

**Project Inspection Report**  
**Submitted**  
**to**  
**Vinderup Rotary Klub (VRK) Denmark**

Project: **Junbesi Communication Center (JCC)**  
Location: **Junbesi, Beni-4, Solukhumbu**  
Date of inspection: **17<sup>th</sup> April, 2008**  
By: **Namgyal Jangbu Sherpa**  
**Manager of Himalayan Project Nepal (HIPRON)**



**Historical Background of Junbesi Village**

Junbesi Village is located in Solukhumbu District, Beni ward no. 4, eastern part of Nepal. This is a very beautiful valley decorated with cultural and historical heritages like Junbesi Tashi Thongmen Monastery, built in 16<sup>th</sup> century and renovated in 18<sup>th</sup> century, and Stupa, etc.. Apart from that this valley has been decorated with many luxurious tourist lodges. The main way to Mt Everest passes through the valley and is the center point for Pikey, Dudh Kunda and Kalla trek.

Sherpa community dominates the village where around 250 people are living. Their primary occupation is tourism and secondary agriculture.

The term "Junbesi" was derived from Nepali language. Jun means moon and besi means valley. There for it is the Moon Valley. The word "Junbesi" contains a mythical importance. It is said that once upon a time there was an orphan going down to the river to fetch water by the dusk, looking at the sky urging the Moon to take him away as there was no one who takes his care. On the request of the orphan, the Moon had descended and taken him up. When Moon was descended its imprint was printed on the stone by divine power. This imprint can still be seen clearly. Furthermore, this valley is surrounded by many beautiful mountains like Pikey, Singsare-La, Langate and Kalla-Ri from where many mountains of Nepal, including Mt. Everest, can easily be viewed. Mt. Numbur and Karyalung, and Holy Lake also called Milk Lake, Sangiphug are also located at the distance of one day

walk from Junbesi. Serlo Monastery and Thupten Chholing Monastery, which are historically and religiously very important, are also surrounding the valley.

### **Present condition**

In 2006, Tourism for Rural Poverty Alleviation Program (TRPAP)) built the Junbesi Tourist Information Center (JTIC) in collaboration with District Development Committee and local people. This information center is located in midst of the village. Its main objective is to promote tourism in this area by introducing its beautiful nature, culture, tradition, ethnicity, religion and livelihood of the local people. It also aims at providing the necessary information to the tourists. But this tourist information center has been without communication facility. Despite the fact that communication and information are the urgent requisites for the local people to boost up tourism business and people involved in development field but due to budgetary lackness and past political conflict, JTIC hasn't been able to set-up communication center over here.

Now, the number of tourists has been incredibly increased in this area. They look for communication centers from where they could converse with their family members and friends. They could also report them about their journey when intend. But it remains only their dream as there are no such centers. It's natural that domestic and international tourists feel quite lonely and boring in such. JCC is planning to set up a communication center to meet their dreams to reality.



### **Establishment of Junbesi Communication Center (JCC)**

Junbesi people, Hotel entrepreneurs, development workers and those who are involved in tourism have a great demand to set up an internet connection in Junbesi for their own and visitors' convenience. This can be beneficial for the large scale recipients. Keeping their demand in mind, Himalayan Project played the role of mediator to make the approach to Vinderup Rotary Klub (VRK) in 2006.

But the process of establishing communication center didn't go further due to the unavailability of internet connection. However, they managed a room and furniture for communication center in the JTIC building.

Now Nepal Telecom has established tower of Code Division Multiple Access (CDMA) and distributed the phone, which can also enjoy the internet speed of 153.6kbps and SMS, in Junbesi. JCC has already in March 2008 bought this telephone to operate voice connection to the surrounding world. The service is prepaid phone in which the charge is deducted from its balance as per the use. In the case of internet access the rate depends on the size of the downloaded file ó mor the moment the rate is 0,25Rs/100KB. JCC also already set necessary furniture for placing the PCs and 7 k/w electricity is being operated for 22 hours a day.

### **Some technical dataB about CDMA**

#### **GSM (Global System for Mobile Communication)**

GSM is the usual mobile technology in European countries and in Kathmandu as well. GSM use the following type of network: It has a MS (Mobile Station, e.g. our mobile set). Then it has BTS (Base Terminal Station) that controls and switches the MS. Next, there is BS (Base Station) that controls the BTS and the Operation and Maintenance Centre.

