has become "the media" in the minds of many. Indeed it is highly effective but calls for a careful strategy and skilled producers. Today, digital video cameras make the use of video simple. They come with batteries that can last up to 7 or 8 hours, and can fit in a small backpack. They also have a screen that can be used not only to capture but also to show immediately the images to a small group of people. They are very easy to learn to operate and handle and make a good tool that community members can use by themselves.

As in the case of photography, video is usually used to illustrate a given problem or to demonstrate a given solution, by way of a program put together by the research team or produced elsewhere.

In cases where the document is produced by the research team, it is always more effective when it is done in a participatory way, including community members in the planning, scenario development and realization.

Video is also more effective when it positions a problem and documents the causes without suggesting solutions. Those are to come from participants viewing the documentary.

As in the example of disposable cameras, it can also be a tool put in the hands of community members for them to show an aspect of a problem or solution, or record a "video letter".

A powerful utilization of video is what is known as the "Fogo Process" (the name comes from a Canadian island where it was first used). In this process, video is used to introduce an issue and is followed by a community discussion. The discussion is captured and shown to the community afterward where it triggers other discussions to bring forth a consensus for action.

In some contexts, the discussion of the issue by a community can also be shown to other communities, where the discussion is also recorded.

### Slide sets/ film strips

| PROS | CONS |
|---|---|
| -Slide-sets quite simple to produce<br>-Low-cost equipment for production and projection<br>-Very good colour/visual quality<br>-Filmstrips made of robust material and are small, easy to transport | -Production requires laboratory process<br>-Cannot be used in daylight without a special rear-projection screen<br>-Turning slides into filmstrips requires laboratory process which is not always available in developing countries |

| -Excellent training medium for all subjects except those few for which showing movement is an absolute essential | |
|---|---|

Slide sets/ film strips have proved an invaluable training aid in rural and agricultural development but they are tending to lose out to video, despite the higher cost of the latter.

## *Audio cassettes*

| PROS | CONS |
|---|---|
| -Easy and cheap to produce programmes<br>-Cassette players quite widely available<br>-Easy to localise information<br>-Good for feedback because farmers can record their questions/reactions<br>-Can be used well in conjunction with rural radio | -Audio suffers some of the weaknesses of radio, though repeated listening may help to overcome it |

Audio cassettes are very good low-cost medium, whose potential has not been sufficiently recognized. They are especially useful if used in conjunction with extension and rural radio. Audio recording can be used to capture the views of community members and stir a discussion afterward on these views. The recording can be played on tape recorders in the context of a community meeting or small group discussions, but it can also be broadcast on the radio when such collaboration has been achieved.

Audio recordings of songs and dances and the use of small audio players can also be effective tools for community members working with the research team to reach other members of their communities.

Audiocassette forums have also been used with some success. In this approach, tape recorders and cassettes are given to specific community groups, who decide on their content and discuss the problems and potential solutions to implement.

## *Flip charts*

| | |
|---|---|

| PROS | CONS |
|---|---|
| -Cheap and simple to produce and use<br>-Good for training and extension support | -Not as realistic as projected aids<br>-Care required to make drawings understandable to illiterates<br>-Lack the attraction of audio-visual materials |

Flip charts are very useful to help extensionists/technicians in their work with rural people. Drawings are notoriously difficult to understand for people with low visual literacy, so careful design and pre-testing are needed. When considering using photography (or drawings), we usually think of taking pictures to illustrate what we want to discuss with other people, and use them during a visioning session, or as cards or posters. It is in fact a very flexible and supportive tool, but there are also other ways to use this tool.

One utilization consists of producing what people in West Africa have called *boîte à image* (flip chart). It is a succession of photographs or drawings that tell a story with three to ten pictures, and without any text. The images illustrate problem situations and situations where the problem is resolved. It is used with the facilitator asking people what they see in the images. This tool is very effective in stimulating discussion, comparing points of view and developing consensus on a given issue.

The images can be drawn, printed or glued on paper or cloth.

Another interesting utilization consists in giving disposable photo cameras to people in the field, asking them to photograph problematic situations they have to cope with or solutions they would like to see adopted and multiplied. An exhibition could be later made and discussions could be conducted to identify strategies for action.

Similarly, photographs can be used with a discussion where people put forth their points of view with the help of what they illustrated or to present a "before" and an "after" situation.

They are also powerful tools in the context of home visits, where they can be used to ask people what they see in the pictures and how they feel about particular situations.

### *Printed materials*

| PROS | CONS |
|---|---|
| -Relatively cheap, simple and easy to produce<br>-Can be taken home, consulted, and kept as a permanent reminder<br>-Particularly valuable for extensionists, technicians, and community leaders | - Of limited use among illiterates but bear in mind "family literacy" as opposed to literacy of individual farmers |

Well designed, carefully written for their intended audience, printed materials can provide a vitally important and cheap source of reference for extensionists and for literates among the rural population. Local press is of course not an interactive medium. But it can greatly assist the efforts of a participatory development initiative, by informing the community or targeted decision makers on the evolution of the initiative. Again, collaboration with a journalist at the beginning of the initiative may develop into a partnership, while occasionally requesting the participation of a journalist may be considered a demand of services.

### *Folk media (Theatre, Puppetry, Storytelling, etc)*

| PROS | CONS |
|---|---|
| -Does not require capital investment<br>-Does not depend on technology that is liable to break down<br>-Intrinsically adapted to local cultural scene<br>-May be highly credible and persuasive where folk media has a strong tradition | - Requires skilled crafting of development messages into the fabric of the folk media<br>-May lack prestige vis-a- vis more modern media in some societies<br>-May be difficult to organize; calls for close working between development workers and folk media artists |

Creative use of folk media-- in cultures where it is popular and well entrenched-- can be a subtle and effective way of introducing development ideas and messages. Care required to ensure that the mix of entertainment and development is appropriate, so furthering the latter without damaging the former. The same considerations can be said of using theatre or other traditional media which should   be

complementary to a process involving a set of interactive activities. Usually, theatre is used to raise awareness on a given issue.

A play will often attract a large number of people in the rural areas, but will not do much by itself to accompany an initiative to resolve a given problem. It must be part of a global strategy and like other communication tools, contribute to the identification of a given development problem and a concrete initiative to be set up.

Theatre debate (where a debate with the audience follows the play) and theatre forum (where some parts of the play are played again by audience members, usually to try to convince a character of the play to change her behaviour) are powerful techniques used to address critical issues. But again, they must be linked to a longer-term initiative in order to accompany a development initiative in the community.

Another strategy is to have specific community groups to participate in the writing and production of the play. When the play addresses specific problems and demonstrates useful solutions, the message is much more convincing when the actors are people from the community.

## *Information and Communication Technologies (Mobiles, Internet, etc)*

| PROS | CONS |
|------|------|
| -Effective in education and information<br>-Access to new markets<br>-Opportunity to find business partners | - Rural areas often lack the required infrastructures<br>-Require talent, skill, and experience both  to produce good programmes for development and to use them<br>-Requires rather sophisticated repair and maintenance facilities<br>-Dependant on the use to which it is to be put, may call for quite large capital investment |

The Internet, especially through the use of e-mail, can link together different community initiatives. This type of communication can motivate the actors in the development initiative and enable them to get support or relevant information or to exchange ideas.

In some cases, it is feasible to produce a web page for an initiative. For the actors involved in the development initiative, it contributes to breaking the sense of isolation and nurtures the motivation to act, knowing that progress on what they are doing can be known around the world.

This information can also be used in the context of a similar development initiative carried out elsewhere, to show what other people have been doing in a similar context.

Portable computers now also come with batteries that can be self-sufficient for many hours. They also fit easily in a carry-all bag. With software like PowerPoint or others, it is easy to store photographs, maps, video sequences, etc. and show them to specific groups in the field or in poor communities where there is no access to electricity. Photographs taken by the community members can also be scanned and integrated into such presentations. Likewise, comparing satellite maps with community maps or viewing the data on the availability of water, and comparing with indigenous knowledge on the issue, etc. can be powerful activities.

## 5.6 Planning and Implementation of a Communication Program for Rural Development

Once the appropriate media have been selected, communication content and materials should be prepared and pre-tested.

Communication is not always associated with producing material and content. When it is however, there are some considerations to keep in mind. The use of communication tools implies not only the development of messages, content and materials, but also a pre-testing phase aimed at confirming the effectiveness and relevance of the messages and materials and the ways in which the tools and materials have been deployed.

Pre-testing is a way of improving ideas and prototypes for materials by submitting them to participating group representatives and obtaining their feedback before the final production stage (or checking whether materials already produced are appropriate to the aims of the development initiative).

This will allow the estimation of their reaction, the revision of the concepts and communication materials and perhaps the amendments of the strategy.

The concepts put forward in the communication materials should be well understood by participants and the material should be suitable.

To ensure that the communication concepts and materials are well adapted to the different groups of participants, a group of representatives should be asked to give their opinion on aspects such as the following:

**- Content of Information**

Understanding the content

Accuracy of information presented

Credibility of the people expressing themselves through the material

The kind of reactions induced by the content

**- Form of Materials**

Interest evoked

Technical quality

**- Materials**

Reaction to formats used

The technical environment necessary to use the material and the life of the material

**- Feedback**

Usefulness of the material for evoking reactions and expression of viewpoints from participants.

For pre-testing purposes, drafts or outlines or samples of the materials intended to be developed should be elaborated. In the case of films or videos, the concepts can be simply presented in the form of text, drawings and photographs.

Producing an implementation plan includes planning to undertake specific activities, identifying responsibilities and tasks, establishing the time line for the communication strategy and preparing the budget for each activity.

The preliminary steps of communication planning are usually:

**- Identification of the Goal of the development initiative**: the researcher or the development practitioner and the community have

first identified a specific problem they want to tackle. An initiative to experiment with a set of solutions or actions is then decided.

**- Identification of specific groups**: the different community groups, policy makers and other development stakeholders affected by the problem or involved in the solution have been identified. The researcher or practitioner, together with community representatives will then identify the specific groups with whom they will work with in priority.

**- Identification of communication needs and objectives:** the needs of each of these groups in terms of communication, information, awareness, learning new knowledge or new techniques, etc., have been identified and prioritized. Based on the needs selected from this list, communication objectives have been identified in a way that spells out what is to be accomplished with each specific group at the end of the communication initiative.

**- First draft of an implementation plan**: to plan the sequencing and the follow-up of the communication activities and to identify areas of responsibility, it may be useful to organize the different choices that have been made in a table such as the one shown below, where each planned communication activity is linked to an objective.

The following table might be useful in order to identify the communication objectives, activities and tools required in a communication initiative.

*Table 2: Activities for a communication plan*

| Communication Objectives | Activities | Communication Tools | Material Requirements | Resource Persons | Budget Requirements | Implementation Period |
|---|---|---|---|---|---|---|
| 1 | 1.1 | | | | | |
| | 1.2 | | | | | |
| | 1.3 | | | | | |
| | 1.4 | | | | | |
| 2 | | | | | | |
| | | | | | | |
| | | | | | | |

## 5.6.1 Planning the Follow-up of the Communication Activities

The planning of the follow-up of the activities will allow to determine whether activities are being conducted as and when planned. To do this it's necessary to recast and complete the table by identifying the following in greater detail:
- The order and sequence of activities
- The timing and the duration, details of date, time and place
- The individuals responsible for each activity
- The partners and resource persons involved, other persons invited
- The material requirements (e.g. room, documents, film projector)
- Budget needs (e.g., cost of gasoline for getting to the activity site)
This table can be used for forecasting the activities before they are carried out, as well as for monitoring the overall performance of the activities.

*Table 2 : Activities for implementations of communication plans*

| Implementa-tion Period | Location | Person Responsible | Observations |
|---|---|---|---|
| 1 | 1.1 | | |
| | 1.2 | | |
| | 1.3 | | |
| | 1.4 | | |
| 2 | | | |
| | | | |

*Source: Bessette, G. (2004): "A Guide to Participatory Development Communication", Southbound/IDRC.*

The preparation of the follow-up plan leads to the identification of the period of time over which the activities will be conducted.

It is important to establish a realistic time schedule for the various activities: making initial local contacts, deepening our knowledge of the problem, planning communication activities, carrying them out and evaluating them.

This schedule should also be consistent with three different calendars:

1) the periods of availability of the different community groups the research team or practitioner intends to work with

2) the agenda of the technical agents involved in the activities

3) The moments of availability of the research team or practitioners themselves

Thus, there are several elements that must be taken into consideration:

- The timing of activities
- The availability of participants and resource persons
- The research team or practitioner's own availability
- The availability of required materials and equipment

Where travel and communication are difficult and where material resources are scarce, the most modest activity often takes much longer than initially expected.

### 5.6.2 The Support Budget

When the time comes to prepare the support budget for the communication strategy and each of its activity, it is necessary to think carefully about the notion of cost. The idea is not to build up an impressive budget, but to encourage groups of participants to take responsibility for activities.

Preparing a budget involves several different stages.

- Identify the human and material resources needed to carry out each activity: resource persons and physical resources; materials and equipment, fuel needs (exchange visits, travel by resource persons), consumable supplies (photographic film, paper, batteries, ink, poster paint, etc.).The participation of resource persons should not usually imply costs chargeable to the budget, except for travel to the locale of the activity. For material resources, it is important to know which materials can be borrowed and which can be bought and produced.

- Review each of the needs, weigh their importance, and find out if there is an alternative. For example, renting chairs for a meeting or providing snacks or meals for participants can hardly be said to be essential.

- For each of the needs, it is important to evaluate those that can be covered by the researcher's or practitioner's own organization, by the budget of the research team, or by contributions from various partners and collaborators. Some costs may be borne by the municipality or local agencies or by the participants in the communication activities. It is important to involve local players in supporting the cost of these activities. Even if the contribution is minimal or symbolic, it allows participants and resource persons to feel a sense of ownership over the activity, and not to regard themselves merely as beneficiaries or as invited guests.

- Estimation of the expenses involved in covering the material resources needed for each activity.

## 5.7 Impacts of Communication by Types of Outcome

In communication interventions, the outcome is generally measured in two ways, although evaluation studies may or may not elaborate both.

The first one involves the examination of the extent to which the target populations adopt, in a broad sense, the communication practices that are promoted. A variety of practices constitute this type of change: listening to media campaign messages, engaging in spousal communication, communicating more effectively with health professionals and clients, probing and activating indigenous knowledge, institutionalizing community discussion groups and so on.

The second one consists of changes, as the result of communication interventions, amounting to the realization of specific programmatic goals, such as a reduction in HIV prevalence.

The aim outcomes of communication programs are to identified in :

- **Evidence of Behavior Change**: the hallmark of development communication intervention is the explicit or implicit desire to modify the way people behave by leading them to the adoption of desirable behavioral patterns.

- **Empowerment and Capability Building**: prototypical development communication interventions are designed to trigger behavioral and attitudinal changes at the individual-level.

- **Coalition Building and Partnership**: contemporary development interventions are not just limited to the traditional resource input model in which financial and technological resources are transferred to the people, but focus on the agglomeration of local and domestic capabilities for development through coalitions and partnerships among groups and individuals.

- **Resource Development**: finally, some of the recent studies in communication for development assess the interaction between communication interventions and the creation of tangible resources. For example, in addressing the problem of soil nutrient depletion, participants can experiment on various low-external input techniques for soil management in order to reduce their dependency on external technologies as well as to make soil management more economical.

# CHAPTER VI

# A COMMUNITY MEDIA PROJECT IN UTTAR PRADESH

*"The state of community media around the world is in some instances in a process of evolution, in others more like revolution"[94].*
                    D. Mackenzie, in *"The Social Shaping of Technology" (1999)*


## 6.1 Background of the Project

This study presents the findings of the pilot project entitled *Enhancing development support to rural masses through community media activity*, launched in 2005 by the Department of Mass Communication and Journalism of the Faculty of Arts of the University of Lucknow and by the local NGO Bharosa with the financial support of the Delhi University Grants Commission.

The project aimed to involve rural villagers, and especially farmers, in a participatory community media project. The goals of the project included, but were not limited to, using appropriate tools and technologies in order to:

- teach and empower underprivileged rural villagers to use media to research, collect, analyze data, document and disseminate information to their communities on current issues like agriculture, education, commerce and governmental schemes.
- enable farmers to access markets and making informed choices (what to grow, where, when and how to sell) thus increasing household incomes
- benefit rural areas of the district of Lucknow where print and non print media are limited or not available.

The project intended to train rural villagers to become innovators for the benefit of their local communities and the improvement of their living conditions. It is a known fact that where communities have a

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94 Mackenzie, D. (1999), "The Social Shaping of Technology", 2nd edn. Buckingham: Open University Press.

ready access to information and knowledge, people more have sustainable and equitable opportunities for growth and progress[95]. Being informed of current affairs, especially those affecting them directly, can help people to make their unheard voices heard.

The activities – which lasted for 3 years and terminated in January 2008 – took place in two rural villages in two distinct blocks, namely Kumhrava e Barhi Gaghi, in the district of Lucknow.
In Kumhrava a community rural newspaper was conceived, written and published.
In Barhi Gaghi a multipurpose community internet centre was established and informative activities were carried out. Basically two different media (the "traditional" newspaper and the "innovative" internet) were used in a participatory way to achieve an over-all rural development of the selected areas.
The two initiatives were accomplished simultaneously therefore the planning and the coordination of the different activities, as well as the evaluation, required extensive preparation, accurate care and well-timed actions.

The management of the project was under the supervision of the Department of Mass Communication and Journalism, which was also responsible for the ex-ante baseline survey, the development of contextually relevant community media applications, the training of local villagers and the ex post evaluation. The local NGO Bharosa was in charge of the coordination of some activities on the field, mainly training and informative activities, and was basically a support for the University staff more than an active partner.

The study represents an attempt to provide answers to three main research questions:

*1) What defines a meaningful community media practice?*
*2) Do community media & technology practices contribute to empower communities?*

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95 "Making New Technologies Work for Human Development", Human Development Report 2001 (available at http://hdr.undp.org/en/reports/ global/hdr2001).

*3) Is the community media sector sustainable, effective and viable in the Indian rural context?*

The answers to these questions were searched through an extensive research including face-to-face interviews, questionnaire-based analysis on people' awareness and response to media use and training.

Community media projects like this one have been rarely carried out in India which hasn't a proper community media tradition. Even though the Government of India has recently focused its policies on the right of information and knowledge for all its citizens (see Chapter 2), media still continue to be almost exclusively driven by commercial considerations, thus excluding the rural communities who
are often unable to understand the various facets of information provided by the commercial media.
The management of the project was in itself a kind of novelty in U.P.: so far, the majority of media initiatives for improving rural conditions in UP has been carried out through national programmes which are large-scale and target driven in nature, but often unable to involve local participation in planning and decision making, nor ensuring adequate follow-up measures.

## 6.2 My Role as Western Researcher

I arrived in Lucknow for the first time in 2006; I had been invited to a conference at the Indian Institute of Management. I didn't know Uttar Pradesh and I had little knowledge both of community media and of the information gaps in the Indian rural areas.
During that rather short but intense period, I came to know the vibrant atmosphere of the University of Lucknow and got in contact with Dr. Mukul Srivastava.
He told me about the community media project he had launched. He was so enthusiastic about it that he transmitted me curiosity and interest: I followed him during one of his visit to Kumhrava.
Six months later, in December 2006, I joined the staff of the project and worked with them as volunteer.

Despite being the only woman in a team of only men, I was warmly welcomed from the very beginning. Even though I was meant to be an external observer – and follow the activities of training, monitoring and evaluation without getting personally involved - I gradually became active part of the staff. I travelled with Dr. Srivastava to the villages, I helped in organizing the different phases of the project and in preparing interviews.

I personally elaborated the questionnaire which was distributed to the villagers at the end of the project activities and helped the staff to elaborate an analyses of the outcomes.

I was also very welcomed in the villages. The first time I visited Barhi Gaghi and Kumhrava I told villagers about my origins and my role in the project. I ask them to pose me questions: I assured them that my recordings, transcriptions and field notes would have remained confidential.

I tried carefully not to be intrusive or disruptive: after all I was nothing but a foreigner Italian woman researcher to them.

As it can be reasonably evident, the language has been a major obstacle to my field work: only a few people could speak English in the villages and I couldn't speak Hindi.

In most of the cases I was helped by the university staff who translated for me but the communication to the rural villagers was always (except in some cases) mediated.

That, combined with the discontinuity of my presence on the field, have been the main problems I encountered during my two years' activities in U.P.

From the theoretical point of view, my approach to the project was that of a Western European researcher: the society in which I was operating was essentially an alien culture to me.

I had in the mind the teaching of Louw (2004): in his writing he makes reference to differences between the way in which Western-oriented people and Indians in general analyze events.

According to Louw, an Indian's analysis of reality refers more to the moment and the past while a Western-oriented person's analysis of reality will refer more to the future, thus leading to different interpretation of the reality.

In traditional Indian culture, people are generally more community-

oriented than in Western cultures. Beller (2001) refers to them as living in what he calls a we-community.

In the West, the individual is often considered the most important social unit, and individual ownership of technology is taken for granted. Each person aspires to owning his own PC, cell phone or television: in India, as in many other Asian cultures, by contrast, the emphasis is on the community, not the individual, and sharing of technology is commonplace. Sharing is viewed as a social good: this aspect was a benefit for all the collaborative activities that were carried out.

What I noticed as particularly interesting during my visits to the villages was the relationship between technology and religion in rural India. For example, the idea of "constant connectivity," of 24-hour access to information seven days a week, is viewed as technological progress in the West: but the Hindu religion prescribe times for worship when followers should be explicitly disconnected from the everyday world. For these consumers, "always on" may not be an attractive option.

Ensuring that technology is compatible with spiritually was something more I learned from the project.


## 6.3 Methodological Overview

In order to develop community media projects successfully, all initiatives should be based on the understanding of the local context and of the people involved in it: observation, data collection, data analysis and data interpretation should be therefore organized as to provide a complete framework of the agenda and of the various ways to conduct activities (Onwuegbuzie, 2002).

The methodology used during the project was based on a mixed approach consisting of both qualitative and quantitative data.

Qualitative researchers study phenomena in their natural settings and attempt to make sense of or interpret phenomena in terms of the meanings that people bring to them (Denzin & Lincoln, 2003). Qualitative research can also give coherence to different kinds of data and explain how the different parts work together. The primary elements in qualitative research are the researcher, fieldwork, inductive

strategy, and rich case description (Merriam, 1998).

Quantitative research is instead directed at analyzing the relationships and regularities that appear between selected factors (Merriam, 1998). Thus it generates measurable changes and produces data that are more generalizable than in qualitative research (Cohen, Manion & Morrison, 2000).

The present research applied specific methodologies to the various phases of the project.

The methodologies are presented in the following paragraphs.


### 6.3.1 Baseline Survey Methodology

A baseline survey was employed in order to have a comprehensive picture of the socio-economic conditions of the two villages. Quantitative data (number of inhabitants, of households, of infrastructures) were gathered together with qualitative data (for example the quality of current information at disposal of rural villagers to meet their needs).

Part of the quantitative data were collected through the Census of India 2001 and part through a simplified version of the "village development index" (VDEVELOP): we determined 33 parameters and evaluated their status (in terms of presence or absence) in the village or in its proximity.

The infrastructures (availability and access to electricity, telephones, roads, drainage, water, schools, shops, etc) were the focus of the survey.

100 household surveys (50 in Barhi Gaghi and 50 in Kumhrava) were consequently carried out in order to understand household composition, income, religion, language, media use and information sources of the local villagers.

Villages in India are typically multi-caste, with no two villages being identical in either the number of castes or in the numerical strength and wealth of each resident caste (Srinivas 1987).

For example, in Uttar Pradesh an average village with 150 to 300 households may have 15 to 25 castes

represented in its population (Ahmad and Saxena 1994). Moreover, a given caste group may occupy different positions in neighbouring villages (Srinivas 1987).

The caste composition and occupations were nearly the same in both villages: as a consequence, the information needs were also very similar.

