Co-ordination of Rural Development through Information Services

The inter connectivity between the primary factor of rural development in the area under study is linked with the present and the possible use of technology in certain sectors, as the resource for development. Information becomes the media between technology and development. Organising information is the important factor towards identifying and developing the appropriate technology for assimilation in the rural development. Unfortunately, organised information structure does not exist in the area under study. The interconnectivity information in matrix, in some selected sectors towards coordination of rural development through information services are indicated including the model structure as under.
INTERCONNECTIVITY BETWEEN RURAL DEVELOPMENT:APPROPRIATE TECHNOLOGY AND INFORMATION INFRASTRUCTURE

MODEL
Organised information facilitates smooth flow of development from plan to plan, project to project and thus acts as an integrating factor for sustained development. Rural Development being multi-dimensional concept has to work with so many parameters, in its functioning. One of the most important factors to keep this total system in its place is the concept of co-ordination which runs as a life line between various resources such as co-operation with human resources, with institutional infrastructures, the environmental resources, and foremost being the financial interlink for better co-ordination.

There are various governmental and non-governmental information systems and services which has a direct bearing on a rural development process. These range from the most traditional to most sophisticated application of services in the development. The Government of Karnataka has sponsored many popular rural development schemes like Vishwa an appropriate technology oriented scheme, Ashraya the rural housing scheme, Bhagyajyoti a rural electrification programme utilising solar energy windmill etc, Shushrusha a health and family welfare programme for rural poor.

One of the main objectives of the Library is to provide need based information service to the public at large, considering their professional aspects also. In this direction, the new trend that has emerged is the organisation of specialised library services for special group of users, noting the professional aspects of users through community survey.

This modern trend has paved the way to the organisation of library/information centre and service for the rural development sectors like
• Agriculture
• Sericulture
• Small Industries
• Social Forestry
• Irrigation
• Health, Housing, Women & Child care

The Karnataka Public Library system has established a Public Technical Library (Industrial Library) at Peenya Industrial Estate, Bangalore. On the same lines technical libraries in the field of Sericulture in Mysore district, is one of the felt needs (1). These libraries mainly aim at rendering information services regarding technological aspects for rural development. Library system not only provides information sources and documentation services out of its own collection, but also relay upon regional, national and international information systems and services for transfer of appropriate technology information.

One of the sectors "Small industries" is examined in the light of the development factors, level of information services, indicate the reason for the sickness of the industries.

There is no specific need based identification for production, both in terms of local and regional requirement. Secondly even for those identified, scientific approach towards trade, and market management have not been done which ensures or projects continued production of products and processes for consumption. The conception and perception of the consumer towards the processes and products is totally absent.

The traditional approach of partly restructuring and changing the processes and production line as a matter of time has resulted many small industries to go sick and finally out of scene. Other reasons are family, social and financial.
The level of information packages readily available are through information centres, Libraries, District Industries Centres - not updated. There is lacuna in the coordination of getting information packages produced through R&D efforts through invocation for application and implementation and subsequent back reference to Research & Development Labs for updating and modifying the information package for sustained growth and development.

The reasons for the sickness of industries are mainly due to the use of:
* Outdated technology
* No proper communication
* No proper technological blending for continued sustenance
* No proper market survey of consumer requirements
* No proper utilisation of human resources with updating of training and skills

Here the role of Govt and Non Govt Organisations is not small, both in terms of planning, funding and control of the total process of rural development through various schemes plans and projects.

An integrated information package with built-in flexibility of coordination for blending not only the technology upgradation but also its related material and human resources can help reduce the gap. The information package with bridging plan and action steps for each of the required small industry will sustain the industry. It will also allow for evaluation to keep the changing needs to achieve the ideal goal of almost no gap situation at any point of development. The study indicates the information package situation in all the other sectors identified are by and large similar, if not same.

