

www.magnus.com.np P.O. Box: 19446 Pulchowk, Lalitpur, Nepal Phone:977-1-5546945/22239

E-mail: tika@magnus.com.np

ICT4D — WHY THE PROJECT FAILED? By E.E. Tikajit Raj

Even though ICT for Development (ICT4D) project may have first interjected an idea of Rural Tele-centers in Nepal, as compared to its promising beginning, the project short-lived and came short of its tremendous potential. The two year project (July, 2002 – June, 2004) that was commissioned under United Nations Development Program (UNDP) and Ministry of Science and Technology (MoST) exhausted USD 6,25,680.00 in this unsuccessful endeavor that was to install 15 rural development Tele-centers.

Today, after six years of project initiation, only one is operational. As the outcome of the project speaks for itself, all are left with bitterness because the project could have snow-balled in to bridging the Digital Divide in the nation. It is, however, unfortunate that the project did not deliver and the falsely-promised underserved communities are still at the bottom in country's economic hierarchy.

So, even with the clarity on the project's potential, even with involvement of organizations such as UNDP and MoST in strategic level and even with the resources allocated why did the project fail?

Following is my assessment.

PROJECT BACKGROUND

In an agreement between UNDP and MoST (<u>http://www.ict4d.org.np/proj_desc.php</u>), it describes that "The project will implement 15 pilot rural development Tele-centers in order to provide communities with shared access to ICT, principally computers and the Internet. Mechanisms will be installed alongside the technology to ensure communities are able to articulate and prioritize their own information requirements and to implement necessary strategies in order to satisfy those requirements."

Then it continues with "... Additional information supplies will be sourced and provided for known priority areas as previously expressed by government, viz; agricultural information, distance learning, telemedicine, productive economic activities, environment protection, natural disaster mitigation. Arising from the pilots, suitable mechanisms and policy interventions will be designed for replicating successes and for achieving a national rollout of rural development tele-centers."

The project deliverables were to accommodate and realize all that are listed in the preceding two paragraphs through 15 rural tele-centers.

LOCATIONS FOR TELE-CENTERS

With local consultations, the project identified 15 locations (see Table 1) for piloting Telecenters.



Mustang, however, was not the original location selected. Due to the security reason (then Maoists' insurgency) in the far west, it was selected later as a substitute.

#	Districts	VDCs	Locations	Connectivity type
1	Okhaldhunga	2	Okhaldhunga/Rumjatar	V-SAT/Wi-Fi/VoIP
2	Achham	1	Mastamandu	Dial-up
3	Sunsari	2	Dumraha/Singhiya	Dial-up/Wi-Fi
4	Parbat	2	Katuwachaupari/Kajhphant	Dial-up
5	Mustang	2	Jomsom/Marpha	V-SAT/Wi-Fi/VoIP
6	Nuwakot	1	Gekhutar	Dial-up
7	Dang	2	Narayanpur/Lamahi	Dial-up
8	Bardiya	1	Gulariya	Dial-up
9	Dadeldhura	1	Amar Gadhi	Dial-up
10	Baitadi	1	Dasharath Chand	Dial-up

Table 1

The project was launched during the peak years of Maoists insurgency. As a result, following took place:

- 1. In June 30, 2003, Tele-center at Achham was closed down because Nepal Armed Police Force took control of the phone line.
- 2. Tele-centers at Dang, Bardiya, Dadeldhura and Baitadi never got materialized because the security could not be ensured.

WHAT THE PROJECT DELIVERED?

When the project phased out, following 7 Tele-centers were operational:

- 1. Dumraha, Singhiya and Madhusa at Sunsari.
- 2. Jomsom and Marpha at Mustang with.
- 3. Okhaldhunga bazaar at Okhaldhunga.
- 4. Gekhutar at Nuwakot.

1. Dumraha, Singhiya and Madhusa at Sunsari

Even though proposed plan was to install two Tele-centers in Sunsari District, one was added towards the end of the project.