Qualitative data were collected through face-to-face interviews.

Staff focus groups were organized at the end of the baseline survey to identify salient aspects of organization and project's operations.


*6.3.2 Field work Methodology*

During the first phase of the project on the field, the one concerning the development of the community media project, a qualitative ethnographic action research approach was applied.

Ethnography is traditionally based on long-term engagement in the field of study, or field site.

A key method is participant observation, where the ethnographer participates in the society or culture being studied (i.e. he lives amongst those people) yet retains an analytical or observational position so that through reflection and analysis the ethnographer can describe and interpret the subject of the study.

An ethnographer looks for patterns, describes local relationships, understandings and meanings.

Ethnography takes a holistic approach to the subject of study that is, the ethnographer looks at the whole social setting and all social relationships. That includes the participants (how they are organised, how they carry out their work, how the project fits into their lives), the users (their everyday lives and ways of doing things), the wider social context of the project (e.g., social divisions within the community, language issues, local economy, social and cultural resources, power and institutions in the community) and the social structures and processes beyond the community (e.g., infrastructure, government policies, economic developments).

Ethnography is an approach to research, it is not a specific method like participant observation, or interviews, or surveys. In fact, it is a multi-method approach: we do not carry out and analyse a survey, for

example, separately from our interviews or in isolation from the diaries or field notes that our volunteers or participants write. We try to look at all this knowledge and experience together and in relation to each other.

A key feature that distinguishes ethnographic action research is that it involves people in all four stages of planning, doing, observing, and reflecting.

*Figure 1: Ethnographic action research's stages*
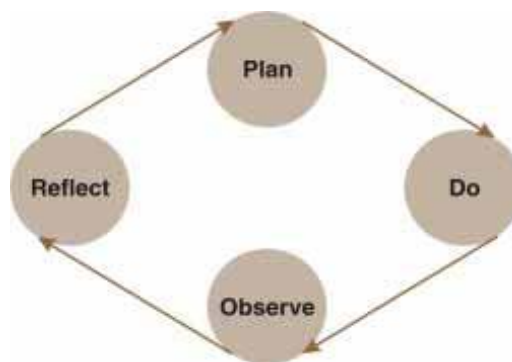
Using participative methods ensures that the aims, methods and analysis of research arise from, and then feed back into, a rich understanding of the particular place and project being developed.

Research is focused on how problems and opportunities are defined by people locally and allows

research methods and the project itself to be creatively adapted to the local situation.

During our community media project there has never been a simple division between "us" (researchers) and "them" (research subjects). Hence, we tried to involve participants both as informants and as fellow researchers.

Through ethnographic action research we tried to develop the project through a rich understanding of the communities and active participation (the people who should benefit from the research participated in defining the aims and direction of the research).

Our research demonstrated from the very beginning to be flexible, responsive and diverse - in a word, creative.

By always keeping in mind the 4 questions (What are we trying to do? How are we trying to do it? How well are we doing? How can we do it differently/better?) we managed to adapt, add and change as necessary.

Participant observation, the keeping of field notes, face-to-face interviews and group discussions were central aspects of our method. Supplemented by questionnaire surveys, content analysis and information sharing exercises, we selected, mixed and matched the approaches depending on the research needs which in turn was dependent on the needs of the project and its development.

Data generated by these various methods was analysed as a whole, each data stream feeding into the total research picture, producing themes and findings that could be further explored and tested through different methods and through practice.

The results of face-to-face interviews- which involved more than 'yes' or 'no' answers - and of focus groups – which involved two or more participants- helped us to develop both qualitative and quantitative data (concerning the outcome of the project).

The phase of the "Information needs assessment" was naturally of utmost importance for the development of the project. Information requirements needed to be identified in order to plan the communication activities in a proper way.

### 6.3.3 Training Methodology

During the training period – which lasted eight months from January 2006 to August 2006 - we tried to build a good learning environment where a dynamic interaction between instructors, learners and tasks could provide an opportunity for learners to create their own truth due to the interaction with others.

A kind of social constructivism approach was thus emphasized. This particular methodology looks for explanations and generates usable knowledge. Knowledge is not passively received but actively built up by the cognizing subjects. "The function of cognition is adaptive and serves the organisation of the experiential world, not the discovery of ontological reality" (Von Glasersfeld, 1989).

Learning occurs through interaction and reflection. Learning is viewed as a social process: it does not take place only within an individual, nor it is a passive development of behaviours that are shaped by external forces (McMahon, 1997).

Lave and Wenger (1991) assert that a society's practical knowledge is situated in relations among practitioners, their practice, and the social organization and political economy of communities of practice. For this reason, learning should involve such knowledge and practice (Lave & Wenger, 1991; Gredler, 1997).

Social constructivism is problem-oriented and utilizes practical goals. The aim in using this method is to achieve understanding while continuing on a functional level to innovate and solve problems as they arise.

Social constructivist approaches in this project included reciprocal teaching, peer collaboration, cognitive apprenticeships, problem-based instruction, web quests in the case of the Internet centre, and other methods that involved learning with others.

### 6.3.4 Outcome Evaluation Methodology

Outcome evaluation examines the project's outcomes, which usually means the effects of grantee strategies and activities on its target audience. Usually at least 5% of the total campaign budget should be devoted to the evaluation.

In the case of this project, financial resources were not enough to comprise an outcome evaluation budget.

As a consequence, the evaluation was carried out by the staff on free voluntary base: I personally gave my contribution by elaborating and writing the questionnaire that was distributed to the villagers at the end of the project. The questionnaire implied multiple choice answers and was divided in three main sections (the first one regarding content issues, the second one regarding the general level of satisfaction of the users and the third one regarding benefits and negative aspects of receving more information). I drew inspiration from UNESCO questionnaires which were used in other similar projects and tried to develop a comprehensive questionnaire.

In general the staff was very committed to find out whether the project had had an impact on the target communities and in which terms.

*Table 1: Summary of methods and research materials*

| Methodology | Actions | Material | Contribution |
|---|---|---|---|
| Baseline Survey | Census of India combined with the Village Development Index | Quantitative data on inhabitants, households, infrastructures, etc. | Expand numerical scope of findings |
| | Household Interviews | Questions on household composition, income, employment and economic condition, education, social dynamics, media consumption and resource sharing, communication gaps, common means of communication. Conducted in households, usually with several members present | Rich investigation of ways of life and role of communication needs and media |

| | Staff<br>focus groups | Definition of all aspects of organization and its operations | |
|---|---|---|---|
| In the Field (qualitative ethnographic action research) | Group Discussions | Discussions with users of computers/internet and participants in both community media activities. Identification of information needs and general questions concerning their way of life | Insight into operation of project; relation of participants to project as organization |
| | Face-to-face users interviews | Social gatherings, homes, communication centres | Insight into communication Needs, learn through participation, observe spatial and material culture |
| | Participant observation | Socializing, participating in project activities | |
| | Informal | | Building more confiding relationships, informal conversation, agenda arises from discussion |

| Training Methodology (social constructivism) | Social interaction (reciprocal teaching, peer collaboration, etc.) | Field notes | Collaboration among learners and with practitioners |
|---|---|---|---|
| Outcome evaluation | Questionnaire | Filled out questionnaires | Evaluate the project outcomes and impact on the villagers |
| | Final survey | Informal interview | Identify the main sources of information for villagers |

Interviews denote in-depth discussions generally lasting an hour or more. There were in addition numerous informal chats (not included in the table).

Nearly one month after the end of the community project, a survey was conducted in order to assess whether there had been changes in the way villagers search for information and if the community media had become or not their main source of information.


### 6.3.5 Ethical Considerations

The ethical basis of the research has been assured by frequent joint consultations and agreements with all participants (the staff members of Lucknow University on one side and the rural villagers on the other) who participated in the development process. This means in effect that the university has been carefully appraised of what has happened in the research.

The privacy, anonymity and confidentiality of the rural people have also been assured by various measures. They were also explained that data from the research questionnaires, observations and interviews would have no effect on their position in the village and/or in their jobs. All research
outcomes were reported in a way that the anonymity and confidentiality of all participants were assured. (Cohen et al., 2000)

When referring to the project staff I sometimes used the term "WE" .

This is a simplification partially due to the fact that I felt part of the team.

Moreover, I normally use the past tense when referring to the project, this because, at the moment of writing, the project was over.


**6.4 Limitations of the Study**

Due to budget limitations the study could be only carried out in two villages and the evaluation of the project was completed on voluntary basis.

It would have been interesting to launch community media activities in at least one more village and to have more funds in order to have a more comprehensive framework of the project's impact on the local populations.

Almost no women took part to the activities in both villages, even though there were highly skilled and ambitious women.

Gender raised therefore an issue that was frequently and openly discussed by staff and interviewees.

Above all, local families were reluctant to let female members (whether daughters or wives) join the activities, be it the rural newspaper or the village internet centre. Parents felt in particular that their daughters should not work in mixed groups.

Age represented another issue. Internet attracted youth more than the rural newspaper, thus leading in a younger group of users in the case of the Internet centre.

Local language issues also raised concern. India shares with many parts of the world general problems of linguistic localisation when we consider the use of internet and of the computer in general (these include for example adapting keyboards to languages that involve over a hundred characters and getting the right fonts for a wide range of software).

Access to Internet equates to providing local language computing framework and tools to translate and display information in the languages spoken by the users. Publishing content means using these tools to generate information in the required local languages. Inability to do computing in local languages is a major obstacle to providing universal access to information and learning.

During the computer and internet training we managed to work by using predominantly sites in Hindi that could be easily accessed and used by the villagers. The necessity to have local content in the local language was a main requirement during the all course of the project.

## 6.5 The Community Media Project at a Glance

*Table 2: Scheme of the project*

| PARTNERS | BUDGET | DURATION | VILLAGES INVOLVED | ACTIONS |
|---|---|---|---|---|
| 1) The Dept. of Journalism & Mass Communication of the Faculty of Arts of the Lucknow University<br><br>2) Bharosa – local NGO based in Lucknow<br><br>Staff involved: 8 people plus many volunteer students | The project has been funded by the Delhi Grant Commission in the sum, of Rs. 574.600 (9.941,48 euro) | 3 years (Jan.2005 – Jan. 2008) | 1) Barhi Garhi from Malihabad block (this block is made up of 100 villages)<br><br>2) Kumhrava from Bakshi Ka Talab block(this block is made up of 197 villages). Both villlages are in the district of Lucknow | 1) Community rural newspaper in Barhi Garhi<br><br>2) Community Internet centre in Kumhrava |

## 6.5.1 The Department of Journalism & Mass Communication of the Faculty of Arts of the Lucknow University[96]

*Photo 1: Entrance of the Department*



The Department of Journalism & Mass Communication came into existence in 1992 and is a premier education centre.

Dr. Ramesh Chandra Tripathi is the present Head of the Department. The department has a well equipped 'Electronic Media Lab', Computer Lab, Photo Lab and a Library enriched with rarely available precious books on journalism, public relations, audio-video production, computers, ethics, law and skill of writing.

The staff from the Department has been the initiator and implementer of the community media activities in both villages. Under the leadership of Dr. Mukul Srivastava, Senior Lecturer in Electronic Media and Photography, three researchers and three students (plus many volunteer students) have worked to make the execution of the project possible: Dr. Mukul Srivastava and his staff were completely devoted to the cause of enhancing rural development and improving the living conditions of the rural villagers.

They were committed to ensure that the project would have been more than the donation of equipment; the focus was on the "thinking process

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of what it takes to create a sustainable environment with a cheap business plan"[97].

### 6.5.2 Local NGO Bharosa[98]

*Photo 2: Entrance of Bharosa*



Bharosa (meaning "the trust") is a grass root level NGO based in Lucknow whose main activity sectors regard rural development, food and nutrition, health and sanitation.
Since 1997 it is working thanks to funds provided by the Naz Foundation International[99] and with the help of volunteers and donations.
Its role is to provide supportive advice, accurate information and counselling working to foster rural development; it conducts relevant

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97 Declaration by Dr. Mukul Srivastava pronounced during a visit in Kumhrava (April 2007) and contained in my field notes.
98 www.bharosatrust.com
99 It is a charity working in England, America, India and Bangladesh, providing education, counselling, support services. (www.nfi.net)

research basically on health issue and publishes the results of such researches. It produces various forms of literature and audio-visual materials.

It carries out field work and works in cooperation with other agencies: its team builds up friendship and networking in a variety of locations, building a sense of community affiliation.

With a budget ranging between five Lakhs to twenty five Lakhs (500000 - 2500000), the aim of the NGO is to work with the oppressed masses towards a more democratic and decentralized working which will help them improve their standard of living.

Its overall aim is to provide opportunities through the development of community based structures.

The staff of Barhosa is made up of 3 employees (2 full time and 1 part-time).

The employees supported the staff of the Department of Journalism & Mass Communication in preparing training activities. They were not responsible for the overall project management.


### 6.5.3 Budget

The budget was provided by the Delhi University Grants Commission[100] which is the apex monitoring body of the higher education in the country. It provides funds and coordinates and determines the maintenance of standards in higher education institutions and scientific research.

The budget - for the all length of the project - was of Rs. 574.600 (equivalent to 9.941,48 euro[101]).

Below the grant details are illustrated.

Grant Details:

| | |
|---|---|
| Equipments | 120.000/- |
| Books & Journals | 80.000/- |
| Project Fellows | 216.000/- |
| Contingency | 45.000/- |

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100 http://www.ugc.ac.in
101 1 INR = 0,0172986 EUR / 1 EUR = 57,8083 INR (currency data as on 15th of January 2008).

| | |
|---|---|
| Hiring Services | 25.000/- |
| Travel / Field Work | 60.000/- |
| Overhead Cost | 28.600/- |

The budget was very limited. Such a small amount of money couldn't include the management cost of the evaluation, which as explained before, was accomplished on voluntary basis. I personally prepared the evaluation questionnaire and analysed its outcomes.


## 6.6.First Phase of the Community Media Project

### 6.6.1 Justification for the Selection of the Villages

The selection of the villages took place at the Department of Journalism & Mass Communication in Lucknow.
The names of 6 villages from different blocks of the district of Lucknow were written on separate slips. These 6 villages had been pre-selected according to the following criteria:
- they reflect the typical rural scenario of an Indian village
- they are close to the University of Lucknow for easy monitoring and they are connected to Lucknow via pucca road[102]
- they had previously agreed to a base-line survey.

The slips were put in a container  and subsequently two were picked up randomly by lottery method.
Through this method Bar Garhi from Malihabad block (a block made up of 100 villages) and Kumhrava from Bakshi Ka Talab block (a block made up of 197 villages) were selected for the study.

The following table shows the number of villages in each block of the district of Lucknow according to the data of the Census of India in 2001. This is the most reliable source of information in terms of number of villages and infrastructures, even though not a very recent one (but the next census will be in 2011).

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102 Pucca road is a durable rural road built with labour-intensive techniques so that it doesn't vanish during the monsoons.

*Table 2: District of Lucknow - Census Data Updation Status*

| Block | No of Villages As Per Census in 2001 |
|---|---|
| **Bakshi Ka Talab** | 197 |
| **Chinhat** | 66 |
| **Gosaiganj** | 114 |
| **Kakori** | 81 |
| **Malihabad** | 100 |
| **Mall** | 87 |
| **Mohanlalganj** | 113 |
| **Sarojininagar** | 90 |

*Source: http://nicd.org/Dst_Lucknow.asp*

## 6.6.2 Villages Survey

*Figure 2: Map of the blocks around the capital Lucknow*
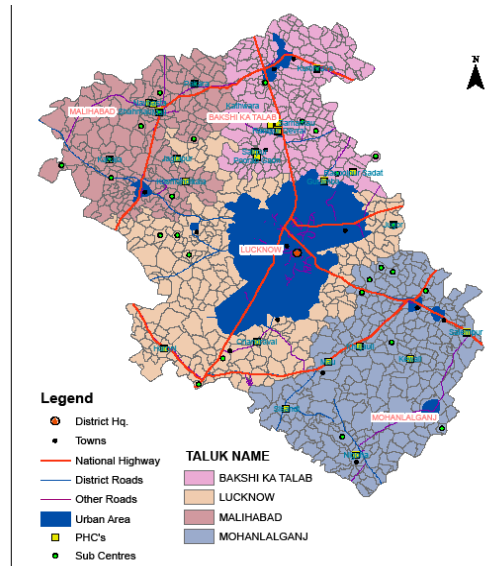


*Source: jsk.gov.in/up/up_lucknow.pdf*

The first step was to collect data regarding the number of inhabitants and the caste composition. They were derived from the Census of India 2001[103] that gathers data on socio economic and demographic characteristics, educational features and migration.

The second step was to develop a simplified version of the village development index (VDEVELOP)[104], as elaborated by the Centre of Science for Villages, an institution working for village development in

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103It was the 14th census in an unbroken series, and the 6th after independence in 1947 (with the exception that census could not be held for Assam in the 1981 and Jammu & Kashmir in 1991). 2001 census was conducted in two phases, the first being House numbering and House listing operations, carried out in May 2000, and the second being population enumeration, carried out from February 9 to 28, 2001. The reference time for the census is 1 March, 2001. (www.censusindia.gov.in).

104 Replicated from Drèze and Kingdon (2001).

India[105]. We intended to quantify the infrastructures in terms of access to electricity, telephones, roads, drainage, water, schools, shops, etc. We determined 33 elements and evaluated their status (presence/absence) inside the village or their distance from the villages (measured in kilometres).

### 6.6.2.1 Barhi Gaghi Village Profile

| | |
|---|---|
| **Total population:** | **1466** |
| **Male population:** | **783** |
| **Female population:** | **683** |
| **Total literate:** | **668 (Male = 417, Female= 251)** |
| **Caste composition:** | **Agricultural 69.1%** |
| | **Other Backward 11.9%** |
| | **Scheduled  19%** |

| | Amenities | Status | Distance Range (in km.) |
|---|---|---|---|
| 1 | Block Headquarter | No | 4 |
| 2 | Rural Development Officer Centre | Yes | 0 |
| 3 | Fare Price Shop | Yes | 0 |
| 4 | Source of Drinking Water | Yes | 0 |
| 5 | Agricultural Tools, Pump set, Diesel-Engine etc. Repair Centre | No | 27 |
| 6 | Bazaar / Hat | No | 4 |
| 7 | Whole Sale Agricultural Mandi | No | 27 |
| 8 | Cold Storage | No | 15 |
| 9 | Seed Storage | No | 4 |
| 10 | Veterinary Hospital/Animal Husbandry Centre | No | 4 |

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105 Centre of Science for Villages was started by Dr. Devendra Kumar, a scientist initiated by Gandhi's concept of rural development and decentralized economy.

| 11 | Artificial Breeding Centre/Sub Centre | No | 4 |
|----|---------------------------------------|-----|----|
| 12 | Primary Agricultural Loan Cooperative Society | No | 4 |
| 13 | Sales/Purchase Cooperative Societies | No | 27 |
| 14 | Government Sales Centre | No | 4 |
| 15 | Junior Basic School (Co-Educated) | Yes | 0 |
| 16 | Senior Basic School (Boys) | No | 4 |
| 17 | Senior Basic School (Girls) | No | 4 |
| 18 | Higher Secondary School (Boys) | No | 4 |
| 19 | Higher Secondary School (Girls) | No | 4 |
| 20 | Allopathic Hospital/Dispensary/Primary Health Centre | No | 4 |
| 21 | Ayurvedic Hospital/Dispensary | No | 27 |
| 22 | Unani Dispensary | No | 27 |
| 23 | Homeopathic Hospital/Dispensary | No | 4 |
| 24 | Family Welfare Centre/Sub Centre | No | 4 |
| 25 | Pucca Road | Yes | 0 |
| 26 | Post Office | No | 4 |
| 27 | Telegraph Office | No | 4 |
| 28 | Public Telephone | No | 4 |
| 29 | Railway Station/Halt | No | 4 |
| 30 | Bus Station/Stop | No | 4 |
| 31 | Agricultural Cooperative and Rural Development Bank | No | 4 |
| 32 | Commercial Rural Cooperative Bank | No | 4 |
| 33 | Post Office Saving Bank | No | 4 |

6.6.2.2 Kumhrava Village Profile

| | Total population: | 1674 |
| --- | --- | --- |
| | Male population: | 875 |
| | Female population: | 799 |
| | Total literate: | 868 (Male = 564, Female= 304) |
| | Caste composition: | Agricultural 72.3% |
| | | Other Backward 15.4% |
| | | Scheduled  12.3% |

| | Amenities | Status | Distance Range (in km.) |
| --- | --- | --- | --- |
| 1 | Block Headquarter | No | 12 |
| 2 | Rural Development Officer Centre | Yes | 0 |
| 3 | Fare Price Shop | Yes | 0 |
| 4 | Source of Drinking Water | Yes | 0 |
| 5 | Agricultural Tools, Pump set, Diesel-Engine etc. Repair Centre | No | 10 |
| 6 | Bazaar / Hat | Yes | 0 |
| 7 | Whole Sale Agricultural Mandi | No | 30 |
| 8 | Cold Storage | No | 11 |
| 9 | Seed Storage | No | 12 |
| 10 | Veterinary Hospital/Animal Husbandry Centre | Yes | 0 |
| 11 | Artificial Breeding Centre/Sub Centre | Yes | 0 |
| 12 | Primary Agricultural Loan Cooperative Society | Yes | 0 |
| 13 | Sales/Purchase Cooperative Societies | No | 30 |
| 14 | Government Sales Centre | Yes | 0 |
| 15 | Junior Basic School (Co-Educated) | Yes | 0 |
| 16 | Senior Basic School (Boys) | Yes | 0 |

| 17 | Senior Basic School (Girls) | Yes | 0 |
|---|---|---|---|
| 18 | Higher Secondary School (Boys) | Yes | 0 |
| 19 | Higher Secondary School (Girls) | Yes | 0 |
| 20 | Allopathic Hospital/Dispensary/Primary Health Centre | Yes | 0 |
| 21 | Ayurvedic Hospital/Dispensary | No | 16 |
| 22 | Unani Dispensary | No | 37 |
| 23 | Homeopathic Hospital/Dispensary | No | 12 |
| 24 | Family Welfare Centre/Sub Centre | Yes | 0 |
| 25 | Pucca Road | Yes | 0 |
| 26 | Post Office | Yes | 0 |
| 27 | Telegraph Office | No | 12 |
| 28 | Public Telephone | Yes | 0 |
| 29 | Railway Station/Halt | No | 10 |
| 30 | Bus Station/Stop | No | 10 |
| 31 | Agricultural Cooperative and Rural Development Bank | No | 12 |
| 32 | Commercial Rural Cooperative Bank | Yes | 0 |
| 33 | Post Office Saving Bank | Yes | 0 |

Although the two villages are similar in terms of number of inhabitants (they both have between 1000 and 1500 inhabitants) and caste composition (the agricultural caste is the predominant one) the villages differ in terms of infrastructures. Kumhrava has schools, health centres, post and telegraph office, public phones and even a commercial rural bank: Barhi Gaghi has a rural development officer centre (which Kumhrava has not) and a junior basic school but no health centres, post and telegraph offices, public phones and banks.

It can be said that in general better infrastructure tends to be conducive to higher levels of investment and local entrepreneurship. The village with better infrastructures (Kumhrava) was consequently the more

progressed village in terms of public and private services available to its rural villagers.

Once the village development index was completed and analysed, Kumhrava was selected for the establishment of a rural community internet centre and Barhi Gaghi for the foundation of a rural community newspaper.

The third step was to conduct household interviews - in forms of oral questions - in order to identify employment and economic condition, education, social dynamics, media consumption and resource sharing, communication gaps, common means of communication.

50 households in Kumhrava – comprising 153 persons - and 50 households in Barhi Gaghi – comprising 157 persons - were interviewed.

The outcomes, reported in a narrative way, are illustrated in the following paragraph.


### 6.6.3 Outcomes of Household Interviews: Socio-economic Features and Ways of Village Communication prior to the Project

Informal household interviews were conducted to assess critical issues which influenced communication and interaction among people within the villages.

