One Village One Computer Campaign in India

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INTRODUCTION

For social development to take place in rural areas it is necessary to involve the people and assist them in becoming technology-enabled and knowledge-enabled because knowledge is always held collectively (Hayek, 1945). It is said that the growing digital divide has added one more dimension to the already skewed process of development-underdevelopment (Castells, 2000). In reality however it has more to do with the deprivation of information and knowledge than the non-availability of hardware and connectivity. To overcome this, it is necessary to look from a fresh perspective and introduce a new socioorganizational model that builds on the principles of Information Society (Castells, 2000), Economics of Knowledge (Machlup, 1962; Arthur, 1985; Romer, 1990) and Social Capital (Coleman, 1988; Putnam, 1995) to ensure better development of human and social capital.

BACKGROUND

One Village One Computer (1V1C) is an IT for development concept for introducing IT solutions in backward areas and for underprivileged communities. The project aims at developing a sustainable IT-based development model that integrates IT in the mass struggles working on the problems of underdevelopment in the most backward regions.

1V1C has developed new methods of mass IT education and training for village youth and formation of community-owned IT Centers. The services that are offered through the IT Centers are not confined to a few technology services that are generally offered through the tech centers, but are wider in scope covering people's needs and issues. 1V1C strives to facilitate the vertical knowledge flows. It is the flow of subject knowledge held by experts to the contextual knowledge held by people and vice versa that can lead to development. So far IT is dominantly used to IT-enable corporations and businesses, software are essentially developed to facilitate industrial and business processes. 1V1C attempts to ITenable the social processes and create developmental software. This software will be put in the public domain to make it available to the society as free software. 1V1C acts as a network, which offers the existing social movements, Non Government Organizations (NGO) and Community based Organizations (CBO) to IT-enable themselves. 1V1C's intervention leads to leadership development, widening and deepening of the scope and scale of these organizations. The activities of 1V1C lead to the development of enough social capital assets in a given locality making possible the formation of an IT Center at a negligible cost. The IT Center is a community-owned cooperative and is an autonomous body. With this democratic and flat structure the rights of local communities over information and knowledge resources are safeguarded. The 1V1C model can be adopted in varied social, geographical situations. It opens the window of the world to the local community while keeping their basic characteristics intact. It offers them access to the world level cutting-edge knowledge which they can use, after appropriate contextualization, for their development and also a facility to transmit their own traditional, as well as newly developed, knowledge to the world community.

THE PROJECT

The first grassroots experiment of One Village One Computer was conducted in village Mod, District Nandurbar of state of Maharashtra in India, in the year 2000. A database of 3,000 landless laborers was collected. The collection of this data and its interpretation highlighted problems confronting destitute senior citizens, women and patients. This led the laborers to organized agitation and make structured presentations of their problems, which were resolved immediately with the help of the local landless laborer's union.

In the same year, this understanding guided the work with tribal women in district Thane, and women in district Pune of state of Maharashtra in India. Extensive data regarding ration cards for the Public Distribution System (PDS), availability of food grains, functioning of ration shops under PDS, distribution of kerosene and black marketing of ration goods, etc., was collected from selected areas of ten districts including tribal dominated areas. Because of this concrete information, tribal women in Thane district could ensure that every family got a ration card, and as a result the women in district Pune managed to restore over 2,500 ration cards that had been arbitrarily cut out.

It was decided to situate this learning and success at one location, and a Resource Centre was established in the village of Agroli in New Mumbai on 6th January 2002. This area of New Mumbai, covering 95 villages, was chosen for the pilot, as this represented a classic example of the "digital divide." Thirty years ago, a mega city was thrust on this agrarian society without any adequate rehabilitation.

There have been quite a few attempts throughout the world to instigate initiatives around ICT for development. However closer study of many attempts, reflects that people's involvement and their real needs were often never really taken into consideration when attempting to use ICT for development. Most often these initiatives were focused around implementing inappropriate readymade ICT solutions and packages, or in setting up an ICT service centre which was run and managed by private individuals or enterprises that offered limited "fee for service" options. However, many people have not imbibed the culture of using the principles and skills of ICT for their very survival. In reality, they have not been able to learn and draw from these techniques and skills and apply them to improve their own conditions at the village level particularly for primary concerns associated with daily living. Issues pertaining to unemployment, water, and women's empowerment are still crucial problems affecting rural India's daily life, and the acquired knowledge of ICT is not being effectively utilized.

Further, most of the applications of ICT for local development in these disadvantaged situations have adopted a "top-down" approach and treated the local communities as mere receivers of a service and not integrated them into the process or developed the human capital or the social fibre of the community to ensure sustainable and long lasting change. Hence whilst there has been constant talk of how information technology has revolutionized business processes of large corporations, thereby enabling them to achieve better results or make more profits, almost nobody has even attempted to explore how social processes can be enhanced and made more powerful through the use of ICT techniques and solutions.

1V1C does not talk of the spread of "hi tech" technology and solutions of expensive investments. Instead it talks of providing to rural India the very basic core functions, which urban educated people often take for granted. Its aim is to make a positive impact on the many lives of rural India through the use of very basic techniques and inputs of the ICT world that offer rural India the capacity to tackle significant problems.

The basic thinking under which 1V1C was conceived was to develop an innovative socio-organizational concept that used ICT techniques and principles in building and supporting a people's movement and a rural activism

to effectively campaign for and implement people-centric development at the village level.

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Although working towards the creation of a self-sustaining open platform for solving important social concerns through the community-oriented use of information technology, 1V1C was always conscious that the techniques of and principles of ICT were to be used as an enabler, an improviser to increase knowledge, skill, reach and impact. These are the aims that the people's movements and organizations are constantly undertaking in rural India. They are aimed at giving a greater momentum to the existing struggles of people at the village level and the development of initiatives in rural communities.

1V1C's efforts have been towards the teaching and organizing of village communities to collect information and data relevant to their own particular issues and concerns. The communities where 1V1C has worked have tackled locally relevant problems such as the lack of work. These efforts have been supported by organized and systematic data collection on unemployment in the villages, and in turn this information has been used to lobby for the release of more work under the government's employment guarantee scheme. Local communities have also been taught the value of the principles and techniques of ICT such as systematic and reliable data collection and fact finding on their core issues like the Below Poverty Line numbers in villages, demographic representation of population. These data can in turn be used effectively to accelerate people's struggles on issues such as the Public Distribution System, housing schemes for homeless and old farmer pension schemes.

1V1C has worked to bring in specially designed water management software to local communities and train them on its effective use. Armed with these results and findings the local village groups and elected representatives have lobbied with the government for more investment in water harvesting programs. Another issue is that of health, particularly in relation to women and children. Here too systematic data collected on the occurrence of the relevant problems when analyzed and presented to the local health authorities, was enough to convince the state health department to organize health camps to ensure the health of the community. Such examples demonstrated at the community level have proved to the local community the value of principles and techniques of reliable data collection and the science of ICT.

1V1C's work involves the organization of mass training camps to generate an interest among the local communities on the various uses of ICT to benefit their own lives. 1V1C works through existing people's organizations, elected representatives and the village community at large. It often involves youth and works towards forming social structures such as computer support committees (CSC) who are interested in using the ICT methodology

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