

Consolidated Project Progress Report

July 2008 to March 2009



Project Title:

"Improve quality of life of communities impacted by infrastructure development in nine Gram Panchayats of North Sikkim that are affected by Teesta Stage III (1200 MW) HEP by providing sustainable opportunities to improve livelihoods, health education and thereby promoting wellbeing of communities"

Prepared By



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Submitted To



Teesta Urja Ltd

Besides Community Centre, Development Area,
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Consolidated Project Progress Report July 2008 March 2009

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"Improve quality of life of communities impacted by infrastructure development in nine Gram Panchayats of North Sikkim that are affected by Teesta Stage III (1200 MW) HEP by providing sustainable opportunities to improve livelihoods, health education and thereby promoting wellbeing of communities"



Background

Bhavishya Bharat Foundation (BBF) has been entrusted with the responsibility of undertaking the CSR activities outlined in Local Area Development Programme (LADP) under the Environmental Management Plan (EMP) of Teesta Stage III (1200 MW) HEP. An agreement to this effect was signed between TUL and BBF. BBF had undertaken detailed activity planning during the period July to September 2008. This included extensive field visits to all nine PAVs, consultation with village representatives, meetings with PRI members and discussion with various government officials at the district level. Based on the extensive field work, a detailed action plan was drawn. The same was presented during the second Rehabilitation and Resettlement (R & R) Committee meeting held on 15th December 2008. Please refer *Annex 1* for minutes of the R & R Committee meeting. The meeting was ended with a clear suggested action plan based on the expressed needs of the community members and Panchayat Raj representatives.

The Detailed Action Plan Development

Extensive field visit and area assessment

A consultant was hired for primary assessment of the project area keeping the below mentioned objectives.

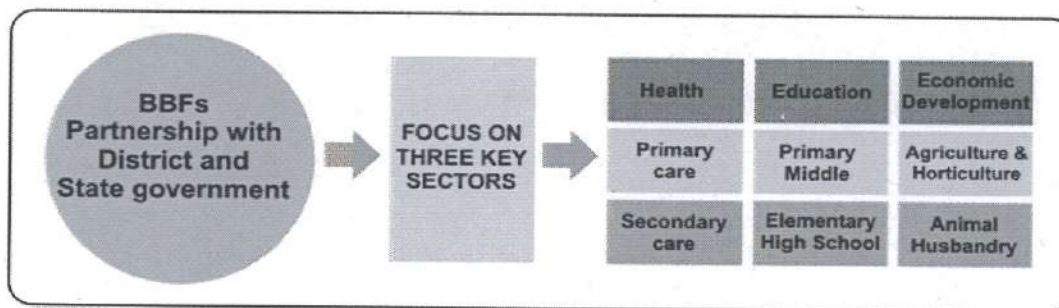
- ☐ Conceptualise the operational strategy befitting to BBF values, vision, mission and objectives and suggest programmes to take up the specific task assigned to BBF by TUL in these nine Project Affected Villages (PAVs).
- ☐ Methods to converge with the national programmes like NRHM and SSA in developing better strategies to take up our health care and education programme in order not to duplicate the efforts but to coordinate with each other and bring in synergy that would be useful in development of the community?
- ☐ Help BBF to establish linkages and have a mutual agreement with line departments like Health and education and utilize their resources to empower our target community?
- ☐ Identifying the possibilities of creating community-based structures like CBOs who can take up the issues of community mobilisation and be responsible for maintenance of community infrastructures like school, PHSCs, drinking water facilities like tanks etc., which cater the needs of the community in the long run.
- ☐ Identifying possible activities under the interventional areas that would help BBF in attaining the objectives.
- ☐ Evolve possible monitoring plans and methods to maintain specific MIS and database that would be helpful for the project.

Details of Methods Adopted by the consultant

- ❑ Meeting and discussion with senior staff members of BBF & TUL.
- ❑ Visit to villages and interaction with people.
- ❑ Interaction with other key stakeholders i.e. Panchayat representatives (including President of Zilla Panchayat), government officials: Honourable Minister Health, Secretary Health, Director Agriculture, Sr. Scientist Spices Board, Head Masters and School teachers, etc.
- ❑ Meeting experts at Manipal Sikkim Hospital and Medical College
- ❑ Meeting with CMO, Mangan District

Detailed Project Implementation Plan

BBF envisages integrated and all round development of Sikkim. It sees this project as a point of entry in Sikkim to test and pilot innovative approaches which would bring development in the fields of health, education and economic development. The key focus within each of the functional areas has been illustrated in figure below.



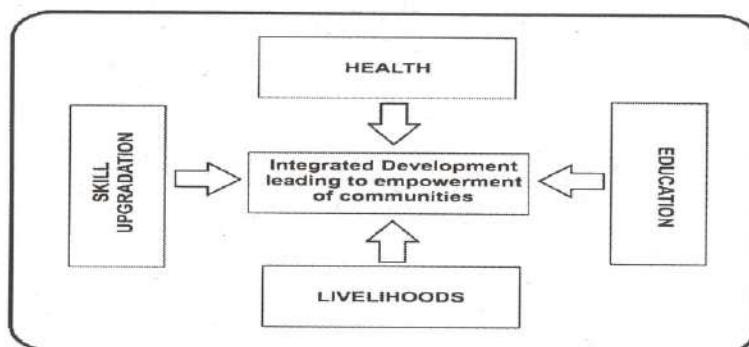
BBF's long term plans envisage a greater role of rolling out the successful achievements in the project area to the entire state with the active support and cooperation of the government and other institutions. Keeping this in mind, BBF had evolved the project implementation strategy which is decentralised and transparent.

Proposed Project Implementation Strategy

The Social and Economic project implementation by BBF is entirely guided by the R&R plan. It seeks the guidance and support of R& R committee from time to time to completely achieve the objectives of the R& R plan for the nine project affected villages.

The suggested project activities are based on the guidelines of the Environmental Impact Assessment Report and Gazette Notification of Govt. of Sikkim constituting R& R Committee and the principal objectives set out in the R& R document

Proposed activities are integrated and multi-sectoral in nature aimed at all round development of the project affected villages. Integrated implies inclusive development of poor and marginalized natives. Multi-sectoral implies interventions in education, health, economic and environmental development leading to integrated and holistic development of communities. This is explained clearly in the figure given below.

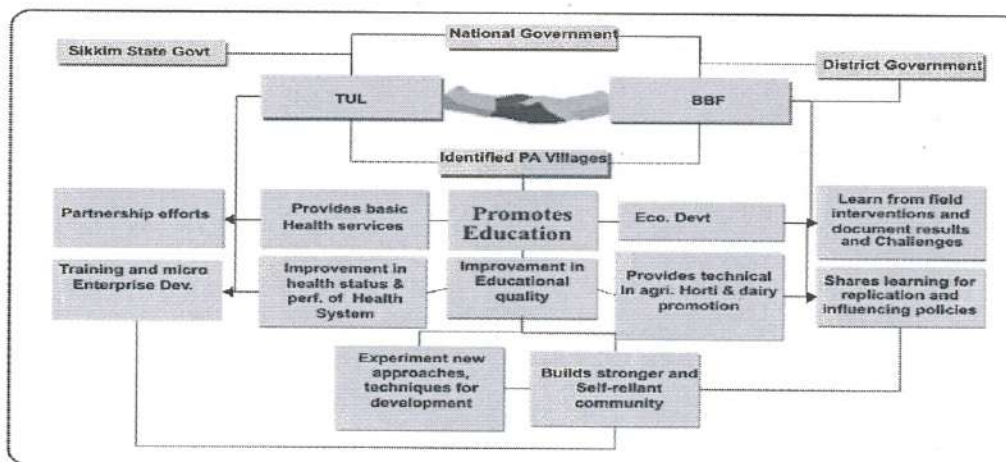


BBF plans to evolve participatory approaches to project planning, implementation, monitoring and reporting. Scientific methods of project formulation, execution and reporting were proposed

Empowerment of target communities is central to the achievement of R& R plan. Hence, these become the end result of our project.

BBF sees the partnership with TUL and Government of Sikkim, district government and Zilla Panchayat as innovative and trend setting. To make full use of the available opportunities, BBF focuses heavily on bringing in high quality technical and management inputs in all its programme areas.

The proposed partnership elements based on the R& R documents are outlined in the figure below.



BBF has evolved the following project management structure for the timely and efficient implementation of the R & R plan. The plan will be guided by the state government and the R & R committee. For facilitating the project implementation, BBF has put in place a robust and dynamic project management team. The key expertise of BBF's board and its staff team are presented below.



Project Initiation

Detailed work plan and methodology including the project team structure and detailed job description was developed as output of the primary assessment of the project area by the consultant Mr. K.P. Rajendran. Please refer Annex 2 for the detailed report. This report formed the basis for discussions during the 2nd R & R committee meeting. The action plans were further crystallised as per the outcome of the meeting. Please refer annex 1 suggested priorities by the 2nd R & R Committee meeting.

Programme Area : Community Health Care

The key objective is to provide comprehensive quality primary medical care for all people in the nine PAVs. To this end an integrated primary health care clinic system evolved. Under this five clinics were setup in the project villages to adequately cover all nine PAVs.

Health Programme Launch

The Community Health Scheme of BBF was inaugurated by the Hon'ble Chief Minister in conjunction with 5th Mangan Music Festival conducted by Mangan Tourism Development Committee (MTDC) at Mangan. The highlight of the launch was the Free Super Specialty Medical Camp organized by BBF for the residents of the PAVs. The detailed report is attached as Annex 3.

**Health camps**

Namprikdang Free Medical Camp during yearly Namsoong Festival was organized by BBF at the request of the local representatives of the people. A Request was also received from Namsoong Celebration Committee to hold a Free Medical Camp during Namsoong Festival at Namprikdang Ground on 3rd and 4th January 2009. Please refer to Annex 4 for more details on the medical camp and services provided.

Participation in government immunisation programmes

BBF participated in the government immunisation programmes actively in the project area. In this regards Pulse Polio Camp was held at 6 project Affected Villages by BBF in collaboration with PHC Chungthang, Department of Health, North District, and Government of Sikkim on 21 & 22 Dec 2008. Polio vaccine boxes were handed over to the ASHA and Anganwadi workers & PHSC Nurses who carried out the immunisation programme in their respective Villages with the help of our Community Organisers. Details of children benefited due to the camp have been given in tabular format below. More than 260 children were benefited in this camp.

SI	Name of the PAV	No of children who administered polio drops
1	Chungthang	150
2	Pegong	25
3	Theng	7
4	Shipgyer	38
5	Ramom	11
6	Safoo & Salem Pakyel	30

The villages Singhik and Kazor were directly covered by the health department due to their proximity to the district head quarters. In addition to this BBF coordinated a free Health Camp at Safoo P.H.S.C, which was attended by 30 children.

Training of doctors, Finalisation of Drug list and Treatment Protocols

A senior consultant Prof. (Dr). Kamla Ganesh was engaged for training of our field based doctors on rationalisation of drug usage. Dr. Kamala visited the clinics and interacted with the doctors and provided capacity building inputs in terms of facilitating primary care only. She also met the CHMO of the district and had extensive discussions on providing primary and secondary care level treatment to the villagers. In the end, she carried out an assessment of existing drug lists and prescription practices. Along with our doctors, she had finalized the drug list for our clinics. She also trained the doctors on standard treatment protocols. A copy of the revised drug list finalized by the team is attached as Annex 5.



Standard Treatment Guidelines

Since the diagnosis of most problems are not written in the register kept in the clinic (symptoms are listed in many instance), it is suggested that the Doctors write a probable diagnosis from now onwards. Protocols for the common problems encountered can be accessed from standard treatment guidelines and a copy to be kept in each clinic. A copy of the standard treatment guidelines was procured for the field office.

Medical profiling

BBF aimed at providing holistic primary health care, has embarked upon medical profiling of all persons in the village free of charge. The medical profiling is under progress in the project villages. Initially those persons who came voluntarily have been taken for the profiling. The details of people who availed the free profiling checkups village-wise are as given below

VILLAGE	PROFILING ACTIVITIES CARRIED OUT
SAFFOO/ SALIM PAKYEL	138
RAMMOM	52
THENG	92
PEGONG	78
CHUNGTHANG	156
SHIPGYER	101
KAZOR	93

The analysis and conclusions from medical profiling would help to identify health care requirements as well as calculating the probability of rare treatment extremes. It would help in improving the standards in handling emergencies as well as help in planning methods for risk management. Medically meaningful standards would be proposed to the local clinics and hospitals on the basis of the findings.

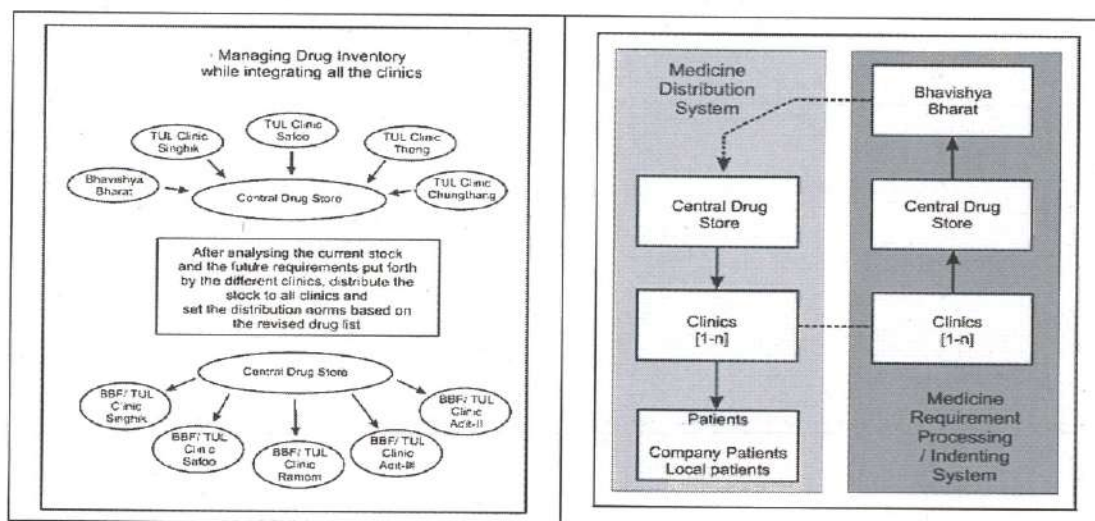
Comprehensive Health Information System

A comprehensive information system for health management was developed by BBF. The central aim is to organize the functions of all clinics in an integrated manner as well as simultaneously build capacity in drugs procurement and supplies. An efficiency information system helps in obtaining reliable data and records. It also includes the organization's capacity to undertake automated processes.

A well maintained and strongly placed information system within the organisation helps to cut costs while delivering high quality services. It also provides critical data for further improvement.

Basic Health Information System to be implemented in BBF in Phase 1 would mainly focus on the following two aspects:

1. Managing the Drug Inventory.
2. Basic Client/ Patient details



Integration of clinics

BBF's aim was to cover all the nine PAVs with primary health care facilities at all times. To this aim, five clinics were strategically positioned to conveniently cover all the nine villages. In areas of low density of population and the shortage of personnel a clinic can efficiently (and without any undue hardship to the patients) serve the population instead of putting up 2 or 3 smaller ill-equipped and poorly staffed units (See health care services provided at Ramom in a hired place).

The integration approach had added efficiency of the clinics thus helping the villagers to a larger extent in accessing quality primary health care services.

Reaching out to Ramom

Ramom is a remote village without road connection. Accordingly, BBF decided to provide quality healthcare service to the people of this remote village. Making a humble beginning, a One Room Clinic was started on 5 Feb 2009 in a rented room. On the first day of the clinic 22 patients with various ailments turned up for availing medical facilities. All the patients were examined and treatment provided. Doctors visiting time have been scheduled as Tuesday and Friday, 10.00 am -1.00 pm.

Clinical performance data

In a period of 10 months, more than 3000 patients availed primary health care services in the five clinics. The detailed break-up is as given under



Month	Villagers	Labourers / Others Migrant Labourers
May 2008	59	0
June 2008	303	20
July 2008	352	63
August 2008	326	76
September 2008	379	52
October 2008	301	35
November 2008	284	56
December 2008	207	42
January 2009	269	53
February 2009	305	79
Total	2785	476

Singhik Primary Health Care Clinic has been upgraded to the facility of a super speciality clinic. It is equipped with state of the art laboratory facilities, x-ray machine, ultra-sound, ECG and other facilities. It is expected to be the referral care facility for detailed investigation and subsequent care.

Programme Area : Education

The state has encouraged its children by providing free education for the age group of 6 -14. The Sarva Shiksha Abhiyan is running in full swing to raise the literacy percentage in remote areas of the state.

However the low no. facilities in the project area can be attributed to the extend of remoteness, low density of population and lack of awareness among parents. The mapping of educational institutions in the PAVs is as given under:

Number of Government Educational Institutions in the district vs. project area (as on June 2007)

Sl.	Category of schools	Entire district	Project area	
			No	Location
1	Lower Primary Schools	21	2	Pegong, Theng
2	Primary Schools	39	2	Rammam, Ship Gyer
3	Junior High Schools	16	2	Salem Pakyel, Kazhor
4	Secondary Schools	11	2	Chungthang, Singhik
5	Senior secondary Schools	3		Only at Mangan
6	Graduation Colleges	-		-
7	Post Graduation colleges	-		-
8	Technical training centres	-		-
9	Teacher training colleges	-		-
10	Monastic Schools	19	4	
Total		109	12	



As the data indicates, most of the schools are lower primary and primary schools. Higher educational facilities are extremely limited. Some of the PAVs like Pegong, Theng have only lower primary schools and they find it very difficult to provide higher schooling for their children.

Other important observations regarding educational status include:

- Majority of children enrolled in Government schools are first generation learners.
- A few students in each school are of migrant families mainly labourers from other states.
- Parents of students are not much concerned about their children's progress mainly due to lack of awareness and education.
- The student teacher ratio varies from 12-18 in the project area.
- The teachers are having sufficient qualifications but requires formal training on enhancing their teaching skills
- Almost all schools are facing the problems of insufficient furniture mainly student desks and benches. Many classes are having damaged blackboards.
- Drinking water in all the schools are mainly from open sources like springs etc. many of these springs dry up in the winter season and thus there is no water throughout the year.
- Majority of schools have separate structures for toilets, but it was found that they are in a bad state due to non-maintenance as well as lack of water. Most of these need separate toilets for boys and girls and also separate toilets for male and female teachers
- The schools do not have any library facilities.
- The secondary and the junior high schools have science as a subject in the curriculum, but these schools lack equipments and laboratory facilities.
- Out of the 8 schools only Salem Pakyel school has a dedicated electric supply, while Singhik and Chungthang schools have only temporary connections.
- Medical checkup are not common in schools. Only secondary schools have these events once in a year.
- Parent teachers meeting are not frequent in these schools. Some secondary schools reported that they have an annual meet.

Suggestions for programmatic interventions

- Residential Scholarship for needy children.
- Improving school infrastructure in needy villages to provide safe and adequate space for quality education.
- Constructions of school play grounds, Improving school infrastructure like science labs, library and computer facilities.
- Strengthening the capacity of school management committees.
- Help School Management Committee to run school hostel for needy children.



- Providing drinking water to social organizations like Schools, hospitals and ICDS centres.
- Arrange school teacher training for their vision development and quality of teaching.
- Strengthening Village Education Committees in all villages.

Selection of candidates for scholarship

1st priority to students studying outside in case there is no facility in the village.
Second priority is to student studying locally but unable to afford the cost.

Criteria of selection

- Pass 35% average marks
- Poor (assets)
- Dropout student
- No of dependents family
- Occupation of parent
- Single parent household
- Orphan children
- Chronically sick parents

Method of selection:-

After identifying the indicators, it should be tabulated for each child. This data (table) should then be shared with the villages or Village Education Committee, by holding a meeting with Gram Panchayat member, respected citizen, Lamas, Anganwadi workers, S.H.G leaders, school HM or teacher.

After that then select the neediest students. In case of any rejection from the list, then identify what are the reasons and also in case of any addition ask the reasons. For more than 5 students from each village, no decision can be taken. If some villages were proposed less than 5, then more number of children can be accommodated. In all, not more than 45 students can be taken from the nine project affected villages.

Scholarship package included the following

Package for (class VI to X)

- Cost of living at hostel
- School tuition fees.
- Totally max Rs.1500/- per month for each student up to class VI to X standard.
- Uniform and books are not provided by B.B.F and there are to be arranged by the parents.

Package for (Class I11 & above) only for Theng & Pegong

- Monthly conveyance Rs 500/- per month
- Amount should be given to his/ her mother's Bank Account.



