

Rural empowerment through access to knowledge: a comparison of two projects on two continents

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Abstract

It is a generally held view that one of the pre-requisites for the alleviation of rural poverty is equitable access to resources. One of the most fundamental of resources is knowledge. The exponential development of ICT capabilities and the growth and increasing ease of access to the internet has given a potential global access to knowledge which was inconceivable just 15 years ago. This paper compares two projects, one in Honduras and one in India, which both tried to realise this potential for the benefit of poor rural communities, but with great variation in success and longevity. From this comparison, recommendations are suggested for appropriate methodologies for developing knowledge infrastructures in poor rural communities.

Key words: empowerment, rural poverty, India, Honduras

1 Knowledge access for the rural poor

Access to knowledge is one of the fundamental pre-requisites to the alleviation of poverty. If you do not know what is possible, you cannot know what you can achieve. What is needed is a shift in the development paradigm, from the rich, developed economies asking “why are some people poor?” to the poor individuals themselves asking “why am I poor?” Without access to knowledge, there is no answer to that second question. With such access, the paradigm shift becomes possible.

The greatest area of global poverty is in the rural communities and environments of the developing world. We can no longer call countries like India or Thailand poor countries, or even developing countries. In many areas their industries and businesses are leading the world. But in their rural and periurban communities there can be some of the highest levels of poverty and deprivation that have ever been seen. Urban poverty stems directly from rural poverty. It is the migration from deprived rural areas to the cities which creates these seething communities. As they grow they generate their own economic needs which the city just cannot satisfy. If the economies of the rural sources of this migration could be improved, it would alleviate the near unmanageable pressure on the slums which are growing in the cities.

1.1 *The impact of the lack of access to information and knowledge*

In the connected, internet enabled world which we enjoy in the industrialised countries it can be surprising how little some people can know. Even more surprising is the profound impact of that ignorance.

If you live in an isolated farming village in India, you certainly don't know what price your rice is selling for on the international commodity markets. You don't even know what it is selling for in the local market town, 10 km away. You rarely go there. Your crop is bought by an agent, who bases his payment to you on what he claims to be the local market price. How do you know that he is being honest? Often he is not and the farmer fails to achieve a fair market price for his produce, effectively being cut off from the global markets he is part of, even if only as a very small player.

If you are a fisherman, setting out to sea on an open catamaran, how do you know that the waves 10 km offshore will be powerful enough to overwhelm you long before you can get back to the safety of the shore? The author knows from personal discussions with fishing families in Veerampatinam, a fishing village in Pondicherry in India, that they would traditionally have expected six to eight fishermen to be lost at sea each year through being overwhelmed by unexpected sea conditions (Swindell 2006).

Marginal, frontier farmers in Central America move into unused lands in the hillside areas to establish new farms, but how do they know who owns this land? Even more importantly, how can they challenge the claimed ownership of the land by another party if they have no access to land registry information?

The repeated question is “if you are poor, how can you *know*?” For the affluent, it can be hard to appreciate just how difficult it is to know anything outside of your immediate experience and environment when you are very poor. At best the poor may have access to radio or a limited newspaper service, but often there is nothing. You know about your own village and its environment but beyond that there is a profound ignorance.

Many attempts have been made at tackling the problems of rural poverty, with the UN Millennium Goals being just one recent example (United Nations, 2000). The very first Millennium Goal is to “eradicate extreme poverty and hunger”, a goal that is almost hubristic in its laudable aim. This paper looks at two very different projects which both set out to address this first goal through improving access to knowledge resources for the extreme rural poor. The locations were very different, the hillside regions of Honduras in Central America, and the rural villages of Pondicherry in the south of India. (The author worked as a consultant on the first project and spent two months on sabbatical with the facilitators of the second in 2006.) The methodologies and outcomes of each are quite different and a comparison may provide guidance on more effective approaches to solving these problems.

2 Honduras and Pondicherry, two rural communities in two continents

2.1 Overview

The project locations were very different, both geographically, historically and, very importantly, politically. This must be borne in mind when comparing them in any way. The prime intentions of both projects was also very different and the outcomes of each were influenced by these differences, but it is also possible to make some important comparisons.

2.2 Honduras

Honduras is a very poor country with little in the way of industrial or commodity output (Norsworthy and Barry 1994). It also suffers from a range of environmental threats, Hurricane Mitch in 1998 being just one well known example (CINDI 1998). It has limited history of democratic systems for managing conflicts at local level. Many of its farming communities, particularly in the hillside regions which were the focus of this project, are only semi-permanent and it may be considered as a frontier economy. They move into as yet unexploited areas as a source of free land and resources. The project in question addressed the whole of Honduras in general terms, but focussed on these hillside regions in particular.

2.3 Pondicherry

India is one of the largest countries in the world, both in area and population. It has areas of extreme poverty but also of extreme wealth. It has an industrial economy of global importance and increasing impact. It has a long tradition of democratic government and institutional conflict management, from national level down to village *panchayat*. Pondicherry is a Union Territory within India and is scattered geographically. The bulk of its area is in the state of Tamil Nadu around the coastal city of Pondicherry itself. It was once a French colony and still has strong cultural links with France.