The important information systems that are in existence are:

- CSRTI library, Mysore
- KSSI DC, Bangalore
• TECSOK, Bangalore (Technical Consultancy Service Organisation of Karnataka)
• SENDOC, Hyderabad - NISSAT sectoral information centre (Small Entrepreneurs National Documentation Centre
• CMTI, Bangalore, NISSAT sectoral information centre
• UNIDO, INTIB, Austria (Industrial & Technical Information Bank of UNIDO)
• Vishweshwariah Industrial Trade Centre Library, Bangalore
• Khadi & Village Industries Board, Bangalore
• Federation of Industries and Commerce, Bangalore
• KVIC, (Khadi & Village Industries Commission, Bombay)
• KSCST, (Karnataka State Council for Science and Technology)

While referring to KVIC,(Khadi & Village Industries Commission) it is important to note that they provide two programmes for R&D under which public library system including Mandal libraries can get the assistance in supplying technological information. These two vital programmes are

Rural Industries Services
A guide to artisans of rural industries in the improvement of production techniques, tools and equipment. It also gives information pertaining to selection of industrial field, availability of raw materials and package assistance

Rural Artisan Services
To upgrade the skill of rural artisan through training in handling tools and equipment. Above all, Appropriate Technology Development Association
Polytechnology Transfer Centre, Rural Technology Transfer of CSIR and Centre of Science for the Villages, ASTRA (Application of Science & Technology for Rural Areas, Indian Institute of Science Bangalore, are providing required information for developmental projects in rural areas. The public library can obtain information services through these organisations. Added to this, an helping hand is being given in organising training programmes, seminars, making plans & blue prints, feasibility reports and publications.

Here it is important to mention the services offered by small Entrepreneurs National Documentation Centre (SENDOC), Hyderabad, which forms National Information Centre for Small Scale Industries, under Department of Science and Technology (3). SENDOC is a division of NISIET (National Institute of Small Industries Extension Training) institute serving to the needs of documentation services. It is envisaged as a clearing house of information for small industry enterprises. The coverage of information is comprehensive that includes management principles, production, technology - chemical and engineering, techniques and skills, machinery and equipment.

SENDOC organises its resource collection under six groups popularly known as TRALIS, stands for -

- Trade literature
- Report literature
- Area literature
- Library literature
- Institution literature
- Sundry literature

While concluding it is worthwhile here to mention that some of the voluntary organisations engaged in R&D programmes have been quite active both in
supplying Appropriate Technological information and mobilising resources and services available at different Government institutes. To name a few are -

- Karnataka Mahila Samakya
- MYRDA, H D Kote, Mysore
- DEED, Hunsur
- SAMUHA, Raichur
- ACTION AID, Bangalore
- KSCST (Karnataka State Council for Science and Technology)
- DANIDA Project (Tool room, Optholmogy) [Danish Development Authority]

Public libraries have to establish an effective co-ordination with these regional organisations which can supply technological information as and when required (2). It is also mandatory on Public libraries to obtain information packages and publications as well as assistance on regular basis from Industrial and Technological information Bank of UNIDO, which is an international organisation under UNO.

**Prabhava Project of Mysore University**

In the direction of finding solutions to various rural development problem keeping in view the accessibility, affordability and practicability the Prabhava project was undertaken. Prabhava project was a rural educational and developmental project with emphasis on women. Conceived as a part of meeting its obligation to society, the project involved the University in the rural development programme. This experiment was taken during the year 1987 and 1988.
The existing situation of the project area was obtained from the available data from various departments to cover the respective fields of the project work. A survey was undertaken to get the actual situation with special emphasis regarding basic data in respect of various fields of project work.

**Female Literacy:**

In the project area, the percentage of literacy was hardly about 20% - 27% among males and 13% amongst females, which was far below the state average. Totally, there were 13,914 male literates and 6,049 female literates as against the total population of 1,01,162. The facilities in the selected area were also not that adequate. There were 10 Pre-Primary Schools, 65 Lower Primary Schools, 20 Higher Primary Schools, 5 High Schools and one Junior College with no First Grade College.