The committee should declare or announce that the five students would be given scholarship for the academic year (Feb-Dec 09)

If the community organizer is convinced that the sixth student is really needy, poor and interested, she should also declare the selection of the sixth student. However in case of more than six students being recommended by committee, she inform that the decision would be taken by HO, based on the availability of scholarship, which is set to be 45 for all 9 villages.

At the end of the village meeting the discussion and decision should be noted in the proceeding book and signature of all committee members and parents of selected children.

Accordingly 49 students were selected for scholarship. The village-wise list of students is attached as Annex-6

Formation of school management committee

Following the recommendation of the villagers and in particular the Zilla Adhyaksh, Deputy Director Education of HRDD, it was decided to upgrade the Singhik School with a hostel facility so that many deserving poor students can study in this school without paying any fee. This is also seen as an effort in improving the quality of education system in government run schools through partnership.

Till the Singhik School Hostel is constructed, it was decided to set up a temporary hostel. Accordingly, an agreement was drawn with the Singhik School Management Committee which is attached as Annex-7

Till now, more than 90 students were given scholarship for continuing high school and higher secondary school education. This includes the 45 students that were selected by Teesta Urja Limited with effect from academic sessions 2007-2008. 25 students were supported for studying in North Sikkim Academy, while the remaining 20 were supported to continue in the schools where they were previously studying. The list of students who were being supported to continue their education in North Sikkim Academy, Mangan is attached as Annex-8

Programme Area : Water & Sanitation

Water is to be managed as an economic asset rather than a free commodity in exactly the same way as any other resource. It should be treated as a resource in its totality and regeneration of sources shall be the responsibility of every user agency, whether drinking, irrigation or other uses. The comprehensive development of the water resources should be opted as a strategy and the village should be considered the focal point for water development. Top to



bottom arrangement is necessary to stop wastage. Supply of water to consumers should normally be based on the principle of effective demand which should broadly correspond to the standard of service, that the users are willing to maintain, operate and finance.

Rural water supply and rural sanitation facilities are essential ingredients in the total programme for rural development. The activity was planned to ensure that all household in the village are provided with sustainable and stipulated supply of drinking water.

An initial assessment was carried out to know the actual coverage status with regard to Rural Drinking Water Supply, re-assessment of actual coverage of rural habitations would be necessary. To this end BBF engaged, a voluntary organisation Grass Roots Action for Social Participation (GRASP) working for community based natural resources management, to plan the nursery and provisioning of safe drinking water supply to six villages, as well as to review the livelihood promotion plans.

The focus of the assessment was on the following key aspects.

- Assess the drinking water requirements of the community for through out the year and estimate the difficult periods in its availability
- Study the existing system for drinking water and suggest cost-effective measures for making available drinking water to the villagers during difficult times
- Suggest appropriate measures and develop action plan and timeline for implementation of the water supply measures
- Suggest mechanisms for the management of water supply by the community
- Technical assistance input and plan for scientifically developing the nursery
- Review the livelihood plans prepared by the team for agriculture, horticulture and livestock promotion and suggest appropriateness of the same, and any changes.

GRASP constituted a team of professionals from the field of water resources development and rural livelihoods to carry out detailed assessment of the situation and prepare techno-managerial plans for the same. The main findings of the assessment study, along with sketch maps of the drinking water supply, pertinent recommendations for implementation of Drinking Water Supply was shared with the key personnel from Engineering and Environment Departments of TUL and BBF

Based on their feedback and suggestions, the final report was compiled. For details please refer to Annex 9

No of households to be covered under the water supply scheme are as follows



Village Name	Total Households in the village	No of Households covered under the water supply scheme	% age of coverage	Total Population covered
Singhik	115	115	100	700
Kajor	99	99	100	474
Saffoo	50	50	100	300
Rammom	33	33	100	110
Theng	40	40	100	350
Pegong	76	76	100	401
Total	413	413	100	2335

Work progress

Three villages Rammom, Singhik and Kajor were selected for implementing the water supply scheme.

Formation of WMCs & Community based supervision and implementation

Emphasis was laid on stake-holders' participation at all levels, from planning, design, location, implementation and management so that the end users can take on the responsibility for operating and maintaining them.

Rather than being supply-driven, the system is planned to be demand-driven, and had considered the user preferences while planning and implementing. People are made aware of the technologies and given the option to select the appropriate technology, as well as monitor the implementation of the project. People's participation at all stages of the project implementation has helped get over the problems of substandard materials, poor workmanship and inadequate monitoring.

Programme Area : Livelihoods

Livelihoods opportunities Assessment of PA Villages

Due to hill terrain, the scope for agriculture is highly limited. Agriculture-related labour and activities are common, though the major crops include cardamom and fruits. Skill based trades have not been picked up much. The local markets are in the process of getting diversified. With the increased opportunities for labour, there are migrant labourers in the project affected areas. These labourers would invariably become agents for market diversification, especially in creating new entrepreneurship opportunities. There are increased markets for vegetables, fruits, milk, meat and meat products, etc.

Brief summary of assessment of local market opportunities

Characteristics	North Sikkim District
Types	Main city market at Mangan and a few local ones
Size of the local markets	Catering to the neighbourhood villages
Main goods traded	All goods (food, cloth, daily needs) in high demand
Specialised goods	Dry fruits, woollens, cardamom and fruits
Meat, egg, poultry, fish, etc	Very high demand
Scope for Services in market	Travel and transport, tourist services, hotels/ restaurants, eco-tourism
Scope for Services in rural markets	Transport, horticulture, spice processing, vegetable cultivation using gree-house
Local specialised products traded	Handicrafts (bamboo)

Economic development of poor families through income generation activities could be effective when carried out with a systematic planning and implementation of a series of interventions, which are interlinked. These interventions could fall in three categories, as follows. This section explains the principles and process of the basic interventions, which could be applicable to the project:

- Selection of villages and beneficiaries
- Community mobilisation
- Selection of activities

Selection of villages and beneficiaries

All nine project affected villages will be considered for income generation activities. Families will be selected through the socio-economic survey findings as well as in consultation with the village Panchayats.

Community Mobilization

This will be done through strengthening the existing SHGs as well as forming farmers clubs for taking up specific agro-horticulture, animal husbandry and other allied activities.

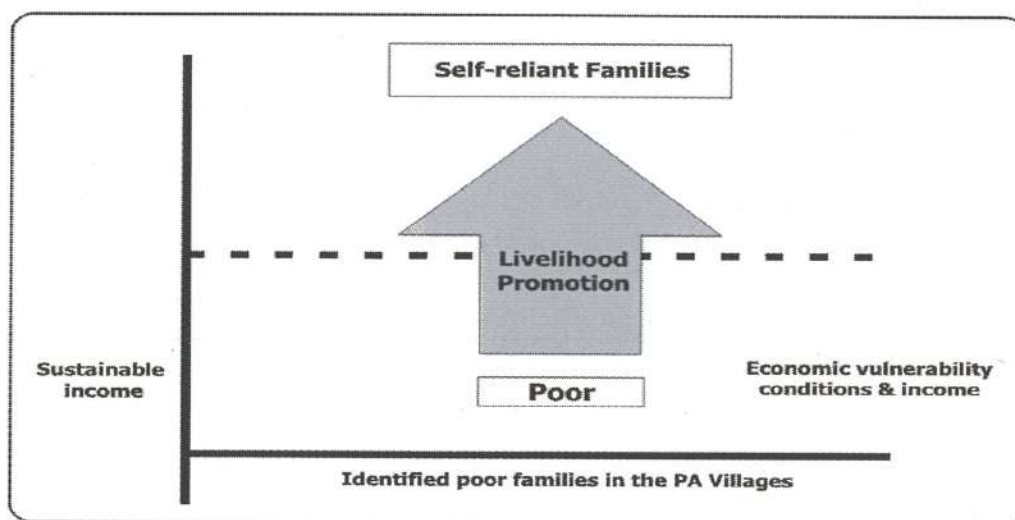
Selection of activities

This will be done in consultation with the target families, matching available skills and resources. Families will be guided by technical specialists for facilitating the selection of suitable activities.

Suggested Activities

- Vegetable cultivation
- Horticulture (cardamom and apple)
- Livestock (poultry, ducks, turkey, goats)
- Dairy promotion activities and strengthening Milk Cooperative Societies
- Petty trade (vending vegetable, and other items)
- Services (loud speaker, electrical, electronic repairs), driving as well as training in house-keeping jobs
- Processing like pickles and badi
- Bamboo crafts
- Eco-tourism

In providing all the above-mentioned services to the families, BBF may envisage facilitating both technical and financial support services. BBF can pool technical and financial assistance to the target families in partnership with district and state government, other NGOs. The aim as said above is to create self-reliant families as described below.



Livelihood approach and plans include in the following:

- Skill up gradation of rural youth by training them in Computers, craft making and other agro-horticulture activities
- Diversification of agricultural practices by helping families to adopt scientific farming in Cardamom and Black Pepper
- Promotion of horticulture, floriculture and animal husbandry.
- Supporting small and marginal farmers with technical know how and improved disease free seedlings.
- Developing a nursery and demonstration plots for farmers to motivate them and adopt new ideas and farming practices.
- Training of interested farmers on various on farm activities.



Establishment of nursery

A barren agricultural land approx 1.5 hector located in Upper Sankalang Village, along the TUL Road to Power House, near Bend 11, was handed over by TUL for BBF Nursery. during end of December 2008. The land is in a slope with terraced fields, part of which was never cultivated and part was uncultivated for the last 5/6 years.

The initial work of clearing wild growth and removing stones and boulders from the land has been done. After clearing the land digging commenced which was an arduous task due to hardness of the long barren land. The method applied for digging was initially by breaking the surface by crow bars followed by use of digging tools. The dug up hard stone like mud was broken, stones removed, weeded and the field was levelled.

Agro Sheds were built to house approximately over 20000 seedlings in poly bags when ready. These sheds are built with locally procured bamboo and agro shed net.

Simultaneously, programme officer has been visiting PAVs and educating the villagers on the following:-

- ❖ Rapid Multiplication Nursery Building (RPM)
- ❖ Eradication of Plant Disease with special reference to large cardamom
- ❖ Black Pepper cultivation
- ❖ Cultivation of vegetables and flowers
- ❖ Possibility of growing apples in Saffo village on the lines of Lachung Apples orchard
- ❖ Marketing and Transportation

Progress of Nursery: It has been only one month but nursery has started taking shape as almost one hector has been prepared as terraced fields. 9 agro sheds are ready and more are being built to cover an area of a hector so as to house and shelter over twenty thousand poly bags of seedlings. 2 sheds, one with plastic roof and another with GI Sheet roof have been built fore store and chowkidars respectively.

Primary Nursery: A primary nursery has been started I about half a hector land for seed germination where seeds of following crops have been sown:-

- | | |
|-------------------|--------------------|
| ▪ "Dalley" Chilly | ▪ Bitter Gourd |
| ▪ Brinjal | ▪ Garima hybrid |
| ▪ Cauliflower | ▪ Chichinga hybrid |
| ▪ Cabbage | ▪ Laboni |
| ▪ Raddish | ▪ Ridge guard |
| ▪ Hybrid Chilly | ▪ Papaya |
| ▪ Tomato | ▪ Seasonal flowers |
| ▪ Orange | |
| ▪ Capsicum | |

In the primary nursery germination of Dalley chilly and hybrid chilly has started. Once the seedlings sprout and develop two leaves it will be put in poly bags and stored in agro sheds. After three months, on attaining the height of one foot, these will be distributed in the PAVs for planting. IN this regard Mr Foning will inspect the prepared beds in the villages and guide the villagers on scientific method of cultivation of these seedlings as well as disease control and marketing.

By the end of April 2009 we expect over twenty thousand poly bags of seedlings of various varieties of crops ready for distribution to villagers.

Future plans are as under:-

- Uprooting of diseased large cardamom plants through SHGs and by offering subsidies
- Gap filling by disease free plants
- Plant nursery grown seedlings in the barren lands of the villages
- Spray bio fungicide in old plants

More than 105 hectre of land and 450 no of families will be benefited through cardamom, black pepper and vegetable cultivation in the first year itself.

Programme Area : Social & Cultural Development Initiatives

The following activities were undertaken in this regard.

- Comprehensive socio-economic profiling of the villagers to study the macro and micro developmental problems of people
- Improving environmental safety and environmental friendly living styles
- Developing community infrastructure like renovation of Gompas, kitchen at Gompas, Hostel/ transit accommodation, etc. are being planned.
- Promotion of local arts and crafts and cultural activities will be undertaken after the proper assessment.

Mangan Music Festival

Bhavishya Bharat actively participated in the 5th Mangan Music Festival held 12-14th December 2008 and sponsored some events in order to promote the social and cultural harmony among the population in the area. This was also important as the area is witnessing high infrastructure growth and as a result of this there has been a large increase in the population of migrants. This event helped the migrant population to understand the local culture and traditions better.

Bhavishya Bharat also organised a free medical camp during the festival. For details, refer to report under health.

Namsoong Festival

A health camp was organized during the Namsoong Festival. For details, refer to report under health.

Photo Gallery

Programme Area : Community Health Care

Glimpses from the launch ceremony and free medical camp organised by BBF during Mangan Music Festival held during 12 - 14 December 2008.



Dr. Pawan Kumar Chamling, Hon'able Chief Minister of Sikkim, Inaugurates the mobile hospital and community healthcare scheme of Bhavishya Bharat Foundation



Patients waiting for their turn to meet the specialist doctors during the free medical camp.



Patients waiting for their turn at the pharmacy to collect medicines prescribed by the doctors



Specialist doctors interacting with CMO North during the free medical camp.



Specialist doctors interacting with Managing Trustee during the free medical camp.

Dr. Jyoti Pradhan, Examining the patients

Photo Gallery

Programme Area : Community Health Care

Glimpses from the launch ceremony and free medical camp organised by BBF during Mangan Music Festival held during 12 - 14 December 2008.



Dr. Chettri, Conducting an ultrasound test on a patient during the free medical camp.



Dr. Rajesh Gupta, examining the patients during the free medical camp.



Dr. B.S.R. Moorthy, examining the patients during the free medical camp.



Dr. S. D'silva, examining the patients during the free medical camp.

Glimpses from the free medical camp organised by BBF during Namprikdang yearly Namsoong Festival held during 3rd and 4th January 2009.



Patients visiting the free medical camp organised during the yearly Namsoong Festival.



Dr. Bhavana Thapa, examining the patients during the free medical camp.

Photo Gallery

Programme Area : Community Health Care

Glimpses from the free medical profiling carried out in all the project villages.



Dr. Rinchen, Conducting the medical profiling at Chungthang Village



Dr. Navraj, Conducting the medical profiling at Theng Village



Medical profiling in progress at Safoo Village



Medical profiling in progress at Singhik Village

Photo Gallery

Programme Area : Education



Extension of Safoo School Play Ground



Admission of BBF sponsored students in Singhik Sr. Secondary School



Children from the project Villages being accommodated to the new hostel in Singhik



Children having their meals in the hostel mess

Photo Gallery

Programme Area : Water & Sanitation

Glimpses from the initial assessment visit to identify the sources and study the existing water supply system



Community level discussions for preparing the base maps and distribution layout plans for the water supply programmes

Photo Gallery

Programme Area : Water & Sanitation



Tanks and collection chamber construction works under progress in project villages



Community level meetings in project villages to explain the need of community level supervision and monitoring of the construction and other technicalities of the water supply works



Formation of Village level water management committees (WMCs) and training of WMC members

Photo Gallery

Programme Area : Livelihoods

Glimpses from the nursery development activity to improve rural livelihood through agriculture and horticulture promotion among farmers in project affected villages



Initial land conditions in the allocated area for nursery development.



Laborers involved in land development and terrace development in nursery land.



Land development and seed bed preparation in nursery land.

Photo Gallery

Programme Area : Livelihoods



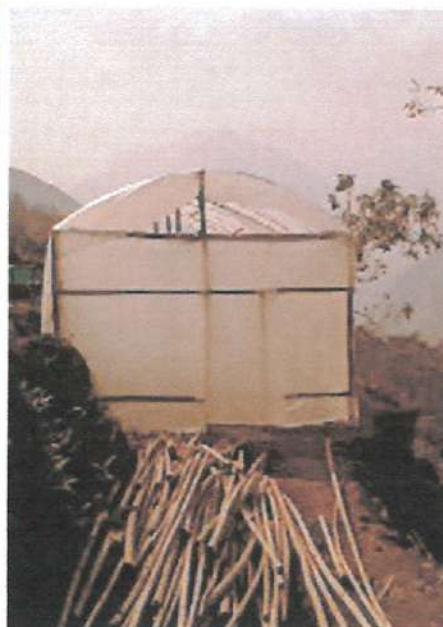
Developing agro shade platforms for seedling and sapling development



Poly bags being used for seedling development under the agroshades



Awaiting germination of seeds



Development of RPM nursery in progress for black pepper

ANNEX - 1

TEESTA STAGE-III HEP
Social and Economic Development Activities by
BHAVISHYA BHARAT FOUNDATION

MINUTES OF 2ND R & R MEETING HELD ON 15 DEC 2008
R& R Meeting No:002 **Venue: Office of DC North**

1. Introduction and briefing

This 2nd R & R Meeting was held on 15 Dec 2008 at the Office of District Commissioner (North), Mangan. The meeting commenced with welcome address by Mr TN Kazi, District Commissioner who welcomed the dignitaries; Sh Sonam Gyatso Lepcha, Hon'ble MLA, Dzongu, Sh Tshering Wangdi Lepcha, Hon'ble Zilla Adhyaksha, North and Lieutenant General (Retd) Hari Prasad, PVSM, UYSM, AVSM, Managing Trustee, Bhavishya Bharat Foundation. The list of members and invitees who attended the meeting is attached as annex-1.

The welcome & introductory address by Sh TN Kazi, District Commissioner gave the background and appraised the members about the progress of R & R activities since the last meeting which was held on 6th September 2008. The DC requested the Managing Trustee, Bhavishya Bharat Foundation to brief the honourable members of the R& R committee on the progress so far and actions plans for the future.

Managing Trustee briefed the members about the overall vision and mission of BBF for the project affected nine villages. He appreciated the support and cooperation of the Committee members in enabling BBF to understand the needs of the area and come up with a set of concrete action plans for the nine PAVs. He emphasised the need for matching the plans developed by BBF and that of the requirements expressed by the panchayat representatives and requested the Committee members to see this opportunity an important opportunity to address the all round development challenges of the villagers. Sustainable development must be the central concern of the villagers which is also the key focus of the R& R plan. Thereafter he directed Sh KP Rajendran, Programme Advisor, BBF to proceed with the presentation of proposed action plans.

Presentation by Sh KP Rajendran, highlighted the plans in the areas of Health, Educational, Social and Economic Development, including entrepreneurial development initiatives for the nine PAVs of Teesta HEP Stage III. The plans were drawn keeping the overall vision of sustainably improving the quality of life of target communities. The detailed programme presentation is attached for reference. Along with the programme presentation, copies of presentation and one copy of the detailed action plans for the aforesaid sectors was also submitted to the Committee for their review and comments.

2. Programme Priorities:

- Provide primary health care services and facilitate accessing secondary health care services. This includes establishment of PHCs and support health camps, etc. Establish and /support educational institutions for improving the quality of education for the children
- Provide necessary support to the aged, destitute and vulnerable families based on the findings of village consultations
- Help physically challenged, disabled and mentally challenged

- Assist communities to improve qualities of life by rejuvenating the agriculture and horticulture
- Women empowerment through skill building and setting enterprises
- Promotion of ecology & environment through community based interventions

3. Progress so far:

- Established Project Office in Mangan and appointed key staff including specialists in community development, agriculture, agriculture & horticulture promotions
- Prepared plan of action for Community Health Scheme, Education livelihoods including agriculture, horticulture, & diary promotion, clean drinking water and sanitation.
- Comprehensive socio-economic profiling
- Teesta Urja Ltd has initiated Local Area Development programmes since the beginning and has already spent more than Rs.59 Lakhs on social welfare activities
- And set up Teesta Industrial Training Development Centre (TITDC) and spent Rs.2 crores on it.
- At the end of the presentation points from committee were discussed as follows.
- Presented the summary of proposals received from the Village Panchayats and the observations of BBF. It was said that most of the activities requested for were construction of monasteries, kitchens and community centres and the importance of these activities, in relation to the overall development of the villagers will be less significant.