100 household interviews had been carried out for 4 months (September 2005- December 2005) both in Kumhrava and Barhi Gaghi. They aimed at assessing the socio-economic features and ways of village communication prior to the launch of the community media initiatives. The results are presented below in a narrative way.

*- Work life balance*

It was observed that all villagers, who are predominantly daily wage farmers, lead hectic work lives. They have little time for leisure and other activities. This impact their communication needs.

Prior to the project, most people preferred to initiate communication events for specific reasons (like social events or for business purposes), rather than for casual conversations. They did not undertake communication unless it directly influenced their everyday lives.

Congruent with goal-specific communication, the frequency of communication was also goal-specific. It was driven by immediate social and economic circumstances of the villagers.

Frequency increased if there was a change from status quo, like a sickness in the family; or if one or more family members moved out of the village to a different geographical location; or a social event occurred; or for financial reasons like loans or sale of produce and other similar situations. Depending on the individual context, the frequency of calls through pay-phone or personal visits was high at such times.

*- Economic condition*

The economic condition of all villagers were generally poor. Rural villagers are mainly small-scale farmers who lack the means and capacities to demand, organise or finance the information access and communication services they need for development. Farmers' organisations as cooperatives, associations, unions or extension groups don't exist in neither of the two villages.

Very few households have somewhat surmounted penury. Alongside poverty, there also exist limited purchasing power.

Mobile phones and landlines are not so diffuse in these two villages. In Barhi Gaghi there is no public phone and in Kumhrava it was transformed into a shared device: its use is not for free and specific amounts are charged for calls, which are dependent on call-duration and whether calls are made to landlines or mobile phones. Charges for the former are lower than the latter.

Such costs attached to making phone calls, determined the manner by which communication was initiated through phone calls. It was also dependent on villagers' economic condition. People preferred to make calls through payphones, even when they had access to mobile phones, because it was cheaper.

*- Education*

Level of formal and informal education influence the means of communication used by villagers. Some of the villagers cannot not read or write.

Limited literacy caused people to share one newspaper in the entire village. Those that could read and write the local language read the newspaper and passed on information to others. News and information were also consumed through the alternate medium of television. In fact,

there was a high dependence on television for information and entertainment.

*- Social dynamics*

Social dynamics in the villages, greatly determined the use and access of communication or information devices. Men were perceived as decision-makers, while women were seen as homemakers. In fact, men not only purchased devices, they also controlled most channels of mediated communication. Women depended on men for the use of devices like mobile phones, television sets, CD (audio and video) players and radios.

This dependence caused women to have limited technology exposure.

Women equally shared the responsibility of initiating and receiving information through non-mediated communication (i.e. personal and human interaction).

*- Media consumption and resource sharing*

Television was the prime source of entertainment for villagers as was mentioned earlier. Everyone preferred watching serials, movies and reality shows followed by news programmes every evening. People infrequently visited movie halls, due to the distance and their own hectic work lives. People also had access to a daily newspaper (kept in the pay-phone kiosk or grocery shop), in which headlines and astrological forecasts were keenly read. Radio had limited popularity, although people heard live cricket commentaries on it.

Despite such media consumption, not all village households owned televisions, mobile phones and CD players. Consequently, owners shared some of these resources - especially television - with friends. In fact, watching television shows together were social occasions for people. On the other hand, mobile phones were shared primarily with immediate family members.

*- Communication Gaps*

Although most communication occurred through phone, they were considered inadequate for extending social invitations to people on special, shared occasions. They had to be followed up with personal visits.

There were communication gaps in the economic domain too. They manifested themselves as lack of awareness among daily wage farmers. Daily wage workers, who travel to the city, faced uncertainty and were unaware about employment opportunities.

Village farmers, who depend on middlemen to sell their produce in the cities and towns, lacked information on market rates and consumer demands.


6.6.3.1 Common Means of Communication prior to the Project

Communication within these villages was primarily through word-of-mouth and informal interactions. Since most villagers belonged to the same social and economic background, community ties among them were strong. These strong ties fostered social and personal communication in the form of verbal interaction; personal visits to each other's homes; participating collectively in social events; and maintaining social bonds (through informal chats and information exchange).

There were few instances of economic communication too. This was specifically in the case of kiosk operators, village shop owners and workers, whose services/goods were bought by other villagers. Since there were no computers in both villages, means of communication like e-mail, or the internet were not used. Even the postal system was seldom used. Unlike inter-village communication, interaction between the villages and city was largely economic with few instances of social interaction.

People from the village depended on the city, not only to sell their produce in the wholesale market, but also for employment opportunities. Apart from this, villagers also purchased goods and services that were absent in the village.

Payphones were the most popular and frequently used means of communication.

However, our findings also revealed that – in the case of Kumhrava - people did not always use the local, village payphone, because they believed that the kiosk operator over-charged them. He did not have a billing machine. Besides, the electronic display of call duration faced the kiosk owner and not the customers. This engendered significant erosion of trust among villagers, who also felt that the kiosk owner held a virtual monopoly over them.

In order to increase their options, villagers used payphones in neighbouring townships. Here, billing machines were functional.

Nevertheless, the village kiosk operator was individually known to every village household. This meant that they could depend on him to deliver messages to them, from people who called in their absence. Thus, the relationship between the kiosk operator and villagers determined the use of the payphone to a large extent.

What has emerged from the household interviews is that the two villages are very similar in terms of economic condition, education, social dynamics, media consumption. The interviews revealed that the majority of interviewees was aware of the lack of relevant information connected to their information needs. Men expressed the wish for more information about agriculture (such as availability of seeds, rates of fertilizers and pesticides, price details), education and health related issues.

It was felt that local production had to be encouraged to address the specific village contexts.

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**Box 1 - What does the term "Community" refer to?**

In general the term ' community' refers to a group of people who are bound together in some way – by living in close proximity to one another, sharing or having common needs, interests, life experiences, cultural or religious characteristics, common values or common activities.
It is useful to think of community along with the words 'common' and 'commune'.
– '**Common**' points to the **characteristics that people in the community have in common** and that define the group as a community.
– '**Commune**' highlights the element of **communication** and interaction that shapes and sustains communities.
It is important to understand the communities one works with for a number of reasons including:
– understanding who the target users are and what their needs are is the only way to provide meaningful content and services. Some people call this process **'market definition and analysis'**.
– the legitimacy and long term sustainability of the project depends on community involvement, support, ownership. This process is also known as **'community participation and ownership'**.
– strengthening the community is likely to form part of the core goal — "**capacity building"**, provision of resources and support, facilitating public participation in local or national.

## 6.7 Second Phase of The Community Media Project

### *6.7.1 Planning of the Community Media Activities*

When the baseline survey phase was concluded, the staff of the Department of Mass Communication and Journalism, together with a volunteer from the NGO Bharosa, draw a graphic like the following one to underline the three basic components of the community media project, basically: rural people, media, content.

*Figure 3: The three basic components of the project*
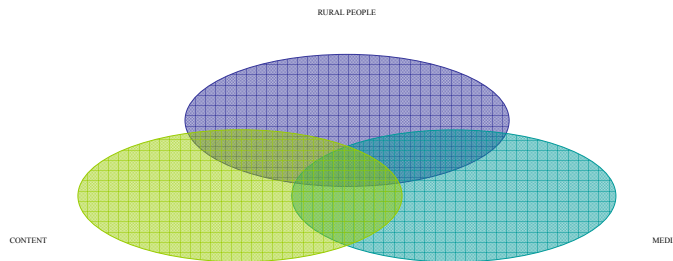


*Source: Dr. Mukul Srivastava's field notes*

Since rural people had already been interviewed, the focus was on the sequence of media work and the actions required to start the community media activities. The scheme below is the same as illustrated by FAO's publication *Effective Rural Communication For Development Report, 2006* and already cited in Chapter 4 of this PhD thesis. It provided a good starting point.

*Figure 4: Sequence of media work*
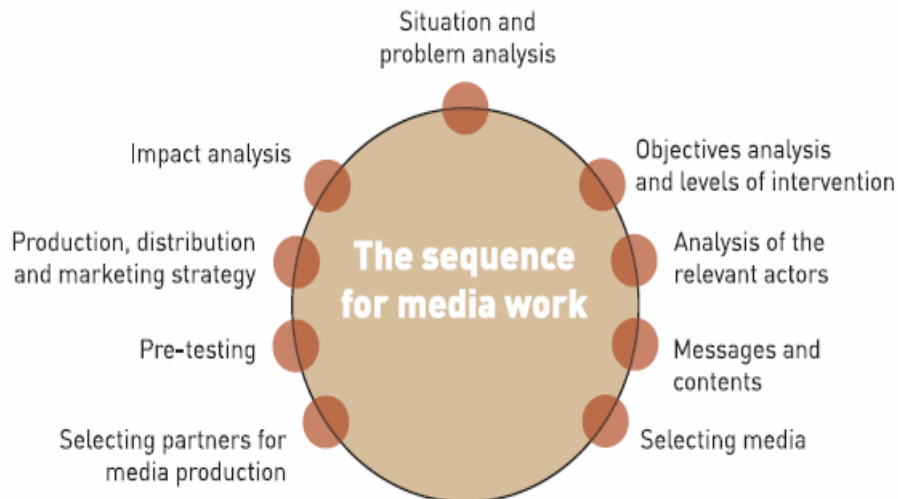
*Source: Effective Rural Communication For Development Report, FAO 2006*

The development of a media strategy needs to consider the issues of context, access and capacity dimensions. It also needs to ensure that there is coherence within the communication process and that the chosen technologies are in line with the cultural norms and the environmental situation, and are designed to use the available and appropriate infrastructure. The critical factor in the design of the strategy is a participatory analysis of the knowledge, attitude, and practice of the intended audiences in respect of the information to be shared and disseminated, as well as the channels to be used.

The key aim is to achieve cost-effective communication that is culturally and technically relevant and that is sustainable.

The sequence of phases required to launch the community media newspaper and internet centre were the following ones:

1. **Strategic planning**
   a. Identify key activities
   b. Identify options to motivate rural people to take part to communication activities
   c. Plan and coordinate the activities with the communities involved

2. **Organization and management**
   a. Provide and ensure access to information
   b. Ensure dissemination - improve the service

3. **Evaluation**
   a. assess the impact
   b. evaluate the results

## 6.8 The Rural Community Newspaper in Barhi Gaghi

In India, even though the publication of community newspapers finds no legal obstacles, there are only a few cases of successful community newspapers.
In general they are not able to generate sufficient revenue, unlike the mainstream dailies, and it's not always easy to evaluate their impact on the target audience.

Bearing in mind all these difficulties, the project staff intended to conceive a community rural newspaper written for and by the rural community of Barhi Gaghi.
The decision to launch a community rural newspaper as main medium of communication was due to the following motivations:
- the staff from the Department of Journalism and Mass Communication had an extensive experience in journalism training
- printing a newspaper was a rather inexpensive initiative.
- the infrastructures in Barhi Gaghi would have not allowed the establishment of a well functioning internet centre.

### 6.8.1 Objectives

The long-term goals were:
- to foster rural villagers' participation in communication activities
- to increase their communicative capacity
- to enhance their knowledge about topics of interest

This was actualised in the publication of a Hindi bi-monthly newspaper, *PEHAL* (INITIATIVE), that focuses on development issues of interest for the community living in Barhi Gaghi.
Five numbers of *PEHAL* have been so far published.


### 6.8.2 Budget

The budget estimated for the launch of the newspaper was 250.000 Rs (4.294,44 euro). The sum encompassed equipments, books & journals, project fellows and travel/field work.


### 6.8.3 Location of The Community Rural Newspaper

The place dedicated to the community newspaper activities was a large room, normally used for public events and run by the local sarpanch. The room was furnished with a small library, a display board and mimeographing facilities.


### 6.8.4 Local Support and Participation

As first step, the staff from the Department of Journalism and Mass Communication got first in contact with the sarpanch (the head of the panchayat) in order to explain him the project in details, know his opinion about the activities to be undertaken and assess his availability to support them.
In Indian villages no projects can be initiated or carried out without the formal approval of the sarpanch.
He gave his positive response to the initiative and even helped the staff to promote and diffuse the project among the villagers by word of mouth.
A series of peer group discussions and focus groups were then organized with the villagers.
The aim of such focus groups were:
- to identify their information needs
- to identify their expectations towards the project

- to clarify conditions and rules for the making for the newspaper, specifying what level of commitment was required in terms of timing, and the condition for abandoning the project
- to set up clear agreements (understand, share and respect rules of the project are important to prevent a general discontent and an unequal distribution of information).

## 6.8.4.1 Identification of Information Needs

It is important to prioritize the information and services, so as to ensure that the critical areas of information needs are addressed, particularly those that are highlighted as priority issues by the people themselves.
During a focus group discussion, the scheme below (in the form of a diagram) was submitted to 80 people (men and youth) in order to identify their information needs. The information were grouped into information categories. This diagram was generated by a largely inductive approach, and provided a checklist of potential information needs of rural villagers. It was largely inspired by the Information Needs Assessment Model (INAM) developed by A. Dhingra and D. C. Misra[106] and also utilized in some UNESCO projects.
Reported below is the profile of the interviewed people:

*Age-group and number of participants:*
20-30 : 10
30-40 : 26
40-50 : 33
50-60 : 10
60-70 : 01
*Literacy:*
Basic literate – 51.96%
Intermediate – 26.76%
Graduate – 21.28%
*Occupation:*

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106 "Information Needs Assessment Model for Identifying Information Needs in Rural Villagers", Mit Press Journal, Volume 2, Number 2, Winter 2004 available at http://www.mitpressjournals.org/doi/pdf/10.1162/1544752044193461?cookieSet=1

Farmers: 75%
Self-employed: 14%
Traders: 10%
School teacher: 1%
Reported below is the English version of the diagram.

*Figure 5: Diagram for the identification of information needs*
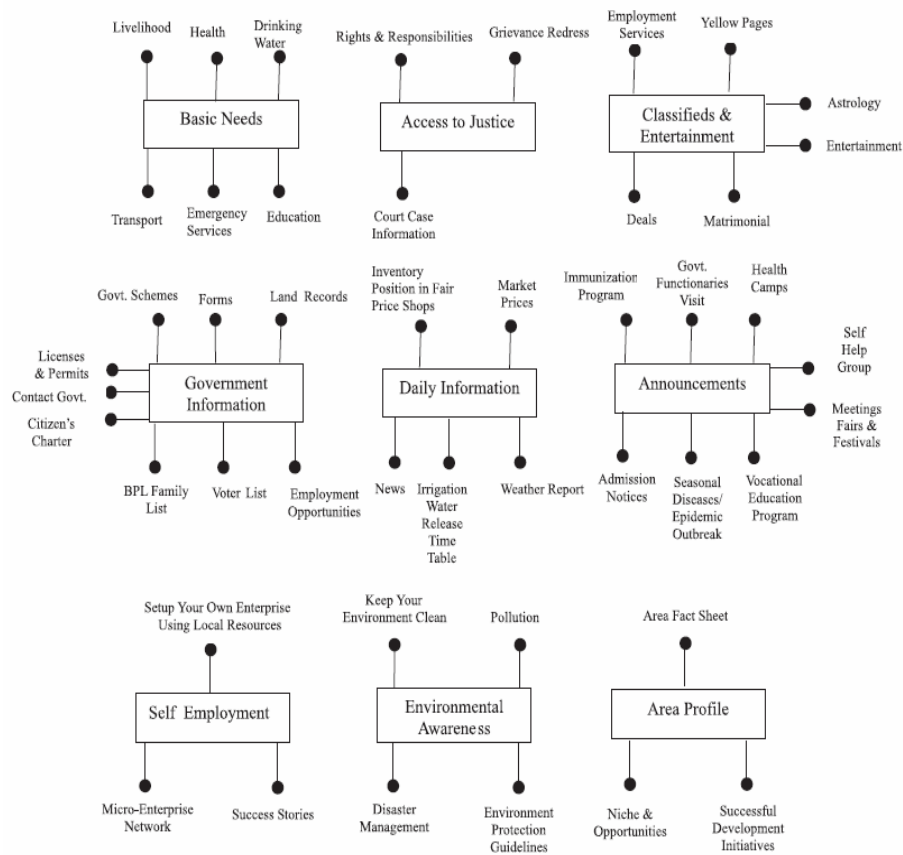
The survey provided the following percentage positive response vis-à-vis Information Categories.

Basic needs 81%
Access to Justice 74%
Classifieds & Entertainment 61.45%

Government Information – 71.5%
Daily Information 95%
Announcements 45%
Self-employment 78%
Environmental awareness 41%
Area profile 71%

What resulted from the compilation of the diagram was that villagers were more interested in daily information (like inventory position in fair price shops, market prices, news, irrigation, weather report) and basic information (livelihood, health, drinking water, transport, emergency services and education) than in environmental awareness and entertainment.

6.8.4.2 Team Building

The sarpanch helped to identify the most educated and available rural villagers to collaborate in the effective writing of the newspaper.
Five men were identified - among the literate and better educated people of the community - to be the project leaders inside the community. Their participation, which implied the involvement in production and management of communication systems, was incentivated from the very beginning at various levels:
- at the *production level*, by making them available technical facilities and production resources and the support of the staff.
- at the *decision-making level*, by implying them in the selection of news for each issue.
- at the *planning level*, by setting clear objectives, in order to promote development and empowerment.

Unfortunately women didn't participate in the project.
As a matter of fact, women were not allowed by their families to join the rural newspaper's activities and mix with the men. Moreover very few women used to read newspapers in the village. Even lady teachers were not used to read newspapers. Whatever little news they got they got from radio and television.

6.8.4.3 People involved

In total, a group of 20 people took part to the training activities, very often in a discontinuous way. They helped in diffusing the newspaper and the information to the other villagers, involving as many people as they could (200 is the estimated number of the rural newspaper's readers).

## 6.8.5 Training for the Community (January 2005- June 2005)

Local villagers needed training; more than the basic media skills, they needed to develop community development skills, experience of group works, knowledge of local conditions and of local problems. The best way to involve people was to get groups of friends or relatives (especially cousins or siblings) to be trained together, or to ask participants to bring friends or relatives with them.
Training included techniques of non-directive learning, experience in working with the others, and organizational skills.

The training for the community newspaper was carried out in loco by the staff of the Department of Mass Communication and Journalism.
The staff reached the village by car (nearly 40 minutes away from Lucknow) twice a month for 6 months (excluded the period of the monsoon).
The meetings lasted between 2 and 3 hours and took place in the late afternoon.

*6.8.6 Information gathering and transmitting (September 2005 –
March 2006)*

During the training course the following phases were pursued:
- discussion on location with the rural people to elaborate ideas for the
newspaper→ *Development of the main ideas*
- research into the subject to discover the range and type of content →
*Development of the script*
- follow-up research with the rural villagers to check the relevance of
the proposed content, and to ensure that the level of the material was
correct and comprehensible → *Planning of production + Production of
the written materials*

The staff used print materials such as posters, leaflets and booklets to
aware the rural people about development issues and to enable them to
have in-depth knowledge of different issues.
At the end of the training they were able to collect news autonomously
and to write them in a simple language using local slang.

*Photo 3: Staff during field activities*



It's important to underline that in no aspects of the project there was a
traditional teacher/learner division between the staff and the local
people. A dialogical form of communication was preferred to the
transfer of information' approach.
Media programming employs 'codes' to focus group discussion for at
least some aspects of the work.

In none of the parts of the project information was simply presented without the opportunity for further interrogation by the target group.

Informational inputs are likely to be necessary and, here, community media are valuable. The information may be factual, or it may be more experiential.

The training was concerned with methods of gathering information, organization and decision-making activities, printing skills.

Reported below is the description of an awareness' campaign which was conducted in Barhi Gaghi on the 1st of December 2006. It provides an example of activities carried out as part of the information gathering/transmitting activities.

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**Box 2 - A Day in Barhi Gaghi**

An awareness campaign on AIDS was conducted in Barhi Garhi by the staff of the local NGO Bharosa with the help of some theater artists and the free support of students from the Department of Journalism and Mass Communication.

A "Nukkad Natak"(street play) based on HIV/AIDS was prepared. For collecting people on one place the"Munadi System" was used[107]. Even though "Munadi" is considered a thing of past, it drew the attention of a large number of villagers who came out of their houses to witness the 15-minute street play.

After the show, a short film based on HIV/AIDS awareness was also screened in the village and
some literature regarding health, hygiene and HIV/AIDS prevention was distributed to the audience.

In order to get feedback and check awareness level on HIV/AIDS in the village, a simple questionnaire was prepared and distributed before and after the campaign. The aim was to check if the awareness level of the people had increased or not.

A comparative analysis was carried out and the feedback was good. 79% of the people had increased their knowledge about AIDS.

The agenda of the programme was as follows:

**Agenda of Program**
**Date:** Thursday, 1 December, 2005
**Time:** 12.00 PM

**Place:** Block Malihabad, Village – Barhi Garhi
**Purpose :** Spreading awareness about HIV/AIDS
**Target Audience:** Village People with primary focus on youth
**Organized By :** "Bharosa" (NGO) and the Department of Journalism and Mass Communication

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107 Munadi is a traditional drum beaten by the kotwar to draw people's attention to any announcement to the village.

| Program Activities: |
| :--- |
| <ul><li>- gathering of the people</li><li>- distribution of a simple questionnaire to check what they knew about HIV/AIDS</li><li>- street play</li><li>- film screening</li><li>- questionnaire distribution</li><li>- question/answer session</li></ul> |
| - The program venue was Anganbadi Kendra of Barhi Garhi village. The program started with welcome address and brief introduction by Research Fellow Mr. Syed Nawaz Ahmad (Dept. of Journalism & Mass Communication Lucknow University, Lucknow). After that Dr. R.C. Tripathi, Head, Deptt. of Journalism & Mass Communication Lucknow University, Lucknow, and Gram Pradhan told how HIV/AIDS spread in our society. <br><br> - Later on Mr. Javed Abbas from NGO Bharosa told rural people about basics of HIV/AIDS. He explained many ways of transmission of HIV through power point presentation. The most important thing he said that difference between HIV & AIDS. <br> - A questionnaire was distributed to check the participants 'awareness on HIV/AIDS <br> - A Street play was played <br> - A video was screened (it was produced by NACO & BBC for the purpose of AIDS awareness). <br> - The last part of program concerned the distribution of a questionnaire. In this questionnaire ten simple questions were framed in simple language. The aim was to find out how much people had learnt about HIV/AIDS. |

## *6.8.7 General Content*

It was commonly decided that the newspaper had to treat themes like prices of agricultural inputs (such as seeds, fertilisers, pesticides) and outputs (rice, vegetables), market (potential for export), entitlement (the multitude of schemes of the central and state governments and banks) health care (availability of doctors and paramedics in nearby hospitals, women's diseases, HIV), cattle diseases, transport (road conditions, bus and train schedules, cancellations), weather (appropriate time for sowing, areas of abundant fish catch, wave heights).

Articles had to be only two to three paragraphs in length, each with its own one -line head.

The use of colour and photos was also very important in making the newspaper more appealing.

It was decided that complete files were kept of each newspaper and careful attention was given to direct correspondence.

## 6.8.8 Content of the First Issue

Several days in advance before the printing of the first issue, the project leader adviser checked that all printing supplies were on hand and that the mimeograph machine was in good working order.

News gathering and writing of some of the stories didn't take more than half of the day.
The second half of the day was spent in completing the writing, cutting the stencils, and printing and stapling 400 copies.
For the first issue, the staff and the locals decided to write on a range of topics, estimating for each of them the percentage of content they had to occupy.
The following graphic illustrates the percentage decided for each topic.