3 The Honduran Project

Honduras is unusual as a poor developing nation in one respect. It is considered a “data-rich environment” in that extensive nationwide datasets were available covering demographics, farm economics, natural resources, long timescale remotely sensed imagery, topographic data and soils information (CIAT 2000). For this reason it was chosen as an example site for developing methodologies for modelling such resources at multiple scales, from national down to local farm level, as an aid to decision making at all of these scales (CIAT 2000). The project was funded by the *Ecoregional fund to Support Methodological Initiatives* (Ecoregional Fund 2005) within CGIAR (Consultative Group on International Agricultural Research), with CIAT (International Center for Tropical Agriculture) as the project leader and Prof. Barry Dent of the Royal Agricultural College as the principal investigator.

The project started in 1997 and finished in 2000. A team of experts from three universities and CIAT itself, spanning three continents, was assembled to deliver the project. One of the fundamental maxims of the programme was to encourage stakeholder participation throughout. Workshops were held in Honduras, Nicaragua, Georgia, Costa Rica, Florida and Colombia. Government officials, NGOs, local politicians and, crucially, farmer representatives were invited. In reality, there were farmers present only at an initial meeting in Tegucigalpa, the capital of Honduras, in 1997, but they never attended any more. This was partly due to the impracticality of getting poor farmers to attend intimidating international conferences, but also to the wholly unpredictable impact of Hurricane Mitch in 1998, which overwhelmed all farming communities in Honduras and drove all other concerns from their minds (CINDI 1998).

3.1 *Project Intentions and methodology*

The project intentions were possibly contradictory. The Ecoregional Fund was aimed specifically at methodological development. This in itself would have little direct, immediate impact on farmers on the ground, but should help to provide a framework for ongoing work by international NGOs in development work. CIAT wanted to include farmers and local government members as participatory stakeholders in the process, in order to improve the direct relevance of the work. This was very difficult to achieve in practice and the whole concept of participatory development has come under some criticism as being superficial in its impact (Martin and Sherington 1997, Rhoades 1998, Swindell 2002).

The outline methodology was based on the availability and relatively easy access to the large amounts of spatially referenced data available for Honduras. Techniques were to be developed firstly for modelling and integrating this data at different scales of interest and secondly for accessing this information as a means of decision making by local stakeholders in different ecoregional areas of the country, with the initial focus on the hillside regions.

3.2 *Outcomes and discussion*

The intended outcomes were to be a set of tools for use by stakeholders for accessing and exploring relevant decision support information at an appropriate scale for any problems in hand. The reality of reaching this huge goal in such a short time proved largely unachievable. A series of tools were produced, but they were mainly proofs of concept. They did not have real time access to the full data sets and were largely untried and unrefined. They did provide starting points for further development, but had little or no impact on the ground. The project ended in 2000 and after a final project review workshop in Costa Rica (CIAT 2000), the teams involved dispersed.

This was a fairly typical example of a top-down, major international project with significant funding, amounting to several million US dollars. It was started by an international organisation, run and managed almost exclusively by international universities and research organisations and produced outcomes which were of interest and use mainly to that community. It wanted to include farmers and community leaders as project stakeholders, but they were invited to join something they did not ask for, did not understand and could see little or no use for. On the whole they did not participate in the project activities and it is unlikely that the project had any measurable effect on their own livelihoods. The project did have very important benefits for Honduras, although they were quite unintentional. When Hurricane Mitch reeked

such appalling damage to Honduras in 1998, the assembled spatial data being used by the project proved an invaluable resource for aiding the relief operation. Some of the accessibility mapping proved quite revolutionary in its ability to identify areas which would benefit the most rapidly from targeted repair works to the transport infrastructure.

4 The Village Knowledge Centres of Pondicherry

The M. S. Swaminathan Research Foundation (MSSRF) was established by Prof. Swaminathan in Chennai in 1988 with a mandate to improve the economic growth of rural areas based on pro-poor, pro-nature, pro-women activities (MSSRF 2007a). Its focus is on rural poverty alleviation in India and it has run a range of projects in this area since its inception.

In 1997 MSSRF developed a small scale, localised project in the nearby Union Territory of Pondicherry as an extension to an existing farmer support programme called the *Biovillages* (MSSRF 2007b). In just ten very poor villages, both farming and fishing based, MSSRF gathered information on what the villagers did know already, as a local resource, and what they needed to know to help them improve their livelihoods, a required resource. They then developed an ICT based network which shared this local knowledge amongst the villages and gave access to the needed knowledge (MSSRF no date). Local villagers were trained as volunteers to manage and maintain the system, whilst MSSRF acted as a hub centre to coordinate and expand the activities. Strong commitment was needed from the villages to the project and they were consulted extensively before being included. In most cases this consultation stretched over two or three months, but could last up to a year (Vedavalli 2005, Swindell 2006). This project attracted the interest and long term support of the Canadian International Development Research Centre (IDRC) who continue to support it (IDRC 2005).