Educating a woman is educating a family; a literate woman is a social asset who can contribute immeasurably to the total development of the family. The existing infrastructural facilities were quite inadequate to meet the needs of all the children of school-going age in spite of the existence of the provision for free and compulsory education. The dropout rates were high, especially amongst females, in rural areas with predominant SC/ST population. The number of illiterates in these areas over the years were to be high. Action was taken to increase the infrastructural facilities by providing adequate number of school buildings, competent teachers, equipment, etc.

To minimise the school dropout rates, incentives were contemplated for the students, parents and teachers. Mid-day meals, supply of uniforms, teaching aids, cash incentives to the parents for good attendance of their children were proposed. Motivated teachers, preferably lady teachers were proposed to be appointed in these schools.

Adult education for the age group of 15 to 35 was taken up intensively with the utilisation of the existing schemes of University Grants Commission, Government of India, Adult Education Department, State Adult Education Council and other...
voluntary organisations by starting Adult Education Centres on a massive scale in every village. It was planned to start about 300 centres in all the 70 villages.

**Economic Development of Women:**

Majority of women in the area were under-employed and unemployed. Most of women in the poorer sections of this area were working as agricultural labourers taken for only seasonal employment. The survey has revealed that there were enough potentiality to provide employment by introducing income generating activities. The existing facilities under Co-operation, IRDP, Anthyodaya, Selfemployment schemes are proposed to be systematically channelised to this group of women, by organising them to establish individual and community production units, Mahila Jagritha Mandals, Women's Co-operatives, etc. Taking into consideration, the locally available raw materials and traditional skills, industries like coir industry, silk rearing and reeling, 'Donne' or leaf cup making, have been identified. Community poultry units, rabbit rearing units were started and assisted through commercial banks, in addition to the popular schemes like dairy, piggery and sheep rearing which were being assisted through the existing schemes.

In the area, considering about 50% families are under-employed and unemployed, 700 families in 70 villages were proposed to be organised every year for taking up such of these economic activities. Marketing aspect was also taken care of, by organising women co-operatives, Mahila Jagritha Samities were formed to take care of the economic, educational and social activities.
Primary Health Care:

All the existing National programmes such as Expanded Programme of Immunisation (EPI), National programme of prevention of Blindness-Prevention of Vit 'A' deficiency, Leprosy control programme were planned to cover 100% of the population by the end of the year 1987-88. The Family Welfare programmes were intensified by innovative methods, like meaningful incentives, active community participation, etc., to exceed the targets set under each of these programmes.

Talent Search and Training of Rural Students

The potentially bright rural student population was deprived of higher and technical education for want of right environment and opportunity. To remedy this situation and train rural students for competitive examinations for admission to medical, engineering and other technical and professional courses, under this programme, about 10 children from each school in the area at the 9th and 10th standard were selected based on their school records, reports of their teachers, parents and a test. The selected children were provided with additional teaching and training to enable them to compete with the urban children to get into technical and other professional courses. These students were given additional training in English, Physics, Chemistry, Mathematics and Biology through the selected teachers who themselves were exposed to special training in the new methodology of teaching. Additional coaching were provided to students to acquire competence and merit in these subjects at a slightly higher level than others. These teachers and students were brought to Mysore City during vacation, to expose them to the urban atmosphere, Medical, Engineering and other Technical Colleges and the University.
Active Involvement of the Community:

Committees at the village level involving women, youth and the children were constituted. A committee at the taluk level was also constituted with local officers concerned with various development schemes and local leaders for the effective implementation of the programmes. Guidance to this project was given by a Central Committee consisting of the Vice Chancellor, the President of Zila Parishad, Chief Secretary of Zila Parishad and other Divisional and District functionaries of Government.