Further, instead of using Dial-up for these Telecetners, an agreement was reached with Purbanchal University (PuU) to use its V-SAT Internet service as a hub from which the three VDCs will be connected using WiFi technology.

Please, see Figure 1 for the Network Setup.



In the agreement, it was understood that (PuU) would provide service to maintain the Network; in return, V-SAT cost would be borne by the project.

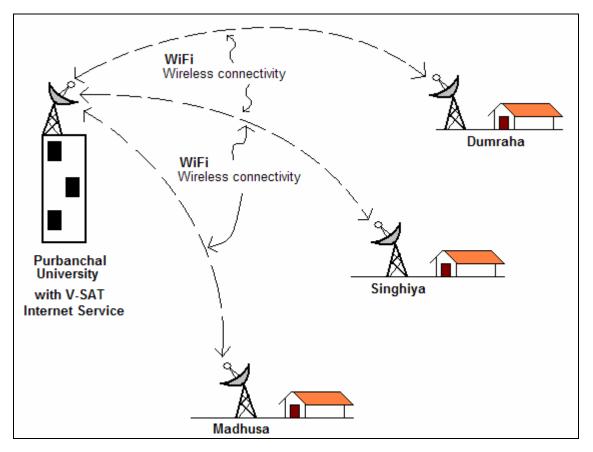


Figure 1

2. Jomsom and Marpha at Mustang

Jomsom and Marpha was connected using WiFi radios from Mustang Airport. Mustang Airport was provided with V-SAT and Internet Service. (Network looks like Figure 1.)

3. Okhaldhunga bazaar at Okhaldhunga

A V-SAT was installed right at the bazaar from where the connectivity extended with cable to the Tele-center.

4. Gekhutar at Nuwakot

A dial-up was setup for Tele-center at Gekhutar.

WHO TO LOOK AFTER PROJECT CLOSURE?

The pilot projects were handed over to Village Development Committees (VDCs). Please see more on this at <u>http://www.ict4d.org.np/ict4d_org_situation analysis.htm.</u>



www.magnus.com.np P.O. Box: 19446 Pulchowk, Lalitpur, Nepal

Phone:977-1-5546945/22239 E-mail:<u>tika@magnus.com.np</u>

THE PROJECT TEAM

The project was executed under following members:

- 1. Project Manager: Aadarsha Tuladhar (MoST)
- 2. Consultants:
 - a. Purna Bhadra Adiga (then under secretary, HLCIT)
 - b. Deepak Shrestha (UNDP)
 - c. Deepak Shrestha (Now at Subish Cable Network)
 - d. Manohar Bhattrai (Current General Secretary, HLCIT)

Please, visit <u>http://www.ict4d.org.np/management arrangements.php</u> for details on management arrangement.

WHY DID IT FAIL?

"The primary objective of this UNDP funded "ICTs for Development" Project is to assist the government to pilot a few tele-centers to support groundwork for developing sustainable framework of operations of tele-centers and provide practical inputs, based on the experience from the pilot, for necessary policy and management considerations for government's national rollout of tele-centers." (Quoted from UNDP's objective on ICT4D.)

The objective defined here in the preceding paragraph specifies post-project activities that also include 'necessary policy and management considerations for government's national rollout of tele-centers.'

According to the study's findings, none such activities ever took place.

Among the proposed 15 tele-centers only one at Mustang is operational. This has been possible only because of Globalplus, a private company (<u>http://www.globalplus.biz</u>), took over the project. (Now the service is extended to Kobang, Tukuche, Nepal Army base, and District Development Committee office.)

With interactions with project members, following reasons have been identified which caused this project to fail:

- 1. Technology centric over training/technology transfer
- 2. Unable to localize the content
- 3. Wrong sustainability model
- 4. Incompetence of project members?
- 5. Mismtach of deliverables against allocated time/effort

1. Technology centric over local capacity development

Even though expensive and mature technologies where used for the infrastructure—V-SAT and WiFi (please note that ISM band was not deregulated



then and the use of WiFi without license was illegal)—lack of proper training to develop human capacity to actually understand the technology and to maintain it may have hindered the outcome of project.