There are different antennas that have radial or hexagonal area of coverage. Once we move from one area of coverage of an antenna to that of other, the break-before-make strategy is applied. E.g. while driving a car and having a conversation on a GSM mobile, first the link is broken of 1<sup>st</sup> station and the link of 2<sup>nd</sup> station is established.

The total number of users that a GSM network can support is hard limited, i.e. we have a fixed number of users inside a network that the network can support. If the number exceeds, then weøve problems in network connection.

#### **CDMA (Code Division Multiple Access)**

CDMA technology is decided to be in use in the remote mountainous regions of Nepal because of various convenient features among which is the better data-transmission than in the GSM system. CDMA introduces the use of code (PN code, etc.) such that the voice or data are first encrypted with the help of the codes. If a userø's voice or data is hacked by another user, then the second user canøt read or understand the data of the first user. So itø's more secure.

The make-before-break strategy is applied. E.g. while driving a car and having a conversation on a CDMA mobile, first the link is created with 2<sup>nd</sup> station where the user is going to move, and then the link of the 1<sup>st</sup> station is broken.

The total number of users that a CDM network can support is soft limited, i.e. in a CDMA network; we can add the users to the limit till the interference/noise makes the scenario worse.

#### **Comparison**

Several features makes CDMA a better technology than GSM specially in the case of Junbesi. CDMA has a better quality of voice communication, it has better quality

of data communication (SMS/Internet) too. It's because voice communication is a complex field. CDMA, which is better in complex field of voice communication, is better in data communication than GSM.

CDMA is better than GSM and is a great technology for Junbesi

### **Important Features of CDMA**

In the CDMA technology, although maximum speed is about 153,6 kbps, it will be shared among the subscribers in that area where the BTS (the tower) is kept. In this concept this technology is not so good for a city area like Kathmandu if they have more subscribers. For Junbesi it is excellent.

The charges are like Rs .25 per 100 kb for both download and upload of the data.

In order to activate, one needs to buy a RIM Card (Rs 1.135) and if you want to add data transfer facility (Rs 250). Now if you want to use it only for voice you need a Mobile set and to use it over the internet for data transfer, you need a PCMCIA Card.

There are hardly any problems one faces with data transfer unless there is some technical problem in the tower itself. It is rare.

CDMA has a wide coverage and is only the technology available for Junbesi at this point of time.

1. CDMA 2000 1x PDSN (packet data service node) Service provided by Nepal Telecom
2. it's a wireless CDMA service with the speed of 153.6 kbps maximum.
3. The charging scheme is 0,25Rs per 100 KB.
4. Coverage area: - the area wherever CDMA phone works is within all over Nepal. In Solukhumbu it is Salleri, Junbesi, Tamakhani, Bakanje, Taksindu which has the best coverage area.
5. CDMA is good for voice and data transfer

### **To have facility of CDMA in laptop**

Various types of devices support the PDSN service for laptop

Eg. PCMCIA card (personal Computer Memory International Association) compatible only for laptop having the corresponding port: - the laptop should have the PCMCIA compatible port

USB MODEM (Preferable for data service only)

Mobile sets that supports PDSN Service Eg. NOKIA 6255i, Nokia 3155i, Nokia 6235, Spice d-88, Indicom C2900i (Dual purpose for voice communication and data service)

### **Location of JCC**

JCC will be operated in the TIC building. It contains 2 big rooms and a toilet. One room is used for museum and another room is for tourist information and communication center. JCC has all-set in this room in order to operate communication



center. Electricity, furniture and CDMA phone are well set for PC.

### **Service**

Tourist Information Center (TIC) is providing all the possible services, except communication one to the visitors. It has made availability of the necessary materials like, tourist maps, tourist guide books, Dudhkunda Pikey Culture Trails Documentary CDs, brochures, post cards, stamp, instruction books, batteries, handicrafts, posters etcí

From this Center, independent tourists, who canøt effort to hire the trekking guide, are benefited.

Communication service will be operated when JCC is fully equipped with PC. JCC is planning to provide internet / email, local, STD and ISTD call services.

### **Economy**

TIC generates income by selling tourist guide books, maps, documentary CDs, post cards, handicrafts, calendars etcí

JCC generates the income from the internet/ email and telephone charge.

Account of the income and expenditure of both centers shall be kept independently.

Both accounts will be verified every month.

Economic report will be presented to the donor periodically.

### **Management**

JCC will be operated under the Management Committee of JCC.

JCC itself is the owner of the communication center.