4. Comments from the Committee Members

The committee members from various panchayats welcomed BBF and appreciated the important plans presented by BBF. At the same time, they expressed their serious concerns and reservation on the slow pace of the work, the plan not reflecting the requirements or demands submitted by each of the village. They stated that if this was the slow pace of the work, they are afraid that even after the project is completed the R& R plan would remain unimplemented. They expressed their displeasure in ample words and asked BBF to show actions in the field. The committee members wanted to know the following two aspects:

1. What is the total budget for the R& R
2. What happened to the plans already prepared and submitted by panchayats

The above-said points were responded by BBF. The total budget for the R& R is Rs.13 crores of which approximately Rs.4 crores has already been spent. BBF also presented the details of Rs. 25,600,000 in the presentation. The available budget as on date would be Rs.9 crores.

With regard to what happened to the plans and proposals already submitted by the Village Panchayats, BBF had requested the Village Panchayat representatives to kindly review their proposals again so that BBF would be able to implement all round developmental activities for the sustainable development of the villagers. BBF further emphasised that the earmarked budget is very small to accommodate all the requests for construction as well as implement developmental plans. Therefore, it would be important to review the proposals once more and come-up with a priority list.

The Panchayat representatives had happily agreed to the proposal and agreed to draw up a priority list with related to construction of important facilities. The important dignitaries of

the Committee had facilitated and motivated the Village Panchayat members to draw a set of priority tasks for their villages. Accordingly each village had identified their priority needs and the same is presented below.

List of priority tasks finalized by the Panchayat Representatives during the Second R& R Committee meeting held at DC-North Office, Mangan District on 15 December 2008

1. SAFOO	
1	Upgrading PHSC
2	Cardamom Nursery and Plantation
3	Cooperative society / shop
2. SALEM PAKYEL	
1	Construction of Water Supply Scheme at Saffo Village
2	Renovation of Gumpa
3	Extension of Play Ground at Saffo School
3. RAMAM	
1	Water Supply
2	Construction of kitchen shed for Gumpa
3	Construction of PHSC
4. SHIPGYER	
1	Construction of monastery school hostel
2	Renovation and reorganisation of present Shipgyer gumpa
3	Assistance to women society
5. THENG	
1	Renovation of School buiding for Theng Lower Primary School and add new rooms
2	Construction of Mani Lakha
3	Water Supply
6. PEGONG	
1	Construction of community centre
2	Extension of School play ground
3	Training of teachers
4	Water supply at Pegong - Shimpher
7. CHUNGTHANG	
1	Laboratory and Renovation of girls hostel
2	Guru Laghang renovation
3	Meditation hall for 10 Lamas
4	Construction of community centre (at choten) Not an affected village
8. SINGHIK	
1	Construction of Kitchen for Singhik gumpa
2	Construction / renovation of Singhik Gumpa
3	Construction / renovation of Singhik school
4	Construction of PHC
5	Water Supply
9. KAZOR	
Since the representatives from the village were absent it was decided to discuss and finalise in their presence at a later point of time. <i>Received on 23 Dec 2008 and endorsed as under:-</i>	
1	School ground extension and school water pipe work
2	Village water pipeline work

The Committee directed BBF to take up these priority tasks on an urgent basis and start implementing the same without further loss of time. Repeatedly, the Committee members

emphasised the need to implement activities and come up with the progress of tasks for the next meeting. The following points were identified as action points for BBF.

1. Develop action plan for the identified priority tasks above and start the implementation.
2. Consult the Panchayat representatives for their cooperation and support in implementing the identified priority tasks
3. BBF continue to implement its developmental plan in the areas of health, education and economic development, but clear action and results to be presented in the next meeting
4. Scholarship for children to continue and new 50 Scholarships may be provided this year. This work should be initiated on an urgent basis to enable students to seek admission, etc. Responding to the issue of qualified teachers, BBF would train the local teachers adequately so that we have well trained and motivated teachers available for schools. Teachers from outside will always be a problem as they leave very quickly. Both quality teaching, teaching learning materials would be emphasised.
5. Revise the budget in the light of the priority tasks and submit the integrated action plan.

5. Other important points discussed in the meeting

- Names of the villages and places should be correctly spelt in the project & programme papers with correct spellings as used by the local administration
- Appropriate exposure visits of the community members for sustainable community development may be done

6. Matters related to TEESTA STAGE-III HEP implementation

Sh Tum Tshering, Land Owner in Singhik and General Secretary, Sikkim Lepcha Association explained his pending land locked case with Teesta Urja Ltd in Singhik and the Joint Project Director informed that he would give top priority to finalise the case. The Committee recommended that this matter was investigated in detail and the approval was accorded by the Hon'ble Chief Minister. TUL has been asked to update the DC-North within a week about the settlement details.

Sh Lhendup Lepcha, member R&R Committee pointed out that Teesta Urja Ltd should keep the affected villagers in the forefront of their development/project work and any issues that emerge must be discussed and resolved at the village levels instead of taking such issues to the District or State Govt Authorities, or filing police case. He also stressed the need to keep the villagers informed of the development plans and future plans in the villages. He also emphasised that there would be regular & timely meeting with between the villagers and officials of Teesta Urja from the nearby project areas as also the lower level officials of the Project should regularly interact with the villagers of the area.

The point was well responded by Sh Radhakrishnan, Joint Project Director, Teesta Urja Stage III and appreciated the cooperation accorded by the villagers and assured the committee that care would be taken to ensure that villagers are involved in resolving issues and that they would be informed timely about future plans and actions about development in the affected villages.

The meeting was concluded with the remarks by Sh Sonam Gyatso Lepcha, Hon'ble MLA, Dzongu explained in detail the value of meetings such as R&R meeting and said that this was a good sign of a vibrant democracy. The Honb'le MLA further explained that it is for the people to see what is best and take decision regarding what sector to accord priority. He stressed that to achieve overall development of human resources that there is utmost need for good schools with well trained and dedicated teachers whereas North Sikkim does not have good education system. Accordingly, the Honb'le MLA suggested that Bhavishya Bharat Foundation needs to provide good teachers from outside so as to fill up the deficiency of teachers in the schools thereby improving the education system. He further added that there is urgent need for science & maths teachers in the schools.

The Hon'ble MLA cautioned that the work site issues and all other issues emanating from the implementation of the project would be addressed at the Panchayat level and we should not take such issues with the state, etc.

The meeting ended with a vote of thanks by Sh. T. N. Kazi, DC North, Mangan District.

ATTENDENCE

DATED 15/12/2008

SL. NO	NAME	DESIGNATION	SIGNATURE
1	Suman Gyanta Lepcha	Vice Chairman	
2	Tshering Wangdi Lepcha	Adviser, B&F	
3	L. K. (K. K.) Lepcha	Managing Director, B&F	
4	T. N. Ganga	SC (ex)	
5	P. P. Rasthankar	Joint Project Director, Teesta Stage III	
6	Col (Retd) Mani K. Gendray	Dy Asst. Comdr, Hq. B&F	
7	Mika Lepcha	President, HMAS/NGO, Doochay	
8	AVV PRASADA RAJU	HEAD-HR, TUL	
9	T. T. Lepcha	on behalf of T. T. Lepcha Plot No. 176	
10	Y. S. Lepcha	P. P.	
11	Suman Thakur Lepcha	P. P.	
12	Chodup Lepcha	Parachutist, Gurkha	
13	Sundup Lepcha	Ex Parachutist, Gurkha	
14	D. K. Lepcha	DV Mgr. TUL	
15	ARUN N. VARGHSE	Manager, Megachem, B&F	
16	Karna C. Lepcha	Joint Project Director	
17	Uma Lepcha	"	
18	Karna Lepcha	"	
19	Falgun Lepcha	Parachutist, Gurkha	
20	Devi Lepcha	Parachutist, Gurkha	
21	Rishang Lepcha	Member	
22	Dawa Dawa Lepcha	P. P.	
23	Suman Lepcha	Dy. Supd. TUL	
24	K. P. Rajendran	Adviser, B&F	
25			

ANNEX - 2

Annex - 2

**Overall project implementation plan
for
Bhavishya Bharat Foundation**

**In 9 Villages of Mangan and Chungthang sub divisions
of north Sikkim district**

**K.P. Rajendran
Consultant**

Background

The consultant had visited district North Sikkim (Mangan and Chungthang Sub-division) the nine villages covered by the Teesta Urja Limited (TUL) for developing overall project implementation plan for Bhavishya Bharat Foundation (BBF). The visit was undertaken from 12- 21st August 2008. The project plan has to be based on the overall narration of the Local Area Development Programme [LADP] of Teesta Urja Limited. Teesta Urja is constructing a 1200 MW Hydro-electric power project in North Sikkim. The Teesta stage III project has its dam at Chungthang and the powerhouse is situated near Singhik. The project has identified nine villages that will be affected by the Hydro-Electric Project.

Specific purpose of the visit

The specific objectives of the visit were to help develop an overall project plan for the nine villages, including sectoral plans. The list of nine villages is attached as annexure-1.

The visit to the project area was useful to familiarise with the overall problems of the people in the nine project affected , viz., Chungthang, Pegong, Theng, Ship Gyer, Ramam, Safoo, Salim Pakyel, Kazor and Singhik of North Sikkim district. The specific expectations from the Consultant are summarized in Table.1.

Table 1: Expected Deliverables from the Consultant - BBF

SI No.	ToR	Summary of Outputs	How to do
1	Conceptualise the operational strategy befitting to our values, vision, mission and objectives and suggest programmes to take up the specific task assigned to BBF by TUL in these nine villages.	Strategy Programmes As per TUL	Situational analysis Review of R&R document
2	Suggest, how can we converge with the national programmes like NRHM and SSA in developing better strategies to take up our health care and education programme in order not to duplicate the efforts but to coordinate with each other and bring in synergy that would be useful in development of the community?	Convergence areas to be identified within: NRHM SSA	Discussion with Govt. officials concerned
3	Suggest, how we establish linkages and have a mutual agreement with line departments like Health and education and	MOU Covered above	Broad terms could be explained

	utilize their resources to empower our target community?		
4	Identify the possibilities of creating community-based structures like CBOs who can take up the issues of community mobilisation and be responsible for maintenance of community infrastructures like school, PHSCs, drinking water facilities like tanks etc., which cater the needs of the community in the long run.	Community implementation Strategy in the areas of Health and education	
5	Identifying possible activities under the interventional areas that would help BBF in attaining the objectives.	Other than health and Education	Livelihoods
6	Suggest a possible monitoring plans and methods to maintain specific MIS and database that would be helpful for the project.	Database for key areas	Develop broad base

Methods Adopted

- Meeting and discussion with Mr. Karma, Dr. Pema, Mr. Subba Rao, Mr. Prasad Raju and other staff members of TUL.
- Visit to villages and interaction with people.
- Interaction with other key stakeholders i.e. Panchayat representatives (including President of Zilla Panchayat), government officials: Honourable Minister Health, Secretary Health, Director Agriculture, Sr. Scientist Spices Board, Head Masters and School teachers, etc.
- Meeting experts at Manipal Sikkim Hospital and Medical College
- Meeting with CMO, Mangan District

Main Findings of the Visit

General

- TUL is highly known in the area and generally people (local panchayat heads) are appreciative of TUL.
- The presence of TUL has brought in local economic changes. Many of the natives are local contractors for the TUL in executing various tasks. Therefore, most of the people are currently engaged in executing project related tasks.

- People are aware that TUL will be undertaking a set of social development interventions aimed at improving their economic capacity, educational status and health.
- People expect that TUL will do a set of services (running of schools, PHSCs and PHC, including stock of essential list of medicine
- The main source of livelihoods of the people used to be agriculture- cultivation of traditional variety of cardamom, vegetables, etc. The livelihoods portfolio look very to be limited.
- All farmers who are original native of this place and own land on an average 3 acre plus. People here are not used to intensive work. They normally work leisurely and are contented with their daily wages or earnings.
- There is sizable number of families living in the project villages who are migrants from Assam, West Bengal, Bihar, Nepal, and Tibet. They do not enjoy any native status and therefore are ineligible for any government schemes or social security schemes like Old age pension, Widow Pension, etc.
- The government department personnel were very cooperative and are interested in collaborating with BBF for taking up social developmental tasks.
- Government has a large number of schemes for the development of this area viz., all national programmes of health, education, rural development, including special allocations for tribal community for their development. Therefore, it is essential to look at active collaboration with the government of leveraging resources and technical help.
- The area is witnessing fast development with large number of migrants to the area in search of work and livelihoods.

Social Development tasks undertaken so far by TUL

TUL has undertaken quite a good number of activities based on the priority demands of the local community. Most of the works undertaken are donations for conducting sport events, construction of community halls, etc. The details of works completed as per data provided by Mr. Karma is presented below.

TUL also receives large number of applications for construction work. The details of applications received by TUL which are not executed by them are presented below. A quick glance of the applications indicate that the requests are for construction of various amenities.

So far TUL had spent an amount of Rs. 1.41 million for executing the aforesaid tasks. Currently they are not doing any new additional social development work as they are expecting BBF to set up its office in Mangan and spearhead the execution of developmental tasks.

	Welfare Activities carried out byTUL	Location
1	Street Lighting at Singhik Village.	Singhik
2	Furnishing Items such as Laser Jet Printer, Chairs, Tables, Almirahs, LPG Chula connection etc at Govt. Sec. School.	Singhik
3	Contributions for various Social, religious & cultutral works such as Religious tour (Pilgrimage), Medical treatments, Puja at Gompas etc.	Singhik
4	Repairing of the Suspension Bridge At Ringdong.	Singhik
5	Major Repair & Renovation of Singhik Sr. Sec School including drainwork, playground extension, Gallery Construction, Renovation of buildings, fencing etc.	Singhik
6	Financial Contribution for the Golden Jubilee Celebration of Singhik Sec School.	Singhik
7	Contribution for the electrification of the existing Community Centre at Singhik.	Singhik.
8	Laboratory Equipments and other materials for Tasa Tengay Sec School.	Chungthang
9	Furnishing Items such as Almirahs for Tasa Tengay Sec School.	Chungthang
10	Repairing of Suspension Bridge Across Lachung Chhu.	Chungthang
11	Construction of a Community Centre at Theng Village	Theng
12	Working towards Strengthening Cultural values by organizing Namsoong festival Picnic.	ShipGyer, Ramam, Saffo
13	Contributions for the Repairing works for the Dutchi, ShipGyer Kinzang Choling Gompa.	ShipGyer
14	Water Supply repairing work for the Gyer Ward.	ShipGyer
15	Execution of Green Mission Work through plantation and Fencing of the Area.	ShipGyer
16	Financial Assistance for the construction of Monastic School as ShipHyer Gompa.	ShipGyer
17	Financial contribution for Religious Tour (Pilgrimage) by People of ShipGyer Ramam.	ShipGyer –Ramam GPU
18	Financial contributions to the Monks of Ramam for religious Tour.	Ramam
19	Furnishing items such as Desks, Benches, Tables, Floor carpets to the Govt. Upper Primary School.	Saffo
20	Supply of desktop computers for the Saffo Junior High School.	
21	Supply of Tree Guards for State Green Mission (50 Nos).	Saffo.

22	Contributions for procurement of the sport goods for the Saffo's Youth Cricket Team.	Saffo
23	Renovation and beautification of Mani Gompa .	Saffo
24	Construction of four roomed classroom/building for the monastic school (Gompa) with sizeable number of traditional furnitures.	
25	Renovation cum Beautification of Grave Yard Including Gompa Area	Saffo
26	Transit Camp at Mangan for the Project Affected Villager.	Mangan
27	Educational Books and encyclopedias for Library to Govt. Sec School.	Singhik/Chungthang/Pegong/ ShipGyer/Saffo
28	Financial contribution for the Celebration of yearly Mangan Music Festival (2006, 2007).	Mangan
29	Financial contribution for the Celebration of yearly Namsoong Namprikdang Mela(2006).	Namprikdang, Dzongu.
30	Financial contribution for the Celebration of yearly Tendong Lho Rumfat by Sikkimese Lepchas 2007	Gangtok
31	Financial contribution for the Independence Day Celebration(2006,2007) by the Mangan Independence Day Celebration Committee.	Mangan
32	Financial contribution for the celebration of Independence Day (2006,2007) at Chungthang.	Chungthang
33	Financial Contribution for the celebration of World Environment Day at Gangtok (May 2006)	Gangtok
34	Financial contribution while organizing various events such as "1st Himalayan Aquatic Meet 2007" by Sikkim Amateur Swimming Association.	Gangtok
35	Financial Contribution for the Celebration of various religious events like Janmastami by Sri Krishna Janmotsava Celebration Committee, Gangtok -2007.	Gangtok
36	Financial Assistance to the XII Sikkim State table Tennis Championship 2007.	Gangtok
37	Educational Tour Aid to Govt. Sec School.	Singhik
38	Contribution for the Golden Jubilee Celebration-2007 of Phodong Sr. Sec. School	PSSC
39	In support of Prashant Tamang for Indian Idol Grand Finale Contest 07.	Mangan
40	Advertisement in Geothals Magazine	
41	Donation for Volley Ball Tournament	
42	Financial help for conducting cricket tournament by RNCC	Mangan
43	Contribution for organising 55th BN Mallick All India Police Football Championship-2006	Gangtok

44	Aid for Denzong Nagur Thupten Nysand Sheda Ringhik, Mangan	Mangan
45	Renovation of Police Barrack at Toong Check post	Toong
46	Contribution for the State Flower Show 2008.	Gangtok
	Free Health Camp for the Project Affected Villages. The venues were being kept to cover all the 9 villages.	Chungthang, Saffo, Singhik.

Applications received for carrying out Development work by TUL but not done

Pending Applications for welfare Activities	
Construction of Kitchen for Singhik Gompa in North Sikkim	Singhik.
Construction of Cremation Centre at Singhik Village, North Sikkim	Singhik.
Construction/Recifications of Singhik Gompa at Singhik in North Sikkim	Singhik.
Request by Singhik Woman Society for the Sound System	Singhik.
Request for the School Repairing of Pakshep Govt. Jr. High School	Pakshep
Request for the School Furniture of Pakshep Govt. Jr. High School	Pakshep
Financial Aid for the construction of Chungthang Sec School	Chungthang
Request for the Dining Hall & Traditional Gate at Chungthang Monastery	Chungthang
Construction of Religious Chorten at Theng Village	Theng
Request for 3 laptops and one Desktop Computer	Theng
Privision of Electric Supply to the Theng village through DG set.	Theng
Major Repair & Renovation of the Theng School.	Theng
Extension of existing playground of Theng School.	Theng
Provision of water supply system to the Theng Village.	Theng
Provision of the Street light of the whole Theng Area.	Theng
Construction of a Way Side Tourism Cafeteria at Pegong Village.	Pegong
Repairing of a Existing Suspension Bridge at patalpuri across river Teesta, Chungthang	Pegong
Financial Assistance for execution of Extension work of Play Ground and Erection of Fencing thereon at ShipGyer School (Rs. Five Lakhs).	ShipGyer
Financial Assistance for the execution of Water Supply Work at ShipGyer Kunzangcholing Gompa (Rs. Three Lakhs)	ShipGyer
Financial Assistance for the purchase of Furnitures, Tools & Equipments for the for the ShipGyer Prymary Health Sub Centre.	ShipGyer

Repair & Renovation of Foot suspension Bridge above River Teesta From Naga to ShipGyer Busty (13 Mts)	ShipGyer
Streetlightening from Saffo School to Saffo Gompa.	Saffo
Construction of Channel for the Diversion of water from Ramom Kyong to Saffo Kyong and construction of water tank at Gumpa Complex, PHE complex , Salem Pakyel JHS complex and thereby providing water taps to individual households/ public places.	Saffo
Provisioning of multi purpose play ground with basic facilities such as extension of existing playground to standard size, a separate volleyball, basketball and batminton court with proper fencing for the same.	Saffo
Construction of traditional gate and waiting shed cum view point at entry point of Saffo Village.	Saffo
Construction of waiting shed cum view point below gompa.	Saffo
Construction of Multipurpose building with the facilities such as Guest Accomodation (Lodging), Meeting Hall, Storage of essential commodities, Furnitures (beds, Tables, chairs etc)	Saffo
Establishment of Nursery at Saffo Village.	Saffo
Fully wooden Headmaster (Saffo School) Quarter at Saffo.	Saffo