For example, the status of tele-centers equipments at Sunsari district has been reported as "beyond repairable.' Apparently, the system was never serviced and maintained.

Furthermore, how community members in these 15 locations would actually benefit—economically—through available access to Internet without actually developing capacity in them?

If the project had been designed to focus more on local capacity development the project could have lasted longer because the communities then would have realized economical benefit that the tele-center brings.

2. Unable to localize content

ICT vision and strategy should focus on people. For this to happen, it is important to incorporate local people participation through out the project cycle. Strategy must be development with people in mind.

Once the Internet infrastructure is setup, the content was not localized whatsoever. As a result, even though you have V-SAT in your back yard with connectivity, you do not know what you want from it.

In one hand, as discussed in preceding topic, local capacity needs to be developed; on the other, localized content must have been designed and developed so that, in practice, the technology could have been transferred more easily.

(Please note: Designing webpage in Nepali is not localization. Designers must profile potential first-time user habits and identify the best way that they would feel comfortable with to start using a computer.)

3. Wrong Sustainability model

If economical stake of VDCs in the projects were established, the projects would not have failed.

Wherever NGOs/INGOs have taken up projects, often these activities have increased level of complacency in communities: If a donated computer breaks down, why bother fixing it, when the same donor would potentially replace it if once start pan-handling?

If the same community is educated on OWNERSHIP, in other words, "Nothing is free" concept, there will economical motivation not to fail the undertaking.



If, instead of government's VDCs, local communities would have better choice for the sustainability of the projects. However, with the conditions, that will have economical stake in the project.

(Still, the bandwidth cost of V-SAT has been partially paid by MoST. Up/Down link data rate is 64/128 Kbps and annual fee is 12,000.00 USD for the service.)

4. Incompetence of Project members?

The report (#2. in "ICT4DOutput2Status1.pdf") states that "The contract for the 'Feasibility Study of Broadband Connectivity in Nepal' had to be terminated because of lack of progress and overall incompetence of the consultant." This raises a serious issue because without completion of main study, how the project was executed? Was the competence level of all project team at par?

ICT trend in city area is not same as it would be in rural. "Bottom-up" model ought to have been implemented by the team. Only when project team could see through the rural communities' eyes, they could relate to the challenge and difficulty that the communities face when being introduced to ICT.

5. Mismatch of deliverables against allocated time/effort

With the given timeline, the scope of the project (<u>http://www.ict4d.org.np</u>) was too wide. To pilot 15 tele-centers with in the period of two years is logically impossible; especially when these tele-centers are bring introduced to rural areas. To install, transfer technology and to develop capacity in these area with in the time frame is impossible.

AUTHOR'S COMMENT

We must all accept our failure. From it, then, we need to identify our mistakes and learn from them. Now we have got some *know how*s, *Best practices*, and *Lesson Learnt*'s; and we must be careful when we undertake ICT related projects in rural settings.

Okhaldhunga's tele-center is temporarily down due to the damaged Inverter. What I would like to suggest is, why not fix the Inverter and bring the system up. With a new model of "Community based + 100% OWNERSHIP", we can revive the remains of ICT4D.

In the advent of technologies such as WiMAX (see <u>http://www.magnus.com.np</u>) and recent deregulation of WiFi (with up to 4 Watts of transmission power), we can even expand the connectivity up and beyond the periphery of Okhaldhunga.

If we can deregulate WiFi, we can certainly pressure government (and other stake holders) on to exempt the custom tax on wireless equipments (is about 30% when ICT equipments like computers is only 1%) and subsidize telecommunication license fee for rural connectivity. Let's join hand and connect the rural. Access to Information is empowerment, a way to alleviate poverty in our poor country.