*Figure 6: Topics (in percentage) of the first issue*
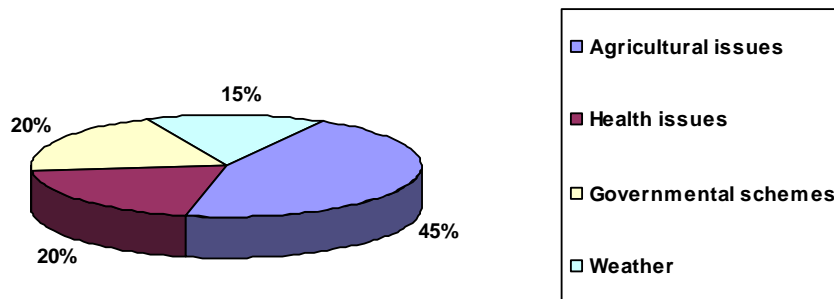


Agricultural topics were to occupy the 45%, news on health issues 20% , governmental schemes 20% , weather 15% .
Advertising was not present in the first issue.

### 6.8.9 Language

In order to be effective and appealing, the newspaper required a special skill in constructing simple messages with short, understandable words and sentences.

In many cases the grammar standards and idiomatic expression of a national newspaper are so remote from the language of the rural population, that national newspapers do not have much of an impact on the education of the rural society.

### 6.8.10 Distribution

The newspaper was meant to circulate free of charge to stores, local houses, meeting places and nearby government offices. Circulation will probably remain a problem for some time to come but it will improve as transport in the interior increases.

### 6.8.11 Technical Infrastructure

The writing and printing required:
- a standard handy typewriter
- a crank mimeograph machine
- a stapling machine typewriter
- stencils, paper, ink, correction fluid

It was estimated that the newspapers would have needed in one year - on the basis of four pages per issue, once every two months, and 400 copies per issue: 5,500 stencils and 1,100 reams of paper.

### 6.8.12 Problems encountered

The start up of the project was delayed by about a month as formalities were completed to register the newspaper with the authorities. It was launched in April 2006 with an official ceremony where all the people

from Barhi Gaghi and the nearby villages were invited to take part.


**6.9 The Rural Community Internet Centre in Kumhrava**

Inadequate Internet and telephone connectivity to India's rural areas is a key challenge.
The fact that the urban-rural tele-density gap is widening, with the former at 31% compared to just under 2%[108] for the latter, remains a real cause for concern.

The initiative in Kumhrava aimed to assess and document the impact of the establishment of an Internet centre to enhance rural development.
The decision to launch a community rural internet centre was due to the following motivations:
- the staff from the Department of Journalism and Mass Communication had an extensive experience in computer using and training
- the infrastructures in Kumhrava were good enough to allow the establishment of a well functioning internet centre
- some people were known in the village to be computer literate.


*6.9.1 Objectives*

The long-term goals were the same as in Barhi Gaghi:
- to foster rural villagers' participation in communication activities
- to increase their communicative capacity
- to enhance their knowledge about topics of interest
The goal was to ameliorate their livelihood conditions and increase their opportunities in terms of income and new opportunities.
It is in fact well documented that there is a close relationship between the use of Internet and empowerment. When individuals acquire computer skills and the ability to access information, they often find their social status as well as employment opportunities increase.

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108 http://www.apnic.net/mailing-lists/s-asia-it/archive/2002/05/msg00034.html

Small farming communities can also become more empowered through better access to market prices and opportunities, and through the interaction with other communities and institutions at regional and national level. This strengthens social inclusion of disadvantaged groups and rural communities.

### 6.9.2 Budget

The budget estimated for the launch of the newspaper was 324.600 Rs (5.575,90 euro). The sum –which was higher than the one designated to Barhi Gaghi - encompassed equipments, books & journals, project fellows and travel/field work.

### 6.9.3 Location of the Internet Centre

Differing from the case of the rural newspaper, the place dedicated to the community Internet centre was a large room, not run (as in the case of Barhi Gaghi) but of property of the local sarpanch. The room was furnished with a desk, chairs and electricity.

### 6.9.4 Local Support and Participation

As in the case of the rural newspaper in Barhi Gaghi, the staff from the Department of Journalism and Mass Communication got first in contact with the sarpanch (the head of the panchayat) in order to explain him the project in details, know his opinion about the activities to be undertaken and assess his availability to support them.
He gave a positive response and offered a room of his property as location for the Internet centre.
Then a series of peer group discussions and focus groups were organized with the villagers. The aims of such focus groups were the same as in Barhi Gaghi:
- to identify their information needs
- to identify their expectations towards the project
- to clarify conditions and rules for the making for the newspaper,

specifying what level of commitment was required in terms of timing, and the condition for abandoning the project
- to set up clear agreements (understand, share and respect rules of the project are important to prevent a general discontent and an unequal distribution of information).
Situation analysis, need analysis and information needs, time map and time management were discussed and drawn on a participatory mode.


6.9.4.1 Identification of Information Needs

During a focus group discussion –and as in the case of the rural newspaper - the diagram below was submitted to 80 people (men and youth) in order to identify their information needs.
Reported below is the profile of the interviewed people:

*Age-group and number of participants*:
20-30 : 25
30-40 : 29
40-50 : 16
50-60 : 10
60-70 : 0
*Literacy:*
Basic literate – 23.60%
Intermediate – 50.10%
Graduate – 26.30%
*Occupation*:
Farmers : 70%
Self-employed: 17 %
Traders: 10%
School teacher: 3%
Reported below is the English version of the diagram.
*Figure 7: Diagram for the identification of information needs*
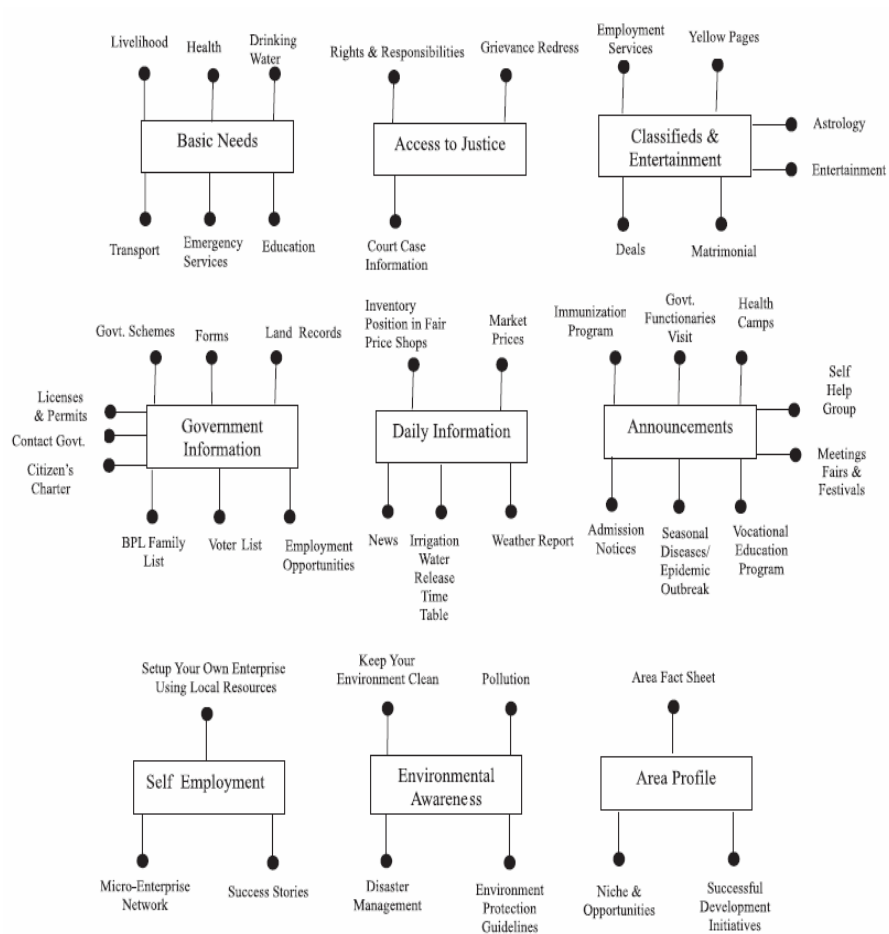
The survey provided the following percentage positive response vis-à-vis Information Categories
Basic needs 79%
Access to Justice 73%
Classifieds & Entertainment 54%
Government Information – 75%
Daily Information 97%
Announcements 40%
Self-employment 79%
Environmental awareness 43%
Area profile 65%

What resulted from the compilation of the diagram was that men were more interested in daily information (like inventory position in fair price shops, market prices, news, irrigation, weather report) and government information (govt. schemes, forms, land records, employment opportunity, voter list, licenses) than in environmental awareness and entertainment.

People involved in the project were generally younger than in Barhi Gaghi, better educated and with a higher percentage of self-employed people and a lower percentage of farmers.


6.9.4.2 Team Building

The sarpanch helped to identify the most educated rural villagers available to become computer literate.

He helped the staff to identify the people that could be available and interested in learning computer skills and become project leaders. Their role should have been also that of instructing other villagers, in order to increase the sustainability of the initiative and educate as many people as possible.

The two main criteria for the selection were the individual's enthusiasm, the interest to learn and the family's support to cooperate with the learners.

Five men –as in the case of Barhi Gaghi - were identified - among the literate and better educated people of the community.

Even though the project was designed to be non-discriminatory in its delivery of services, and provides relevant local information in Hindi language, no women took part to the activities.

6.9.4.3 People involved

A group of 20 people took part in the training activities and learnt basic Internet and computer skills. They helped to train other villagers. (250 is the estimated number of Internet users).

### *6.9.5 Training for the Community (January 2005- June 2005)*

The staff held several workshops aimed at promoting computer and Internet use.
The learners were trained in operating the computers in the following ways:
- the key parts of the computer were taught to them in their local language. They used cd and touch-screen monitors and for this hands-on training for the learners were carried out.
- to explain the functionality of emails and the internet theoretical parallels with normal mail were drawn.
- typing and word processing became an important part of the course as the participants discovered that these skills were essential.
- the reading and writing practices of the learners were also supported by theme-based power point slides. The themes were identified on the basis of their relevance for the community: major topics were agriculture, health and governmental schemes, as in the case of the rural newspaper in Barhi Gaghi The facilitators regularly prepared power point slides with the support of the learners with appropriate photographs taken from different village contexts. Print outs of these slides were compiled and converted as booklets for the learners. The learners could borrow these booklets for their reading practice whenever they have free time.
Natural Language Interfaces were used in order to ease the communication and provide content in a language natural to them. The Interfaces included Intelligent Tutoring systems .
Intelligent Tutoring Systems (ITS) consists of four different subsystems called models or modules: the interface module, the expert model or domain model, the student model, and the tutor model. The interface module is the way the student interacts with the ITS, usually through a graphical user interface and sometimes through a rich simulation of the task domain the student is learning (e.g., controlling a power plant or

performing a medical operation). The expert or domain model contains a description of the knowledge or behaviors that represent expertise in the subject-matter domain the ITS is teaching -- often an expert system or cognitive model. The student model contains descriptions of student knowledge or behaviours, including his or her misconceptions and knowledge gaps.

In an e-learning environment Natural Language Interfaces along with touchscreen technology and voice enabled are generally recognized as the best inputs.

The learners were divided by the staff into four batches and structured classes were organized once a week at the most convenient timings (late evenings).

The principle of the "many working through one single equipment " has been extensively applied and refined down through the ages in India (for example: the traditional practice in rural areas of many people together watching a single TV set). This custom is related to a "spirit of cooperation" which is a deeply-ingrained characteristic of Indian culture. According to this principle, teams of individuals work together, each contributing by performing whatever helpful process he or she can.

Peer discussion and mutual learning were also organized with other members of the community.


### 6.9.6 Information gathering and transmitting (September 2005 – March 2006)

Very broadly, the purposes served by the use of the Internet Centre included information gathering, document preparation, general communication and information exchange.

The centre offered three types of services:

- Informational services involving a generic (noncustomized) information, such as agricultural practices, weather forecasts, jobs, health, contacts, government schemes and procedures, news.

- Transactional services involving an exchange of specific (or customized) informational services or funds between two or more parties using the ICT infrastructure. Examples are availability and purchase of goods/services, banking, photography.

- EGovernance services involving transactional services that entail local, state, or national government. Providing land records and submitting complaints to local officials are examples. Form downloads and submission, land records, government certificates, licenses/permits, and vehicle registration are some of the possible operations.

*Table 3: Services offered by the Internet centre*

| Service category | Category definition |
|---|---|
| - Informational services | - Weather forecasts, agricultural practises, jobs, health related information |
| - Transactional services | - Mainly purchase/exchange agricultural produces |
| - E-governance | - Download of Governmental schemes, land records, certificates, employment opportunities |
| - Communications<br>- Offline services | - E mail<br>- Printing, word processing |

The staff introduced the audience to some Internet sites that could be used as main source of information. Among the most common accessed sites there were:

- **www.sitapur.nic.in/lokvani**: LOKVANI (meaning "Voice of People") is an e-governance initiative launched by the combined efforts of District Administration and National Informatics Centre in Sitapur (UP). Citizens, instead of coming all the way to the District Office, can avail several government services at the tehsil, block and town level itself. Services like Land Records, Arms license application status, GPF accounts of basic education teachers are available online now. The land records have been computerized and available on line at Lokvani website.

- **http://enrich.nic.in**: eNRICH is an ICT solution that has been developed as a Community Software Solution Framework addressing the needs of rural people. Through its customizable local language sensitive interface, eNRICH truly puts ICTs in the hands of its users.

eNRICH, which was initially developed for UNESCO to facilitate intra-community communications, was subsequently enhanced to work as a framework capable of networking communities and building collaborations between government and citizens, particularly mainstreaming the rural people who are most disadvantaged and underprivileged.

- **http://agmarknet.nic.in**: AGMARKNET is an Agricultural Marketing Information System Network that links all important Agricultural Produce Market Committees (APMCs), State Agricultural Marketing Boards/Directorates and Directorate of Marketing & Inspection (DMI) regional offices located through out the country for effective information exchange on market prices related to agricultural produce. Through this web based information system, farmers now have choice to sell their produce in the nearest market at remunerative prices. As part of this project, 735 Agricultural Produce Wholesale Markets (APWMs), 75 State Agricultural Marketing Boards/Directorates and DMI Regional Offices have been networked during 2000-02 and an additional 2000 Markets have been embarked upon during the Tenth Plan Period (2002-2007).

- **http://ruralbazar.nic.in**: RuralBazar is an e-commerce solution developed to address the marketing needs of the rural producers. The software provides provision for simple showcasing of the products, off-line payment as well as on-line payment.

- **http://panchayat.nic.in**: e-Panchayat is a comprehensive suite of Panchayat applications designed and developed to effectively solve the information management problems at the village level. It benefits the citizens, the Elected Representatives, the Gram Panchayat and other village level officials, the Administrators and Planners at district and state level. All the functions of the Panchayat are computerised and web enabled. Internet based services for Birth and Death Registrations, House Tax Assessment Collections, Trade Licenses, Old Age Pensions, Works Monitoring, Financial Accounting, are being provided as part of e-Panchayat system. Additional services such as market prices and agricultural extension advice are also being provided to the citizens of villages through e-Panchayat.

As a public service, the Internet centre did not offer commercial services such as fax, document binding, and photocopying.

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**Box 3 - A Day in Kumhrava**

**4 p.m**: The project staff arrive and go through the week's schedule of activities with the village audience. Then they carry out basic preventive maintenance of the equipment in the Internet room, blowing dust out of the keyboards, deleting unnecessary files and checking the data tracked on computer.

**5 a.m:** The first training session of the week begins. It is an introductory course of the use of search engines, given by Dr. Mukul Srivastava. He explains the use of search engine in order to find customized information. In order to explain the process, he draws on a paper a series of piled boxes: the smallest one contains a treasures, which he pictures as gold and coins (symbolizing the information they are searching for).

Throughout the following hours, local people (children and women) come to the Internet centre to bring food to the men engaged in the training and to have a look at what is going on in the centre.

**8 p.m:** Before closing the centre, the staff rearrange the computers for the next use. The local sarpanch waves good-bye to the staff.

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### 6.9.7 Language

The language used in the learning material was simple, clear and suitable in style. The logical order established in the learning materials ensured the deeper understanding of the learner and also the direction in the learning.

The development of locally relevant content and language is essential. Without accessible, local content that addresses the real problems of local people in their own language, ICT projects would most probably fail.

### 6.9.8 Technical Infrastructure

The project made use of the following technologies:
1 PC
1 printer

1 scanner
speakers

A range of technical challenges have proved to impact on the sustainability of the Internet centre.

Among them:

- *electricity*: irregular electricity supply, regular power cuts, low voltage and load shedding impeded sometimes the Internet centre's operations. These conditions forced to procure additional equipment including a generator which increased its overheads.

- *internet costs*: the high cost of connectivity meant higher operating costs for the Internet centre. These costs ultimately reduced the funds available to run the programme.

- *equipment/maintenance*: the Internet centre has a lack of trained technical staff to take care of equipment repairs and upgrades. This has a direct influence on programme production and the every day running of the centre. While the Internet centre has been able to manage with its current technical configurations, concerns about costs of future equipment maintenance are now being discussed.

The equipment is often imported and there is no authorised service centre nearby to carry out repairs and maintenance. The nearest repair centre is in Lucknow. The repair centres are not reliable because they are not officially authorised (Gunakar Aryal, Station Manager, Madanpokhara CMC 2007).

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**Box 4 - Things to consider in launching a Community Internet Centre**

Our preliminary study allowed us to point out some recommendations, indicative in nature, but that could result useful, when launching Internet centres in rural areas of the developing world.

- Adaptation and acceptance could be easier if communication solutions consider present lifestyle, division of labour, daily schedule and other environmental factors of rural users. They should be cognizant of socio-cultural dynamics of resource sharing in the village as well. These solutions should also not violate social factors like community norms, roles and beliefs.

- Connectivity should also translate into immediate monetary benefit for rural users. This is because with their limited economic means, they visualize the future only as short and medium term, incremental goals, which must be quickly realized.

### *6.9.9 Problems encountered*

Technology frequently broke down (these failures were attributed to external providers' problems), consequently usage was sometimes disappointingly low, with some period averaging five users per day. Internet download speed was of 256 kilobits per second (kbps) which according to Western consumers, increasingly used to accessing information at eight times that speed or faster, is a slow service.

Moreover segments of the population were excluded. The initiative served mainly farmers, thus excluding the female population.
The lack of budget to implement the infrastructure and sustainability of the Internet centre was another main issue. Usage at most sites was simply not high enough to cover costs in the foreseeable future.
The lack of sustainability means that the future goals of similar initiatives are likely to be
sharply curtailed in the absence of new frameworks that can increase viability.
The goal of creating a widespread rural ICT infrastructure, embodied, for example, in MSSRF's Mission 2007, which seeks to bring a Knowledge Centre to every Indian village by the year 2007, seems a difficult objective to reach.

**6.10 Third Phase of the Community Media Project - Evaluation of the Community Media Activities**

Evaluation is a systematic and objective assessment of an ongoing or completed project, including its design, implementation, and results. Evaluation leads to more informed decisions, allowing those involved in the project to learn from experience and to be accountable to donors and stakeholders.

Evaluation is used to demonstrate accountability and to understand the dynamics of the program.

It is important to recognise that evaluation is a not magic wand that can be waved to make problems disappear, or to cure them, or to miraculously make changes without a lot of hard work being put in by the project or organisation. In itself evaluation is not a solution, but a valuable tool.

Evaluation can be accomplished in four ways:
• *Internal or self-evaluation* meaning that the same people implementing a project are responsible for evaluation.
• *External evaluation* meaning that the evaluation is conducted by an individual or group outside the implementing organisation.
• *Independent evaluation* meaning that the evaluation is undertaken by individuals or groups who are not only outside the implementing organization, but also completely independent from it, in terms of control, remuneration capacity, political pressure, or other factors that could affect objectivity.
• *Interactive evaluation* implying a very active interaction between an outside evaluator or evaluation team and the organisation or project being evaluated. Sometimes an insider may be included in the evaluation team.

Depending on the focus and objectives of the project the perspective and mix of methodologies will vary.

There can be five types of indicators:
1. Performance indicators, relating inputs to outputs
2. Effectiveness indicators, relating outputs to usage
3. Cost-effectiveness indicators, relating inputs to usage
4. Cost-benefit indicators, relating inputs to outcomes

5. Impact indicators, relating usage to outcomes.

In the case of the two community media initiatives, the evaluation was internal and accomplished through impact indicators by staff volunteers. The budget was in fact not enough to envisage an evaluation phase (usually at least 5% of the total budget should be dedicated to the evaluation)
Focal points of the self-evaluation were:

• Opinions → villagers giving opinion on project's usefulness.
• Changes in Knowledge → identifying changes in knowledge, attitudes and skills.
• Changes in Practice → identifying changes in practices (mainly agricultural practices) and changes in the standard of living of farmers.

The instruments used for the evaluation process were a questionnaire and focus group meetings.
I personally elaborated the questionnaire drawing inspiration from UNESCO's evaluation questionnaires[109].
The questionnaire was basically divided into three levels in order to assess the profile of the person who was trained, his level of satisfaction regarding the initiative and the development impact of the programme on his life.
Users were requested to rate several statements like: 'Through this project I am more involved in decision" or 'Through this project I have access to price information to sell my produce.'
Data analysis based on the questionnaires provided over-all valuable information.

To put the data analysis in a qualitative perspective and to start learning from the results, focus group meetings were organised in which project partners and users discussed the possible explanations for the results and shared knowledge on possible solutions to the issues raised. This component provided project partners and users with an instrument for learning and adjustment of their projects.

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109 For example, "A guide to community media centres. How to start and keep going", UNESCO Handbook 2007.

As with any evaluation methodology, such system presented challenges.
Extrapolation of results of the evaluated users group (the survey sample) was not an easy task.
'Impact' should be better measured after one or two years of implementation, which is unusual in
the field of development programmes.

For each initiative (the community rural newspaper and the community internet centre) a sample of 100 people was taken in consideration. They were asked to fill out a questionnaire in Hindi: reported in the appendix 1 and 2 are the English version of the questionnaire.
People had 2 hours time to carefully fill it out.

### 6.10.1 Outcomes of the Evaluation of the Community Rural Newspaper

What emerged from the questionnaire is:

PROFILE OF COMMUNITY RURAL NEWSPAPER USERS:
- the average age of the people interviewed was 45.
- 98% were able to read
- 85% were landless labours
- 91% were Hindu
- 100% belonged to backward class
- 88% had an annual income < Rs. 10,000, 10% between Rs. 10,000–Rs. 20,000, and 2% between Rs. 20,000–Rs. 30,000
- 63% thought that the community rural newspaper had addressed the problems of their daily life.

The types of information accessed and the benefit deriving from the "use" of the rural newspaper are reported below:

*Figure 8: Types of information accessed in percentage (community rural newspaper)*
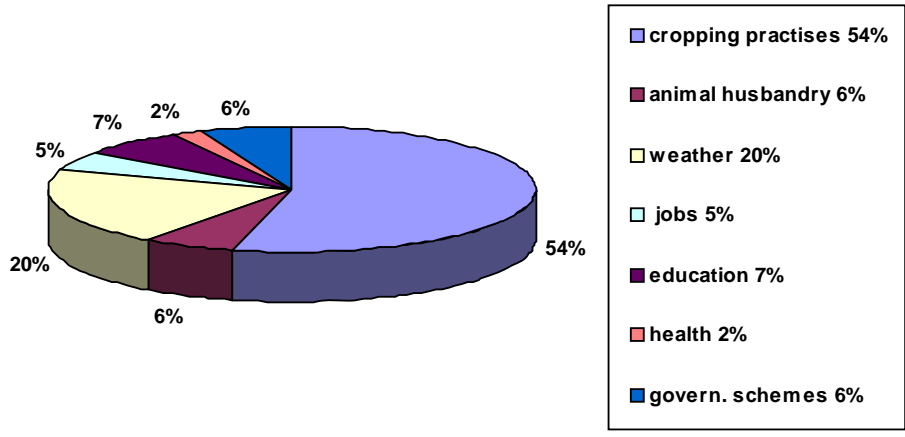
*Figure 9: Benefits deriving from the use of the rural newspaper*
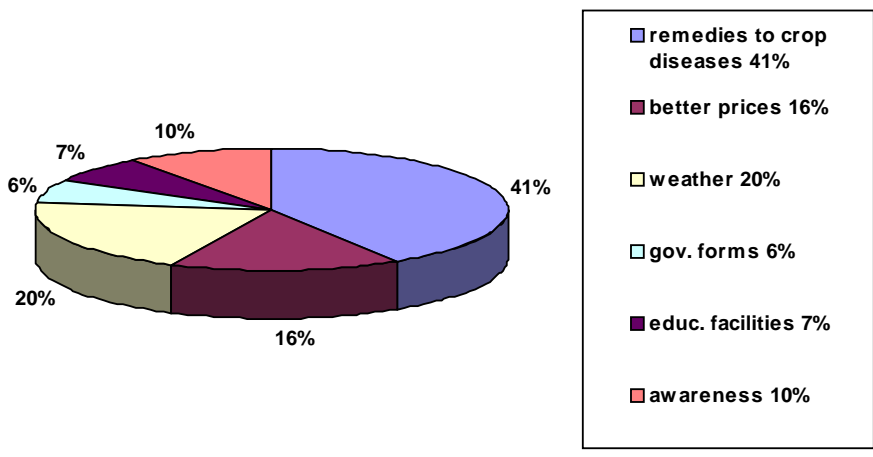


Nearly no users encountered problems in using the community rural newspaper.

