

# **Society for Promotion of Alternative Computing and Employment (SPACE)**

## **Annual report**

**2005 - 2006**

### ***1. Introduction***

2005 – 2006 was an active year for SPACE. With the help of Hivos and SOMA, SPACE started executing a Free and Open Source Software(FOSS) development program focusing on capacity building and employment generation. This program, with financial support from Hivos, is focusing on FOSS Advocacy, Support to Small business and capacity building through technical programs. We were able to execute substantial activities in all the three program areas. This report gives a brief overview of SPACE activities in each of the three program areas. Some of the key initiatives have been outlined at the end of the report.

### ***2. Advocacy and Policy initiatives***

Advocacy and policy initiatives from SPACE focused on the role of free software in developing countries. SPACE is working with support from the Government of Kerala, to create confidence in FOSS. We are also trying to highlight the fact that FOSS is a new way of looking at development collaboration across the globe. With this understanding, SPACE is trying to work with other developing countries, thereby creating a global collaboration.

#### **2.1 Free Software Free Society conference.**

SPACE's programme for 2005-2006 started with an International conference on FOSS, “Free Software, Free Society - A Four Nation Conference on Freedom in Computing, Development and Culture”. The two day conference was held on 28<sup>th</sup>-29<sup>th</sup> May 2005 at Technopark, Thiruvananthapuram, Kerala. The conference was unique in its content and participation. The conference discussed the model of free software movement and how it relates to other fields of human creativity. It brought together people from Latin America, Europe and Asia. People from various fields like software industry, politics, film, media and law all came together in the conference to share their ideas. The keynote speaker at the conference was Dr. Felipe Perez Marti, economist, and former Minister of Planning, Venezuela. The conference was covered by local and international media ( for

instance, <http://www.ilmanifesto.it/Quotidiano-archivio/10-Luglio-2005/art76.html>).

The conference acted as a springboard for the launch of SPACE activities for this year. It also contributed in making the people of Kerala aware of our initiative. For the conference, we worked closely with the Government of Kerala. This has helped in creating confidence among them on the Free Software model. This could be an important factor in the long term success of our project. The government partnered with us in organizing this event and is happy about the outcome. The conference was attended by more than 100 delegates from Venezuela, Brazil, Italy, Norway, Bangladesh and many parts of India. The event grabbed an overwhelming attention by the media also. The conference received sponsorship support from Kerala State IT Mission and Intel.

## **2.2 Free Software in Public Sector.**

SPACE initiated an investigation on FOSS usage in public sector institutions in Kerala. Data was collected from major public sector institutions in Kerala which are providing free software based solutions to government. From this investigation we came to understand that the use of FOSS in Public Sector of Kerala was more than what was being perceived by the public. A report has been made on 8 important projects we have identified and on various organisations in Kerala providing FOSS support to government. This study helped us to highlight the fact that free software can be a major player in e-governance initiatives of the state.

## **2.3 ICT Policy discussions.**

Members of SPACE participated in various public forums on ICT policy. This has helped create public dialog on the role of FOSS in Kerala.

# **3. FOSS Business Development**

## **3.1 Hardware Vendors training.**

One of the thrust areas of SPACE activities for 2005-2006 was to develop free software support groups across the state. In order to achieve that we have initiated training programs for Hardware Vendors in association with All Kerala IT Dealers Association. This training program was aimed at helping Hardware Vendors to tackle common issues with GNU/Linux installation and hardware compatibility. Small booklets on troubleshooting were also made as part of this program.

The first session under this initiative was held on 11th and 12th of Sept 2005 in Malappuram. Around 20 people from Malappuram participated in this training program representing around 18 business units. 8 of them had some prior experience and others were newcomers. Most of them faced customer request for supporting GNU/Linux. They

used to avoid such requests as they lacked knowledge in GNU/Linux. They found our training useful for their business. All of them participated in the training program actively and made use of the lab facility made available to them.

With the experience from Malappuram we conducted workshops in Thrissur, Kozikkodu, Thiruvananthapuram, and Kollam. Altogether, 125 professional service providers participated in this program.

### **3.2 VMEs initiated.**

We have identified 5 Virtual Micro Enterprises providing various FOSS based services. Around 15 people will be supported under these 5 units. First unit, lead by Mr Sajan is providing web solutions development. They have executed 2 major projects under SPACE. Business operations of other units are two units on training, one on networking, and one on embedded systems.

### **3.3 System Administration Course.**

In order to create GNU/Linux support units across the state, SPACE will be launching a System Administrator training program. The advertisement for this has been released and we received nearly 60 applications. Out of 60 applicants 20 will be selected for the training program. Training will be conducted jointly with Indian Institute of Information Technology and Management – Kerala.

### **3.4 Koha for Libraries - VME Program.**

Koha is a popular free software application for library management. It is a business opportunity for a VME. Thousands of village libraries across Kerala and academic institutions across the state are some of the possible clients.

As a starting point, Barton Hill Engineering College agreed to automate their library using Koha. We are trying to build a VME comprising of people with skill in software and library management for Koha deployment. We should be able to discuss with Kerala state library council regarding deployment of Koha in thousands of libraries under it. Some initial work has been done to localise Koha in Malayalam.