Amount spent in Welfare Activities carried out byTUL

S.N	Date	Request Made by	For the purpose of	Amount	Location
1	May, 07	Head Master, Govt. Jr. High School, Salim Pakyel	Supply of Furnitures for Govt. Jr. High School	55000.00	S. Pakyel
2	March, 07	O.C., Sikkim Police, Chungthang	Renovarian of Police Barrack at Toong Check post	15000.00	C.Thang
3	Dec.07		For Puja etc.	5000.00	C.Thang
4	Jan.07	Gram Panchayat, Ramam	Pilgrimage tour to Budhagaya by Monks of Ramam Village	10000.00	Ship Gyer
5	May, 07	Zilla Member, Shipgyer	For construction of Mani Lakhang at Ship Gyer	100000.00	Ship Gyer
6	June, 07	Gram Panchayat, Shipgyer	For Construction of Drinking Water supplysystem	50000.00	Ship Gyer
7	June, 07	Gram Panchayat, Shipgyer	For Green Mission works	50000.00	Ship Gyer
8	July, 07	Zilla Member, Shipgyer	For construction of Mani Lakhang at Ship Gyer	100000.00	Ship Gyer
9	July, 07	Gram Panchayat, Shipgyer	For Construction of Drinking Water supplysystem	50000.00	Ship Gyer
10	July, 07	Gram Panchayat, Shipgyer	For Green Mission works	50000.00	Ship Gyer
11	October, 07	Gram Panchayat, Shipgyer	For Construction of Drinking Water supplysystem	50000.00	Ship Gyer
12	October, 07	Gram Panchayat, Shipgyer	For Green Mission works	100000.00	Ship Gyer
13	October, 07	Zilla Member, Shipgyer	For construction of Mani Lakhang at Ship Gyer	100000.00	Ship Gyer
14	October, 07			97934.00	Ship Gyer
15	October, 07			20000.00	Ship Gyer
16	Feb. 08	Head Lama, Rekzing Choling Gumpa	Financial Assistance for Lama Gongdi Puja	20000.00	Ship Gyer
17	May, 07	Youths of Safoo	Financial aid for buying dresses & equipments for Cricket team	10000.00	Safoo
18	Dec. 06	Gen. Secy, Namsoong Celebration	Namsoong Festival-2006 at Namprickdong	100000.00	Dzongu
19	Dec.07	DC (North)	Namsoong Festival-2007 at Namprickdong	100000.00	Dzongu
20	August, 06	Boys of Singhik	To participate Foot ball Competition	5000.00	Sighik

21	December,06	Singhik Sec. School	Educational tour of School Children	6000.00	Sighik
22	April, 07	Ms. Pema Doma Lepcha, Singhik	Medical Assistance for undertaking Medical tests	7500.00	Sighik
23	July, 07	Locals of Singhik	Participation of Inter Independence Day football league	5000.00	Sighik
24	December, 05	President, MTDC	Contribution for Organising Mangan Music Festival, 2005	50000.00	Mangan
25	August, 06	O.C. Sikkim Police Mangan	Contribution for Participating Foot Ball Tournament	5000.00	Mangan
26	August, 06	IDCC, Mangan	Donation for Independence day Celebration of 2006	25000.00	Mangan
27	Sept.06	SSP, Mangan	Contribution for organising 55th BN Mallick All India Police Football Championship-2006	50000.00	Mangan
28	December, 05	President, MTDC	Contribution for Organising Mangan Music Festival, 2006-07	100000.00	Mangan
29	March. 07	Treasurer, MTDC	Aid for Denzong Nagur Thupten Nysand Sheda Ringhik, Mangan	15000.00	Mangan
30	March, 07	Treasurer, MTDC	Aid for Denzong Nagur Thupten Nysand Sheda Ringhik, Mangan	15000.00	Mangan
31	August, 07	IDCC, Mangan	Donation for Independence day Celebration of 2007	25000.00	Mangan
32	October,07	Chairman, GJCC, Phodong	Contribution for the Golden Jubilee Celebration-2007 of Phodong Sr. Sec. School	20000.00	Mangan
33	Sept. 07	North District Monitoring Committee, Mangan	In support of Prashant Tamang for Indian Idol Grand Finale Contest 07.	5000.00	Mangan
34	Nov.07	President, Goethals Alumni, Sikkim	Ad in Goethals Magazine	30000.00	Mangan
35	Jan.08	Girls Volley Ball Team, Mangan	Donation for Volley Ball Tournament	10000.00	Mangan
36	March, 08	Club President, RNCC	Financial help for conducting cricket tournament by RNCC	5000.00	Mangan

1,461,434.00

Priority TASKS identified for BBF

- Setting up the field office with a small guest house
- Getting the first RR Committee to meet and introduce BBF to the RRC as the developmental tasks implementing arm of TUL
- Get the RR Committee to vet the suggested LADP
- Look at developing activities in all core sectors like Health, education, and livelihoods promotion.
- Initiating tasks alone in health sector for the first year is not a good strategy
- Initiating tasks in promoting livelihoods fits well within the overall activities suggested in the RR Plan
- There are ample scope for promoting livelihoods of the people through horticulture, livestock development and agriculture promotion. Any interventions in this area would bring about lasting economic changes in the project villages which are also central to the fulfillment of conditions described in the RR Plan.

Summary points of discussion with Government Officials

The summary points of discussion with government officials are described below.

Health Department

- Had extensive discussion with the CMO, Mangan district. The CMO has agreed to the following suggestions and asked us to draft the MOU as per the agreed tasks. The agreed tasks:
- PHSCs would be strengthened to provide primary health care services besides its routine tasks. A Medical officer would visit at least for three hours thrice weekly. Government would ensure the supply of basic medicines and BBF would only need to fill the gap. The ANM and nursing assistant who are the personnel present at the PHSCs would be instructed officially to assist the running of clinics as per prior- worked out schedules. The PHSCs at ShipGyer, Salem Pakkal would be covered under this.
- Other than using the PHSCs, the BBF would do the basic beautification works; ensure availability safe drinking water and renovation of sanitation facilities.
- The PHSC in Sighik would be taken up as a model PHSC. The PHSC building, being dilapidated would be re-constructed as per the engineering plan worked out by the Project team in consultation with the concerned government

department (PWD). The PHSC here will have basic laboratory test facilities, X-ray machine and X-ray technician.

- The Chungthang PHC would be upgraded to model PHC. Government would provide additional doctor and nursing staff as well as medicine supplies as per the provisions under NRHM. The PHC would have a good lab and x-ray facilities.
- Referral cases would be taken up by the Mangan district Hospital and there are provisions under government schemes for this.
- BBF would establish Standard Treatment Protocols for improving quality of health care services.
- BBF would establish sound MIS for recording all activities of the project to assess change and also help the government in up-scaling of activities in the future.
- District Hospital can provide its ambulance for the Project team for conducting health camps, health education camps as well as transporting referral cases up to Mangan.
- BBF would undertake two studies for clearly planning future interventions. One study would be to find out why people are not using the government health facilities. The other study would be on improving anaemia of women and children in the project villages. This study is an action research leading to reduction of anaemia of women and children in the project villages. BBF would be free to access technical help from government and Manipal Sikkim Hospital for expertise to conduct these studies.

Discussion with government officials on Agriculture, Horticulture and Livestock promotion

The discussions with government officials were very useful. It seems that the project could leverage a lot of resources for agriculture, horticulture and livestock promotion.

In the area of agriculture, the KVK based at Mangan can provide technical support for promotion of appropriate agriculture like Maize, paddy, etc. Horticulture can provide seedlings of cardamom, fruit saplings (apple and peach) and seeds for vegetable cultivation besides technical training of farmers.

Mangan district has established Milk co-operative and it actively looks for partnership in promoting dairying for increased milk production. The project must look for active partnership to improve livestock in the area.

The aforesaid department is willing to help BBF in assessing the technical feasibility of promotion of agriculture, horticulture and livestock. BBF could write to Director Agriculture seeking technical partnership for conducting the study.

The Director has agreed to pool together the team for the said study. BBF would need to arrange for the logistics, draw-up the technical frame-work as well as put its own experts during the study to see that the study report is of actionable quality.

Occupational Profile of the Villagers

The families covered under TUL perform a variety of activities to earn their living. Labour is the main broad category of occupation for most target families in all nine villages. The livelihoods pattern and opportunities also look similar. After the beginning of the operation of TUL, many agriculture-related labourers became sub-contractors of construction related works of TUL. However, still there are many families whose income level could be improved tremendously through diversified livelihoods promotion activities.

The main agriculture crop used to be cardamom. Last one decade saw massive loss of cardamom due to some plant diseases. Government of Sikkim and agricultural resource agencies are trying to rejuvenate the farming of cardamom through land reclamation and planting of new seedlings.

Other agriculture crops are maize and paddy. These are undertaken for own consumption purposes and not for sale.

Villagers are turning to promotion of horticulture including vegetable cultivation using "green house" mechanisms.

Based on the discussion with villagers and government officials, a plan for promotion of agriculture, horticulture and livestock promotion has been developed. The same is given below.

Livelihoods promotion plan with time line attached as Annex 2

Education

Due to paucity of time, the education section could not be developed fully. This will be attempted after the 10th September. However, a suggested plan of action and budget is presented as Annex 3.

Health Action Plan

• Background to Health Situation in Project Villages

- Generally the health of children and women appear to be good. People in the villages are living in small wooden huts and have a diversified approach to livelihoods. The availability of water is abundant, yet villagers are not educated on safe drinking water.
- As per the assessment conducted by the project team as well as our interactions with the people and PHSC staff, the common problems reported are Hypertension, Alcoholic Liver Diseases, Cardi-myopathic, TB, Gastritis, Viral Diseases, Measles, Chickenpox, Mumps, CSOM, Acute Respiratory Infection. However the morbidity rate is very low and this is also very evident from the data available with the PHSCs. People's lifestyle and food habits are normally very healthy, except over consumption of alcohol by men.
- The women and children are reported to be anaemic. It has also been found out that the study done for the National Commission of Women on anaemia had reported presence of anaemia amongst children and women is very high. The interactions with CMO and other specialist doctors in Maninpal Sikkim Medical College also confirmed this.

Gaps in Service Coverage

Except 3 villages i.e. Rammam, Theng and Pegong all villages have Primary Health Sub Centres (PHSC). These PHSCs are managed by ANM and a health assistant. They are also being supported by ASHA workers (exact number to be found out centre-wise).

The PHSC ensures routine immunisation of children, implementation of pulse polio and to some extent ANC & PNC services. In the case of promoting pre-natal, natal and post natal care the services offered are limited to counselling and referral of cases, if suspected any complications. From the appearance of the PHSC (its maintenance and up-keep) it was felt that hardly any delivery cases are attended to from here. The PHSC also provides basic medical care for fever, cough, etc. The medical supplies are done by the Directorate of Health Services through the CMOs in each district.

The quality of services offered by the PHSCs was found weak and wanting upgrading the quality of basic health care services. PHSCs do not have provisions for a trained doctor, therefore not serving any quality work in curative services. It has also been observed that the ANMs do assist safe deliveries at home. The exact number of institutional deliveries conducted at PHSCs is not known at the moment. However the rate of incidents of maternal mortality is said to be very-very low. This also means, the villagers are seeking medial care and attention during pregnancy and deliveries are conducted else where in a hospital and most probably at Gantok.

These PHSCs are playing a vital role in ensuring almost complete routine immunisation, including the administration of National Health Care programmes viz., NRHM, RNTCP, NMEP, Pulse Polio, National Blindness Control Programme, HIV-Aids Education, etc. PHSCs are not monitored well. There appeared to be a huge problem of functional organization. Work does not seem to be organized and clear hours of functioning of PHSCs are not observed.

Proposed Action Plan by BBF

The occurrences of other diseases reported are Acid peptic, diseases, Gallstone, GI cancers, Acute gastroenteritis. A quick review of the diseases reported indicate that the common diseases are gastroenteritis and associated problems. The disease profile of the area, the observed hygiene, sanitation practices and availability and use of safe drinking water could be directly correlated. Therefore one of the issues that may be addressed along with facilitating better curative services are facilitating the provision for safe drinking water, facilitate provision of sanitation facilities through local community partnerships.

BB would focus up on facilitating improving the quality of primary health care services by entering into partnership with the Government of Sikkim. The quality improvement would focus on improved patient care for patients with common diseases through the presence of a medical doctor on pre-defined schedules at least three days in a week, institutionalizing performance system, building MIS (including baseline data), upgrading the physical outlook of PHSCs, upgrading the physical amenities of Chuntang PHC and re-building the Singhik PHSC. These activities are presented with time-line in the Action Plan attached with MoU.

The improvement in Health awareness, sanitation, and drinking water could be achieved through organising a series of health education camps / events. The health education activities need to incorporate the prevention of communicable diseases. Since the area is witnessing the inflow of migrant labourers, it is pertinent to have education on prevention of HIV Aids, malaria, treatment of TB. The education may also include a session on environmental health including safe disposal of waste.

The detailed, village-wise need for addressing access to health care services has been presented in a tabular form and is attached as annex H1. The same may be referred to.

Important observations

1. The project seems to have made commitments in upgrading (model) the singhik PHSC. The discussion with the Zila Panchayat Adyaksha has confirmed this. It has also been reported that the necessary paperwork for adopting the Singhik PHSC is being done by the CMO North in coordination with the state Health Department. Therefore this is something that may be taken up on

priority. A draft MOU of upgrading the singhik PHSC has been worked out for forward action by BB.

2. Strategically¹ Chungthang PHC could be upgraded for promoting institutional health care services. The infrastructure facilities available with the Chungthang PHC are good and therefore provide a win-win situation for Public Private Partnership. However the expectations from BB need to be moderated to the extent of just the gap filling in terms of supply of equipment and the infrastructure. The focus should be on improving the hospital management systems (functional efficiency) including supplementing essential human resource.
3. The important requirement has been listed in annex H1. Essentially, the PHSC building has to be demolished and rebuilt. The cost of rebuilding needs to be worked out by a civil engineer.
4. Almost all the project villages have direct access to primary health care services. The present need is to upgrade the quality of service provisions mostly by utilising the available health infrastructure of the government and supplementing additional inputs as described in Annex H1.
5. The medical team may be entrusted with the task of developing the detailed action plan, which must form as an integral part of the MOU with District Health Department.
6. The health education camps may be introduced to prevent major health hazards.
7. Introducing sophisticated health care services like telemedicine may not be a cost effective as well as useful activity.
8. Facilitating quality primary health care services require an efficient management approach in terms of evolving clear work plans for medical officers, paramedics and standards for clinical examinations (protocols).
9. The medical team may be helped with developing a list of essential medicines. This would help us in procuring quality generic medicines and centralising the procurement processes.
10. All the health facilities (our clinics² as well as government health centres) need to evolve a comprehensive database, which would help us to communicate the change brought in effectively.
11. Safety standards and safety education to project labourers may be introduced so that the incidents of disease and accident amongst labourers could be tackled effectively.

¹ The project dam is located at Chungthang

² Present company operated clinics.

Proposed Health Programme Implementation Strategy

1. Formalise collaboration with district government as an enabler of health services rather than giving an impression of undertaker of health services. Keeping this in view, the MOU has been framed accordingly.
2. BB must focus upon securing govt. permission for using the existing PHSCs, receiving support from the existing staff of these centres so that services of qualified medical personal could be made available to villagers in a systematic manner. This has also been worked out in the MoU.
3. Our approach should be of gap filling and enhancing quality of the delivery of services through supplementing necessary infrastructure and HR support. For instance, the improving quality of health care services at Chungthang should be seen as collaborative venture enabling govt. agencies to take credit (make claims of having improved health services).
4. For ensuring transparency and accountability (mutual) BB may consider formulating a Health Advisory Committee consisting (HAC) of CMO medical officer of PHC Chungthang, health coordinator of BB and Dir. Programmes BB. This would help BB ensuring the fulfilment of the commitment with the complete knowledge of concerned authorities. Further this would also enable the project to encourage consultative and constructive decision-making processes.
5. BB may develop annual action plan for facilitating health care services in all 9 affected villages based on annex H1. The plan must be approved and forwarded to the RRC by the Health Advisory Committee.
6. Conduct baseline study particularly on the current use of the facilities by the people so that periodic changes in the use of these facilities by the people due to project interventions could be measured and documented.
7. Improving quality of services would require evolving standards. This may be attended to by developing Standard Treatment Protocols.

Suggested immediate steps to be undertaken

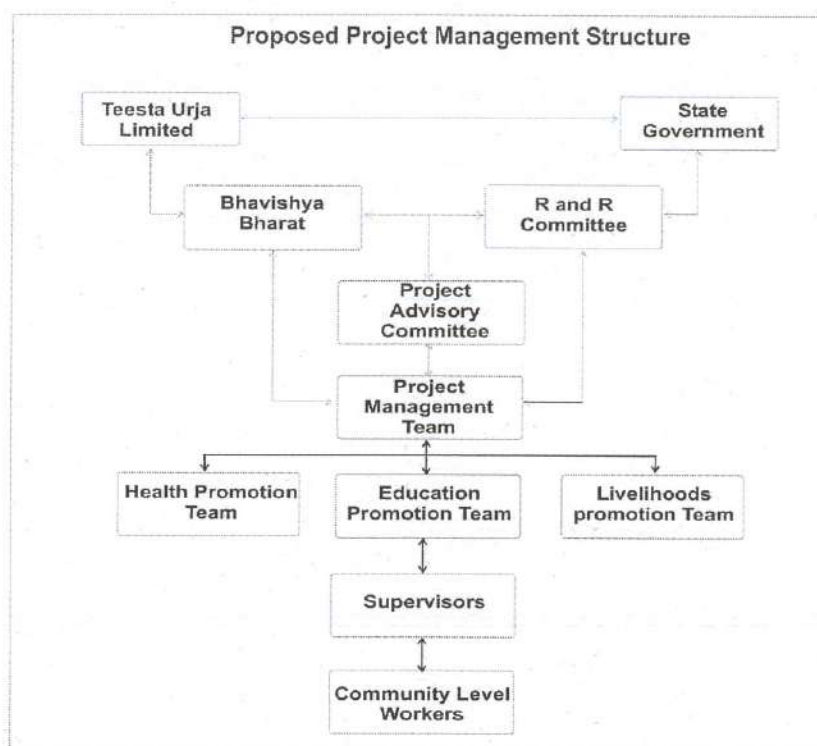
1. Development of an annual action plan and budget (proposed action plan, staffing structure and tentative cost projection already given)
2. Decide on Health Advisory Committee.
3. Agree on suggested project staffing and initiate processes for recruitment.
4. Explore technical assistance from Manipal or other hospital for developing quality standards and MIS
5. Collect performance data of Govt. health facilities (PHC/ PHSCs) and document as baseline.

	Village Name	Gaps Observed	Suggested Project Interventions
1	Salem Pakyel	<ul style="list-style-type: none"> In terms of access and facility no gaps Services need to be improved 	<ul style="list-style-type: none"> A medical officer can visit the PHSC thrice weekly. Small renovation (cleaning) may be required. Sanitation facilities need to be built. Additional furniture (1 table and chair) may be added. No additional staff required. In emergencies, villagers can access the Project Clinic Services.
2	Safoo		
3	Ramam	<ul style="list-style-type: none"> No health facility exists Most service deficient area 	<ul style="list-style-type: none"> From Edit-III (portal) road connection need to be established. Local girls can be trained to ensure immunization and basic health care services. Medical team can visit the villages (thrice weekly) from Safoo. No need for additional mobile health clinic. Services can be ensured from PHSC Salem Pakyel and Project Clinic from Safoo. Health referral in case of secondary care need to be worked out. Safoo clinic can provide emergency ambulance service as per need
4	Shipgyer	<ul style="list-style-type: none"> In terms of access and facility no gaps. Services need to be improved 	<ul style="list-style-type: none"> A medical officer can visit the PHSC thrice weekly. Small renovation (cleaning) may be required. Sanitation facilities need to be built. Additional furniture (1 table and chair) may be added. No additional staff required. In emergencies, villagers can access the Project Clinic Services.
5	Theng	<ul style="list-style-type: none"> Company clinic 	<ul style="list-style-type: none"> Scope of company clinic can be expanded to include provision of health care services for the local people. It is a small village with only 37 family and not more than 3 to 4 cases will come to access the services on an average a day.
6	Pegong	<ul style="list-style-type: none"> Chungthang PHC can be accessed. 	<ul style="list-style-type: none"> The possibility of accessing Secondary care services from Army Hospital need to be explored. Chugthang PHC is very near to the village and can be accessed for health care services

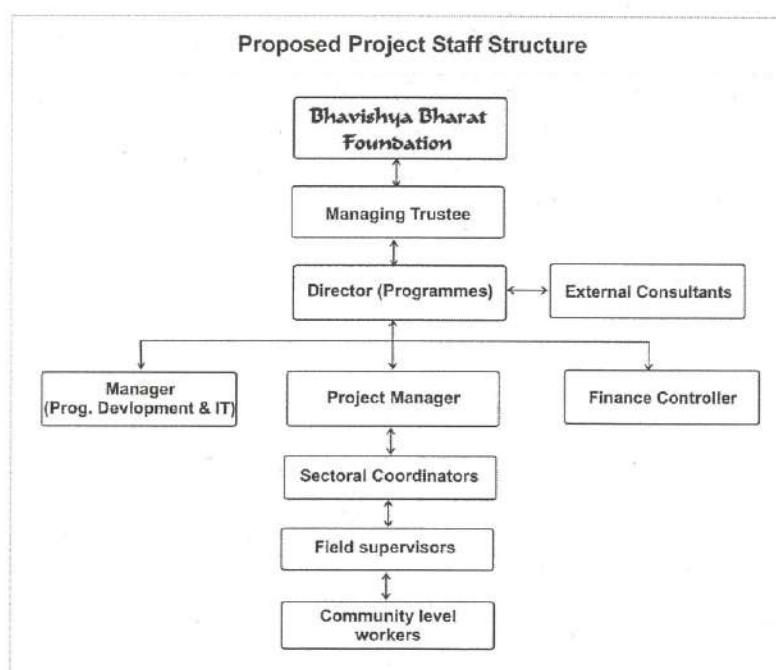
7	Chungthang	<ul style="list-style-type: none"> Services need to be improved 	<ul style="list-style-type: none"> Additional doctor (1) may be appointed for the PHC. Cleaning of the existing facility, ensure water and sanitation facilities. Lab may be upgraded, including the provision of a trained Technician. Establish Hospital Management System. Additional equipment like ECG may be made available as per the need assessment by our medical team. One trained nurse could be appointed. Develop this along the lines of Model PHC for this region. Specialist service on a regular interval could be added. One Dentist may need to be appointed with a dental assistant
8	Singhik	<ul style="list-style-type: none"> Building in dilapidated condition 	<ul style="list-style-type: none"> Promised to convert it as a model PHSC. Building needs to be re-built. It can be built in the same area. Clinic doctor could visit the PHSC for 3 hrs thrice weekly. X-ray facility and ECG could be ensured thrice weekly for fixed hours. Mini-lab may be established.
9	Kazhor	<ul style="list-style-type: none"> Singhik PHSC can be accessed 	Can be covered well by the Singhik PHSC

Suggested Health Action Plan with Timeline is attached as Annex 4
Overall budget for entire project period is attached as Annex 5

Suggested organogram for supporting TUL project implementation by BBF.