4.1 *Project Intentions and methodology*

The intentions of the project were to exploit the power of ICT to share local knowledge and give access to remote knowledge for hitherto isolated villages. The needs were defined by the villagers themselves and the so-called *Village Knowledge Centres* (VKC) were, and still are, run by local volunteers. Each village as a community had to commit to supporting the VKC in kind, by providing a physical location for it and maintaining the resources, after appropriate training by MSSRF staff.

The methodology for establishing individual VKCs and their local grouping has been developed and refined over the ten years since the project started and is published as a 10 stage process, described in a widely circulated handbook, the *Toolkit for setting up Rural Knowledge Centres (RKC)* (MSSRF no date). At all stages this includes the input and agreement of the local participating communities. This has proved so successful that the programme is being implemented in other areas of India and the networks established are going to be joined with other similar ones to create a nationwide network of connected farming/fishing communities across the whole country by 2007, the *National Alliance for Mission 2007: every Village a Knowledge centre* (MSSRF 2004)

4.2 *Outcomes and discussion*

The farmers now know the current local market prices for their produce (OddanchatramMarket.com 2007). No fisherman has died from drowning for many years as they now check sea conditions for the Bay of Bengal on US navy web sites. When the tsunami hit their coast in 2004, the VKC in Veerampattinam village received prior warning from Singapore and people were told to run from the sea. In 2006 the network had grown to 40 villages with 10 hub centres, and by 2007 MSSRF aims to link these villages to a growing national network which aims to give knowledge access to all rural villages in India, as described above (MSSRF 2004). MSSRF have collated specific benefits derived from the VKC project (MSSRF 2003).

The underlying strength of this project has been that it was and is local. The lead organisation MSSRF is based in amongst the communities it is serving. It did not go away on completion of the project, or between project meetings. The workers from MSSRF all speak Tamil and visit the VKCs regularly. The hub centres which serve groups of VKCs are manned by permanent, local support staff. Many

international bodies have been involved with the development and support of the VKC programme, but it is not dependent on their continued participation. The long term and embedded democratic systems of India provide a strong framework for the development of local and shared resources. Above all, the VKCs provide resources demanded by the user communities in the villages, who in turn have to provide physical resources to support the VKC, reinforcing their commitment to it.

5 Comparison of the two projects

These projects were very different in their intent and it would be unfair to simply say one worked and one did not. However, the broad purpose of both was similar in that they set out to make use of modern ICT technologies to give access to knowledge to isolated rural communities and so a comparison is relevant and important.

5.1 *Contrasting methodologies*

The immediate difference between these projects is the contrast of top down, heavily funded international initiatives and bottom up, locally driven problem solving. The Honduran project started with a massive collection of data and a perceived need to make it accessible to many users, few of whom had been consulted or understood what the data contained. The project had a defined time period at the end of which the team had to report to the funding agencies on the outcomes and achievements. The Pondicherry project started with an exploration of local needs and potential and then addressed these needs within the localities. Even the enabling agency was local to the villages. Reports were produced for external funders, but there was no specified end period for the project. It is in fact seen more as an extension of national social services, similar to the Citizens Advice Bureaus in the UK, than as a development project. It is hoped that it will be funded on a continuing basis by local and central government in the future.

5.2 *Contrasting outcomes*

The outcomes of the Honduran project were predetermined, however unintentionally, by the very nature of the project. It was commissioned and carried out for an international funding agency. Their requirements were final reports on completed activities and fully justified expenditure. The outcome of the Pondicherry project was meant to be a functioning, largely self-supporting or publicly funded network of village based ICT resources. This has largely been achieved and the model is being extended and implemented in an increasing number of locations. The original villages are nearly all still actively functioning, ten years after their first establishment.

6 Discussion and recommendation

Can big, international development projects deliver lasting benefits to localised, impoverished rural communities? Can the drive for change be stimulated by outside agents, or does it have to come from within the community itself? Is it possible for projects with time-limited funding to deliver lasting change beyond the project end? Such fundamental questions cannot be answered by reference to just two examples, but some lessons can surely be learned from these.

The prerequisite of true participation is that a project addresses a local need, and addresses it in the long term, not just for a delimited project period. Proposing solutions to problems identified by external agencies immediately disenfranchises the potential stakeholders. Invitations to participate in the established project can be too late and may be largely meaningless.

The keyword to the success of MSSRF in Pondicherry is *local*. The needs are local, the resources are largely local as well, and the facilitating agency itself is permanently based in the locality. Its staff are socially different from the project beneficiaries, but they are speakers of the same languages and citizens of the same country, subject to the same laws, procedures and protocols. Maybe this is the route to successful long term outcomes. The prime facilitators should be local to the project sites, with a historic track record preceding and hopefully carrying on for an indeterminate time into the future. A time limited project with foreign direction is likely to be of only passing interest to the intended beneficiaries. As Schumacher (1974) tellingly stated "Think global, act local".

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