## **4. FOSS Manpower Development**

### **4.1 FOSS Cells**

Barton Hill college became the first college to have SPACE Free software cell. Head of Department of IT, Prof Gopakumar took a lead in organising this. With this unit as our test bed, we conducted several programs from teacher training to development projects by students. With experiences gained from these programs, we expanded our FOSS Cell operations through out Kerala. Today there are around 12 colleges working with SPACE.

These cells organised around 15 events, covering nearly 500 students. An annual event of FOSS cells was organised at National Institute of Technology, Calicut. Representatives from all the free software cells participated in this event. Conference proceedings during two days helped students learn about various technologies in free software domain. The event also helped in motivating the students. Every FOSS cell now wants to organise one event of their own.

#### **4.2 Teachers Training.**

Teachers training is essential for getting colleges migrate towards free software. SPACE had developed a training module on GNU/Linux for Engineering college teachers. In association with Directorate of Technical education we conducted training sessions in 4 different colleges in Kerala. Around 80 teachers participated from various engineering colleges in Kerala. In coming days this will help us getting more students trained in FOSS.

#### **4.3 Scientific Computing and Free Software.**

As part of FOSS Cell development, we conducted a two day training program at SB College, Changanassery on the use of free software in scientific research. Participants of this program were postgraduate Physics students and teachers. They were interested in working further on free software. We also developed a compilation of free software for physics students.

#### **4.4 FOSS and New Media**

FOSS technologies and philosophy is playing an important role in the development of new media, which is more decentralised and accessible. In order to create an awareness about this and to build media professionals capable of handling FOSS applications we organised 3 training programs for media professionals. We worked with School of Media Studies, Cochin and Press Club, Thiruvananthapuram to organise these training programs.

### **5. Pilot Projects**

#### **5.1 Keralashree Web portal**

Kudumbasree project, the successful poverty alleviation programme of the Government of Kerala, approached SPACE to provide technical support in developing an employment portal. After several discussions with the Director of the project it was agreed that a VME under SPACE will develop this portal.

The development of the portal was undertaken by a Virtual Micro Enterprise (VME) under SPACE initiative, and was completed in two months' time with popular Free Software such as PHP and MySQL. The low cost of development and deployment as well as the quality of work shows the potential of the VME model and the use of Free, Libre

and Open Source Software (FLOSS) proposed by SPACE.

The site provides a database of Kudumbashree members registered under the project. Prospective employers can choose from the list of available members according to their needs and the skill sets of the candidates. The Kudumbashree project is socially relevant since it aims to provide a link between potential employers and job seekers from economically challenged families.

## **5.2 Free Electron**

Free Electron is a GNU/Linux Operating System specially designed for Electronics students and teachers. Release of Free Electron CD was a major achievement of SPACE in this quarter. This project was undertaken by the first FOSS Cell launched in Barton Hill Engineering College. They also conducted a teachers training program based on the CD. We are now trying to get colleges to migrate their labs to free softwares given in this CD.

Free Electron also got a good media coverage in South India. We are getting queries from other Indian states like Tamilnadu, Andhra Pradesh, and Orissa. We got a very interesting letter from a plus two student in Andhra. We also got queries from Qatar and Australia.

A small booklet has been prepared to distribute along with the Free Electron CD. The booklet includes materials on installation of the CD and description of various tools available in the CD.

Free Electron CD is made available online for download. We worked with the Education Grid project of Indian Institute of Information Technology and Management (IIITMK) for this. Developer team of this project is now working on updating the CD and also on improving the documentation. They will conduct Free Electron training sessions in other FLOSS Cells as well.

Report in The Hindu on Free Electron CD.

<http://www.hindu.com/edu/2005/12/27/stories/2005122700110200.htm>

## **5.3 Alakal Community radio**

Alakal is the first exclusive community radio initiative in India for fisherfolk. Alakal is a joint initiative of civil society organisations including SPACE. We are looking after the technical aspects of project Alakal. From FOSS point of view Alakal is the first such community radio initiative in the country. The use of FOSS has helped make Alakal project cost effective. This is a model which can be replicated by other community radio initiatives.

Alakal has started a daily three-hour experimental narrowcast from 1st May 2006 at coastal radio clubs located at three fish landing centers in Thiruvananthapuram, Kerala. It covers people from 15 villages who come to these centers to buy and sell fish. The programmes, now being recorded on CDs and played on box speakers, will soon go on air from a local FM radio station.

#### **5.4 SPACE in Tsunami relief efforts.**

SPACE members played an important role in various post Tsunami relief efforts in south India. Three of our board members actively worked to setup communication network for media and rescue personals. During the relief phase, softwares were developed for coordination and inventory management. Village Information Centers were established in several parts of Tamil Nadu. SPACE board members provided active leadership and technology inputs in all the efforts.

One of SPACE VMEs worked with South Indian Federation of Fishermen Societies (SIFFS) to develop software for its large tsunami housing project (that is building nearly 2,000 houses in Nagapattinam district). This software automates various parts of this project such as inventory management, material billing, costing and progress monitoring.

#### **5.5 Rescue Morphix CD**

During the training programs for Hardware Vendors we were able to identify common issues they face with free software support. In order to address those issues and to help hardware service engineers in troubleshooting, we developed a custom live CD with various troubleshooting tools. The CD was field-tested during our training program for hardware vendors. Rescue Morphix CD was released with IT Lokam Magazine in its April Issue. IT Lokam is the most popular IT Magazine in Malayalam.