- LEVEL OF SATISFACTION

83% villagers answered they had achieved their goals by participating in the project: 17% expressed a weak satisfaction, 13% were partly satisfied and 70% were strong satisfied.

- DEVELOPMENT IMPACT

Although some options were left in blank, we report the percentage for each option.

Through this project I see the importance of information more than before
□ Strongly disagree **0%** □ Disagree Partly disagree **0%** □ Neutral Partly agree **47%** □ Agree Strongly **43%**

Through this project I see opportunities in rural newspapers I had not seen before
□ Strongly disagree **0%** □ Disagree Partly disagree **0%** □ Neutral Partly agree **40%** □ Agree Strongly **45%**

Because of this project I feel I am of more value to my colleagues and superiors
□ Strongly disagree **0%** □ Disagree Partly disagree **0%** □ Neutral Partly agree **30%** □ Agree Strongly **48%**

Through this project I am more involved in decision making processes in my community
□ Strongly disagree **5%** □ Disagree Partly disagree **8%** □ Neutral Partly agree **55%** □ Agree Strongly **19%**

Through this project I have gained specific skills
□ Strongly disagree **0%** □ Disagree Partly disagree **16%** □ Neutral Partly agree **30%** □ Agree Strongly **40%**

Through this project I receive information about prices of my products in the local market
□ Strongly disagree **0%** □ Disagree Partly disagree **0%** □ Neutral Partly agree **19%** □ Agree Strongly **81%**

Through this project my standard of living has improved
□ Strongly disagree **3%** □ Disagree Partly disagree **7%** □ Neutral Partly agree **37%** □ Agree Strongly **42%**
This project infuenced me in a positive way

| □ Strongly disagree **0%** | □ Disagree Partly disagree **0%** □ | Neutral |
| --- | --- | --- |
| Partly agree **8%** | □ Agree Strongly **92%** | |

The project seems to have been successful in achieving most of its objectives.

The contribution of the rural newspaper in addressing the problems of everyday's life was remarkably good as well as the general level of satisfaction. Most of the villagers are very satisfied with the information received about prices of their products in the local market.

What evaluation of the qualitative objectives showed was a significant increase in positive attitudes in the participating people. Although the project has not strongly contributed to the involvement of users in decision making processes of the community (mainly because decisions continue to be taken by the Panchayat System), it has contributed to increase the standard of living of the greatest part of users.

92% of the rural newspaper affirmed that the initiative had positive impact on their life.

In evaluating the results of the questions, Dr. Mukul Srivastava concluded :

*"Though none of the measures used provided a perfect proof of attitude change among the participants, the combination of all, plus the actions that were taken, offer sufficient proof of the potential of the project in increasing the participants' sustained self-awareness, knowledge and empowerment".*

There is growing evidence that farmers are using the information received from the newspaper.

For example, 14 farmers who had had their sugar cane crops devastated by "red rot" disease in two consecutive years were able to contact an entomologist thanks to information provided in the newspaper.

The rural newspaper has proved that ameliorated communication leads to increased information aspirations in the population.

### 6.10.2 Outcomes of the Evaluation of the Community Internet Centre

What has emerged from the questionnaire is:

- PROFILE OF COMMUNITY INTERNET CENTRE USERS:
- the average age of the people interviewed was 35.
- 100 % were able to read
- 69% were landless labours
- 95% were Hindu
- 100% belonged to backward class
- 79% had an annual income < Rs. 10,000, 15% between Rs. 10,000–Rs. 20,000, and 6% between Rs. 20,000–Rs. 30,000
- 81% think the use of the Internet centre has addressed the problems of their daily life.

The types of information accessed and the benefit deriving from the "use" of the rural newspaper are reported below:

*Figure 10: Types of information accessed in percentage (community internet centre)*
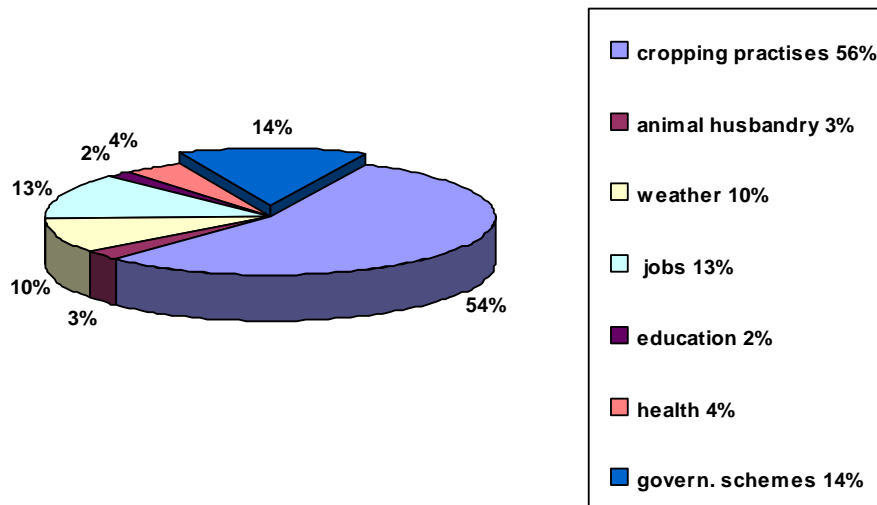


*Figure 11: Benefits deriving from the use of the internet centre*

remedies to crop diseases 42%
better prices 18%
weather 10%
gov. forms 14%
educ. facilities 2%
awareness 14%
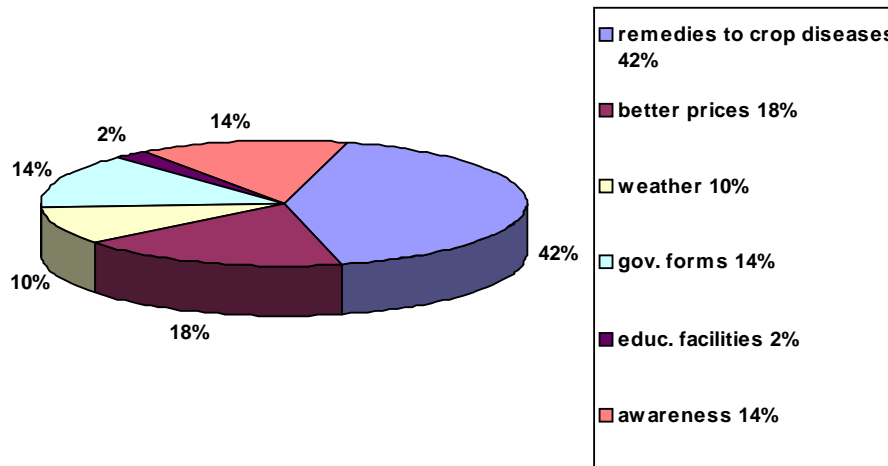
81% thought the Community Internet Centre had addressed the problems they face in their daily life.

Nearly no people encountered problems in using the community rural newspaper.

- LEVEL OF SATISFACTION
97% answered they had achieved their goals by participating in the project: 3% expressed a weak satisfaction, 16% were partly satisfied and 81% were strong satisfied.

- DEVELOPMENT IMPACT
Although some options were left in blank, we report the percentage for each option.

Through this project I see the importance of information more than before
□ Strongly disagree **0%**        □ Disagree Partly disagree **0%** □      Neutral
Partly agree **5%**        □ Agree Strongly **90%**

Through this project I see opportunities in information technologies I had not seen before
□ Strongly disagree **0%**          □ Disagree Partly disagree **0%** □      Neutral Partly agree **23%**          □ Agree Strongly **76%**

Because of this project I feel I am of more value to my colleagues and superiors
□ Strongly disagree **0%**          □ Disagree Partly disagree **0%** □      Neutral Partly agree **40%**          □ Agree Strongly **57%**

Through this project I am more involved in decision making processes in my community
 □ Strongly disagree **4%**          □ Disagree Partly disagree **11%**          □ Neutral Partly agree **61%**          □ Agree Strongly **21%**

Through this project I have gained specific skills
□ Strongly disagree **0%**          □ Disagree Partly disagree **0%** □      Neutral Partly agree **39%**          □ Agree Strongly **60%**

Through this project I receive information about prices of my products in the local market
 □ Strongly disagree **0%**          □ Disagree Partly disagree **0%** □      Neutral Partly agree **0%**          □ Agree Strongly **96%**

Through this project my standard of living has improved
□ Strongly disagree **3%**          □ Disagree Partly disagree **2%** □      Neutral Partly agree **35%**          □ Agree Strongly **57%**

This project infuenced me in a positive way
□ Strongly disagree **0%**          □ Disagree Partly disagree **0%** □      Neutral Partly agree **6%**          □ Agree Strongly **92%**

When comparing the outcomes of the community rural newspaper with those of the Internet centre it is evident that the Internet centre has been more successful in most of the indicators.
81% (versus 63% of the rural newspaper) thought that the community Internet centre had addressed the problems they face in their daily life

and 97% (versus 63%) answered they had achieved their goals by participating in the project .

The types of information accessed were different: in the case of the Internet Centre great emphasis was put on governmental forms with consequent benefit in specific activities like forms download, availability of certificates, etc.

Just as in the case of the rural newspaper, the greatest positive benefit deriving from the initiative regarded the information received about products prices in the local market (96% of the villagers affirmed to have benefited from such news).

The evaluation anticipated that the internet initiative supported sustainable grassroots community development and an improved quality of life through access to a broader range of information and through improved knowledge sharing.

The evaluation team has seen a number of positive signals: benefits and impacts were in fact realized quite early within the community, indicating a quicker progress when compared to the rural newspaper.

It is evident that, although the computer and internet training might be more time-consuming than the newspaper training, benefits deriving from the use of Internet are achieved much faster.

### 6.10.3 Final Survey

A very important survey was carried out in the month of February 2008 on the same sample of 200 villagers (100 from Barhi Gaghi and 100 from Kumhrava) who had filled out the evaluation questionnaire.

It aimed at identifying the main information sources for villagers one month after the end of the community media project.

The identification of information sources was important in order to assess whether the project had brought about changes in the way villagers search for information.

The survey – which was carried out in the form of an oral informal interview - aimed at identifying the most preferred information sources by measuring the usage in percentage.

Traditional and modern information sources were taken in consideration (rural newspaper, internet, radio, television, word of mouth).
Table 4 reports the outcomes of the survey.

*Table 4: Major source of information for agricultural practices*

| Sources | Rural newspaper Users | Internet centre Users |
|---|---|---|
| Internet | 0% | 78% |
| Rural newspaper | 65% | 5% |
| Other farmers | 20% | 6% |
| Private agencies/NGOs | 6% | 0% |
| Farmer's school | 0% | 0% |
| Krishi Vigyan Kendra* | 1% | 0% |
| Radio | 3% | 3% |
| Television | 5% | 8% |
| Other | 0% | |

* Krishi Vignan Kendra (KVK) is a project of ICAR (Indian Council of Agricultural Research) for testing and transfer of Agricultural technologies to bridge the gap between production and productivity and to increase self employment opportunities among the farming communities. The trainings offered here follow the principles of "Learning by doing" and "seeing is believing". It offers skill and knowledge oriented trainings in multidisciplinary areas like crop production and plant protection, horticulture, Animal Sciences and Fisheries, Home Science and Agricultural extension.

If prior to project the main source of information for people of both villages was mainly the "word of mouth", radio and television (see paragraph 6.6.3.1), after the conclusion of the project the preferred sources of information are community media.
Of the rural newspaper users, about 65% villagers reported that they receive most of the information and services from the newspaper as compared to 5% in the internet user groups. On the other hand, internet users prefer to access internet in the percentage of 78.
Such data establish that the project has indisputably changed the behaviour attitudes of villagers. They show that villagers have trust in the community media and that they have become aware of the usefulness of such media.

**6.11 Sustainability**

I think the main question regarding sustainability is whether we should treat the community media activities as commercial ventures or as initiatives contributing to community development and social change. I suggest that the concept of sustainability should be reviewed in terms of community ownership and in terms of concrete benefits to community organisation and development, particularly in rural areas.

I believe that, in the case of the rural newspaper, sustainability depends on the capability of rural villagers to proceed - with the same enthusiasm - to gather and print information.

The survival and sustainability of the rural newspaper require efforts and commitment. It is much more difficult to run a rural newspaper than an Internet centre. The writing of the newspaper requires an extensive activity in which the villagers are mentally and physically involved.

In the future, villagers might decide to make the newspaper financially sustainable by adding advertising or by fixing a price for each copy (but the latter would contribute to widen the gap between those who can afford access to information and those who cannot).

The internet centre is less effort demanding than the rural newspaper and easier to maintain.

In the future the internet centre might become even more valuable – and consequently sustainable - if considered as a modern version of public libraries, with an additional outreach communication component that transforms the former individual relationship between the library and the user into a collective process involving the community.

One of the main thrusts of Internet centre is to open the world of information and knowledge to the communities, with the advantage that internet can tailor the information to community needs. From the point of view of sustainability, community internet centres should be treated as public places where people can have access to a multitude of information and services.

I believe community knowledge is precisely what must be sustained after a project completion.

It is the knowledge that the communities use into the future to implement development activities, to build their consciousness and culture, to mobilise around their social and political needs, and so forth.

Thus community media activity may begin within a project, but may end up in the community itself.

The now logic of profit that comes along with globalisation is not going to contribute to solving the problems of underdevelopment, but is going to contribute to a wider gap between rich and poor, those that can afford access to information and those that cannot.

As a relatively new knowledge and communication tools for development and social change, we need to pass the stage of fascination for the technology and reach the point where we can look at it with critical eyes, applying what we have learned during the past 50 years from development in general, and in particular from community participation and participatory communication.

The experience of community media should allow us to establish the difference between a commercial venture and a public service for development and social change.


## 6.12 The Relationship between Trust and Communication

The concept of trust, although is not a new one, has only recently been taken in consideration in the project management.

Trust is a psychological state in which Individual A, given a specific situation, takes the risk of assuming that Individual B's first reflex will be to adopt a behaviour (judgement, a position or action) that meets Individual A's expectations. Trust takes the form of a wager on the behaviour of another. A certain amount of risk is accepted in exchange for a reduction in the transaction costs associated with the management of the situation. The concept of trust is integral to what have become Blau's classic theories of social exchange, and to the transaction costs theory developed by Coase and Williamson.

In the framework of our community media project, trust has revealed to be a major component.

Each team member began the project with some concerns about what they could expect of their colleagues and with expectations about their work relationships.

When team members met the villagers for the first time they knew that trust, communication and cooperation were not taken for granted.

Although actual empirical results on the relationship between trust and project performance are mixed and inconsistent, the project revealed that trust speeded up the development of the project and the negotiation processes.

Trust was necessary for cooperation, which was in turn the social lubricant that allowed autonomous but interdependent group members to achieve common goals harmoniously.

Technically dependent members of a group should cooperate, because cooperation is an indispensable part of the relational dependence required for their group to be truly functional.

It is also likely that, given the above definition, trust and cooperation among group members become more important as their tasks require more interdependence in their working relationships.

Anyway a minimum of trust is essential because fair communication cannot occur if information exchange is clouded with doubts over motives.

In the case of the internet centre, the involvement of the local sarpanch proved to be important.

The sarpanch, who was also the owner of the room where the computer was placed, played an important role in building trust around the project and between staff members and villagers. Consequently villagers, who respected their sarpanch, were more eager to go to the centre and not hesitant to use computers.


## 6.13 Final Considerations

Most of the Indian villages are deprived of communication facilities.

With the advent of global information society, new communication tools are increasingly being adopted as effective tools for reaching rural audiences. Yet the benefits of the information revolution are still much debated, particularly, in the case of developing countries like India.

There is serious concern that the gap between the information "haves and have not's" will continue to grow. Unless the developing countries acquire the infrastructures and resources necessary to access these new technologies, they are likely to become more marginalized and economically, socially and politically isolated.

The situation is more serious for remote rural communities where basic communication infrastructures such as newspaper, television, radio and telephone are lacking.

The project *Enhancing development support to rural masses through community media activity* demonstrated that it is essential to disseminate information in local languages and to ensure that it is relevant to local development needs.

Various communication tools - namely a rural newspaper and an internet centre - have been established.

The ethnographic research on media technologies carried out for the project tried to demonstrate that that there is no one single model for local communication initiatives that can be applied universally, but that each place requires an approach to the development of projects tailored to local needs, which should take account of local lives and environments.

The ways in which people use communication tools are defined in large part by their local everyday lives, the social, political, economic and cultural environment in which they live, and by the ways in which they might get in contact with communication tools (Slater and Tacchi 2003; Tacchi and Slater in preparation; Miller and Slater 2001).

It is also recognised that projects "initiated from the inside" (as in the case of our project which was coordinated by the Department of Journalism and Mass Communication) are more likely to tap into existing communication networks. A lack of understanding of and engagement with the local social, cultural, economic and political milieu normally hinders communication projects seeking to bring about change (e.g. giving greater access to civil society, reducing poverty, improving information and communication flows).

A suggestion for making rural information systems projects relevant is to invite the largest community participation (Caspary and O'Connor, 2003).

Roman and Colle (2002) call for a "conscientious attention to participation" because it "conveys a sense of community ownership; it provides indigenous wisdom; it helps reflect community values and needs; it provides important resources, such as volunteers or technical expertise".

Kanungo (2004) states that collective ownership of a communication tools enables access to everyone regardless of social status. In a similar vein, Gómez (1999) calls for research on "community involvement, participation and use" and Whyte (2000) emphasizes the need for community participation in evaluation.

With this in mind, our research approach was designed not simply to research a project, but to gain a level of understanding of the local context and thus, to assist in project design, monitoring and ongoing evaluation, in a continual cycle of research and project development.

In effect we aimed to overcome any separation between research and project development, placing the evaluation of project work at the centre of project practice, making that evaluation at the same time both more relevant and more useable. Evaluation here is not simply about measuring predetermined impacts - it is about awareness and adaptability.

The project helped us to identify a series of success factors for community media projects.

They imply capacities (intended as performances) and capabilities (intended as abilities) in various fields:

- *Technological capacity* (implying reliability, robustness & appropriateness of media tools)
- *Organisational capacity* (implying motivation, goal, objectives, Management Community participation
- *Informational capacity* (implying information literacy, ICT literacy, friendly infomediary, human-technology interface)
- *Human agency capacity* (implying economic affordability, socio-cultural motivation)
- *Infrastructural capacity* (implying reliable power supply, easy accessibility)
- *Economic capabilities* (enhancing access to market, capital and technology – thereby reducing production cost, increasing quality, enhancing productivity)
- *Political capabilities (*enhancing citizens participation in the decision-making process)
- *Cultural capabilities (*strengthening people's cultural identity, diversity and unity)

*- Psychological capabilities(*strengthening self-esteem, self-reflection, social capabilities, enhancing skills, knowledge, health and working conditions, functional, inclusive, participatory development)

The lessons learned from the two case studies and empirical analysis of community media projects in India, show the following considerations:
- ***there is no single way of approaching community media***. The process is dynamic and consists of several stages: raising awareness about the potential of community media for local development; encouraging basic use of them; providing specific products and content to meet local demands (e.g., materials in national languages and products tailored to the needs of specific sectors of the population, such as youth, women or disabled people). This is a challenging situation because it involves the need to be able to adjust to the pace of increasing community needs.
Political decision makers are affected by these challenges because they must set up legal and regulatory frameworks that create the optimum conditions for equal access and appropriation of media (in particular ICTs) within and by communities.
- ***participation is a crucial problem*** in the process of introducing and promoting the use of community media for development. Appropriation mechanisms should be initiated within the communities, but finding ways to involve large segments of the population still constitutes a real problem, even when people are aware of the potential usefulness of media.
It is equally important to try to better understand the attitude of communities toward changes, so as to identify the factors that underlie the adoption of community by poor rural communities.
- A specific aspect concerns the fact that ***women barely use community media***, and when they do they use these tools less than men, even when they are relatively literate. Knowing that women's involvement, despite some resistance and constraints, is a prerequisite for their participation in the Information Economy, steps should be taken to promote some kind of positive discrimination toward women. Projects specifically designed for women seem to offer efficient ways to obtain this involvement. Women's involvement in project management and the promotion of leadership by women are also important conditions for enhancing their participation and appropriation of community media.

- Due to installation costs and the recurrent expenses involved in the use of Internet, adaptable and ***affordable alternative technologies*** are needed to ensure universal access and to improve the living conditions of the population.

- ***Political will, community leadership and ownership are key enabling factors***, and accurate strategic planning, effective monitoring and critical evaluation are indispensable to identify factors inhibiting impact and to ensure sustainability.

- ***community media are a tool, not a recipe.*** Currently, in India, the availability of specialists in community media and even training institutions in this area is extremely limited. It is therefore necessary that the sector reforms address this issue of basic training and developmental training so as to ensure the existence of sustainable, quality facilities, accessible to all in the sector, to ensure continued and improved availability of the requisite professional and operational human resources. Forging alliances between private and public sector, including international and multilateral organisations is pivotal. In this connection, an important aspect to take into consideration is the need to overcome the resistance of decision makers as a key factor in the effective involvement of all stakeholders. This can be done only through the promotion of general community media diffusion and creating awareness and appreciation as well as literacy among populations, especially women and young people.

# CONCLUSION

Community media struggle at the periphery of a contrasting and often iniquitous Indian media landscape.

In contrast with the government's efforts to bridge the information and digital divide and take information technology to the masses and in contrast with the Supreme Court Judgement of 1995 that endorsed airwaves to be public property, the gap between potential use of community media and practices appear to be wide.

If the two tiers of public (government) and private media are already a legitimate part of media processes in the country, a third tier – that of community media – still needs to be legitimized.

Priority should be given in issuing of community broadcasting licenses to rural areas and other regions and communities that are least developed in terms of various socio-economic indicators. The least developed regions and communities of the country are also least served by media.

There is a need to develop models of collaboration among researchers, social scientists, technologists, so that local requirements are met in a affordable and self-sustaining way.

If the denial of information aggravates the poverty gap, information without communication could be unuseful.; rather than an ocean of information that is irrelevant to local needs, communities need small ponds of sweet water that are suited for their consumption.

Farmers – as emerged from the project - need to know the price of their crops at the city market, if there is a veterinarian at a walking distance, or if the local government has credits available for them.

They need information in their own language, and presented in a layout that they can understand and that is culturally appropriate. Language is the vehicle that communities use to communicate; but it is also the essence of their identity. Strengthening and enhancing cultural values through communication tools, can only benefit long-term sustainable social development.

The relative good success of the community media project in Kumhrava and Barhi Gaghi demonstrates that if participants perceive themselves as active participants, the projects have some chance of making a real difference to the welfare of local communities.

High levels of participation and consensual modes of decision making have proved to be at the base of the development process.