Under this project, two hobbies consisting of 70 villages with a population of 1,01,162 (51,700 males and 49,462 females--1981 Census) in the Santhemarahally and Chandakavadi hobies of Chamarajanagar Taluk of Mysore District, were selected. This is a backward area with a high population of scheduled castes, scheduled tribes and other backward classes.

The implementation of the project was done through the National Service Scheme Wing of the University. The whole programme was managed with almost no extra funds from the University. It was proposed to make use of the funds and the facilities already available under the various schemes of the Government and the University. The project with its well established infrastructure has been able to achieve its objectives to a large extent, but the scheme had not taken the sustainable growth and development due to various technical, professional, political and social factors.
Bharani Project

The project "Bharani" - a national programme of rural reconstruction was launched by the University of Mysore as a part of its diamond jubilee celebrations during July 1976. Operation "Bharani" was designed to develop the rural area of HUNSUR taluk of Mysore District. The important concurrent objective being, to bring new concepts, theories, methods and techniques derived from the empirical findings in its courses of studies and to sensitize the university education with the basic realities of Indian society. In this task the university has worked in close collusion with all ranks and files of the Mysore District administration and got the support of Government of Karnataka. University also got the encouragement from all Central Government agencies and organizations like University Grants Commission, Ministry of Education through its NCERT (National Council for Educational Research and Training), Indian Council of Agricultural Research (ICAR) and Indian Council for Social Science Research (ICSSR), etc.

The project aims were

- Extending the benefits of modern science and technology to rural areas
- Devising and testing new institutions and organizations for the most effective use of material and human resources of rural areas
- Preparing and implementing an integrated development plan with accent on weaker sections and
- Sensitizing university education with the basic realities of the environment
Scope of the project

Though broad in scope, the context of the accent has been mainly on the development of weaker section of the society. The following have been taken to fall under the purview:

- Maximum use of local reasons on ecological principles
- Full employment and community participation
- Agricultural development through various modern concepts
- Development of small scale and cottage industries on local resources and expertise
- Development of live stock with reference to rural activity
- Improvement in the functioning of schools, co-operatives and panchayat raj institutions
- Total health coverage of the people and improvement in health delivery and sanitation systems
- Introduction of appropriate technology in rural life
- Special care of weaker sections and
- Develop infrastructure for successful implementation of the project

The strategy to achieve the objectives were:

- Multi-pronged approach - social, economic and technological
- Synchronised action - of research, planning and administrative functions carried out independently by University, Government Organisation and Voluntary agencies
- Involvement of participation by the rural communities and giving a catalytic intervention.
Work accomplished

July, 25, 1976 to June 25, 1977 During this phase, the project was implemented in all aspects in the pilot unit consisting of the Hinkal village panchayath area near Mysore City, while the preliminaries for the implementation of the project in Hunsur Taluk were worked out. The idea behind starting with a pilot unit was to learn the problems in implementing the project.

A quick survey of the Hinkal village panchayat was conducted to identify the problems of villages and the potentials of their development. A development plan was chalked out in consultation with the people and the local leadership. The Government agencies and other institutions such as Grameena Bank, State Bank of Mysore were involved in implementation of the plan.

Highlights of the programmes implemented were:

Education

1. (a) A teachers training camp for 32 teachers of Hinkal V.P. area was held at the Regional college for a fortnight from 15-12-1976 to 31-12-76.
   (b) Another course for primary school teachers of Hinkal and Hunsur Taluk was organised by the Central Institute of Indian languages.
   (c) A four day conference of Head Masters and Science teachers of all the High Schools of Hunsur Taluk was held from 5-2-77 to 8-2-77 at the Regional College of Education, Mysore to improve the science teaching in rural High Schools.
2. 20 rural artists have been trained in Music etc., in Music college at Mysore from 3-4-1977.
3. The school timings of Primary Education were changed to suit the society.
4. Action was taken to start 3 more nursery schools at Hootagally, Bogadi and Manchegowdanakoppal, covering all the villages of the Village panchagat with Nursery education facility

**Under Agriculture**

1. A comprehensive survey of land resources by soil correlator, Government of India Hebbal was taken up and completed in Hindal Village panchagat area.
2. 828 soil samples from Hinkal Village panchagat area were tested by the soil testing laboratory.
3. A block of 426-50 acres covering 100 families was taken up for a study of 'increasing production in dry farming' and the required inputs have been supplied to the Agriculture experts and agricultural department.