Suggested Staffing Structure for TUL project by BBF.



Annexure 1
List of Villages:

Sl	Village Name	Sub Division
1	Salem Pakyel	Chungthang
2	Safoo	Chungthang
3	Ramam	Chungthang
4	Shipgyer	Chungthang
5	Theng	Chungthang
6	Pegong	Chungthang
7	Chungthang	Chungthang
8	Singhik	Mangan
9	Kazhor	Mangan

ANNEX - 3

REPORT ON THE LAUNCH CEREMONY OF COMMUNITY HEALTH CARE SCHEME & MULTI- SPECIALITY MEDICAL CAMP

12 to 14 December 2008.

Mangan Public Ground, North Sikkim



Sponsored by Teesta Urja Limited



Bhavishya Bharat Foundation

Project Office: Dr. Lobzang Tenzing Marg, Pentok, Mangan, North Sikkim 737 116
Head Office: 143-144, Udyog Vihar, Phase IV, Gurgaon, Haryana - 122015



Dr. Pawan Kumar Chamling Hon'able Chief Minister of Sikkim.
Inaugurates the Mobile Hospital and community health care scheme
of Bhavishya Bharat Foundation.

Background

Bhavishya Bharat Foundation (BBF) is a public charitable trust with the overall aim of promoting integrated and inclusive development by establishing and implementing social, economic and environmental development projects in areas where high infrastructure development is happening.

The Vision of BBF is to "Develop the quality of life of communities impacted by infrastructure development, focusing on creating self reliant communities and thereby promoting progress, peace and goodwill". The mission of BBF is to "Provide sustainable solutions to ensure wellbeing of communities" in the geographical areas it works.

The programme priorities of BBF are as follows:

- Establish and/or help medical institutions and facilities for benefit of communities through appropriate partnership.
- Establish and/or support educational institutions for improving the quality of educational inputs to children.
- Provide relief and help to the poor, aged and orphans.
- Help physically handicapped, disabled and mentally challenged.
- Assist during natural calamities.
- Assist communities in improving their quality of life and self-reliance through appropriate livelihood promotion programmes
- Women empowerment through appropriate skill building and creation of community based platforms.
- Promotion of ecology and the environment through community based interventions.

BBF has been entrusted the implementation of social development activities in 9 villages impacted by the Teesta Stage III HE project of Teesta Urja Limited ("TUL"). BBF plans for Empowerment of target communities through integrated and multi-sectoral efforts. Integrated implies inclusive development of poor and marginalized natives. Multi-sectoral implies interventions in education, health, economic and environmental development.

Purpose of multi-speciality Medical Camp

The people of North- Sikkim district are the most affected population due to under development of medical facilities. People are affected with various fatal infections, infernal diseases due to under-nutrition, unhygienic, living and working conditions associated with poverty and inaccessibility of health care facility. Major water borne diseases which cause wide spread morbidity and high Mortality are the direct consequence of an unsanitary conditions and infected water supply. Tuberculosis, diphtheria, whooping coughs, influenza, Measles are the major air borne diseases, whose spread is facilitated by unsanitary condition. The other diseases like goiter and anemia are endemic amongst women. Women are also affected by respiratory infections and diarrhoeal diseases¹.

¹ A recent survey on the nutritional status of women and children in Sikkim (AII HPH and GOS, 1994) revealed that among children aged between 1- 14 years, nutritional deficiency diseases such as anaemia, dental caries, angular stomatitis, bleeding gums, glossitis conjunctival Xevixis and

Launch of BBF and Medical Camp

BBF was privileged to have our honourable Chief Minister, Dr Pawan Chamling, as the Chief Guest to launch officially the activities of BBF in North Sikkim District. His inspiration and continuous guidance will be the strength and motivation for BBF to complete its tasks for the people in the project affected villages. In his inaugural address, the honourable Chief Minister said that Health is most important aspect of people's lives and it is very heartening that BBF has taken this Rural Health Scheme initiative in the Project Affected Villages which will bolster the existing Govt Health Schemes and go a long way in ensuring Good Health & Healthy Life for the people in the villages. He also assured all support and cooperation of the Government of Sikkim to BBF to carry out its integrated and multi-sectoral programmes for the well-being of the people. The honourable Chief Minister wished BBF all success.

2. Sh Hissey Lachungpa, Minister of Health Care, HS & FW & SJEV Dept., thanked the hon'ble Chief Minister for Launching the Community Health Care Scheme with Free Medical Camp of Bhavishya Bharat Foundation. He also said that as the Health Minister of Sikkim he accorded top priority to good health and well being of people of North Sikkim and welcomed BBF in its Mission towards providing good health care in the Project Affected Villages.

Lt Gen (Retd) Hari Prasad, PVSM, UYSM, AVSM, Managing Trustee, BBF, expressed his gratitude for the benign presence of Hon'ble Chief Minister & Health Minister and for inaugurating BBF Community Health Scheme & Free Medical Camp. He said that BBF is committed to providing professional and dedicated health care to the people of nine Project Affected Villages of North Sikkim. In this regard BBF has put in place a dedicated team of qualified doctors, lab technicians, X-Ray Technician and Nurses with a special Mobile Diagnostic Van with lab facilities including Ultra Sound & X-Ray. He thanked The Chief Minister and the Health Minister for providing full support to BBF in its mission and said that all efforts will be made to ensure a healthy life to the

Bitot's spots were remarkably prevalent. Among the adolescent girls (aged between 10-17 years) the abovementioned diseases have also been conspicuously present. District wise variation has been seen in distribution of these diseases for example; Prevalence of anaemia has found to be 35% in East District as against 70.4% in the North District. Noticeable Nutritional deficiency diseases among the pregnant and lactating mother and other women aged up to 44 years were again anaemic, dental caries, bleeding gum, angular stomatitis, visible enlargement of the thyroid gland, glossitis, bitot's spot and conjunctival xerosis. Anaemia was found to be prevalent among lactating women. Furthermore bleeding gums were also highly prevalent in pregnant and lactating mothers as well as women in general.

The problem of under-nutrition among pregnant women creates anaemia related diseases among them. It equally affected their children which is not desirable for a developing state like Sikkim. Though it is true, that Infant Mortality Rate, Crude Death Rate and live birth rate is lower than the national level, however these indicators are significantly high as compared to some of the developed states.

people of 9 PAVs, apart from working hard to ensuring all round developmental support to the people of project affected villages. He emphasised that the approach of BBF is three pronged, viz., health sanitation and drinking water, education and income improvement of families in the project affected villages. He briefly touched upon BBF's plans in Education, livelihood programmes including horticulture, agriculture, provision for making clean drinking water and improving hygiene and sanitation status of families in the project affected villages. He finally said, the vision of BBF is to extend tangible and integrated development support to the people in the entire Sikkim with the valuable and professional cooperation from all departments of Government of Sikkim. Once again, he thanked profusely the honourable Chief Minister, Health Minister, and the Zilla Panchayat President Mr. Tshering Wangdi Lepcha, the representatives of the Panchayats, the distinguished guests and eminent medical team from Hyderabad consisting of Specialists and Super Specialists for their support, good will and kind cooperation at all times.

Super speciality camp: Constitution of Medical Team

The Super speciality medical camp was planned to offer the people from the project affected villages and neighbouring villages the services of specialists to address to their immediate and chronic health care issues. Therefore, a multi-speciality team was put in place by BBF. The medical team consisted of Dr. B.S. R Murthy, MA PH.D., FCGP, FCCP, FCIP, Chairman B.S.R. Health Care Institute, Hyderabad, MD., Dr. Rajesh Gupta, M.D, D.M Consultant Gastroenterologist, Asian Institute of Gastroenterology, Hyderabad, Dr. T. Raveendra, Head-Aterior Segment and Glaucoma, Sankar Foundation, Visakhapatnam, Dr. Jyoti Pradhan, DM & CW in Paediatric Medicine, Dr. S. Saujanya, MD in medicine, Dr. B.A. Seshu, Gynaecologist, Dr. D'Silvia, Ophthalmologist and Dr. Sunita Gupta, Physiotherapist, BBF. Dr. Pema T. Lachungpa, BBF was the overall coordinator for the Medical Camp.

Health Camp Planning

Information about the Medical camp was given to all the households in the project affected villages through our community organisers as well as through Panchayat representatives of respective villages. Printed leaflets were distributed to the villagers informing them about the camp. Transport was arranged from all the nine villages for the patients to come to the Medical Camp at Mangan and send them back to their respective villages.

Overall attendance

The Free Medical Camp was attended by a team of super specialist doctors in the fields of Medicine, Gastroenteritis, Ophthalmology, Paediatrics, and Physiotherapy. The Specialist doctors were supported by 4 Nurses, 2 Lab Technicians, one X-Ray Technician and Visual Acuity Technicians.

The Treatment

General Check up: Patients were initially welcomed by our Community Organisers and guided to the waiting area with comfortable seating arrangements. Thereafter, patients were guided to the General Check up wherein a nurse and BBF staff carried out the general check up of the patients which included BP, Pulse, Temperature, Height & weight recording. Thereafter the Patient was guided to the general physician who checked the patients and directed them to various specialist/super specialists for further investigation and treatments.

Check-up & Treatment by Specialist & Super Specialists:

All the specialists/Super specialists examined the patients in detail and diagnosed the ailment thereafter, depending on the type of ailment and the treatment required thereto; the patients were guided by the Community Organisers to the Dispensary for free medicine and further investigations.

Laboratory Tests

Patients requiring Pathology and Urine Tests, Ultrasound and Endoscopy Tests were guided to BBF's Mobile Diagnostic Van where the Doctors carried out the prescribed tests and completed the diagnosis.

Dispensation of Medicine

Finally, patients whose tests and diagnosis completed were guided to the pharmacy where free medicines were given by BBF nurses as per the prescription of the doctors.

Transport & Lunch

Transport was provided to the patients to & fro their villages to the camp site in Mangan. Lunch was also provided to all the patients and their escorting family members.

Camp details and other information

A total of 786 persons visited the medical camp, recording an average of more than 260 persons every day. Women visited more than the men. The day-wise attendance of people in the cam is given in the table below:

Table 1: Gender distribution of patients attended the Super Speciality Camp

Day	Male	Female	Total
12.12.2008	50	79	129
13.12.2008	150	153	303
14.12.2009	168	186	354
Total	368	418	786
%	47	53	100

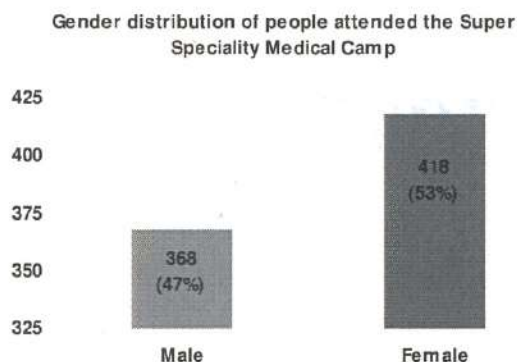


Table 1 shows that 53% of the attendees were women.

Though the medical camp was organized for the nine project affected villages, people from approximately 51 villages attended the camp. The details people from villages are given as annex-1.

Table 2: Date wise patients attended by different doctors

Sl	Doctors Name	12.12.2008			13.12.2009			14.12.2010			Total of 3 days		
		M	F	Total	M	F	Total	M	F	Total	M	F	Total
1	B.A. Seshu Gynaecologist	-	1	1	-	-	-	6	33	39	6	34	40
2	B.S.R. Murthy Medicine	14	18	32	59	55	114	25	9	34	98	82	180
3	Jyoti Pradhan Paediatrician	4	17	21	19	29	48	1	62	93	54	108	162
4	N. Saujanya Medicine	12	16	28	5	3	8	23	24	47	40	43	83
5	Rajesh Gupta Gastroentrologist	6	6	12	2	2	64	47	21	68	85	59	144
6	S. D'silva Ophthalmologist	3	10	13	14	14	28	16	22	38	33	46	79
7	Sunita Gupta Physiotherapist	-	1	1	6	5	11	10	4	14	16	10	26
8	T. Raveendra Eye Specialist	11	10	21	15	15	30	10	11	21	36	36	72
		50	79	129	150	153	303	168	186	354	368	418	786

Table 2 shows that a total of 786 persons visited the camp and eight specialists doctors provided them treatment advice and medicines.

Table 3: Age-wise distribution of patients attended Super Speciality Medical Camp

Age group	Male	Female	Total
0 – 5	19	33	52
6 – 18	56	61	117
19 - 40	143	211	354
41 - 60	99	83	182
61 - 80	45	26	71
Above 80	6	4	10
Total	368	418	786

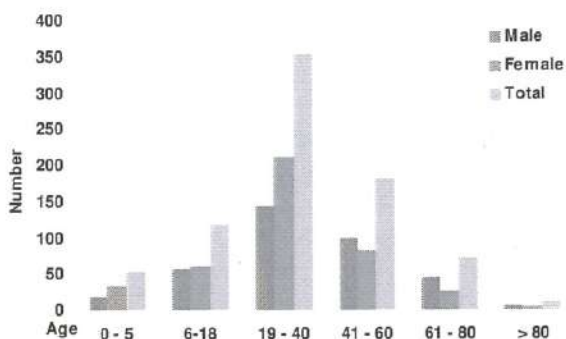


Table 3 gives detailed account of number of persons attended the camp. Persons in the age group of 18-40 were the maximum attendees followed persons between the age group of 40-60. It was noticed that people from all age group attended the medical cam.

Follow-up

BBF is maintaining and updating its database. Patients requiring follow-up treatment are being attended to. BBF is also in the process of establishing a base hospital at Singhik which would cater to the secondary care requirements arising out of the camp.

District hospital at Mankan and government hospital and Gangtok are being networked to evolve efficient referral system.

Annex-1: Villages / Places from where patients attended the camp

Sl	Village / Place	Male	Female	Total
1	25 mile	-	2	2
2	Ambithang	4	2	6
3	Burtuk	1	-	1
4	Centre Pandam	-	4	4
5	Chandey	4	4	8
6	Chong	1	1	2
7	Chungthang	5	6	11
8	Dzongu	3	4	7
9	Gangtok	9	2	11
10	Kabi	1	-	1
11	Kalay	2	1	3
12	Kamdang	-	1	1
13	Kazhor	7	10	7
14	Koring	1	-	1
15	Lachen	1	-	1
16	Lachung	6	1	7
17	Lingdong	3	9	12
18	Lingzya	6	2	8
19	Makha	1	-	1
20	Malli	2	1	3
21	Malling	1	5	6
22	Mangan	129	156	285
23	Mangshilla	21	7	28
24	Manul	6	15	21
25	Meyong	1	-	1
26	Naday	2	3	5
27	Naga	5	9	14
28	Namchi	1	-	1
29	Namok	-	2	2
30	Namthang	1	-	1
31	Pakshap	9	18	37
32	Pangthang	4	1	5
33	Pentok	14	26	40
34	Phensong	-	1	1
35	Phodong	1	2	3
36	Ramom	8	5	13
37	Ramthang	2	3	5
38	Rangrang	11	13	24
39	Ringhim	5	3	8
40	Saffoo	0	13	23
41	Salem Pakyel	5	2	7
42	Samdong	3	-	3
43	Sankalang	-	1	1
44	Ship Gyer	12	15	27
45	Singhik	34	32	66
46	Upper Singhik	4	7	11
47	Swayam	2	3	5
48	Tangtang	-	5	5
49	Theng	4	13	17
50	Tingchim	6	7	13
51	Toong	-	1	1
		368	418	786

Photo Gallery



Managing Trustee introducing the Community Health Care Scheme to the people of North Sikkim.



Initial examination of patients to record the vital signs



Registration of patients



Patients being taken to specialists by BBF volunteers



Patients being taken to specialists by BBF volunteers



Patients waiting for their turn to meet the specialists



Patients relaxing after their treatment



Medicines being distributed as per the prescriptions



Dr. B.S.R. Murthy examining the patients



Dr. B.S.R. Murthy and Dr. N. Saujanya counseling the family members after examination of a patient



Dr. Rajesh Gupta (Gastroenterologist) examining the patients.



Dr. Jyoti Pradhan (pediatrician) examining a child



Dr. B.A. Sashu (Gynaecologist) examining a pregnant woman



Dr. S. D. Siva (Eye Specialist) examining a child's vision



Technician conducting a vision screening exercise



Dr. Surita (Physiotherapist) suggesting a few exercises to a patient



Dr. Chetri conducting an ultrasound



Dr. T. Raveendra (Ophthalmologist) conducting.



Bhavishya Bharat staff waiting for the inauguration ceremony



Lt Gen (Retd) Hari Prasad, Managing Trustee Bhavishya Bharat meeting the specialist doctors



Dr. I.L. Sharma, CMO North District discussing the overall health situations in the state with specialist doctors



Dr. Rajesh Gupta conducting an endoscopy



Patients coming out after the lab tests



BBF volunteers helping a chronically ill patient.

ANNEX - 4

BHAVISHYA BHARAT FOUNDATION

FREE MEDICAL CAMP DURING NAMSOONG CELEBRATIONS AT NAMPRICKDANG GROUND 3 - 4 JAN 2009

Introduction: Introduction: A Request was been received from Namsoong Celebration Committee to hold a Free Medical Camp during Namsoong Festival at Namprickdang ground. The dates requested for Medical Camp were 3rd & 4th Jan, since hon'ble Chief Minister was to have visited the venue on 4 Jan 2009. The matter was discussed with Managing Trustee & Programme Advisor. Accordingly approval was accorded by the Managing Trustee to organize a free Medical Camp at the given dates.