Recently there is an ad-hoc committee consisting three people - Ang Dome Lama, Chungba Lama and Bed Bahadur Shrestha, working to set-up the center. When communication center is fully established, the ad-hoc committee will hold the village meeting and form the Junbesi Communication Center Management

Committee (JCCMC) in order to run JCC effectively. On the behalf of the very meeting ad-hoc committee will hand over the responsibilities to the newly formed committee.

There will be an operator who will operate both TIC and JCC. S/he shall be good both in English and computer.

Both JCC and TIC will bear operator's salary equally.

Technical problem will be solved by Seagate Institute

**Letter by Chungba Lama, the Temporary Operator of JTIC and member of the ad-hoc committee of JCC**

A letter by Mr. Chungba Lama, was sent on 09 May 2008. Chungba Lama wrote this letter to HP for fund release. Letter was in Nepali version and was translated in to English by Namgyal Jangbu Sherpa. Following a translated version of the letter:

09 May 2008

To The Chairman of Himalayan Project, Denmark

Junbesi Tourist Information Center (JTIC) was established in 2063 (2006) by TRPAP (Tourism for rural poverty alleviation Program) in the coordination of District Development Committee. JTIC is lies in Junbesi Valley, which is the center point of Mt. Everest, Pekey and Dudhkunda highway with sharp's locality.

JTIC aim is to promote tourism by introducing Pikey Dudhkunda as well as Culture, Tradition, ethnicity, religion and the livelihood of that region.

This center is providing all the possible service with necessary information to new visitors, except communication service. Communication service will start once Junbesi Communication Center (JCC) is equipped with all the communication means. JCC is trying its best to set up communication at the earlier possible keeping in mind that communication center is the highest demand of Junbesi people and visitors.

In the past, it hadn't been possible due to the lack of network. Now Nepal Tele Communication has distributed telephone and internet through CDMA (Code Division Multiple Access) which effectively run 153.6kbps internet as well. JCC has got the same telephone having internet facilities.

We also have made all the necessary preparation for communication center like electricity, telephone and room. Now we want bring JCC in operation having it equipped with the necessary equipment. So, we Junbesi people would like request to HP to release the fund for the equipments of communication.

Till today, this center is providing the necessary materials to visitors like: Map, Post card, Stamp, Batteries, Handicraft, Poster, Dudhkunda Pikey Culture Trails Documentary CD. The main income of this center is the selling of above materials and we manage the salary of one staff and manage this center by this money.

We hope that when JCC is connected with internet, all the visitors will be enjoying the service. And from which Junbesi people can promote tourism business and raise their income.

Nowadays this information center is running under the direction of Ang Domi Lama with one staff. It opens at 8am to 6pm.

- All the income and expenditure shown once a month of 12<sup>th</sup>
- JCC has made all the necessary preparation like: Computer Desk, Electricity as well as CDMA Telephone.
- In Junbesi there is 7 kilowatt electricity which can supply electricity for 22 hours a day.
- JCC has got CDMA wireless telephone through with the internet facilitates.
- Once JCC is equipped with the PCs provided by HP, JCC will start giving Internet/email service to the visitors and all the income and expenditure will be recorded in computer as per HP's instruction
- This information center is decided that, after 2 years of its establishment, 20% of the whole income will be given to Junbesi Secondary School. So that this School also can raise its income.

Sincerely Chungba Lama  
Operator of JTIC and JCC

### **Mount Everest English Secondary School (MEESS)**

Computers donated to the Mount Everest English Secondary School (MEESS) by Vinderup Rotary Klub, Denmark were observed during the runner service in April, 2008. I found them just fine. Principal of MEESS informed that all the computers are functioning well and no technical problem has occurred till date. School has recruited an especial computer teacher and is also planning to include



computer course from this new academic session. The parents are very much eager to see their children being learned computer. He also informed that students are happy to learn the computer. MEESS gives both theoretical and practical education to the students above class 5 - 10. MEESS has been the first school giving computer education in Solukhumbu District.

### **Conclusion and Recommendation**

As a runner, I sincerely checked the communication center as well as PC condition in MEESS during my service. I found Junbesi people very much gratitude towards the communication center. They have fulfilled their part by making all the preparations for the center. Now they are eager to extend their thanks to the donor after receiving his support. I am fully confident that Junbesi people - especially Management Committee of JCC, will run the communication center effectively and make visitors enjoy the service. Such our effort will make this place a charisma for local people, development workers domestic and international tourists.

To sum up, Junbesi people and Management Committee of JCC will provide communication service to all the people who want to enjoy its service, so, I would like to recommend to the donor to release the support of the PC for JCC. Wishing all the best!!!



Mt. Numbur and Karyalung,