

Research Note :

**SCOPE OF INFORMATION TECHNOLOGY FOR
DEVELOPMENT IN TRIBAL
AGRICULTURAL BELTS OF CHHATTISGARH**

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Information technology has made a spectacular revolution in natural resources management in India during last couple of years. Agricultural is the one among the important renewable natural resources, which is significantly contributing for the national economy. It is contributing approximately 6.7 percent to GDP of the country. Over two third population of the country are involved in agriculture sector, so agricultural has become a main stay for their livelihood. Agricultural sector has made tremendous progress after independence. Annual food grain production increased from 55 million tonnes in the early fifties to 206 million tonnes in the year 2000 (NAP, 2000). However, the population explosion, uneven development and management practices resulted in degradation of productivity of agro-ecosystems.

The agricultural situation is rapidly changing in our country. Population growth rate and higher per capita income suggest that demand for food grains is increasing gradually. Yield growth rates of food grains are also stagnating in most parts of the country. The productivity of soil has also started declining in several regions of the country. According to a recent estimate, India may face a deficit of 36 million tonnes of seed grain by 2020 (Bhattacharya, 2000). Empirical estimates also suggest, India is going to be net importer of food grains in near future. Therefore, increase in the productivity becomes essential to ensure the goal of food security for future generations. The vast agricultural resources in many parts of the country, which are untapped for a quite long time, should be utilized on sustainable basis for

maximizing the productivity. Agricultural productivity, especially in tribal belts of the country is far below the national average. The reasons underlying poor productivity are lack of adoption of innovative agricultural technology package, traditional farming and poor socio-economic condition. Information technology is an indispensable tool for the dissemination of the real time information on scientific and management techniques of different agricultural crops, efficient water and land management practices. Information technology can bring significant change in life style and economy of tribal masses.

METHODOLOGY

Chhattisgarh is one of the recently formed states of India, which is predominantly inhabited by tribal masses, especially in southern and northern regions. It is located between 17° 41' and 24° 25' N latitudes and 79° 30' and 84° 15' E longitudes and cover a geographical area of 14.4 million ha. This region is divided in to three agro climatic zones (ACZ) namely Chhattisgarh region, Northern hill region and Baster plateau. Out of total population of the state, nearly one third (32.5 percent) are tribal (Anonymous, 1996). Maria, Muria, Gond, halba, Kolam, Gadava, Biaga, Kamar, Bhasra, Abujhmaria are the major tribes of the Baster zone, where as Pohari-Korwa, Behari-Korwa, Majhi, Manjhar, Agaria, Pando, Kawar, Orawn, Narosia, Gond Bhoomiya, Urtha are living in northern hill region. Gond, Agaria, Ojha, Pradhan, Baiga, Sarwar, Bharia-Khairwar, Binjwar, Dhanwar are inhabited in Chhattisgarh plains (Sharma 1998).

Agricultural status—Shifting/swidden cultivation is practiced in several parts of Baster and northern hill region. The tribe of Baster plateau mostly follow mono-cropping practices and crops like Kodo, Kutaki, Nizer, Toria, Kulthi, Rice and Maize are cultivated (Khan 1997). In northern hill region, Kodo, Kutaki, Graoudnut, Til, Lentil, while in Chhattisgarh plains Rice, Til, Mung, Gram, Mustard and Laythrus are cultivated. They practice mostly subsistence agriculture. The productivity of all these crops are low because due to lack of scientific practice of cultivation. The causes for low productivity of crops are mainly ascribed to use of local varieties, non-adoption of plant protection measures and inadequate fertilizer application. According to a recent study conducted, only 9 percent of tribal farmers use high yielding varieties and 4.5 percent chemical fertilizers and no use of plant protection measures (Gupta, 1998). The main source of annual income of tribal is agriculture, which contributed up to 40.9 percent of total average annual income. However, only a 3.71 percent average expenditure incurred for agricultural crop production. The major expenditure i.e. 10.03, 4.73 and 12.71 percent are incurred in celebration, smoking and liquor, respectively. It clearly indicates the negligence on agricultural crop production, which is contributing is major source of annual income. In this context, strong extension strategies are required for the enhancing agricultural production, which can uplift socio-economic status of tribal masses. The innovative information's fakes years to reach tribal masses. Information technology plays a vital role in disseminating the improved technologies, instantly. However, Khan (1997) reported less than 9 percent of the tribal masses are not even accessible to Radio, TV and print media.

Agriculture Extension and Tribal Development – A Strategic Planning through IT—Several extension efforts are now being made to improve the agricultural situation in tribal areas. Information on agricultural production system on real time basis will significantly help in resorting the productivity. Information is a crucial resource

for development. Lack of information is a constraint to planning and management of tribal development. Efficient dissemination of information improves decision-making and also promotes adoption of innovative technology leading to higher productivity. There is a dire need to improve the tribal population access to timely agricultural information. Information technology plays vital role in dissemination of scientific agricultural techniques and also help in decision-making.

Information technology is a collective term for the various technologies involved on data collection, analysis, processing, storage and transmitting the information to clientele. The information technology is rapidly progressing all over the world. The recent break through in media scenario such as micro computer, advanced data communication network, desktop, publishing, satellite communication technology, tele-text, video text, CD-ROM etc. have hit the world with full blast (Pandey and Singh, 2000). These technologies offer speedy and easy access to information and have abilities of interactivity. Information technology has been successfully employed in different disciplines and have tremendous potential in agricultural development especially in rural/tribal areas. In tribal belts, IT can be used at planning, execution and management of agricultural and allied sectors. For agricultural development, IT will become useful tool for the establishment of Agricultural Information Center (AIC) in remote tribal areas. In order to reduce the information gap, the tribal farmers linked through agricultural information centers. In this unit, information, will be collected, processed and transmitted to the clientele as per their felt needs and demanding situation. This unit also load down all the information relating to the weather forecast, crop production information, market opportunities and actual and future price of their commodities and other localized clientele demands. This center is also responsible for different agricultural extension activities. Each center covers at least ten to fifteen tribal hamlets. The center will be equipped with internet, E-mail,

tele-net, audio-visual facilities. The center will help in solving the real time agricultural problems of tribals. At each center an educated tribal youth will be made incharge for the center for its effective functioning and he will be trained in accessing the information through Internet, mass-media information and satellite communication programs. He plays an important linkage for exchange of information between the center and tribal masses.

The suggested functions of Agricultural Information Center (AIC) are:

1. Providing a variety of information for tribal people that goes beyond technical agricultural, for example, health, nutrition, family planning etc.
2. Marketing information made available in *user-friendly* form.
3. the centre can also function as feedback unit, where the problems of tribal will be gathered and communicated to subject matters especialre for real itme solution.

4. The unit will serve as a place for convergence of various information sub-system (ARIS) and other agricultural-related network, mass communication system and indigenous information systems.

5. It can operate on a profit-making basis. Its mixture of free and for sale information products and services can results in sustainable community based communication institutions.

6. The centre represents an innovative effort to cover the last mile in reaching tribal masses.

7. The Information Centre linked with cable system., with local FM radio station and with low power television (LPT) stations. These would provide additional channel for increasing awareness of agriculture and allied sectors for rapid decision-making.

8. The centre helps in participatory research and extension in tribal belts by providing a local institution, where the generated information used by the community.

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