The state of Jharkhand is one of the 28 states of the country. It is a newly formed state. It came into existence on November 15, 2000. The state is spread over a vast area covering 79.70 lakh hectares. Out of this total area, forest area comprises 23.11 lakhs hectare (29%) and cultivable land comprises 38.00 Lakh Hectares (47%) of the total area. (Source: Census 2001). The state has abundant natural resources and raw material availability in the form of coal, mica, bauxite, iron ore, precious gemstones etc. Along with these, the state is also endowed with rich forest cover that adds to its potential for industrial expansion. As per the census 2001 the population of the state is 26,909,428. The population lives in rural areas of Jharkhand. The overall literacy rate of the state is 54.13%. Among males it is 67.34% and among females it is 39.38%.

The CoIL-Net Project at BIT Mesra was started in October 2002. This technical progress report reflects work done during the last eight months. This project aims to fulfill the following objectives the Socio-Economic Development of the Jharkhand State. The immediate Objective includes development and testing of products facilitating I.T. localization for the people of this region in Hindi (Local) language and building awareness of IT through Localisation. This project is aimed at developing model for contributing to sustainable socio-economic development of the state through extensive applications of information technology in the following key areas:

- E-Governance
- E-Education
- E-Health
- E-Business
- IT localization clinics

All applications will have Hindi front ends and will be web compatible.

The project would use the following methodology for application development in the above mentioned areas:

1. Identification of appropriate "test bed" Villages/Schools/ Unemployed Youth
2. Design and development of the Applications
3. Implementation of the application of the test bed
4. Study of the impact and feasibility

Progress made by the centre so far

(A) TRAINERS TRAINING PROGRAMME

A Trainers Training Programme was organised from 24th February to 28th Feb 2003 at the premises of BIT Extension centre, Lalpur. The Trainees had come from different Government Institutions/Organisations as well as academic institutions. The CoIL-Net Team members along with the co-ordinators of the project delivered lectures and the training. There were sessions on theory supplemented by extensive hands-on sessions. The Trainees were trained the use of ISM 2000 word processor. Besides this they were also trained in basic networking techniques Internet and Intranet, Power point, Excel etc. They were provided with Training Manuals prepared in Hindi.

The Trainees had come from the organisations such as Directorate of Industries, Birsa Agriculture University, Jawahar Navodaya Vidyalaya, Sadar Hospital, State TB Control Society, Office of the Deputy commissioner, Collectorate, Small Industries Services Institute, PHE Department Jharkhand, District Welfare office and Board of Revenue, Ranchi etc.

After the completion of the training program, feedback was sought from the trainees on the usefulness of the training program, training content and the facilities provided. Almost all the trainees found the programme good.
need to get ready information regarding the different diseases of some commonly grown crops as well as their preventive and curative measures. This provides the information about the prescribed dosage, administration, availability and price, using audio-visual illustrations of the crop diseases and pests.

Agri marketing Information guide

The Agri marketing information guide would give the farmers, the information regarding Mandi/ Haat Price, location of the Haat, transport information (Medium and charges), information regarding cold storage etc. The possible queries and requirements of the end users are also identified. The research was undertaken systematically using statistical tools to arrive at the conclusion. The proposed system has been designed and developed and soon it will be tested in the simulated conditions as well as in the selected test bed.

(B) IT PRIMER MODULES IN GOVERNMENT SCHOOLS

IT primer modules in Government schools aim at creating awareness in schools about IT. With this programme teachers in these schools are trained in different Local Language Software. It is suggested that 10 schools should be benefited with this programme in a year.

First Teachers’ Training Programme to introduce IT Training Modules in Government Schools, was organised in Jawahar Navodaya Vidyalaya, Mera from 7th – 12th April, 2003. The Trainees were trained in Basic computer usage and office applications using Hindi Software.

Second Teachers’ Training Programme to introduce IT Primer Modules in Govt. Schools, Teachers’ Training Programme is proposed to be organised in BIT Mera in consultation with the District Education Officer (DEO). 25 school teachers representing 12 Govt. Schools are expected to participate in this training programme. The training is proposed to be held in the last week of June, 2003.

The Trainees were trained in Basic computer usage as also office applications using Hindi Software. After the completion of the training program, each school teacher was given a model curriculum of the primer module and were asked to introduce it in their schools.

(C) APPLICATION DEVELOPMENT

e-Agriculture

A project in e-Agriculture has been taken up in one of the test beds (Pithoria-Kanke Block) The different areas in agriculture that reflects more usage to the end users of the proposed system has been already short listed and data collection for the same has been finalized. The areas that have been short listed for the purpose of the initial system development and design are:

Crop disease and pesticide management

In crop disease and pesticide management the developed application would cater to the farmers
On the administrative front, consultation and briefing has been carried out with Navodaya Vidyalaya and some Government Schools. On the technical front exploratory studies with the end users of Pithoria Village (Kanke Block) and Palma Village of Bero Block as well as with a group of teachers/staff have been carried out. A List of queries from the students/guardians end and from the staff/teachers end has been finalized. The Findings have been incorporated in the final Questionnaire for the end users and the School authorities.

The user requirement specification and system requirement specification completed.

The System design is in progress and nearing completion. It is being lab tested.

(D) FUTURE TARGETS

In the coming months the centre looks forward to complete the following tasks:

1. Training of Government School Teachers for Introduction of IT Primer Modules in their schools. (Already two such programmes have been completed details in the progress part of the report).

2. Trainers Training Programme catering to computer users in different state government departments and other institutions.

3. Laboratory & Field-testing of applications developed so far by our CoL-Net center in the e-agriculture and e-education areas.

4. Translation and Digitisation of two Bengali Classics. In this connection we have selected two renowned classics, one by Upendra Kishore Raichoudhary’s “A Collection of Short Stories”-Galpo Guchcho from his book “Rachna Samagrah” and Rabindra Nath Tagore’s Kabuliwala.

5. Completion of the book being written on “Introduction to Networking Technology”
   a) in Hindi which would be made available in Public domain to be hosted in the web site.

6. Conducting IT Localization Clinic for the local vendors of IT.

**Courtesy:** Prof. Sandip Dutta  
Dptt. of CSE  
Prof. Shradhdha Shivani  
Dptt. of Management  
Birla Institute of Technology, Mersa,  
Ranchi 835215 (Jharkhand)  
Tel.: 0651-2275333 (O), 0651-2275334 (R)  
E-mail: sandip_dutt@rediffmail.com  
Tel.: 0651-276223 (O), 0651-2275401 (R)  
E-mail: shraddha_shivani@yahoo.com