**Under Health and sanitation**

1. Piped water supply was arranged to Bhogadi village recovering more than 25% of the cost from Village panchayath, Hinkal as people contribution.
2. Water supply to Manchegowdanakoppal was under execution duly obtaining the permission of the Municipal authorities, Mysore. The village panchayath contributed Rs. 10,000 for the execution of this project.

Accent of the plan was on

1. better management of the given resources natural, human and institutional and
2. better deal for the poorer sections of the society.

The problems faced in implementing the project in the pilot unit was taken up with official and other agencies for their resolution.

One of the important achievements of the project was the participation of teachers and students in the rural development.
Teacher's Participation.
The Institute of Development Studies prepared a 'planning Atlas' of Hunsur Taluk. About 15 reports have been prepared by students on Hunsur Taluk as part of their M.A. degree programme on such aspects as Land resources, Water resources, Land use, forest resources, agricultural development, industrial potentials, settlement planning, service centre planning, etc., etc. All these were done after extensive field work by students.

The engineering colleges of the University manufactured a simple and inexpensive solar heater for testing its utility in rural areas.

Students' Participation
Apart from research conducted by students of Hunsur Taluk as part of the academic programme, they participated in the project through National Social Service (NSS) camps also.

Role of Educational Institutions, R&D organisations and Industries

The linkages between industry, University/Institutions and National R&D laboratories have been vital in their extension of services towards rural industry and development. The following model after D. Swaminadhan depicts the related issues which have a bearing on the extension of Information Services for co-ordinated rural development (4).
Networking Information services: NIC and DISNIC

Development process needs a sophisticated information flow from the lowest level of administration to the highest national decision making level. Government of India has set-up National Informatics Centre (NIC) to promote informatics culture in the Government Departments and develop computer based Management Information Systems for decision support at various levels. NIC is in the process of setting up of a nation-wide satellite based computer communication network 'NICNET' covering all districts, State capitals and the Centre in order to facilitate for development of District Information System at District level (DISNIC) and essential databases for the state and central government departments. NICNET has been planned to provide an interactive information base for decision support in the Government administration. NICNET will thus, play a significant role in the exploitation of...
Information Technology to accelerate the social, economic and cultural change in India. DISNIC, after implementation, will facilitate decentralised planning on which 7th plan lays considerable emphasis and which will be an important information source for the 8th Five Year Plan.

At the district level, there exists a good amount of information in the sectors of importance in respect of infrastructure facilities and development indicators relating to demographic, agro-economic and socio-economic aspects for decision making. In the present set up, information essential for planning and decision making flows from districts to state government and then to the central government departments, especially the Planning Commission, after its consolidation at district/state levels. This process has inherent delays and experience shows that relevant the data is rarely available when it is required for decision making/planning.

Using the NICNET facilities at the district level, all reports due for the state and central government departments get information, disciplined and standardised. The information flow will also get rationalised both upwards and downwards. DISNIC will thus, pave way for easy collection, compilation and dissemination and on-line accessibility of information on several sectors of the economy at district level with the availability of qualitative information at all possible levels.

DISNIC has the following functional components:

- MIS for the Revenue Administration
- MIS for the Development Administration (Sectoral databases)
- District Planning Information System (DISPLAN)
- Geographic Information System of NIC (GISNIC)
- National Natural Resources Management System (NNRMS)
References