Personal Organizing the Camp

1. Deputy Programme Director
2. Doctor - 2
3. Physiotherapist
4. Nurses (2)
5. Community Organizers (3)
7. Drivers (2)

CAMP DATE/DURATION	3 rd & 4 th Jan 2009
SUMMARY OF DIGNITERIES WHO ATTENDED THE PROGRAMME	Sh. DT Lepcha, Honb'le Minister SPWD, Roads & Bridges, Labour Dept, Sh Sonam Gyatso Lepcha, Honb'le MLA, Dzongu, Sh Norzang Lepcha, Honb'le MLA, Rokdung Tintek, East Sikkim, Sh Dowcho Lepcha, Honb'le MLA, Rinchenpong, W. Sikkim, Sh Tshering Wangdi Lepcha, Honb'le Zila Adhyaksha, North, Smt Chumlee Saring, Honb'le Chairperson, Child Protection, Sh TN Kazi, DC, North
SUMMARY POINTS OF DIGNITERIES SPEECH	Sh. DT Lepcha, Honb'le Minister SPWD, Roads & Bridges, Labour Dept: Appreciating the Organisers of Monsoong Celebration Committee for the excellent arrangements made for the public, he made a special reference of thanking Bhavishya Bharat Foundaton and Teesta Urja Ltd for having in place Free Medical Camp at Namprickdang during the Namsoong Celebration. He said this kind gesture of Health Programme, besides providing instant Medical backup for any untoward incident during celebration time, has immensely

	<p>helped the public of all nearby villages to have their ailments examined and treated by the expert doctors on site.</p> <p>Sh Sonam Gyatso Lepcha, Hon'ble MLA Dzongu: He thanked the organisers for the excellent show put up to showcase the rich and ancient heritage of Lepcha people in this important annual event of the state of Sikkim. He also thanked Bhavishya Bharat and Teesta Urja for their kind gesture of establishing a Free Medical Camp which would go a long way in taking care of the health issues of the local people.</p> <p>Sh Tshering Wangdi Lepcha, Honb'le Zila Adhyaksha, North said that this monsoong celebration of Lepcha Tribe at this heritage site of Namprickdang is a very auspicious and important event for the entire Lepcha Tribe. He further advised the public, besides enjoying the "Mela" and celebrations, to make full use of the Free Medical Camp established by Bhavishya Bharat and Teesta Urja Ltd.</p>
DETAILS OF ACTIVITIES COMPLETED IN THE CAMP	See Appendix A
No OF PATIENTS AVAILED THE CAMP	32
No OF PATIENTS TREATED	32
No OF PATIENTS REQUIRED FOLLOW UP	Nil
DETAILS OF MEDICINES USED IN CAMP	See Appendix B
SNAPS OF CAMP	Follows in the form of separate CD

DETAILS OF ACTIVITIES COMPLETED IN THE CAMP

General:

The Free Medical Camp was attended by Dr Bhavna Thapa of Abir Constructions, Dr AK Verma of Singtam and Dr Sunita Gupta (PT) of Bhavishya Bharat Foundation. The doctors were supported by Field Medical Officer of Abir Construction & 2 Nurses, and 3 Community Organisers of Bhavishya Bharat Foundation. The overall coordinator was Dr Sunita Gupta (PT). Administration support was provided by Ms Bidhya Pradhan, Office Executive, Bhavishya Bharat Foundation. Advance information about the Free Medical Camp of Bhavishya Bharat Foundation was given to the people through Community Organisers and Namprickdang Namsoong Celebration Committee well in advance.

Transport & Lunch:

One Vehicles was hired for two days for the Transportation of Doctors and Staff from Mangan & Singhik to Namprickdang Free Medical Camp and Free lunch and Snacks was provided to the Doctors & Staff.

General Check up: Patients were initially welcomed by our Community Organisers. Thereafter, patients were guided to the General Check up Stand where in a nurse and BBF staff carried out the general check up of the patients to include BP, Pulse, Temperature, Height & weight. Thereafter the Patient was guided to the Doctors who checked the patients.

Check & Treatment by Doctors

Doctors examined the patients in detail and diagnosed the ailment thereafter, depending on the type of ailment and the treatment required thereto; the patients were guided by the Community Organisers to the Dispensary.

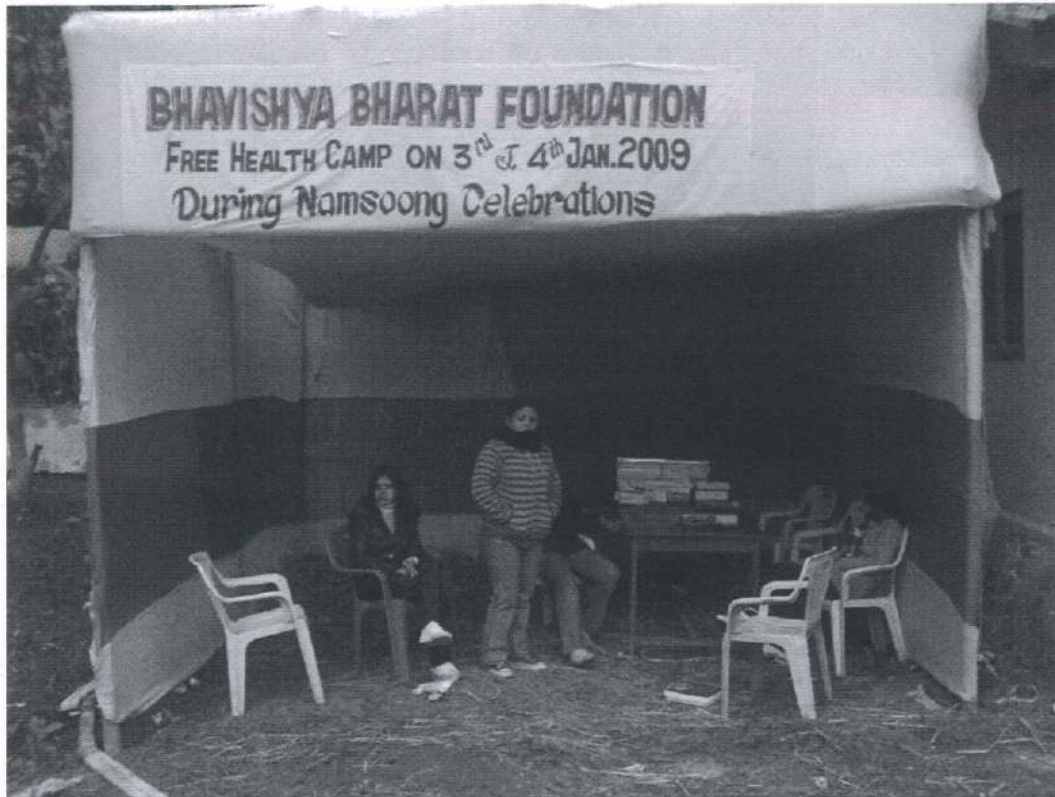
Dispensation of Medicine:

After the Diagnosis was completed the patients were guided to the Dispensary where free medicines were distributed by BBF nurses and volunteers to the patients as per prescription of the doctors.

Appendix B

List Of Medicine Dispensed

1.Tab Acigene		78 Tab
2.Tab Wikoryl		6 Tab
3.Tab Peploc		91Tab
4.tab Amlip		10 Tab
5.Tab Avil		13 Tab
6.Cap Bacipen(500mg)	26 Tab	
7.Oint Clostaf GM		1 Piece
8.Oint Clocip		1 Piece
9.Oint Neosporin eye Oint		1 Piece
10.Omnigel		1 Piece
11.Oint Cipladine		1 Piece
12.Tab Serectochem D	20 Tab	
13.Tab Reactin 100 SR	25 Tab	
14.Tab Paracip(500mg)	4 Tab	
15.Tab Cipgen (500 mg)		35 Tab
16.Tab Hepamerz		10 Tab
17.Tab Nicip(100 mg)		25 Tab
18.Tab Somago	4 Tab	
19.Tab Ibupen(400 mg)	6 Tab	
20.Tab Metrogyl(400mg)		4tab
21.Syp Honitus	1 bt	
22.Syp Paracip		1bt
23.syp Nicip		1bt
24.Syp Zybend	3 bt	
25.O.R.S		1pkt



ANNEX - 5

Revised Drug List

Injections & IV Fluids

SL.	NAME OF INJECTION	DOSE
1	Inj. Mannitol 20%	100ml
2	Inj. Ampiclox	500mg
3	Inj. Ciprofloxacin	100ml
4	Inj. Metronidazole	100ml
5	Inj. Diclofenac	3ml
6	Inj. T.T.	0.5ml
7	Inj. Hydrocortisone	100mg
8	Inj. Ranitidine	2ml
9	Inj. Hyosine	1ml
10	Inj. Frusemide	20ml
11	Inj. Rabipur	1ml
12	Inj. Adrenaline	2ml
13	Inj. Syntocinon	5x1ml
14	Inj. Methergin	1ml
15	IVF. RL	500ml
16	IVF. NS	500ml
17	IVF. DNS	500ml
18	IVF. Haemaccel	500ml
19	Inj. Derephyllin	2ml

Medicines

SL.NO	NAME OF MEDICINE	DOSE
1	Tab. Ciprofloxacin	500mg
2	Tab. Erythromycin	250mg
3	Cap. Ampiclox	500mg
4	Cap. Amoxycillin	250mg
5	Tab. Metronidazole	400mg
6	Tab. Doxycyclin	100mg
7	Tab. Albendazole	400mg
8	Tab. Fluconazole	150mg
9	Tab. Chloroquine	250mg
10	Tab. Ibrufen	400mg
11	Tab. Torex	-
12	Tab. Tus QD	-
13	Tab. Hyosine	10mg
14	Tab. Paracetamol	500mg
15	Tab. Serratiopeptidase	10mg
16	Tab. Ranitidine	150mg
17	Tab. Digene	-
19	Tab. Domperidone	10mg
20	Tab. Terbutaline	2.5mg
21	Cap. Becasule	-
22	Tab. Vitamin C	500mg
23	Tab. Calcium	500mg
24	Tab. Amlodipine	5mg
25	Tab. Alprazolam	0.25mg
26	Tab. Atenolol	50mg

27	Tab. Ecosprin	150mg
28	Tab. Metformin	500mg
29	Tab. Gitazone	2mg
30	Tab. Meftalspas	-
31	Tab. Levocetirizine	10mg
32	Tab. Prednisolone	5mg
33	Tab. Losartan	25mg
34	Tab Iron	-
35	Tab. Folic acid	500 microgm
36	Tab. Sinarest	-
37	Syr. Amoxycillin	60ml
38	Syr. Albendazole	10ml
39	Syr. Metronidazole	60ml
40	Syr. Asthalin	100ml
41	Syr. T Minic	60ml
42	Syr. Ibrufen + Paracetamol	60ml
43	Syr. Polybion	100ml
44	Syr. Paracetamol	60ml
45	Syr. Alkasol	100ml
46	Syr. Cetirizine	30ml
47	Syr. Rapitus	100ml
48	Emulsion Cremaffin	170ml
49	Respule Asthalin	2.5ml
50	Drop Colimax	10ml
51	Inhaler Asthalin	-
52	Inhaler Budecort	100mcg
53	Shampoo Candid TV	60ml
54	Packet Glucon D	
55	Oint. Clotrimazole	15gm
56	Oint. Clotrimazole + Betamethasone	5gm
57	Oint. Betadine	15gm
58	Oint. Faktu	15gm
59	Oint. Diclofenac	30gm
60	Oint. Thrombophob	20gm
61	Eye oint. Ocupol	5gm
62	Oint. Lupiderm	10gm
63	Eye Drop Ciplox	5ml
64	Eye Drop Gentamycin	5ml
65	Ear Drop Ceruklin	-
66	Band Aid	-
67	Emulsion Ascabiol	50ml

Surgical & Medical Consumables

SL.NO.	NAME OF SURGICAL ITEM	Qty/ Specification
1	Spirit	
2	Liq. Savlon	100 ml
3	Liq. Savlon	1000ml
4	Hydrogen Peroxide	
5	Phenol	5 litre
6	Sol. Betadine	500 ml
7	Solution Cidex	5 litre
8	Sol. Glycerine	

9	Dispovan	2 ml
10	Dispovan	5 ml
11	Roller Bandage	5 cm
12	Roller Bandage	7.5cm
13	Roller Bandage	10cm
14	Roller Bandage	15cm
15	Sterile Surgical Gloves	6.5
16	Sterile Surgical Gloves	7
17	Surgical Gloves	6.5
18	Surgical Gloves	7
19	Scalp Vein Set	24
20	Intracath	20
21	Intracath	24
22	IV Set	
23	Silk with cutting needle	2-0
24	Silk with cutting needle	3-0
25	Silk with cutting needle	4-0
26	Chromic catgut with cutting needle	3-0
27	Sterile Gauze Pad	
28	Gauze Thaan	
29	Cotton Roll	
30	Dettol Soap	
31	Countour blood glucose strip	
32	Countour blood glucose lancet	
33	Microtape	2 inches
34	Elastoplast	10 cm
35	Jelly Xylocaine	2%
36	Sol. Xylocaine	2%
37	Surgical blade	
38	Tailor Scissor	
39	Suture Cutter	
40	Thermometer	
41	Sterilizer	
42	Needle Holder	
43	Cutting needle (all sizes)	
44	Straight Artery Forcep	
45	Curved artery Forcep	
46	Instrument tray	
47	Dressing Drum (small size)	
48	B.P. Instrument	
49	Stethoscope	
50	Kidney Tray	
51	Oxygen Cylinder B type	
52	Oxygen Flowmeter with mask	
53	Thomas Splint	
54	Crammer wire	
55	Refrigerator	100 litres
56	Soffban	4"
57	Soffban	6"
58	Gipsona	4"
59	Gipsona	6"
60	Jopson Hornes probe	
61	Tongue depressor	

62	Otoscope	
63	Snellens Chart	
64	Magnifyer	
65	Plastic apron	

ANNEX - 6

**List of students sponsored by BBF under the scholarship Programme in
2009-2010 academic sessions**

Govt. Senior Secondary School, Singhik

SI	Village	Name of the Student	Age	Gender	Class	Gaurdian's Name
1	Kazor	Nerkit Lepcha	18	F	IX	Passang Lepcha
2	Kazor	PhurbaLepcha	14	M	VIII	Lt.Topgay Lepcha
3	Kazor	Solomit Lepcha	11	F	IV	Karma Lepcha
4	Kazor	Dawa Tsh Lepcha	8	M	III	Phurzang Lepcha
5	Kazor	Rinzing Ongmu Lepcha	12	F	III	Pempa Lepcha
6	Kazor	Zermit Lepcha	6	F	III	Lt. Lazang Lepcha
7	Kazor	Emit Lepcha	11	F	II	Lt.Pempa Lepcha
8	Singhik	Dakit Lepcha	17	F	VIII	Chogyel Lepcha
9	Singhik	Sangmo Lepcha	15	F	VI	Saekbu Lepcha
10	Singhik	Pemkit Lepcha	18	F	X	Phugya Lepcha
11	Singhik	Pemkit Lepcha	17	F	VI	Lerab Lepcha
12	Singhik	Ong Tsh.Lepcha	12	M	IV	Dawa Tsh.Lepcha
13	Ramom	Lhakmit Lepcha	12	F	VII	Ola Lepcha
14	Ramom	Norjay Lepcha	15	F	VII	Dawa Tsh.Lepcha
15	Ramom	Enock Lepcha	15	F	VI	Khamtuk Lepcha
16	Ramom	Kalzung Lepcha	11	M	V	Namgyal Lepcha
17	Ramom	Tashi Lepcha	10	M	VI	Pem Tshering Lepcha
18	Salim Pakyel	Dorjee Ongkit Lepcha	12	F	VII	Palden Lepcha
19	Salim Pakyel	Chewang Dorjee Lepcha	13	M	VI	Lakpak Lepcha
20	Salim Pakyel	Zebila Dorjee Lepcha	15	M	VIII	Sonam Tshering Lepcha
21	Saffo	Engkit Lepcha	13	F	VI	Atchung Lepcha
22	Saffo	Lyangreep Lepcha	13	F	VI	Chiya Topgay Lepcha
23	Saffo	Lhakmit Lepcha	12	F	VII	Lt.Cho Tshering Lepcha
24	Saffo	Sonam Ongmu Lepcha	12	F	V	Lt.Tenzing Lepcha
25	Shipgyer	Ongdup Lepcha	12	M	IV	Tashi Tshering Lepcha
26	Shipgyer	Norzay Lepcha	14	F	VII	Attang Lepcha
27	Shipgyer	Noth Lepcha	12	F	IV	Sonam Palden Lepcha
28	Shipgyer	Kersong Lepcha	13	F	IV	Lt.Topchen Lepcha
29	Shipgyer	Karma Tshering lepcha	12	M	II	Datuk Lepcha
30	Shipgyer	Chenga Lhamu Lepcha	10	F	II	Phendup Lepcha
31	Theng	Phurbu Lepcha	11	M	IV	Chopal Lepcha
32	Theng	Chewang Norbu Lepcha	9	M	IV	Nim Tshering Lepcha
33	Theng	Phurmit Lepcha	13	F	VI	Dawa Lepcha
34	Theng	Yangkit Lepcha	13	F	VI	Chungchung Lepcha
35	Theng	Lhakit Lepcha	9	F	VI	Tangay Lepcha
36	Pegong	Chungdi Lepcha	12	F	VI	Passang Lepcha
37	Pegong	Nima Lhamu Lepcha	12	F	VII	Jampal Lepcha
38	Pegong	Nima Khamu Lepcha	13	F	VIII	Tsheten Wongchuk Lepcha
39	Pegong	Karma Doma Lepcha	5	F	III	Kolok Lepcha
40	Pegong	Thendup Lepcha	14	M	VI	Duvu Lepcha

North Sikkim Academy, Mangan

Sl	Village	Name of the Student	Age	Gender	Class	Gaurdian's Name
1	Salim Pakyel	Sonam Dupchen Lepcha	12	M	VII	Nima Tshering Lepcha
2	Saffo	Sunolmit Lepcha	12	F	VIII	Sonam Ongdup Lepcha
3	Chungthang	Dezom Palmu Lepcha	7	F	II	Lozang Lepcha
4	Chungthang	Tshering Dozom Lepcha	11	M	V	Dawa lepcha
5	Chungthang	Yangchen Lepcha	13	M	VII	Gyatuk Lepcha
6	Chungthang	Dorjee Thakpu lepcha	11	M	V	Ihakbu lepcha
7	Chungthang	Topden lepcha	13	M	V	Phutuk lepcha
8	Chungthang	Sukmit Lepcha	9	F	II	Rapden Lepcha
9	Chungthang	Tshering Ongdu Lepcha	10	M	III	Kessang Lepcha

ANNEX - 7

AGREEMENT

between

**School Management Committee,
Singhik Senior Secondary School
Singhik, North Sikkim District
Sikkim**

and

**Bhavishya Bharat Foundation
143-144, Udyog Vihar, First Floor, Phase-IV
Gurgaon – 122 015**

for

**Partnership for improving educational access to rural
school children by building a School Hostel and improving
pedagogical approaches and methods**

PARTNERSHIP AGREEMENT

This AGREEMENT ("Agreement") is entered into between School Management Committee, Government Senior Secondary School, Singhik, North Sikkim District, Sikkim ("SMC"), with its office at Singhik, North Sikkim, India and Bhavishya Bharat Foundation ("BBF"), with its Project office at Singhik, North Sikkim and Headquarters at 143-144, Udyog Vihar, Phase IV, Gurgaon, India.

BBF is a Public Charitable Trust registered vide Deed Registration no. 2125 in additional book no. 4, Vol no. 3160 on pages 62 to 71 on 23.04.2008 with the sub registrar, New Delhi. BBF has been entrusted to implement the CSR activities of Teesta Urja Limited ("TUL") vide Memorandum of Understanding signed between TUL and BBF by Mr. MSP. Rao, Executive Director TUL and Lt. Gen.(Retd.) Hari Prasad, Managing Trustee, BBF on 25th June 2008 (Copy attached for reference).

WHEREAS, SMC is pleased to engage in partnership with BBF, carrying out educational development in their School. The BBF would collaborate with SMC in jointly implementing the quality improvement programmes for education in respect of the school, which includes sponsoring.

WHEREAS, BBF desires to sponsor needy and deserving students from the nine project affected villages of Teesta Urja Ltd, Stage III, as the beginning of overall educational system improvement project, including the Services, for SMC, and possesses the necessary skills, background, tools and materials to perform such services;

NOW THEREFORE, in consideration of the mutual promises, terms, provisions and conditions set forth in this Agreement, the parties agree as follows:

1. **Term.** This Agreement shall commence as of February 2009 and continue up to December 2011, unless otherwise extended or revised in accordance with this Agreement. The agreement can be extended as per mutual agreement subsequently for a period of three years depending upon the need and availability of resources.
2. **Scope of Work.** BBF agrees to perform the services described under clause 5 of this agreement. It is understood and agreed that Clause 5 may be amended from time to time upon written consent of the parties to expand upon or amend the scope of the Agreement.