Even if the concepts of community participation and ownership of media are not as simple to implement – mainly because the communities are traditionally not ready to take on this responsibility - Indians are now getting more familiar with the strategies common to the Western world, such as consumer ownership of programmes, risk taking, and sustainability of programmes beyond the term of external funding.

When properly designed, community-media programs can be highly effective in managing natural resources, providing basic infrastructure or ensuring primary social services.

Successful design requires tapping into local needs, understanding and building on the strengths of existing institutions, and defining the changes needed to support community action.

Community media are unique communication processes shaped by the distinct culture, history, and reality of the communities they serve; in common they share the necessity to build trust, enhance participation and assure sustainability as well as empowerment and networking.

# BIBLIOGRAPHY

- Agar, M. (1986) *Speaking of Ethnography,* Sage, Beverly Hills.

- Atkinson, P. and M. Hammersley (1994) "Ethnography and Participant Observation" in *Handbook of Qualitative Research*, (Denzin, N. and Y. S. Lincoln eds) Sage, Thousand Oaks.

- Brett, E. (2003) "Participation and Accountability in Development Management", *Journal of Development Studies,* pp. 1-29.

- "Making New Technologies Work for Human Development", Human Development Report 2001 (available at www.hdr.undp.org/en/reports/ global/hdr2001).

- Accascina, "Information Technology and Poverty Alleviation", FAO First Consultation on Agricultural Information Management, 2000.

- Acharya, S.S. and D.P. Chaudhri (2001). Indian Agricultural Policy at the Crossroads: Priorities and Agenda, New Delhi, Rawat Publications.

- Balakrishnan, Pulapre (2000). "Agriculture and Economic Reforms; Growth and Welfare," Economic and Political Weekly, vol. 35, no. 12, pp. 999-1004, March 18.

- Beller M. (2001) Integrating new technologies in distance education: Pedagogical, social and technological aspects, London: Chapman & Hall.

- Besley T. and Burgess R., 1998 "Land reform, poverty reduction and growth: evidence from India", Working Paper, London School of Economics,.

- Bhalla, G.S. and Gurmail Singh, (2001). Indian Agriculture; Four Decades of Development, Sage Publications, New Delhi.

- Bhalla, G.S. and Peter Hazell, (2003). "Rural Employment and Poverty: Strategies to Eliminate Rural Poverty within a Generation," Economic and Political Weekly, vol. 38, no. 33, pp. 3473-84, August 16.

- Bohmann, K. (2004): "Media for Rural Development. A Guide for Media Use". GTZ/Inwent, Eschborn.

- Bose, Ashish, (1996), India's Basic Demographic Statistics Results of the census of India 1991.

- Carspecken, P. F. (1996) Critical Ethnography in Educational Research: A Theoretical and Practical Guide, Routledge, New York ; London.

- Caspary, G. and D. O'Connor (2003) "Providing Low-Cost Information Technology Access to Rural Communities in Developing Countries: What Works? What Pays?" OECD Development Centre Working Paper 229, OECD, Paris.

- Chambers, R. (1983) Rural Development: Putting the Last First, Longman, London.

- Chambers, R. (1994) "Participatory Rural Appraisal (PRA): Challenges, Potentials and Paradigm", World Development, 22 (10), pp. 1437-1454.

- Chambers, R. (1997) Whose Reality Counts?: Putting the First Last, Intermediate Technology, London.

- Chand, Ramesh (1999). "Emerging Crisis in Punjab Agriculture: Severity and Options for Future," Economic and Political Weekly, vol. 34, no. 13, pp. A-2-10, March 27.

- Chandha, G.K. (1986). The State and Rural Economic Transformation—The Case of Punjab 1950-85, Sage Publications, New Delhi

- Chopra, Kanchan (2003). "Sustainable Use of Water: The Next Two Decades," Economic and Political Weekly, vol. 38, no. 32, pp. 3360-65, August 9.

- Cleaver, F. (2001) "Institutions, Agency and the Limitations of Participatory Approaches to Development" in Participation, the New Tyranny?, (Cooke, B. and U. Kothari eds), Zed, London, pp. 36-55.

- Colle, R. (2005) "Memo to Telecentre Planners", Electronic Journal of Information Systems in Developing Countries, pp. 1-13.

- Deshingkar, Priya and Start, Daniel, Seasonal Migration for Livelihoods in India: Coping, Accumulation andxclusion, Working Paper, 2003, Overseas Development Institute.

- Dreze, Jean and Haris Gazdar, 1998. "Uttar Pradesh: The Burden of Inertia," in Indian Development: Selected Regional Perspectives, eds. Jean Dreze and Amartya Sen. Delhi, Oxford University Press.

- Epstein S, 1998."Village Voices", Sage Publications,

- Evenson, Robert E., Carl E.Pray and Mark W. Rosegrant, 1999. "Agricultural Research and Productivity Growth in India," International Food Policy Research Institute, Washington, D.C.

- Fan, Shenggen, Peter Hazell and Sukhadeo Thorat (2000). "Impact of Public Expenditure on Poverty in Rural India," Economic and Political Weekly, vol. 35, no. 40, pp. 3581-88, September 30.

- Fraser C., Sonia Restrepo-Estrada (1998): "Communicating for Development. Human Change for Survival", London, New York.

- Freire, P. (1972) The Pedagogy of the Oppressed, Sheed and Ward, London.

- Galjart, B. (1981) "Participatory development projects: some conclusions from research", Sociologia Ruralis, 21 (2).

- Gosling, L. and M. Edwards (2003) Toolkits: A Practical Guide to Planning, Monitoring, Evaluation and Impact Assessment, Save The Children, London.

- Gough, K. 1987. "Rural Society in Southeast India", Cambridge University Press,

- Holdcroft, L. "The Rise and Fall of Community Development in Developing countries", Michigan University Press, 1984.

- Howley, K. "Community Media : People, Places, and Communication Technologies", Cambridge University Press, 2005.

- Information Needs Study", Indian Agribusiness Systems Ltd, June 2001 to November 2001.

- ITU (2004). Case study India: Enabling rural India with information and communication technology initiatives. Mackenzie, D. (1999). "The Social Shaping of Technology", 2nd edn. Buckingham: Open University Press.

- Jones, Gavin , Visaria P., (2001) Urbanization in Large Developing Countries, Clarendon Press Oxford

- Joshi, P.K. and Ashok Gulati (2004). "Agriculture Diversification in South Asia: Patterns, Determinants and Policy Implications," Economic and Political Weekly, vol. 39, no. 24, pp. 2457-2467, June 12.

- Kanungo, S. (2004) "On the Emancipatory Role of Rural Information Systems", Information Technology and People, 17 (4), pp. 407-422.

- Kiri, K. and D. Menon (2006) "For Profit Rural Kiosks in India: Achievements and Challenges" in Information for Development.

- LeCompte, M. and J. Schensul (1999) Designing and Conducting Ethnographic Research, Altamira, Walnut Creek.

- Lewis, I. M. (1985) Social Anthropology in Perspective: The Relevance of Social Anthropology, Cambridge University Press, Cambridge.

- Lok Sabha Speaker Somnath Chatterjee's address, on "Rural India: Developmental Challenges," at the 26th annual convocation of the Institute of Rural Management, Anand, Gujarat, on April 3, 2007

- Misra, R.P, "Million Cities of India" (1998) New Delhi, Sustainable Development Foundation.

- Misra, V.N. and M. Govinda Rao (2003). "Trade Policy, Agricultural Growth and Rural Poor: Indian Experience, 1978-79 to 1999-2000," Economic and Political Weekly, vol. 38, no. 43, pp. 4588-4603, October 25.

- Okunna, C.S. (1995) Small participatory media technology as an agent of social change: non-existent option? Media, Culture and Society, 17

- Onwuegbuzie, 2002., Information Resources and Technology Transfer Management in Developing Countries. London: Routledge.

- Pant, Niranjan (2003). "Key Trends in Ground Water Irrigation in the Eastern and Western Regions of Uttar Pradesh," IMWI-TATA Policy Research Program, Center for Development Studies, Lucknow.

- Pant, Niranjan (2004). "Trends in Groundwater Irrigation in Eastern and Western U.P.," Economic and Political Weekly, vol. 39, no. 31, pp. 3463-3468, July 31.

- Patnick, P (1997) " The context and consequences of economic liberalization in India", Journal of international trade and development, Vol.6, No.2, July 1997.

- Rao, C.H. Hanumantha (1994). Agricultural Growth, Rural Poverty and Environmental Degradation in India, Delhi, Oxford University Press.

- Rao, S.S. (2002), "Knowledge management in India's rural community projects", Online Information 2002 Proceedings, Learned Information, Oxford, pp.29-38.

- Rensburg, R. "Community development: essential contribution or paternalistic communication?" Dialogus on line, 1994.

- Richardson D., contribution to the FAO e-forum "The appropriation of traditional and new media for development -Whose reality counts", December 2001.

- Roul, Chhabilendra, 2001. Bitter to Better Harvest; Post-Green Revolution, New Delhi, Northern Book Centre.

- Sharma M., "Anthropology and Colonialism in Asia and Oceania", The Journal of Asian Studies, Vol. 59, No. 2 (May, 2000).

- Singh, Ranbir. Director of Census Operations, Uttar Pradesh 2001. Census of India, 2001. Uttar Pradesh. Provisional Population Totals.

- Stokes, Eric 1978. The Peasant and the Raj: Studies in Agrarian Society and Peasant Rebellion in Colonial India, Cambridge, Cambridge University Press.

- Untouchability in Rural India", ActionAid Report, Sage Publications, New Delhi, 2006.

- Vyas, V.S. (1999). "Agricultural Trade Policy and Export Strategy," Economic and Political Weekly, vol. 34, no. 13, pp. A-27-33, March 27.

- Vyas, V.S. (2001). "Agriculture: Second Round of Economic Reforms," Economic and Political Weekly, vol. 36, no. 10, pp. 829-836, March 10.

- White, Barbara Harris, India's Informal Economy-facing the 21st Century, Paper for Indian Economy Conference, Cornell University, 19th and 20th of April, 2002.

## Literature on methodology

- Alasuutari, P. (1995) Researching Culture. Sage: London.
- Atkinson, P. (2001) Handbook of ethnography. London: Sage.
- Bryman, A. (2001) Social Research Methods. Oxford: Oxford University Press.
- Clive Seale (ed) (1998), Researching Society and Culture. London: Sage.
- Creswell, J. (1998) Qualitative Inquiry and Research Design. Thousand Oaks: Sage.
- Geertz, C. (1975) The Interpretation of Cultures: Selected Essays. London: Hutchinson.
- Gilbert, (ed.) (2001) Researching Social Life. 2nd edition. London: Sage.

- Glaser, B.G. and Strauss, A.L. (1967) The Discovery of Grounded Theory: Strategies for Qualitative Research. Chicago, Aldine.

- Hammersley, M. and P. Atkinson (1995) Ethnography: Principles in Practice. London: Tavistock.

- Silverman, D. (1995) Interpreting Qualitative Data: Methods for Analysing Talk, Text and Interaction. London: Sage Publications Ltd.

- Slater, D., Tacchi, J and Lewis, P. (2002) Ethnographic Monitoring and Evaluation of Community Multimedia Centres: A study of Kothmale Community Radio and Internet Project, Sri Lanka. London: DfiD.

- Bhatnagar, Subhash (2000). Information and communication technology in development: Cases from India. New Delhi: Sage.

## Reports (International Organizations)

- UNDP Rural and Urban livelihoods for Human Development 2003-2007.

- UNDP, 1997. Human Development in India: Statistical Profile.

- World Bank, June 2004. "Attaining the Millennium Development Goals in India: Role of Public Policy & Service Delivery."

- IMF working paper, revised nov. 06, 2003. "Poverty in India. A Regional Perspective".

- UNDP 2007Human Development Index.

- Fao 2006, Effective Rural Communication For Developmen Report,

- UNESCO 2007 "A guide to community media centres. How to start and keep going", UNESCO Handbook 2007.

## Reports (Government of India)

- Government of India, Ministry of Finance (2005). "Infrastructure: Power" In, India Economic Survey 2004-2005.

- Census of India 1991 and 2001.

- Statistical Pocket Book of India, various issues

- Center for Monitoring Indian Economy, October 2000. Profiles of Districts.

- Center for Monitoring Indian Economy, February 2003. Infrastructure.

- Center for Monitoring Indian Economy, February 2004 and various years.

- Central Electricity Authority, General Review 2000-02.

- Government of India, Ministry of Road, Transport and Highways, "Basic Road Statistics."

- Government of India, Ministry of Finance, Economic Division. "Economic Survey 2001-2002."

- Government of India, Ministry of Finance, Economic Division. "Economic Survey 2002-2003."

- General Registrar of India, New Delhi, 2001.

- Government of India, 2001. "Districtwise Social Economic Demographic Indicators." National Commission on Population.

- India National Family Health Survey 1992-93 and 1998-99, Bombay: International Institute for Population Sciences.

- Registrar General & Census Commissioner, India, 2001 (RGI). Census of India, 2001.Provisional Population Tables.

- Registrar General of India, 1999. "Compendium of India's Fertility and Mortality Indicators 1971-1997," based on the Sample Registration System, New Delhi.

- State Government of Uttar Pradesh, 2004. Department of Statistics.

- State Government of Uttar Pradesh, 2004. Minor Irrigation Department.

- State Government of Uttar Pradesh, 2004. Department of Rural Development, Survey 2006.

**Internet References**

www.unesco.org/webworld/cmc/handbook/full_book.pdf

www.koshvani.up.nic.in

www.demotemp257.nic.in/httpdoc/Census_Data_2001/India_at_Glance/admn.html

www.economywatch.com/indianeconomy/poverty-in-india.html

www.itd.org/issues/india2.htm

www.sdnp.undp.org/gender/links/Poverty/Indicators_Statistics_and_Measurement/Poverty/index.html

www.fao.org/ag/Agl/swlwpnr/reports/y_sa/z_in/in.htm

www.ivcs.org.uk/IJRS Article 5 Page 1 of 5.

www.bharatnirman.gov.in/download.pdf

www.mapsofindia.com/maps/india/india-political-map.htm

www.up.gov.nic.in

www.policyproject.com/pubs/countryreports/IND_U.P._pp.pdf

www.unsystem.org/SCN/archives/india/ch06.htm

www.planning.up.nic.in/articles/Note_on_Farm_Sector.pdf

www.irrigation.up.nic.in

www.up.kvib.com

www.up.mandiparishad.in

www.www.mit.gov.in/download/EX_sum.PDF

www.finance.up.nic.in/TreasManual/TMan/T-FHB-HEAD.htm

www.kannauj.nic.in/bhulekh.htm

www.archive.eci.gov.in/se2002/pollU.P.d/ac/states/s24/Acnstcand25.htm

www.onlinetelemedicine.com/HTML/about_otri/projects_north.htm

www.ruralinformatics.nic.in/files/4_12_0_229.pdf

www.sitapur.nic.in/edist/data/UPeD%20AsIs%20Report%20-%20Ghaziabad.pdf

www.egovonline.net

www.fao.org/rdd/mdg_en.asp

www.diplomatie.gouv.fr/fr/IMG/pdf/KevalKumar.pdf

www.nri-worldwide.com/cgi-local/ts.pl?action=fetch&area=statisticsofindia

www.unisa.ac.za/dept/kom/d11radio

www.southasia.oneworld.net/article/view/142618/1/2285

www.tarahaat.com/about.htm

www.gyandoot.net

www.lkouniv.ac.in

www.bharosatrust.com

www.ugc.ac.in

www.nicd.org/Dst_Lucknow.asp

www.jsk.gov.in/up/up_lucknow.pdf

www.censusindia.gov.in

www.www.apnic.net/mailing-lists/s-asia-it/archive/2002/05/msg00034.html

www.panchayat.nic.in:

www.ruralbazar.nic.in

www.agmarknet.nic.in:

www.enrich.nic.in:

www.sitapur.nic.in/lokvani

www.i4donline.net/articles/current-article.asp?articleid=700&typ=Features.

www.pdforum.org/leal154.html.

www.itd.org/issues/india2.htm

www.fao.org/es/ESA/Roa/pdf/6_Social /SocialViability_India.pdf

www.i4donline.net/nov05/ictdnewsletter.pdf

www.infochangeindia.org/archives1.jsp?secno=9&monthname=September&year=20
03&detail

www.digitaldividend.org/pdf/echoupal_case.pdf

www.itu.int/ITU-D/pdf/fg7/apt004.doc

www.bridges.org/real_access

www.developmentgateway.org/download/181634/cecchini_scott_ICT.pdf

www.dot.gov.in/annualreport/english.pdf

www.dot.gov.in/annualreport/english.pdf

www.itforchange.net/media/askhaya.pdf

www.itcportal.com/agri_exports/e-choupal_new.htm www.poverty2.forumone.com

# PEHAL

# THE RURAL COMMUNITY NEWSPAPER

## संदेश



प्रिंसिपल इन्वेस्टिगेटर
यू०जी०सी० मेजर रिसर्च प्रोजेक्ट

गाँव की धारणा स्थान के बंधन से जुड़ी हुई है। लोग पास-पास रहते ही नहीं बल्कि एक इकाई के रूप में बंधे रहते हैं। एक दूसरे के नजदीक होते हैं। एक दूसरे को करीब से जानते हैं और यह भी जानते हैं कि कौन ग्रामीण जीवन में बेहतर योगदान करने की क्षमता रखता है। वह आत्मीय या करीबी संबंधों से पैदा हुआ एक दूसरे के बारे में ज्ञान/जानकारी ही ग्रामीण जीवन की एक अनूठी विशेषता है।

हमारा देश गरीब और ग्रामीण इन दो भागों में विभाजित है। जनसंख्या के लिहाज से लगभग 70 प्रतिशत लोग आज भी गांवों में रहते हैं। इनका मूल उद्योग या व्यवसाय खेती ही। गांव में कृषि, स्वास्थ्य, शिक्षा, पर्यावरण आदि से संबंधित सभी समस्याओं की जानकारी कराना जनसंचार का मूल उद्देश्य है।

ग्रामीण जनसंचार का मूल उद्देश्य समुदाय को अधिकार सम्पन्न बनाकर विकास कार्यक्रमों में लोगों की भागीदारी को बढ़ाना है। ग्रामीण क्षेत्रों में स्वच्छ पेयजल उपलब्ध कराना, आवास रहावता प्रदान करना, सड़कों का निर्माण, मरुभूमि विकास, गरीबी उन्मूलन, ग्रामीण रोजगार और विकास दुग्धबेल के लिए सहायता प्रदान करना, राष्ट्रीय परिवार लाभ योजना, राष्ट्रीय मातृत्व लाभ योजना, अनुसूचित जाति, अनुसूचित जनजाति तथा शारीरिक रूप से विकलांग लोगों को सहायता देना आदि कार्यक्रमों को क्रियान्वित करने संबंधी समस्त जानकारी देना है।

आज ग्रामीण समुदाय टूट रहे हैं, गांव छोड़कर लोग शहर की तरफ कूच कर रहे हैं, गाँवों में पढ़ने-पढ़ाने के वातावरण का अभाव, चिकित्सा सेवा की कमी, उन्नत कृषि उत्पादन के विषय में जानकारी की कमी, गांव पंचायतों के अधिकारों के विषय में जानकारी न होना आम बात है। जिसके परिणाम स्वरूप ग्रामीण विकास की दर आज भी संतोषजनक नहीं है। ऐसी परिस्थिति में जनसंचार माध्यमों तथा परियोजनाओं के समरस सायित्व निर्वाह करने की अनेक समस्याएं सामने चुनौती दे रही है। ग्रामीण जन को जागरूक करने के लिए सरकार ने

1952 में लगभग सामुदायिक विकास कार्यक्रम, जिसमें कृषि, ग्रामीण उद्योगों, शिक्षा, आवास, स्वास्थ्य, मनोरंजन तथा ग्रामीण जीवन के अन्य पक्ष भी शामिल किये थे तब 1950 के दशक में सामुदायिक विकास कार्यक्रम, 1960 के दशक में हरित क्रांति, 1970 के दशक में समस्त ग्रामीण विकास, 1990 के दशक स्वयंसेवी संस्थाओं को शामिल करना, 1990 के दशक में गरीबी उन्मूलन कार्यक्रम रोजगार सृजन आदि विकासात्मक कार्यक्रमों की अवधारणाएं स्थापित हुई पर, व्यावहारिक और प्रायोगिक रूप में इन कार्यक्रमों का ग्रामीण विकास में विशेष योगदान नहीं दिखलाई पड़ता।

ग्रामीण विकास की अंतीन संस्थाओं को देखते हुए जनसंचार कर्मियों एवं उनसे जुड़ी परियोजनाओं को देखते हुए जनसंचार कर्मियों एवं उनसे जुड़ी परियोजनाओं को आगे बढ़कर हिस्सा लेना होगा विकास के प्रत्येक कार्यक्रम की सुव्यवस्थित जानकारी देना हमारा धर्म एवं कर्तव्य ही। ग्रामीण विकास में बाधक तत्वों को ध्यान में रखते हुए सामुदायिक मीडिया के एकरूपरूप की संरचना हुई ही जिसमें एक सामुदायिक विशेष को समस्त विकास हेतु सामुदायिक स्तर पर प्रिन्ट मीडिया और इलेक्ट्रॉनिक मीडिया के द्वारा जागरूक करके विकसित करने का प्रयास जारी है।

लखनऊ विश्वविद्यालय के पत्रकारिता एवं जनसंचार विभाग को विश्वविद्यालय अनुदान आयोग, नई दिल्ली द्वारा प्रदत्त मेजर शोध परियोजना के द्वारा लखनऊ जिले के गाँवों के विकास संबंधी सभी आवश्यक कार्य कारणों का अध्ययन करके 'पहल' नामक ग्रामीण विकास संबंधी समाचार प्रकाशित करके वहाँ लोगों को यह जानकारी लगातार दी जा रही है कि वे शिक्षा, स्वास्थ्य, कृषि और पर्यावरण के क्षेत्र में किस तरह से निरन्तर विकसित होते रहें।

ग्रामीण विकास के लिए किये जा रहे समस्त प्रयासों को 'पहल' के द्वारा हम गांव तक पहुँचाते रहेंगे, और उसके प्रभाव की प्रायोगिक जानकारी भी हासिल करते रहेंगे। आशा ही नहीं पूर्ण विश्वास है कि 'पहल' के इस अंक से ग्रामीणजन जानकारी प्राप्त करके विकास की अनेक गतिविधियों को अपनायेंगे तभी इसकी सार्थकता सिद्ध होगी।

2~hml

(डा० रमेशचन्द्र त्रिपाठी)

# पारम्परिक संचार माध्यम एवं ग्रामीण विकास

जिस प्रकार हमारे लिए हवा एवं प्रकाश आवश्यक तत्व हैं उसी प्रकार संचार का महत्व भी हमारे जीवन में कम नहीं हैं। संचार का इतिहास काफी पुराना हैं बात को आगे बढ़ाने से पहले यह समझना जरुरी है कि आखिर संचार है क्या? साधारण शब्दों में कहें तो अपने विचारों, संवेदनाओं एवं धारणाओं को दूसरे तक सम्प्रेषित (पहुँचाना) करना है। जब वर्णमाला का अविष्कार नहीं हुआ था तो मनुष्य अपनी बात संकेतों एवं प्रतीकों के माध्यम से कहता था। संचार का महत्व इसी बात से समझा जा सकता है कि एक नवजात शिशु अपने माता-पिता के साथ चीख-चिल्लाकर संचार स्थापित करता है।

यह तो हुई संचार की बात आइए अब समझते हैं संचार के महत्व एवं प्रकार को। भारत जैसे विशाल देश में जहाँ विभिन्न धर्मों एवं संस्कृतियों का अनूठा संगम है, जहां हर प्रदेश की अलग सांस्कृतिक पहचान है वहाँ संचार एक जटिल प्रक्रिया है। इसी वजह से संचार का एक ही मॉडल सर्वव्यापी नहीं हो सकता।

इसीलिए ग्रामीण क्षेत्रों में संचार का पारम्परिक माध्यम बहुत प्रभावी सिद्ध होता है। गीत, नृत्य, नौटंकी, कठपुतली, संगीत आदि के माध्यम से जब विकास की बात

संचारित की जाती है तो संचार प्रभावी होता है। इसकी वजह यह है कि भारत के ग्रामीण सम्प्रेषण की अपनी एक अलग विशेषता है जो उनके पारम्परिक संचार माध्यमों जैसे – लोकगीत, लोकनृत्य, नुक्कड़ नाटक आदि के द्वारा संचारित की जा सकती है। जब बात तकनीक की करते हैं तो



अमित बाजपेयी, ग्राम प्रधान, कुल्हरई जनसमस्याओं के समाधान में सामाजिक चर्चा करते

आज भी लगभग 35 प्रतिशत गांव सड़कों से जुड़े नहीं हैं और टेलीफोन की सुविधा से आज भी बहुत से गांव वंचित हैं। पारम्परिक संचार माध्यम ग्रामीण विकास में महत्वपूर्ण भूमिका निभा सकता है। इसके द्वारा सरकारी या गैर सरकारी विकास एजेंसियों की विभिन्न विकास योजनाओं की सही व विस्तृत जानकारी गांव के आम लोगों तक सही समय पर पहुँचाई जा सकती है। जब आम लोगों को इन योजनाओं की जानकारी होगी तो इस योजनाओं के क्रियान्वयन में आसानी होगी और इसकी स्वीकार्यता बढ़ेगी। इसके अलावा किसी क्षेत्र विशेष की

समस्याओं को इन पारम्परिक माध्यमों द्वारा उजागर किया जा सकता है और उन्हें एक मंच पर लाया जा सकता है। इस प्रकार विकास एजेंसियों को क्रियान्वित की जा रही योजनाओं की आवश्यकता एवं उपयोगिता पर पुनर्विचार करने में मदद के साथ ही नई योजनाओं के निर्माण कर उनकी सहभागिता को सुनिश्चित करने में मदद मिलती है। किसी भी संचार का सबसे महत्वपूर्ण अंग है फीडबैक (प्रतिफल) पारम्परिक माध्यम इसमें भी महत्वपूर्ण भूमिका निभाता है।

विकास के अलावा समाचारों, नए अविष्कारों एवं सम-सामयिक मुद्दों से जागरूक करने में पारम्परिक संचार माध्यम महत्वपूर्ण भूमिका निभा सकता है। इस ज्ञानवर्धन का लाभ यह होगा कि सामाजिक कुरीतियां, अंधविश्वासों को दूर करने में सहायता मिलेगी।

इस प्रकार पारम्परिक संचार माध्यम गांवों के विकास में न केवल एक महत्वपूर्ण भूमिका निर्वाहन करता है। बल्कि आज के समय में जहां अधिकांश योजनाएं इसलिए सफल नहीं हो पाती क्योंकि उसकी सही जानकारी लोगों तक नहीं पहुंचती, इसमें भी पारम्परिक माध्यम सकारात्मक भूमिका निभा सकता है।

*अमित बाजपेयी, ग्राम प्रधान, कुल्हरई*

## प्रमुख बीज कम्पनियों की संकर प्रजातियाँ



| | | |
|---|---|---|
| **नामधारी के प्रारंभिक संकरी बीज** | | |
| टमाटर | – | बरसाती-लक्ष्मी (5005), देव, 100, 7721, 7731, 5031, राजा, सन् 230, 7712, 7810, 7704, 176, 6109 अयातार, अन्नपूर्णा |
| बैंगन | – | गोल-अभिषेक, संध्या, ब्लैक ब्यूटी, 707 लम्बा छाया, बीआई0-706, 1513, गिरीजा अन्य-करीना, कान्हा, हर्षिता |
| मिर्च | – | सोल्जर, तपन, गोदावरी, स्वर्णा, संक्रांति, ग्रीन वन्डर, उजाला, नागिनी, दशहरा |
| भिण्डी | – | तुलसी, इन्दिरा, मखमली, सन-40, सन-8, उपहार, शाइना, कंचन, शगुन |
| फूलगोभी | – | 2801, सरिता, तुहार, हिम पुष्पा, हिमानी |
| पत्ता गोभी | – | बहार, ग्रीन बाल, रिया, प्रगति, उन्नति, मानसी |
| खीरा | – | नूरी, अमृत, रानी, तृप्ति, अजेक्स |
| तरबूज | – | माधुरी (64), स्यूबाला (80), रोजा, रेडश्नी, मुमताज, रेड स्टार, सुरभि, सुगन्ध, खुशबू, मल्लिका, पाकिजा (3051) |
| खरबूजा | – | रसिका, कैस्टीला |
| शिमला मिर्च | – | स्वर्णा, न्यू अनुपम, नूतन, 1090 |

| | | |
|---|---|---|
| करेला | – | रोजो, बरगन्डी, रेडक्रियोल, एक्स केलिबर चमन, किरन, समर, ग्रीन, जीनत (007), अमन श्री |
| लौकी | – | नम्रता, लता, रवीना, ग्रीन गोल्ड |
| लोबी | – | गौरी, नरगिस |
| बेबी कार्न | – | गोल्डन बेबी, स्वीट कार्न-स्वीट पर्ल |
| ब्रोकली | – | ऐश्वर्य |
| मूली | – | नुवाजो, चोकटाउ, अपाची, कुरम्बा, स्कारलेट, कीर्ति रेड |
| पालक | – | मोनीटर डुकाटो |
| सलाद | – | रिवोल्यूशन, डबलिन, बरगामो |
| **जे०के०एग्री जेनेटिक्स इंडिया लिमिटेड** | | |
| बाजरा | – | जे0के0 - 26, जे0के0 - 592 |
| मक्का | – | जे0के0 सुरभि, जे0के0 1001, जे0के0 शीघ्र |
| भिण्डी | – | जे0के0 हरिता |
| टमाटर | – | जे0के0 देशी, जे0के0 - 1195, जे0के0 आशा |
| सूरमुखी | – | जे0के0 चित्रा |
| सरसों | – | जे0के0एम0एम0 - 2, जे0के0 सूरज |

# टमाटर की वैज्ञानिक खेती

टमाटर की खेती लगभग प्रत्येक प्रकार की भूमि में की जा सकती है परन्तु उचित जल निकास वाली दोमट एवं बलुई दोमट भूमि जिसमें पर्याप्त मात्रा में जीवांश उपलब्ध हो, इसकी खेती के लिए सर्वोत्तम होती है। साधारणतः इसकी खेती 6.5-7.5 पीएच0 मान वाली मृदा में अच्छी होती है।

**बीज की मात्रा :** एक हैक्टर खेत की रोपाई के लिए औसतन 400-500 ग्राम बीज की आवश्यकता पड़ती है। संकर किस्मों की खेती के लिए प्रति हैक्टर रोपाई हेतु 150-200 ग्राम बीज पर्याप्त होता है।

**नर्सरी में बीज की बुवाई :–** टमाटर के बीज सर्वप्रथम पौधशाला में बुवाई करके पौध तैयार कर लेते हैं तत्पश्चात् उनका रोपण मुख्य खेत में करते हैं। रोपाई के 25-30 दिन पूर्व इसकी बीज नर्सरी में डाल दी जाती है। नर्सरी हेतु अच्छे जल निकास वाली ऊँची भूमि यथासंभव नई जगह का चयन कर उसकी जुताई कर मिट्टी भुरभुरी बना लेते हैं। उसके बाद एक हैक्टर की रोपाई हेतु 7 मी0 गुणे 0.75 मीटर गुणे 0.15 मीटर आकार की 15 क्यारियां बना लेते हैं। क्यारियों के मध्य 1 फीट चौड़ी नाली बनाते हैं जो जल निकास तथा खरपतवार नियंत्रण के काम आती है। इसके बाद इन क्यारियों के ऊपर मृदा मिश्रण की 3 इंच मोटी परत बिछा देते हैं। इसके बाद 40 प्रतिशत व्यवसायिक फार्मेल्डीहाइड को 25 मिली0 प्रति लीटर पानी में मिला मृदा के अच्छी तर से नम करके 200 गेज की पॉलीथीन शीट से ढक देते हैं। बुवाई के 4 दिन पूर्व पॉलीथीन हटाकर हल्की गुड़ाई कर गैस को बाहर निकाल देते हैं। यदि मृदा मिश्रण का निर्जमीकरण हो पाया हो तो प्रत्येक क्यारी में 100 ग्राम कार्बोप्यूरान लाइनों में 5 सेमी0 की दूरी पर 0.5 से 1.0 सेमी0 की गहराई पर बुआई कर मृदा मिश्रण से ढक देते हैं। इसके बाद क्यारियों को सूखी पत्तियों या पुआल से ढककर उसके ऊपर समय-समय पर आवश्यकतानुसार फुहारे/हजारे से सिंचाई करते हैं। बीजों के अंकुरण के बाद पुआल को हटा देते हैं। अच्छे सख्त व मजबूत पौधा तैयार करे के लिए अच्छा होगा कि प्रति वर्ग मीटर की दर से 100-200 ग्राम डी0ए0पी0 क्यारियों में मिला दें। एक सप्ताह के अंतराल पर क्यारियों में पौधों को मैकोजेब 0.2 प्रतिशत अथवा कार्बेन्डाजिम 0.1 प्रतिशत घोल से उपचारित करें। बीज शैया में बीज की बुवाई के 25-30 दिन बाद पौध रोपण योग्य तैयार हो जाती है।

टमाटर में लीफ कर्ल वाइरस का बहुत प्रकोप होता है। और यह रोग सफेद मक्खी के द्वारा फैलता है। अतः इस कीट से बचाव के लिए नर्सरी को एग्रोनेट से उल्टे यू के समान आकृति वाले छड़ों पर नेट को इस प्रकार फैलाते हैं कि सुरंगनुमा आकार बन जाए और यदि कोई कीट एग्रोनेट लगाते समय अंदर रह गया हो तो उसके नियंत्रण के लिए मोनोक्रोटोफास या डाइमेथोएट का छिड़काव करें।

**पौध रोपण :–** साधारणतया 4-6 पत्तियां वाले पौध जिसकी ऊँचाई 15-20 सेमी0 हो रोपणके लिए उपर्युक्त होती है। गर्मी के मौसम में छोटे पौधों का भी रोपण किया जा सकता है। पंक्ति से पंक्ति व पौध से पौध की दूरी, बीज की किस्म, भूमि की उर्वरकता, व रोपण के समय के अनुसार कम या ज्यादा क जा सकती है। रोपण के तुरंत बाद हल्की सिंचाई कर दें। संकर टमाटर की फसल के रोपण का सबसे उपयुक्त समय नवम्बर माह का होता है।

**खाद एवं उर्वरक :–** खाद एवं उर्वरक की मात्रा भूमि की उर्वरकता पर निर्भर करती है। टमाटर की अच्छी फसल लेने के लिए प्रति हैक्टेयर क्षेत्र में निम्न मात्रा में खाद एवं उर्वरक देना आवश्यक है। गोबरकी खाद रोपण से पूर्व खेत में सर्वत्र एक समान डालकर मिट्टी में अच्छी प्रकार मिला दें तथा फास्फोरस व पोटाश की पूरी मात्रा व नत्रजन की एक तिहाई मात्रा दो बराबर भागों में 30-50 दिनों बाद खेत में पौधों के चारों ओर बिखेर देना चाहिए। फूल लगने के समय 0.4 से 0.5 प्रतिशत यूरिया का घोल छिड़कना काफी लाभप्रद होता है। संकर टमाटर के लिए नत्रजन की शेष मात्रा को तीन बराबर भागों में बांटकर रोपाई के 30, 50 एवं 65 दिन बाद टाप ड्रेसिंग के रूप में प्रयोग करना चाहिए।

**सिंचाई :–** पौध रोपण के बाद दो तीन दिन तक हजारे से हल्की सिंचाई करें या रोपण के बाद सिंचाई इस प्रकार करें जिससे पौधे अच्छी प्रकार से बढ़ सकें। इसके लिए निम्न बातों को ध्यान में रखना आवश्यक है।
1. खेत में खूब पानी न भरें।
2. बार-बार कम मात्रा में सिंचाई करें।
3. जब फल पकने लगें तो सिंचाई न करें अन्यथा फल देर से पकेंगे।
4. अधिक पानी देने से लीफकर्ल विषाणु लगने की ज्यादा संभावना रहती है।

उपरोक्त तथ्यों को ध्यान में रखते हुए शीतकालीन फसल को 15 से 20 दिन के अंतर पर तथा बसंतकालीन फसल को आरम्भ में 10 दिन के अंतर पर व बाद में गर्मी बढ़ जाने पर सप्ताह में एक बार सिंचाई करना चाहिए।

**खरपतवार नियंत्रण :–** अच्छी फसल के लिए खरपतवार पर नियंत्रण करना अत्यंत आवश्यक है। लघु एवं सीमांत कृषक निराई गुड़ाई द्वारा स्वयं ही खरपतवार नियंत्रण कर लेते हैं परन्तु वर्तमान समय में कृषि मजदूरों के अभाव में निराई गुड़ाई करना अत्यंत कठिन और मंहगा हो गया है। अतः रासायनिक दवाओं का छिड़काव करके हम कम लागत में ज्यादा क्षेत्र का खरपतवार नियंत्रण कर सकते हैं।

**सहारा देना :–** टमाटर से अधिकाधिक उत्पादन लेने के लिए हल्की निराई गुड़ाई करके सहारा देना अत्यंत आवश्यक होता है। यह क्रिया असीमित किस्म के लिए अत्यंत आवश्यक है। इसलिए रोपाई के लगभग 30 से 45 दिन के बाद 120 सेमी0 के लकड़ी के डंडे पौधे के पास लगाकर पौधों को ढीले रूप से इस प्रकार बांधते हैं कि सभी शाखाओं को बढ़ने का उचित अवसर मिल सके। सहारा दने के पहले टमाटर के पौधों के नीचे की 2-3 शाखाओं को निकाल देते हैं। जिससे ऊपर की शाखाएं पुष्ट एवं मजबूत हो सकें। गर्मी की फसल को सहारा नहीं देना चाहिए।

**टमाटर में वृद्धि नियामकों का प्रयोग :–** वृद्धि नियामक पदार्थ खाद एवं उर्वरक के अतिरिक्त एक ऐसे पदार्थ हैं, जिनकी सूक्ष्म मात्रा में प्रयोग से ही पौधों के भौतिक बनावट व क्रियाओं में परिवर्तन लाया जा सकता है। टमाटर से अधिक व कम तापक्रम पर फलों न लगना व लीफ कर्ल विषाणु की काफी समस्या है। अतः वृद्धि नियामक पदार्थ जैसे पीसीपीए के 50 पीपीएम का फूल लगने के समय पर्णीय छिड़काव बहुत कम व अधिक तापमान पर फल लगने में सहायक होता है। इसी प्रकार साइकोसिल के 500 पीपीएम का प्रयोग रोपण से 3-4 दिन पूर्व नर्सरी रोपण के 25-30 दिन बाद करने से लीफ कर्ल विषाणु का प्रकोप कम हो जाता है। फलों को जल्द पकने के लिए इथेल के 1000 पीपीएम के घोल का छिड़काव फलों के पकने के समय फल शीघ्र एवं एक समान पकते हैं। इसी प्रकार इथेल के 250 पीपीएम की दर से छिड़काव करने से पौधे अधिक मजबूत होते हैं तथा पैदावार अच्छी प्राप्त होती है।

**धूप से फलों का सफेद होना :–** उत्तर भारत में मैदानी भागों में अप्रैल-मई के महीनों में टमाटर के फल सूर्य के प्रकाश के सीधे सम्पर्क में आने से सफेद पड़ने लगते हैं। इससे फलत के साथ-साथ बाजार भाव भी कम हो जाता है।

**उपचार :–** ऐसी किस्मों का चयन करें जिनमें पत्तियां अधिक निकलती हैं। सिंचाई की व्यवस्था करें टमाटर की दो तीन पंक्तियों के बीच सनई या ढेंचा लगाएं ताकि छाया रहे एवं धूप से फल खराब न हो।
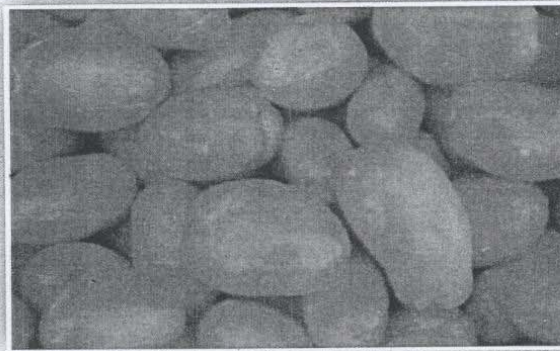
**फलों की तुड़ाई :–** टमाटर के फलों की तुड़ाई उसके उपयोग पर निर्भर करती है। यदि टमाटर को पास के बाजार में बेचना हो तो फल पकने के बाद तुड़ाई करें और यदि दूर के बाजार में भेजना हो तो जैसे ही उनके रंग में परिवर्तन हो तुरंत तुड़ाई करना चाहिए। विभिन्न उपयोग को ध्यान में रखते हुए फलों की तुड़ाई की निम्नलिखित अवस्थाएं निर्धारित की गई हैं:–
1. परिपक्व हरा
2. रंग परिवर्तन अवस्था
3. आधी पकी या गुलाब रंग की अवस्था
4. लाल पके रंग की अवस्था

**श्रेणीकरण :–** टमाटर तोड़ने के बाद रोग ग्रसित सड़े-गले इत्यादि को छांटकर अलग कर देना चाहिए। तत्पश्चात् उन्हें चार वर्गों में ए,बी,सी व डी में आकार के अनुसार अलग अलग छांट कर बाजार में भेजने पर अच्छा भाव मिलता है। भारतीय मानव संस्थान के अनुसार टमाटर को मुख्य रूप से 4 वर्गों में आकार के अनुसार सुपर ए, सुपर फैन्सी तथा व्यापारिक में बांटा गया है।

**भण्डारण :–** यदि बाजार में मांग न हो तो परिपक्व हरे टमाटर को 1.25 डिग्री सेल्सियस तापमान पर 30 दिन और पके टमाटर को 4-5 डिग्री सेल्सियस पर 10 दिन तक भण्डारित किया जा सकता है। भण्डारण के समय आर्दता 85 से 90 होनी चाहिए।

**उपज :–** टमाटर में औसत उपज 200 से 300 कुन्तल प्रति हैक्टर होती है, जबकि संकर टमाटर में 1 हैक्टर से लगभग 500-600 कुंतल फल प्राप्त होते हैं।

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## टमाटर में होने वाले प्रमुख रोग व कीट

**१. डैम्पिंग आफ :–** यह रोग प्रमुख रूप से नर्सरी अवस्था में लगता है। प्रभावित पौधशाला में बीजों का जमाव कम होता है और जमने के बाद सतह से लगा तना पतला हो जाता है। अधिक नम तथा गर्म भूमि में यह रोग तेजी से बढ़ता है।

**नियंत्रण :–**
1. पौध गृह में बुवाई से पूर्व बीज को कार्बेन्डाजिम या मैकाजेब 2.5 ग्राम/किलोग्राम बीज अथवा कैप्टान या थीरम 3 ग्राम प्रति किलोग्राम बीज की दर से उपचारित कर बोना चाहिए।
2. बुवाई से पूर्व भूमि का धूम उपचार अथवा फार्मेल्डीहाइड 2.5 मिली0 प्रति लि0 पानी में घोलकर मृदा को पालीथीन शीट से ढकना चाहिए।
3. यदि बीज जमने के बाद इस बीमारी का प्रकोप हो तो 3 गाम थीरम या कैप्टान प्रति लीटर पानी में घोलकर बीज शैया को अच्छी तरह तर कर दें।

**२. पछेती झुलसा :–** फफूंदी जनित इस रोग से प्रभावित पौधे की पत्तियों तथा टहनियों पर भूरे रंग के अनियमित गीले या जलसिक्त धब्बे दिखाई देते हैं। जो बाद में मौसम अनुकूल होने पर फैलकर पूरे पर्णीय भाग को झुलसा देते हैं। फलों पर जैतूनी रंग के विकनाईयुक्त धब्बे बनते हैं जो बढ़कर पूरे फल पर फैल जाते हैं और फल कट जाता है। एवं दुर्गन्ध भी आती है।

**३. अगेती झुलसा :–** फफूंदी द्वारा होने वाले इस रोग का लक्षण पहले पुरानी पत्तियों पर दिखाई देता है। प्रभावित पत्तियों पर छोटे-छोटे रंग के गोलाकार संकेंद्रीय धब्बा बनते हैं जो मौसम की अनुकूलता पाकर आपस में मिल जाते हैं जिससे पत्तियां झुलसकर लटक जाती है।

**नियंत्रण :–**
1. नर्सरी में बोने से पूर्व बीज को थीरम 3 ग्राम प्रति किग्रा बीज की दर से उपचारित कर लेना चाहिए।
2. खड़ी फसल में रोग नियंत्रण हेतु 2 से 2.5 किलोग्राम जिनेब य जिंक मैगनीज कार्बोमेट प्रति हैक्टर की दर से 800 से 1000 लीटर पानी में घोलकर 10 दिन के अंतर पर 2 से 3 छिड़काव करना चाहिए।
3. पौधे अवशेषों को एकत्र कर जला देना चाहिए।

**४. लीफ कर्ल विषाणु रोग :–** यह बीमारी एक विषाणु द्वारा होती है तथा सफेद मक्खी द्वारा फैलती है। इसमें पत्तियों का आकार छोटा तथा वे नीचे की ओर मुड़ी हुई एवं मोटी खुरदुरी हो जाती है। पत्तियों की नाड़िया मोटी होकर उभर आती है तथा पौधे बौने होकर झाड़ीनुमा हो जाते हैं। फूल और फल बहुत कम लगते हैं।

**५. मोजेक :–** यह भी विषाणु जनित रोग है, जिसमें पत्तियां मोटी, भद्दी तथा चमड़े जैसी सख्त होकर सिकुड़ जाती हैं। कमी हरे रंग के स्थान पर पीले रंग के छींटे से पड़े दिखाई देते हैं। इस विषाणु का फैलाव माहू के द्वारा होता है।

**नियंत्रण :–** उपरोक्त दोनों विषाणु जनित रोगों का निम्न रूप से नियंत्रण किया जा सकता है–
1. रोगग्रस्त पौधों को उखाड़कर गड्ढे में दबा देना चाहिए।
2. सफेद मक्खी तथा माहू के नियंत्रण हेतु मोनोक्रोटोफास 1.5 मिली0 प्रति लीटर पानी में अथवा डाइमिथोएट 1.5 मिली0 प्रति लीटर अथवा इण्डोसल्कान 2.0 मिली0 प्रति लीर पानी में घोलकर 10 दिन के अन्तराल पर छिड़काव करना चाहिए।
3. नर्सरी में पौधे तैयार करते समय एग्रोनेट का प्रयोग करना चाहिए।