3. **Contact Person.** The point of contact with SMC shall be Head Master, Singhik Secondary School, Singhik, North Sikkim. The contact person for BBF would be Col (Retd) Mani K Gahatraj, Deputy Director (Programme), Project Office, Singhik, North Sikkim.
4. **Relationship of the Parties.** It is agreed that BBF is undertaking the quality educational improvement activities at the invitation and good will extended by School Managing Committee, Singhik Secondary School. The implementation costs of the educational activities are financed by the TUL as part of its commitment to Government of Sikkim to undertake Local Area Development Programmes ("LADP") and as described in the Rehabilitation & Resettlement ("R&R") Plan. BBF would make sincere efforts to honour all the commitments expressed under clause 5 to evolve this partnership in to a model partnership. The ultimate aim of this partnership is to demonstrate facilitating quality educational services for the young generation from remote villages. If this is found successful, Government of Sikkim may replicate this in the State.
5. **The detailed terms and conditions of this agreement are as given under:**
 - SMC of Secondary School, Singhik is committed to provide quality free access to schooling of children from nine project affected villages as per this agreement with BBF.
 - SMC would run and manage a quality hostel at a hired place in Singhik for facilitating the continuation of education of children who do not have access for higher education.
 - BBF agrees to construct a hostel building at the Secondary School premises as agreed with the SMC. In the interim period, for the 45 students selected for scholarship, SMC would run a temporary hostel. This arrangement would continue until the new hostel building is ready.
 - The management of both temporary and new school hostel would be the responsibility of SMC. This means the SMC would be responsible for the day to day efficient management of the hostel, separate provisions for girl and boy students, appoint warden and other maintenance staff, provide safe and quality accommodation, mess facilities and contribute to the physical, emotional, and all round development of children
 - SMC would put in place efficient management processes for ensuring total well-being of hostel inmates and prevent any kind of abuse of children
 - BBF would build the capacity of SMC and hostel management team in evolving systems, establishing hostel management

protocols, and making children active participants in the day-today management of the hostel

- BBF would provide a maximum of Rs.1500/- per child for a period of 11 months a year for three years towards the running of hostel.
- SMC and BBF would jointly discuss and put in place appropriate resource mobilization strategy, including creating a corpus under SMC to sustainably run the hostel.
- BBF would undertake teacher training in those subjects wherever capacity building is required. In addition to this, it would assess the overall capacity building to bring about total quality improvement in the running of the school, including achieving quality in the educational outcomes.
- SMC agrees to the monthly monitoring of the performance of hostel and school and provide constructive feedback and suggestions to BBF. In the event of lack of compliance, BBF reserves the right to withdraw its support and financial assistance

6. Partnership with SMC of Singhik Secondary School

The whole effort by BBF should be seen as an effort to demonstrate quality school improvement and management initiative in partnership with SMC.

SMC would strive hard to make this partnership a model by making available all eligible government programmes and resources to the school. In particular, it would take proactive and timely efforts in appointing all vacant positions, if any, enrich library and lab, provide uniform and books, including developing a good computer lab.

SMC would ensure that the teachers in this school are not transferred at least a period of seven years, as BBF and SMC would be investing in improving their capacity and thereby the quality of outcomes of teaching.

7. Management and Monitoring System pertaining to this Agreement

BBF feels honoured and privileged to enter into this agreement with SMC, Singhik Secondary School. BBF would make sincere and credible efforts to honour the commitment as per agreed terms and time. To enable BBF to honour its commitments, it is imperative to evolve a robust management system of this project geared towards realizing its stated objectives. Therefore, the following management

arrangements would be put in place to ensure efficient, transparent and credible implementation of agreed activities said above.

For enabling its smooth functioning and facilitating administrative processes the overall school improvement plan i.e. till December 2011 would be presented to the R& R committee and necessary approval would be obtained (ex-post facto). Thereafter quarterly progress update would be presented to the R& R committee.

To help facilitate efficient and appropriate decision making, the existing SMC would be strengthened for advising the team on technical soundness of activities as well as mobilizing expertise.

The SMC would invite, Deputy Project Director- BBF-, Coordinator-TUL, as Special Invitee Members. SMC is free to invite experts for attending the meeting for their inputs as and when deemed necessary.

The SMC would help in extending timely help and guidance to the team as well as ensure transparency and accountability in implementing project activities.

8. Compliance with Regulations, etc. BBF agrees to comply with the applicable terms of statutory requirements, regulations, as per the Trust Act and as per amendments in force from time to time.

9. TUL would not be responsible for the implementation of the project. Its sole responsibility lies in facilitating financial resources as per the approved project plan as well as presenting its views in the SMC meetings.

10. Settlement of Conflicts

a. **The R& R Committee** will be responsible for settling any conflicts arising out of the execution of this project. Both the parties would abide by the final decision of the R& R committee and it shall be binding on BBF.

b. **Termination of Services.** SMC may terminate this Agreement for want of performance. Prior to termination, BBF would be intimated on its lack of performance or violation in the implementation of agreed activities or any type of misconduct.

c. **BBF** may also terminate the agreement by giving three months notice explaining its inability to continue to perform services as per agreement in force.

11. Miscellaneous. This Agreement shall be governed by the laws of the State of Sikkim (without regard to its conflict of laws rules). Any modification of this Agreement will not be effective unless signed by

an authorized officer or officer designee of SMC and BBF. This Agreement is intended to replace any prior agreements or understandings, whether oral or written, concerning BBF's engagement by SMC, Singhik Secondary School.

IN WITNESS WHEREOF SMC and BBF have each caused this Agreement to be executed on their behalf, to be effective as of the date set forth above.

SMC, Singhik Secondary School, Singhik, North Sikkim

By: _____

Name:

Designation:

Date:

Address

Phone

email

Bhavishya Bharat Foundation

By: _____

Name:

Designation:

Date:

Address

Phone

email

Witness by Deputy Director HRDD, Mangan, North Sikkim

By: _____

Individual Name:

Title:

Date:

Address:

Phone

email

ANNEX - 8

List of students already sponsored by Teesta Urja Ltd. in **North Sikkim Academy**, Mangan, with effect from session 2007-2008 and are to be renewed under BBF sponsorship from 2009-2010 session onwards.

SI	Name of the student	Class	Address
1	Tshering Lhaden Lepcha	II	Singhik Sentam
2	Phurbu Tshering Lepcha	II	Singhik Sentam
3	Dawa Zangmu Lepcha	II	Singhik Sentam
4	Pema Doma Lepcha	II	Chungthang
5	Lajamit Lepcha	III	Salem Pakyel
6	Pemchung Lepcha	III	Salem Pakyel
7	Pemkit Lepcha	III	Chungthang
8	Nima Lhamu Lepcha	III	Salem Pakyel
9	Norpa Tshering Lepcha	III	Singhik Sentam
10	Tshering Pempa Lepcha	III	Singhik Sentam
11	Passang Tshering Lepcha	III	Singhik Sentam
12	Chu Tshering Lepcha	III	Singhik Sentam
13	Armit Lepcha	III	Kazhor Busty
14	Pemkit Lepcha	III	Singhik Sentam
15	Chenga Lhamu Lepcha	III	Chungthang
16	Songmit Lepcha	III	Chungthang
17	Tshering Ongmu Lepcha	III	Chungthang
18	Tshering Thendup Lepcha	III	Chungthang
19	Chungmit Lepcha	III	Chungthang
20	Lhamu Doma Bhutia	III	Ramom
21	Shu Tshering Lepcha	III	Singhik Sentam
22	Chomit Lepcha	IV	Singhik Sentam
23	Tshering Yangden Lepcha	IV	Chungthang
24	Zermit Lepcha	V	Kazhor Busty
25	Tshering Ongmu Lepcha	V	Chungthang

ANNEX - 9

Final Report

Planning for Drinking Water, Nursery and Livelihoods for Bhavishya Bharat Foundation in North Sikkim

Bhavishya Bharat Foundation (BBF) is social development trust set up to promote corporate philanthropy. It has been established drawing inspiration from Teesta Urja Ltd, one of the leading corporate groups engaged in power generation projects in India. It is in the process of setting up a HEP in North Sikkim district, Sikkim. Teesta Urja is required to undertake social and economic development initiatives from the project affected nine villages as a part of its Environmental Assessment Plan. Teesta Urja has mandated BBF to carry out the pertinent social and economic developmental interventions.

BBF has established its field office at Mangan, North Sikkim district to undertake developmental interventions in the field of health, education, livelihoods promotion and water and sanitation. BBF engaged Grass Roots Action for Social Participation (GRASP), a voluntary organisation working for community based natural resources management, to plan the nursery and provisioning of safe drinking water supply to six villages, as well as to review the livelihood promotion plans.

The main focus of the assessment was on the following key aspects.

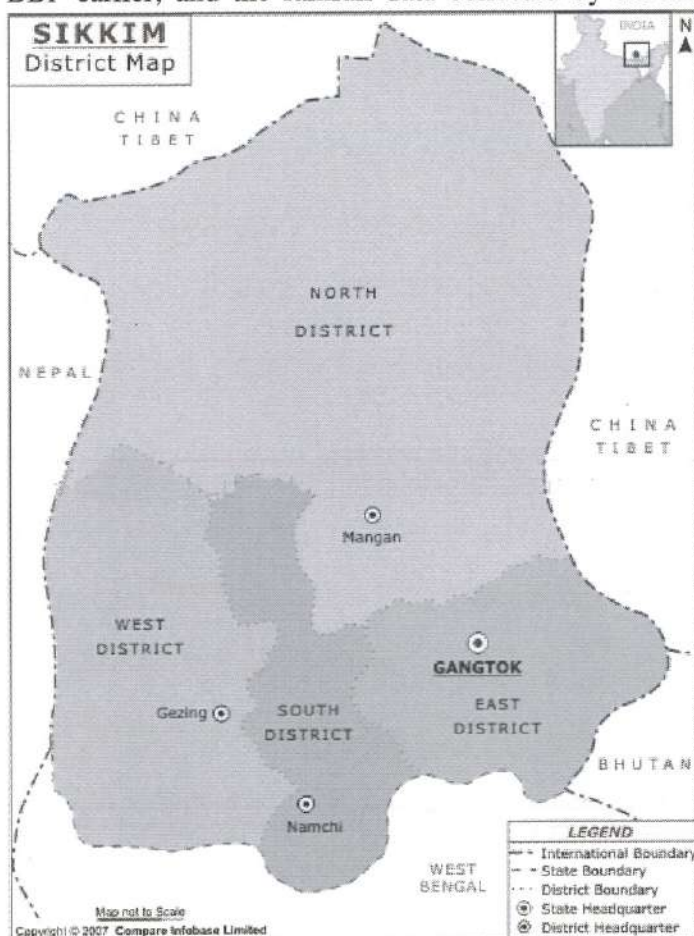
- Assess the drinking water requirements of the community for through out the year and estimate the difficult periods in its availability
- Study the existing system for drinking water and suggest cost-effective measures for making available drinking water to the villagers during difficult times
- Suggest appropriate measures and develop action plan and timeline for implementation of the water supply measures
- Suggest mechanisms for the management of water supply by the community
- Technical assistance input and plan for scientifically developing the nursery
- Review the livelihood plans prepared by the team for agriculture, horticulture and livestock promotion and suggest appropriateness of the same, and any changes.

GRASP constituted a team of professionals from the field of water resources development and rural livelihoods to carry out detailed assessment of the situation and prepare techno-managerial plans for the same. The main findings of the assessment study, along with sketch maps of the drinking water supply, were presented in the Draft Final Report. It was shared with the key personnel from Engineering and Environment Departments of TUL at Mangan. The Draft Report, along with pertinent recommendations for implementation of Drinking Water Supply and nursery plans, were shared with the Programme Advisor, BBF at Mangan and with the Managing Trustee, BBF at Gurgaon.

Based on the feedback and suggestions of BBF, the report was modified and compiled into this Final Report. The report is organised in three independent sections, each dealing with particular aspects of the three proposed interventions, namely, drinking water, nursery and livelihoods promotion. Overall considerations for implementation of these interventions are presented at the end of the report.

Part I : Drinking Water Supply

The Study Team carried out the assessment through field visits to the six villages, where the R&R Committee had identified drinking water as priority area. The villages included Saffu, Ramom, Theng, Pegong, Singhik and Kajor. Prior to the visit, the team reviewed the socio-economic data, pertinent to drinking water and livelihood aspects, collected by BBF earlier; and the rainfall data collected by the Environment Department of Teesta



Urja Ltd (TUL). Base Map for the entire project area made available by BBF was used for broad planning, whereas fresh sketch maps were prepared for the project villages, as village level cadastral maps were not available with BBF of other concerned offices.

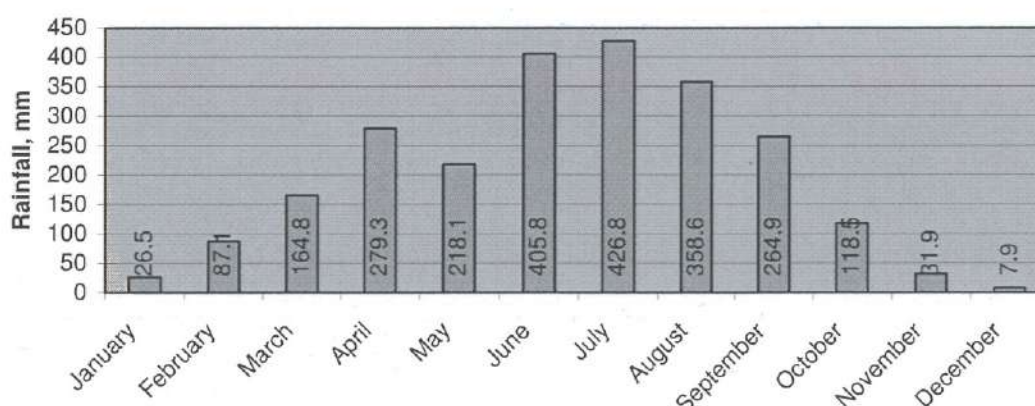
At the end of the field work, a de-briefing meeting was organised with the key officials of Civil Construction Dept and Environment Dept of Teesta Urja Ltd, where the team presented the key findings and proposed designs of the interventions in Drinking Water Supply in the project villages. The sketch maps prepared were shared at this meeting, whereupon the Engineering Department would work and prepared the detailed estimates of quantities and cost.

1. Findings

The main findings of the study are presented in the following paragraphs.

1.1 Water Resources Assessment : The area receives an annual rainfall of more than 2500 mm, most (1500mm - 2500 mm) of which is received during monsoon months of June to September. The low Coefficient of Variation (less than 15% for annual rainfall and of 15%-20% for seasonal rainfall) indicates assured characteristic of the precipitation. The area also benefits from the snowmelt in upper reaches, which contributes to the stream flows and base flow the in the project area. The high number of rainy days (20-30 days during Mar-May and over 75 days during monsoon) indicates well distributed pattern and humid climate.

Fig 1 : Monthwise Rainfall Distribution



The daily rainfall data at Teesta Stage-III Dam site in Chungthang was collected by TUL for a period of last five years (2004-08). The Annual Average Rainfall at Chungthang was 2390.4 mm with Coefficient of Variation of 5.6%. The seasonal rainfall was 662.3 mm for summer and 1456.2 mm for monsoon, with coefficient of variation as 30.2% and 9.9%, respectively. It indicated the assured and well distributed nature of the rainfall. The month-wise distribution of rainfall at Chungthang is graphically represented in Fig 1.

The area is characterised by typical mid-Himalayan topographic and geological condition, where high slope and highly disturbed hydrogeological formations limit the occurrence and use of groundwater thereby limiting its potential. Under such circumstances, surface water and shallow sub-surface water are most common resource for domestic use and irrigation. The existing water supply arrangements in the project villages are based on shallow sub-surface water, tapped through perennial springs in local streams. The proposed rural water supply would use the same time-tested means.

1.2 Drinking Water Availability : There is adequate water available in all villages, even in winter, when the flow from the sources is at the minimum due to low rainfall and negligible snowmelt in upper reaches. The springs and streams flow in full gush during summer (April-June) as the snow melts in upper reaches. The flow transitorily increases in monsoon (July-September) during heavy rainstorms. It starts receding from October and is at the lowest in January-February. The assessment was carried out in middle of January, so as to capture the extreme conditions of low water availability.



1.3 Drinking Water Demand : The Study Team assessed the demand of water for drinking and domestic use based on the present population and livestock holding and projecting it over a period of next 11 years (i.e., up to year 2020AD). The basis for demand estimation was drawn from the guidelines of Rajiv Gandhi Drinking Water Mission, which currently puts it at 25 litres per capita per day for hill areas.

Table 1 : Estimated Demand of Water for Domestic Use

Particulars	Saffu	Ramom	Pegong	Theng	Singhik	Kajor
Projected local population	204	124	420	360	834	194
Projected migrant population	54	14	130	14	120	372
Domestic water demand @ 25 lpd	6,450	3,450	13,750	9,350	23,850	14,150
Projected population of visitors	200	60	-	-	500	60
For number of days per year	24	15	-	-	4	365
Yearly water demand for visitors	48,000	9,000	-	-	20,000	219,000
Projected cattle population	180	215	120	180	476	122
Demand for cattle @ 25 lpd	4,500	5,375	3,000	4,500	11,900	3,050
Projected goat & pig population	300	54	65	210	1,310	320
Demand for goat and pig @ 10 lpd	3,000	540	650	2,100	13,100	3,200
Total demand, litres per day	14,082	9,390	17,400	15,950	48,905	21,000
Total annual demand, cum	5,140	3,427	6,351	5,822	17,850	7,665

Different families reported the water requirement of cattle differently; it ranged from 10 litres to 30 litres per head per day. For the estimation purpose, it was taken to be 25 litres per head per day. Similarly, the water requirement for pigs and goats was reported to be 5 litres to 10 litres per head per day. The latter figure was used in demand estimation. In congruence with the census observations, the population growth rate was taken as 1.6% per annum for human beings and 2% per annum for livestock. The demand for domestic water thus estimated ranged from 9,390 litres per day for village Ramom to 49,905 litres per day for Singhik, corresponding to annual demand of 3,427 cum and 17,850 cum, respectively (Table 1). There is adequate water available in all villages, even in lean season, to meet this demand.

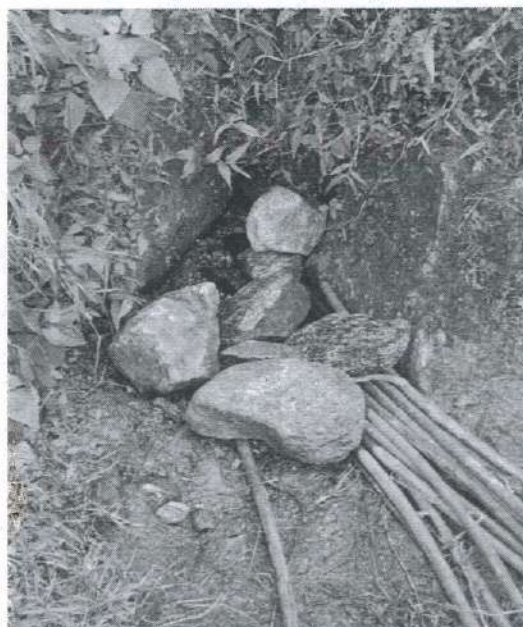
1.4 Water Sources : The conventional method of water supply in the area is to tap water from hill springs and carry it to the households through pipes. The interventions of the government (RD Dept) in the past 30 years adopted the same method, but improved upon



the distribution network. The Government schemes also included the component of storage tank between the source and the user. These tanks serve the purpose of intermediate storage and also facilitate provision of multiple connections, so that the water could be distributed to two or more habitations located in different directions.

Most of the hill springs are located in narrow streams or gullies (the present flow widths are around 10cm to 40 cm, and may increase to around 1-2 metres during summer and monsoon). Traditionally, local people have tapped these springs at places where the visible flow is higher. The location is determined on the basis of their observations of the flow behaviour (low seasonal variation) and topographic requirement (location well above the usage points).

The assessment pointed out that each village has more than one source that can be relied upon. All such sources are within the village boundary and are not very far away from the habitation area.



1.5 Distribution System : The distribution system in the existing water supply schemes of RD Dept comprised of a number of tanks, depending upon geographic spread of habitations and the number of households supplied water. The distribution network normally comprised of small diameter GI pipes of 15 mm to 20 mm dia supplying water to the individual households or to public stand posts from the storage tanks. The storage tanks served the purpose of volume equalisation, and in some steep terrain, also as pressure equalisation tanks. It was observed that none of the existing system was provided



with pressure valves, as the gradient and length of the distributaries were not great. Similarly, the existing systems did not have any air vents. The distribution network in most places were in poor state and needs replacement, although the existing network may be used after repairs in few places (like two habitations of Pegong, part of lower Ramom, and small area in Saffu).

2. Design Considerations

2.1 Water for all : It is recommended that the proposed system supplied adequate water to cover the needs of projected human and livestock population in year 2020 AD. Further, the demand of the social facilities like Gumpa, schools and Anganwadi centres have to be considered.