## जानिए अपने गांव को

| सुविधाएं | स्थिति | कितनी दूरी (कि०मी० में) |
|---|---|---|
| 1. विकास खण्ड | नहीं है | 12 |
| 2. ग्राम विकास अधिकारी केन्द्र | है | 0 |
| 3. सस्ते गल्ले की दुकान | है | 0 |
| 4. पेय जल स्रोत | है | 0 |
| 5. कृषि सेवा केन्द्र | नहीं है | 12 |
| 6. बाजार हाट | है | 0 |
| 7. थोक मण्डी | *नहीं है | 27 |
| 8. शीत गोदाम | नहीं है | 12 |
| 9. बीज विक्रय केन्द्र | नहीं है | 12 |
| 10. उर्वरक विक्रय केन्द्र | है | 0 |
| 11. कीटनाशक विक्रय केन्द्र | है | 0 |
| 12. पशु चिकित्सालय / पशुपालन केन्द्र | नहीं है | 10 |
| 13. डी श्रेणी पशु औषधालय | है | 0 |
| 14. पशु सेवा केन्द्र | नहीं है | 7 |
| 15. कृत्रिम गर्भाधान केन्द्र / उपकेन्द्र | नहीं है | 7 |
| 16. सहकारी दुग्ध संग्रह केन्द्र | नहीं है | 18 |
| 17. प्रारम्भिक कृषि ऋण सहकारी समितियां | है | 0 |
| 18. क्रय विक्रय सहकारी समितियाँ | है | 0 |
| 19. सहकारी क्रय केन्द्र | है | 0 |
| 20. प्राथमिक विद्यालय (मिश्रित) | है | 0 |
| 21. उच्च प्राथमिक विद्यालय (बालक) | है | 0 |
| 22. उच्च प्राथमिक विद्यालय (बालिका) | है | 0 |
| 23. माध्यमिक विद्यालय (बालक) | है | 0 |
| 24. माध्यमिक विद्यालय (बालिका) | है | 0 |
| 25. बैकल्पिक शिक्षा केन्द्र | नहीं है | 28 |
| 26. एलोपैथिक चिकित्सालय औषधालय / प्राथमिक स्वास्थ्य केन्द्र | है | 0 |
| 27. आयुर्वेदिक चिकित्सालय एवं औषधालय | नहीं है | 28 |
| 28. यूनानी औषधालय | नहीं है | 28 |
| 27. होम्योपैथिक चिकित्सालय / औषधालय | नहीं है | 12 |
| 30. परिवार कल्याण केन्द्र / उपकेन्द्र | है | 0 |
| 31. मातृ शिशु कल्याण केन्द्र / उपकेन्द्र | है | 0 |
| 32. पक्की सड़कें | है | 0 |
| 33. डाकघर | है | 0 |
| 34. लेटर बॉक्स | है | 0 |
| 35. तारघर | नहीं है | 28 |
| 36. सार्वजनिक टेलीफोन | है | 0 |
| 37. रेलवे स्टेशन / हाल्ट | नहीं है | 10 |
| 38. बस स्टेशन / स्टॉप | नहीं है | 10 |
| 39. सहकारी कृषि एवं ग्राम्य विकास बैंक | नहीं है | 12 |
| 40. व्यवसायिक ग्रामीण सहकारी बैंक | है | 0 |
| 41. पोस्ट आफिस बचत बैंक | है | 0 |

# वैज्ञानिक तरीके से सब्जियों की पौध तैयार करें

खरीफ या बरसात के मौसम में लगाई जाने वाली सब्जियों की पौध तैयार करने के लिए नर्सरी में बुआई पूर्व मानसून आते ही प्रारम्भ कर देनी चाहिए। इस समय टमाटर, बैंगन, मिर्च, फूलगोभी और प्याज आदि की पौध



तैयार की जा सकती है। बोने के लिए हमेशा अच्छी कंपनियों की उन्नत व संकर किस्मों का ही चुनाव करना चाहिए। इसका ध्यान अवश्य रखें कि बीजों के अंकुरण की अंतिम तिथि निकल न गई हो। यह जानकारी बीज के पैकेट पर छपी होती है। बाजार में मिर्च, बैंगन, टमाटर, फूलगोभी और प्याज की संकर किस्में कई कंपनियों द्वारा बेची जा रही हैं। नुनहैम्स इंडिया प्रा० लि० कई वर्षों के अनुसंधान व ट्रायल के बाद ही बीज बाजार में उपलब्ध कराती है। संकर किस्मों का बीज महंगा होता है परन्तु अधिक उत्पादन देने में सक्षम होता है कई रोगों के लिए प्रतिरोधक क्षमता भी होता है। इस बीज की मात्रा भी लगभग एक चौथाई ही लगती है।

**बीज दर :-** सामान्य किस्मों की बीज दर प्रति हैक्टेयर इस प्रकार है- प्याज 8-10 किलो, टमाटर व बैंगन 500-600 ग्राम, मिर्च - 800 ग्राम से 1 किलो, फूलगोभी- 600-750 ग्राम।

**संकर किस्मों की बीज दर प्रति हैक्टेयर इस प्रकार हैं :-** प्याज-4 किलो, टमाटर व बैंगन - 200 ग्राम, मिर्च 300 ग्राम, फूलगोभी-300 ग्राम।

**निम्नलिखित संकर किस्में इस समय बाजार में उपलब्ध हैं :-** संकर प्याज-रोजो, नरगंडी, एक्सकेलिबर संकर बरसाती टमाटर - 5005 तथा 1001 अन्य टमाटर-राजा सन् 230ए 7712ए 7725 7704 इत्यादि संकर

बैंगन - अभिषेक, संध्या-गोल, छाया, शिल्पा, 706- लम्बा संकर मिर्च - सोल्जर, गोदावरी, देवनूर डीलक्स, दशहरा, शिखा, ग्रीन वण्डर इत्यादि। संकर फूलगोभी - सरिता, 1217, 2801, हिमानीबीज

**उपचार :-** बाजार में उपलब्ध अच्छी कंपनियों के बीज उपचारित होते हैं। पैकेट पर इसकी जानकारी छपी होती है। यदि बीज उपचारित न हो तो 2.5 ग्राम कैप्टान से एक किलो बीज का उपचार बीमारी या आर्द्रगलन से पौधों का बचाव हो जाता है और अंकुरण अच्छा होता है।

**पौध तैयार करने हेतु क्यारी बनाना :-** नर्सरी के लिए ऊँची, उपजाऊ व अच्छे जल निकास की सुविधा वाली मिट्टी का चुनाव करना चाहिए। भूमि की तैयारी करके खरपतवार निकालकर मिट्टी साफ कर लेनी चाहिए। जमीन को समतल करके 3 मीटर लंबी व 1 मीटर चौड़ी व 15 सेमी ऊँची क्यारी बना लेनी चाहिए। प्रत्येक क्यारी में 25-30 किलो गोबर की खाद या कम्पोस्ट डालना चाहिए। इसके बाद बोर्डो मिश्रण से क्यारी को मिट्टी को अच्छी तरह से तर कर देना चाहिए, इससे पौध गलन एवं फफूंद रोगों से पौध का बचाव होता है। बोर्डो मिश्रण बनाने के लिए 100 ग्राम नीला थोथा या कॉपर सल्फेट को रात में प्लास्टिक की बाल्टी में 5 लीटर पानी में भिगो दें। अगले दिन 100 ग्राम बिना बुझा डल्ले वाला चूना 5 लीटर पानी में प्लास्टिक की बाल्टी में भिगो दें। दोनों पदार्थों को लकड़ी से अच्छी तरह चलाकर घोल लें। अब प्लास्टिक की तीसरी बाल्टी में दोनों घोलों को एक साथ धीरे-धीरे उड़ेल लें। इस प्रकार से तैयार करे गए

मिश्रण के 10 लीटर घोल से प्रति वर्गमीटर क्यारी के हिसाब से नर्सरी की क्यारी को तर कर दें व पॉलीथीन शीट से क्यारी का 3-4 दिनों तक ढक दें। फिर पॉलीथीन शीट हटाकर पुनः खुदाई करके प्रति क्यारी 100 ग्राम यूरिया, 100 ग्राम सुपर फास्फेट व 100ग्राम म्यूरेट ऑफ पोटाश मिलाकर क्यारी को समतल कर लें।

**बुआई की विधि :-** बीज क्यारी में एक समान कतारों में बो दें व खाद व मिट्टी के मिश्रण की एक महीन परत से ढक दें। बीज अधिक गहराई में न बोएं। बीज में कुछ बूंदे मिट्टी का तेल मिलाकर बोने से चींटियों से छुटकारा मिल जाता है। बुआई के बाद फव्वारों से सिंचाई करें और क्यारी को घास की परत या पुआल से ढक दें। वर्षा न होने



की स्थिति में हर तीसरे दिन घास की परत के ऊपर से फव्वारे से सिंचाई करते रहना चाहिए। लगभग 5-8 दिनों में अंकुरण हो जाता है। 8-10 दिन बाद घास हटाकर देख लें अगर बीज जम गया हो तो शाम के समय पूरी क्यारी से घास हटा लें।

इसके बाद आवश्यकता -नुसार सिंचाई करते रहें। यदि पत्ती कुतरने वाले कीट दिखाई दें तो मोनोक्रोटोफॉस 1.5 मिली० प्रति लीटर पानी के हिसाब से छिड़काव करें। अंकुरण के 25-30 दिन बाद पौध रोपाई योग्य हो जाती है परन्तु प्याज की पौध लगभग 40-45 दिन बाद ही रोपाई योग्य हो पाती है। पौधों को लगाते समय ध्यान रखें कि इनकी जड़ें न टूटने न पाएं तथा ये अधिक तेज धूप में न रहें। पौधों को रोपने के बाद उसकी जड़ पर मिट्टी डालकर हल्के हाथों से दबा दें। फिर हल्की सिंचाई कर दें।

*साभार : खेती की बात*

# पशुओं में होने वाले मुख्य परजीवी रोग

पशुओं में मुख्यतः अनेक परजीवी रोग पाए जाते हैं जिनका ज्ञान पशुपालकों को न होने से बहुत तेजी से फलते-फूलते हैं। यदि इनकी रोकथाम न की जाए तो यह एक भयावह स्थिति पैदा करके पशुओं को मृत्यु के समीप लाकर खड़ा कर देते हैं।

ये परजीवी रोग मुख्यतः हेलमिन्थ बैक्टीरिया, वाइरस तथा प्रोटोजोआ आदि से हो सकते हैं। इनमें से कुछ परजीवी रोग निम्नलिखित हैं जो पशुओं को बहुत हानि पहुंचाते हैं।

**1. फेशियालिएसिस :-**यह रोग फेशीयोला के कारण होता है। ये फ्लूक चपटा पत्ती आकार का सभी फार्म पशुओं में पाए जाने वाला अंतः परजीवी कृषि होता है तथा फेशियोलिएसिस नामक रोग उत्पन्न करता है। रोमन्थी पशुओं में इनकी दो जातिया फेसियोला हिपेटिका तथा फेसियोला गिगैन्टिका पाई जाती है। ये परजीवी पशु के जिगर में स्थित पित्त नलिकाओं में निवास करते हैं। इनका जीवन चक्र दो पोषकों में पूरा होता है। भेड़, बकरी तथा अन्य पशु इनका मुख्य पोषक हैं जबकि स्नेल इनका मध्य पोषक है।

**रोग जनन :-** फेशियोलिएसिस की तीव्रता परजीवियों की संख्या व पशु की ग्रहणशीलता पर निर्भर करती है। भेड़ बहुत प्रभावित होती है और परजीवियों की संख्या अधिक हो जाने पर मर जाती है। जिन भेड़ों व गो पशु में यह रोग अधिक दिनों तक रहता है वह सुस्त व कमजोर हो जाते हैं जिनसे उनमें रक्ताल्पता और शरीर के निचले भाग में जलाशोथ हो जाता है।

**6. लंगड़िया बुखार :-** यह रोग बैक्टीरिया जनित रोग है। यह क्लोस्ट्रीडियम चौबियाई द्वारा फैलता है। इसमें पशुओं को तेज बुखार आ जाता है। जिससे पशु कमजोर हो जाते हैं। पशुओं के



पैरों में सूजन आ जाती है। सूजन दबाने से चरचराहट की आवाज आती है।

**7. क्षय रोग :-** यह रोग माइक्रोबैक्टीरिया पैराट्यूबर कुलोसिस नामक बैक्टीरिया से होता है। इस रोग में पशु कमजोर हो जाते हैं तथा त्वचा झुर्रीदार हो जाती है। पशु खांसने लगता है तथा आंखों में नाक से पानी गिरने लगता है तथा खांसने से पशुओं के फेफड़े कमजोर हो जाते हैं व पशुओं को सांस लेने में तकलीफ होने लगती है।

**परजीवियों का नियंत्रण :-** परजीवियों का नियंत्रण निम्न प्रकार से किया जा सकता है :-

1. पशुओं को कृमिनाशक दबा कार्बन टेट्राक्लोराइड देकर

2. मध्यवर्ती परजीवियों को नष्ट करके / लिवरफ्लूक का प्रकोप कम करने के लिए पानी के स्रोतों के पास पाए जाने वाले घोंघों के स्रोत के पास घोंघो के विनाश के लिए तूतिया का प्रयोग किया जाए।

3. ग्रुप में सम्मिलित करने से पूर्व पशुओं को कृमि रहित किया जाए।

4. फार्म के समीप स्थित गंदे तालाबों, पानी के गढ्ढों, नदी-नालों से पशुओं को पानी से निकाला जाए।

5. पशुशाला में मल-मूत्र एवं कूड़े के नित्य प्रति हटाया जाए।

6. कृमियों के नियंत्रण के लिए मानसून के पहले तथा बाद में कृत्रिहर का प्रयोग करना चाहिए। परजीवियों के हरण के लिए बाजार में दवा की दुकानों पर नाना प्रकार की दवाएं उपलब्ध रहती हैं। अपने निकट के पशु चिकित्सक से सलाह लेकर ही उनका प्रयोग करें।

*साभार : खेती की बात*

# ग्रामीण विकास की एक झलक ...



**प्रिय साथियों,**

मैं गौरवान्वित महसूस करता हूं कि मुझे विश्वविद्यालय अनुदान आयोग के इस प्रोजेक्ट के साथ प्रोजेक्ट फैलो के रूप में जुड़ने का मौका मिला आप लोगों का सहयोग हमें जिस प्रकार से मिल रहा है उससे हमें आशा ही नहीं पूर्ण विश्वास है कि हम अपनी मंजिल तक अवश्य पहुंचेंगे। साथियों कोई भी विकास तब तक संभव नहीं है जब तक आम लोग उससे न जुड़ें। हमें अब तक आपका जो भरपूर समर्थन मिला है उसके लिए मैं आपका धन्यवाद करता हूं। आपका यह सहयोग हमें उत्साहित तो करता ही है साथ ही कुछ नया करने की प्रेरणा भी देता है। आप अपनी प्रतिक्रिया, समस्याएं एवं विचारों को लेख के माध्यम से इसी प्रकार हमें बेते रहें ताकि 'पहल' को उसकी मंजिल तक पहुंचाया जा सके।

आपका साथी
**नवाज़ अहमद**
प्रोजेक्ट फैलो,
पत्रकारिता एवं जनसंचार विभाग

**ANNEX 2**
**Evaluation Questionnaire for the audience of the**
**Community Rural Newspaper (English Version)**

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**SECTION 1- Profile of the community person**

Age: .................................................................

Gender:...........................................................

Literacy Level
□ Not able to read or write     □ Able to read

Primary Occupation
□ Landowner                     □ Landless labour

Religion
□ Hindu        □ Muslim     □ Christian     □ Sikh        □ Any other,
please specify

Caste
□ Scheduled Caste or Tribe     □ Other Backward Class          □
Any other, please specify

Family Income level
□ Annual Income < Rs. 10,000                 □ Annual Income between
Rs. 10,000–Rs. 20,000
□ Annual Income between Rs. 20,000–Rs. 30,000     □ Annual Income
between Rs. 30,000–Rs. 40,000
□ please specify the amount

**2. What problems do you face in your day-to-day life? What**
**information needs do you have?**
……………………………………………………………………………
………………………………………………….

**3. Do you think the community rural newspaper can address these**
**problems?**

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□ Yes
□ No

**4. Are you able to read the community rural newspaper easily?**
a) Yes
b) No

**5. Were you consulted about your information needs and services prior to the launch of the community rural newspaper?**
□ Yes          □ No

**6. If yes, how was the consultation carried out? (Tick all that apply)**
□ Meetings with members of village Panchayat
□ Meetings with selected families in the community
□ Meetings with different sections of the community—Women, Youth, Elderly, Scheduled Castes/Scheduled Tribes
 (please specify)
□ Any other(s), please specify

**7. Has the community rural newspaper addressed your needs?**
.......................................................................................................................................
........................................................................

**8. Which information did you use more?**
□ **Cropping practices**
□ **Animal husbandry**
□ **Weather**
□ **Permanent jobs**
□ **Temporary jobs**
□ **Education**
□ **Health**
□ **Government services (form downloads, land records, birth and death certificates, licenses and permits)**

**Which benefits did you find?**
□ Remedies to crop diseases
□ Better prices for agricultural produces

□ Timely weather information
□ Easy availability of government forms
□ Reduced time for government procedures
□ Awareness about educational facilities
□ Computer education
□ Improvement in general awareness

**9. What problems do you face in using the community rural newspaper?**
**Rank:**
**0: not a problem**
**1: unimportant**
**2: slightly important**
**3: average**
**4: important**
**5: very important problem**
**List specific problems/examples**

**10. CONTENT PROBLEMS**
□ Illiteracy
□ Irrelevant information and services
□ Outdated content

**GENERAL PROBLEMS**
□ Infrastructure problems (power, connectivity)
□ Computer problems (inadequate number, slow)
□ Time consuming
□ Tardy response from the government

**SECTION 2 - Level of satisfaction**

10. What were your main reasons to participate in this project?
...............................................................................................................................................
...........

11. How often do you use the project?

□ Daily □ Weekly □ Monthly □ Fewer than once a month

12. Have you achieved your goals by participating in this project?
□ yes □ no

13. How satisfied are you with this project?
□ Weak Partly unsatisfactory □ Partly satisfactory □ Strong

14. Training
□ Weak Partly unsatisfactory □ Partly satisfactory □ Strong


**SECTION 3 - Development Impact**
Please mark the option that reflects how you feel about the following statements.

Through this project I see the importance of information more than before
□ Strongly disagree □ Disagree Partly disagree □ Neutral Partly agree □ Agree Strongly

Through this project I see opportunities in rural newspaper I had not seen before
□ Strongly disagree □ Disagree Partly disagree □ Neutral Partly agree □ Agree Strongly

Because of this project I feel I am of more value to my colleagues and superiors
□ Strongly disagree □ Disagree Partly disagree □ Neutral Partly agree □ Agree Strongly

Through this project I am more involved in decision making processes in my community
□ Strongly disagree □ Disagree Partly disagree □ Neutral Partly agree □ Agree Strongly

Through this project I have gained specific skills (besides computer skills)
□ Strongly disagree     □ Disagree Partly disagree     □ Neutral Partly agree     □ Agree Strongly

Through this project I receive information about prices of my products in the local market
 □ Strongly disagree     □ Disagree Partly disagree     □ Neutral Partly agree     □ Agree Strongly

Through this project my standard of living has improved
□ Strongly disagree     □ Disagree Partly disagree     □ Neutral Partly agree     □ Agree Strongly

This project infuenced me in a positive way
□ Strongly disagree     □ Disagree Partly disagree     □ Neutral Partly agree     □ Agree Strongly

**Thank you for your cooperation!**

**ANNEX 3**
**Evaluation Questionnaire for the audience of the**
**Community Internet centre (English Version)**

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**SECTION 1- Profile of the community person**

Age: ...............................................................
Gender: ........................................................

Literacy Level
☐ Not able to read or write    ☐ Able to read

Primary Occupation
☐ Landowner                    ☐ Landless labour

Religion
☐ Hindu         ☐ Muslim      ☐ Christian      ☐ Sikh         ☐ Any other,
please specify

Caste
☐ Scheduled Caste or Tribe    ☐ Other Backward Class              ☐
Any other, please specify

Family Income level
☐ Annual Income < Rs. 10,000                    ☐ Annual Income between
Rs. 10,000–Rs. 20,000
☐ Annual Income between Rs. 20,000–Rs. 30,000        ☐ Annual Income
between Rs. 30,000–Rs. 40,000
☐ please specify the amount

**2. What problems do you face in your day-to-day life? What**
**information needs do you have?**
………………………………………………………………………
…………………………………………….

**3. Do you think the Internet Centre can address these problems?**

□ Yes
□ No

**4. Are you able to access the IT service easily?**
a) Yes
b) No

**5. If No, what are the problems faced in going to the IT Service Centre? (Tick all that apply)**
□ Located at a distant place (from the residence of the user)
□ Located at a place where entry is restricted because of social background (e.g., temple, house of a high-class community person)
□ Not allowed access because of gender bias
□ Unable to pay the fee for accessing the ICT service
□ Unable to access because of other pressing livelihood needs/jobs
□ Working timings at the centre not suitable
□ Any other(s), please specify


**6a. Were you consulted about your information needs and services prior to the establishment of the IT service?**
□ Yes        □ No

**6b. If yes, how was the consultation carried out? (Tick all that apply)**
□ Meetings with members of village Panchayat
□ Meetings with selected families in the community
□ Meetings with different sections of the community—Women, Youth, Elderly, Scheduled Castes/Scheduled Tribes
 (please specify)
□ Any other(s), please specify

**7. Has the IT Centre addressed your needs?**
.......................................................................................................................................
............................................................................

**8. Which information serivces did you use more?**

□ **Cropping practices**
□ **Animal husbandry**
□ **Weather**
□ **Permanent jobs**
□ **Temporary jobs**
□ **Education**
□ **Health**
□ **Government services (form downloads, land records, birth and death certificates, licenses and permits)**
□ **Personal and business**

**Which benefits did you**
□ Remedies to crop diseases
□ Better prices for agricultural produces
□ Timely weather information
□ Easy availability of government forms
□ Reduced time for government procedures
□ Awareness about educational facilities
□ Computer education
□ Improvement in general awareness.

**9. What problems do you face in using the IT services?**
**Rank:**
**0: not a problem**
**1: unimportant**
**2: slightly important**
**3: average**
**4: important**
**5: very important problem**
**List specific problems/examples**

**10. CONTENT PROBLEMS**
□ Illiteracy
□ Unfriendly human intermediaries
□ Difficult software interfaces
□ Irrelevant information and services
□ Not aware about the possible usage of IT in day-to-day life
□ Outdated content

**GENERAL PROBLEMS**
□ Infrastructure problems (power, connectivity)
□ Computer problems (inadequate number, slow)
□ Time consuming
□ Tardy response from the government

**SECTION 2 - Level of satisfaction**
10. What were your main reasons to participate in this project?

11. How often do you use the project?
 □ Daily                □ Weekly        □ Monthly      □ Fewer than once a month

12. Have you achieved your goals by participating in this project?
□ yes            □ no

13. How satisfied are you with this project?
□ Weak Partly unsatisfactory  □ Partly satisfactory    □ Strong

14. Training
□ Weak Partly unsatisfactory  □ Partly satisfactory    □ Strong

**SECTION 3 - Development Impact**
Please mark the option that reflects how you feel about the following statements.

Through this project I see the importance of information  more than before
□ Strongly disagree      □ Disagree Partly disagree      □ Neutral Partly agree    □ Agree Strongly

Through this project I see opportunities in information and communication technology I had not seen before
□ Strongly disagree      □ Disagree Partly disagree      □ Neutral Partly agree    □ Agree Strongly

Because of this project I feel I am of more value to my colleagues and superiors
□ Strongly disagree      □ Disagree Partly disagree      □ Neutral Partly agree      □ Agree Strongly

Through this project I am more involved in decision making pro- cesses in my com-munity
 □ Strongly disagree      □ Disagree Partly disagree      □ Neutral Partly agree      □ Agree Strongly

Through this project I have gained useful computer skills
□ Strongly disagree      □ Disagree Partly disagree      □ Neutral Partly agree      □ Agree Strongly

Through this project I have gained additional skills (besides computer skills)
□ Strongly disagree      □ Disagree Partly disagree      □ Neutral Partly agree      □ Agree Strongly

Through this project I receive information about prices of my products in the local market
 □ Strongly disagree      □ Disagree Partly disagree      □ Neutral Partly agree      □ Agree Strongly

Through this project my standard of living has improved
□ Strongly disagree      □ Disagree Partly disagree      □ Neutral Partly agree      □ Agree Strongly
This project infuenced me in a negative way
□ Strongly disagree      □ Disagree Partly disagree      □ Neutral Partly agree      □ Agree Strongly

**Thank you for your cooperation!**