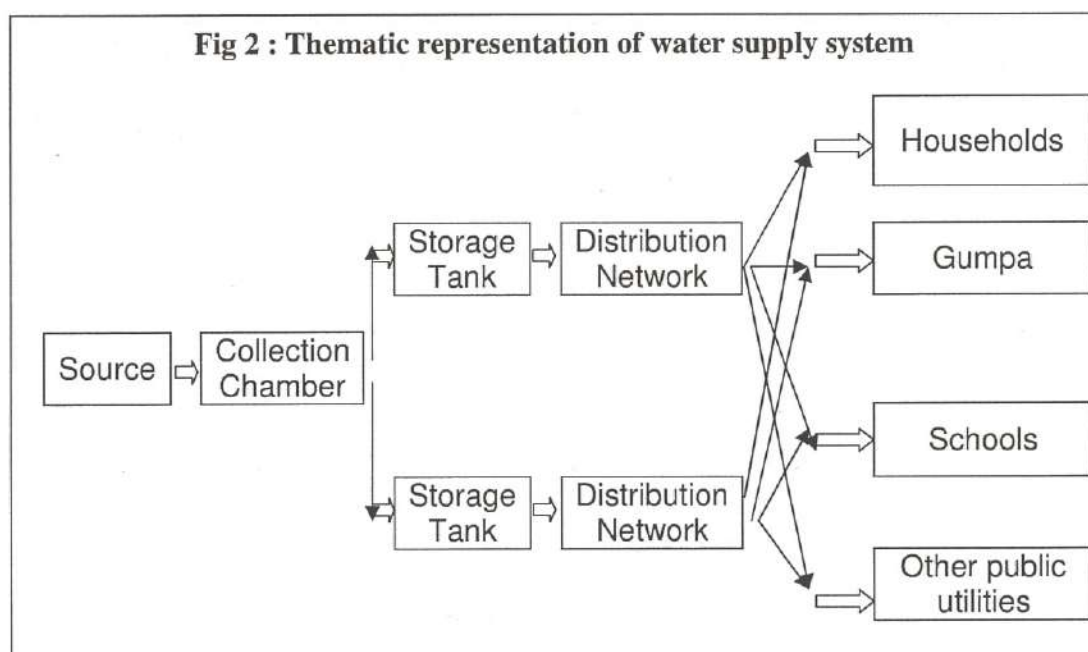
2.2 Water at doorstep : It is recommended to supply water to all households through domestic connections, and not through public stand posts. The public facilities like schools, Gumpa, View Point (in Kajor), market (in Theng) may have to be provided with appropriate stand posts according the anticipated number of users.



Spread of the habitation area : is the main consideration for determining the design and alignment of distribution network. All villages have habitations and/or households residing in scattered manner. Few villages like Singhik have compact residential clusters as well. On the other hand some habitations like Adam's basti of Pegong or lower Ramom have scattered houses spaced more than 50m-60m from each other.

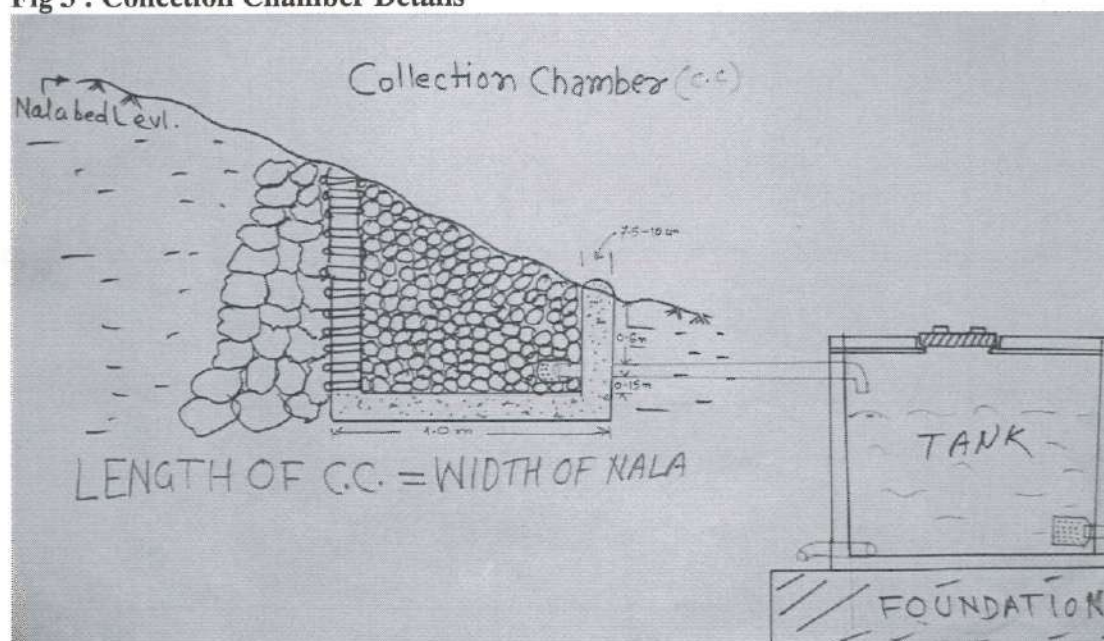
2.3 Implementation in lean season : The implementation of the water supply schemes will have to be completed before March. The construction of Collection Chambers has to complete in February, because the flow in the streams would increase from March onwards, making it difficult to lay concrete in wet conditions.

2.4 Technological Aspects : In order to deliver reliable supply of potable water to the selected habitations, it is recommended to look at the following technological aspects of construction, distribution network and user points. Thematic representation of the water supply system is shown in Fig 2.



2.4.1 Underground collection chamber : is three walled tank constructed below the bed level of stream to serve as a receptacle (Fig 3). It would be less than 1m deep, less than 1m wide and having a length equivalent to the width of the nalla (usually less than 1 m in all villages). It would be fitted with intake pipe of suitable diameter, fitted at 0.15m above the tank bottom, to carry the water to storage tank. It is then filled with graded boulders and coarse aggregate (of nominal size of 20 mm and higher). The collection chamber offers twin advantage; firstly, it prevents leaves and other material in the stream to block the inlet, and secondly, it prevents entry of air in the flow as the inlet is always submerged in water. It may have to be cleaned once in 2-3 years, depending upon silt load. But it being a simple device, the local community can manage it on their own.

Fig 3 : Collection Chamber Details



2.4.2 Use of GI Pipes : It is recommended to use Class B Galvanised Iron pipes for riser main and distribution network. The galvanisation may be grade G2 or higher. The riser main may be fitted with flanged couplings, irrespective of length, whereas the distributaries may be connected with socket joints. When the pipe had to be laid under a road having vehicular traffic, the particular section may be provided in Class C GI pipe.

2.4.3 Provision of drain pipe : Each storage tank may be fitted with a drain pipe located at the bottom of the tank. It may be provided with an end-plug.

2.4.4 User taps : Each connection (either at household or public utility) may be provided with appropriate taps. It is desirable to put brass taps with long thread (requiring 4-6 turns between full open and full shut positions). If budget is likely to pose limitations, the same may be mobilised as local contribution from users.

2.5 Proposed Design : The proposed components of drinking water supply schemes in the project villages are summarised in the following table (Table 2). The proposed design details and layout is presented in six village-wise maps in Annexure 1. The design dimensions of the tanks and pipes are presented in Annexure 2.

Table 2 : Summary of Proposed Interventions

Particulars	Saffu	Ramom	Pegong	Theng	Singhik	Kajor
New Collection Chambers	2+1	2	4+2+1	2	5	3
Refurbishment of old tanks	4	2	4+3+1	3	Nil	3
New storage/ pressure adjustment tanks	Nil	Nil	Nil	Nil	4	2
Refurbishment of distribution line	Partly	Partly	In Sympher	Small part	Nil	Partly
New distribution pipeline and taps	Partly	In upper part	Mostly	Almost all	All	Mostly
Public standposts with taps	At Gumpa	No	No	At bazar	No	At View Pt

3. Management aspects

It is recommended to encourage the community to take up the responsibility of implementation and subsequent management of the proposed drinking water supply schemes. The physical implementation may be carried out with technical guidance and oversight by the Engineering Division staff of TUL. The following approach could be adopted in this regard.

3.1 Water Management Committees : It is recommended to form village level Water Management Committees (WMCs) to implement the proposed systems in respective villages and for subsequent operations and maintenance. The structure and functions of the WMCs could be styled on the Swajaldhara Project of GoI. In the context of North Sikkim, the WMC may draw representation from each habitation within the village, as well as from social and cultural institutions (like Gumpas and monastries). It may also induct the all elected members and office bearers of GP from the village/ ward, GP Secretary, School Teacher and Anganwadi Sevika.

3.2 User Charges : It is recommended that the Water Management Committee determine a monthly or quarterly (but not annual) charges to be collected from every user (individual households, schools, Gumpas and other institutional users). This amount may be kept in a bank account and used for periodic operations and maintenance of system. The User Charges should be adequate to cover future repair and maintenance costs, as well as the wages/ salary of the operator/ watchman.

3.3 Initial roles : The WMCs will have to play four major roles prior to and during the commissioning of the water supply schemes in their respective villages. Firstly, they have to ensure the landowners' consent for construction of collection chambers and tanks and for laying of distributaries. They will also have to determine the exact location and size of public stand posts, wherever proposed. They may have to resolve any local disputes that may come up during implementation.

Secondly, WMCs will have to ensure the quality of implementation, for which they may be given orientation training on basic aspects of civil construction and plumbing. They will have to bring to the notice of the Engineering Team any shortcomings in material or implementation, so that the same could be rectified during implementation itself.

Thirdly, the WMCs will have to maintain basic records of progress of work and post it on the village notice board on daily or weekly basis. For this purpose, a copy of the detailed estimate of works and costs, along with quantities of material, should be made available to them before the commencement of execution. Similarly, the drawing of the layout shall be made available to them for presentation and discussion in Gram Sabha beforehand.

Fourthly, the WMCs will have to discuss and prepare the Operations and Maintenance Plan for future and realistically estimate the cost implications. They will have to begin collecting the amount from the beneficiaries as User Fees.

It is recommended that the Community Organisers and staff of BBF to guide and facilitate the WMCs in fulfilling the aforementioned roles.

3.4 Handing Over : It is recommended that the Water Supply Schemes may be handed over to the WMCs after completion and trial run. Any flaws or shortcomings noticed during the trial run may be corrected before handing over.

4. Follow-up

For expert supervision during implementation of the water supply schemes, especially construction of the collection chambers, the Design Team from GRASP could be invited. The team could guide the engineering staff and the WMCs in implementation aspects, as well as on functioning of the WMCs.

5. General Recommendations

The drinking water situation in any of the village is not critical. However, there are two aspects to consider. Firstly, there is a visible grudge the villagers are holding against "Urja" that they haven't kept their "promises". Secondly, poor rapport with general community in the project villages has led to over dependence on the contact points, which were mainly the Panchyat members or office bearers. The Community Organisers may have to interact with the general community more intensively and frequently.

Part II : Central Nursery

As a part of promotion of horticulture and spices cultivation in the area, BBF is planning to establish a centralised nursery at Singhik on the premises of Power House Colony. The land preparation work for the proposed nursery had already begun by the time of the Study. The Horticulture Coordinator, Mr C R Foning, had prepared a plan for nursery, based on the popular crops in the region. The Study Team reviewed the plans and revised the same in view of the observations during the field visits to the six villages and interaction with the farmers. The observations were discussed with Mr Foning and the Nursery plan was jointly revised. The salient features of the plan are presented below.

1. Large Cardamom

Large Cardamom forms an important component of agricultural livelihoods of Sikkim, which is the largest producer in the country accounting for over 40% of India's produce. It is a traditional crop grown on hill-slopes with minimal care, as the agro-climatic conditions did not pose any challenges in the past. However, in recent years, the crop was attacked with fungal infection and viral infection, thereby calling attention of farmers and scientists to take proper care and pay attention to cultivation practices.



Large cardamom can be propagated either from seeds or from tussocks, the former takes about 8 years to mature while the latter starts yielding in 3-4 years. The latter method has been chosen for promotion in BBF project area. The productive life span of such plants is likely to be around 15-20 years. Large cardamom is the main cash crop that could give sizable income to the farmers. Villagers have reported net earnings of over Rs 2 lakh per hectare a few years ago. It was the times when the market price was over Rs 300 per kg and the crop yields around 600kg to 800kg per hectare.

Currently, the yields have come down below 200 kg per hectare and the prices are low due to diseased fruits. In the villages on northern side (Chungthang, Pegong and Theng), the area under crop has gone down drastically and it is severely affected by diseases, whereas in villages Kajor, Safffu and Singhik, the damage had not been so severe. There are no known remedies for viral infection, but the fungal infection can be controlled using chemical fungicides, which are reportedly banned in Sikkim. However, homemade fungicides like Bordeaux mixture could be effective to some extent.

The main challenge to overcome the crisis is to motivate farmers to destroy the diseased plants and replace the rootstock. This has to be done on a contiguous area basis, so that the spread of the disease could be arrested. Further simple precautions like not using the same knife used on diseased plants while trimming the healthy plants could be helpful.

The nursery is required to prepare disease-free saplings to replace the existing plantation, which is by and large affected by fungal and/or viral infection. The projected requirement would be around 60,000 saplings in the first year and 1.2 lakh in the second. However, the actual demand for disease free saplings could be far higher, close to 2.25 lakh in the first year, as many farmers are interested in replacing their diseased plantation (individual demand is over 1000 saplings each, as they have plantations of 2-3 ha). The proposed nursery could be viewed as a revenue generation option in this regard in future.

2. Other saplings

As a part of livelihoods promotion strategy, it is proposed to propagate fruits and vegetable cultivation in the project area. As such, there is sizable local market available in local bazaars and Mangan market, where vegetables are selling at Rs 10 - Rs 20 a kg and fruits at high prices, as most of it comes from other districts. The prevailing system is largely based on kitchen garden concepts, where many households grow small area (less than 20 sq m in the backyard) for growing, beans, brinjal, tomato and leafy vegetable called Raisak. Cultivation on commercial scale was rarely seen. Oranges (of Malta type) is the only fruit grown in the area, but by a very few farmers in villages located in lower valley. Apples were reported to be grown in higher altitude in the past, but could not be seen at present. Pear and peach trees were sporadically seen.

It is proposed to promote vegetable and fruit cultivation in the project villages by establishing demonstration plots in each villages. It is recommended to focus on four kinds of fruits (orange, pear, guava and Nashpati) and five vegetables (cauliflower, cabbage, tomato, Dhalli chilli and ginger). It was decided to prepare the nursery for the fruit crops and also establish the demonstration plots to show the scientific method of cultivation. It is recommended to provide the saplings of vegetables like tomato and Dhalli chilli to interested farmers in the initial years.



3. Demonstration plots

It was decided to promote the demonstration plots of all the fruit and vegetable crops to be promoted by BBF, so that the farmers could see the scientific method of cultivation and adopt the same practices in their farms. Among fruit trees, three demonstration plots are recommended, one each for orange, pear and guava. Demonstration of Nashpati would be on farmers' fields with guidance from BBF. In case of vegetable crops, four demonstration plots are proposed, one each for garlic, onion, fenugreek and beat. The demonstration of other vegetables proposed would be on farmers' fields with guidance from BBF.

4. Organic manure

The Study Team found out that the soil nutrition level is poor in most agricultural lands in the project area. Simultaneously, there is a strong livestock component in the household economy and local culture of North Sikkim. It is, therefore, recommended to promote organic manures in the project area as an integral part of livelihoods promotion. Scientific methods of preparing Farm Yard Manure, green manure and vermicompost need to be promoted through demonstration and subsidy that could be mobilised from Department of Agriculture (a few such instances were noticed in the project area during the field visit). It is also recommended that the nursery created its own production facility of the aforementioned organic manures.

5. Area Requirement

The area required for the proposed operations of nursery and demonstration plot in current year would be 3 ha as shown in the following table (Table 1). At present the nursery has been allotted a land of about 1 ha near 11th bend in Power House Colony site of Teesta Urja Limited in Village Singhik. Additional land of another 2 ha may have to be immediately demarcated and handed over to the nursery so that the basic land preparation work could be taken up. It is recommended to update the layout maps and indicate the exact location of the nursery and demonstration plots thereon.

Table 1 : Area requirement for Nursery and Demo Plots

S No	Crop	Unit Size	No of Units	Area, ha
1	Nursery in year 2009 (total 1 hectare)			
1.1	Large cardamom	0.50	1	0.50
1.2	Black Pepper, Poly bags	0.25	1	0.25
1.3	Organic manure pits	LS	LS	0.25
2	Demonstration Plots in 2009 (total 2 hectares)			
2.1	Large cardamom (4 varieties)	0.10	4	0.40
2.2	Black pepper + Cardamom	0.20	2	0.40
2.3	Fruit trees (3 species)	0.20	3	0.60
2.4	Vegetable (4 species)	0.10	4	0.40
2.5	Organic manure pits	0.20	LS	0.20

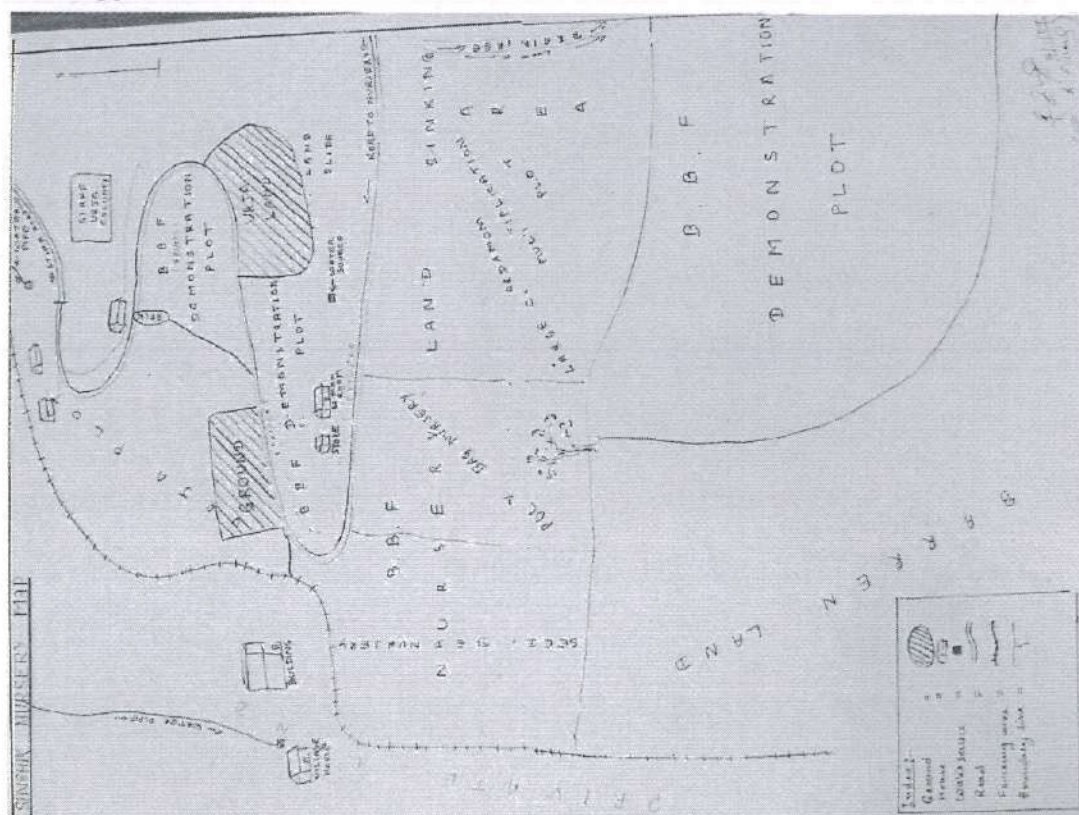
The nursery may be expanded in the coming years based on the response and requirement. Similarly, additional demonstration plots may be required in future. The land requirement for additional nursery and demonstration plots could be assessed in future depending on the changes in plans. It is also proposed to develop nursery of floriculture species and orchids in future. The land requirement for the same may be worked out later.

6. Water for Nursery

The nursery would require regular supply of water in the range of 150 - 300 cum every day throughout the year depending upon climatic conditions. Nearly 50 - 100 cum of water could be tapped from an existing spring immediately above the nursery plot.

The water supply scheme for TUL colony has surplus water at present, and apparently has no future allocations planned or earmarked. The nursery may be supplied water from the existing system. If it is not possible, an additional pipeline of 25 mm dia may be brought from the proposed drinking water supply system for village Singhik (from Tank in Blue Tong Vok), along with proportionate increase in the diameter its riser main and main distributory line.

The land allotted for nursery has a low-lying patch near the valley, which is likely to remain waterlogged for the entire year. It is necessary to drain this area and train the natural drain. The site development plan of TUL may already have incorporated this component, but it could not be ascertained during the field visit. It is recommended to take up the drainage work before the spring season. If the drainage work is not planned under site development work of TUL, the same may have to be taken up by BBF separately. The revised layout of the nursery is presented in the figure on the next page (Fig 1). It also shows the demarcation of area proposed to be used for demonstration of various crops. It also shows the proposed alignment of water connection and drainage of waterlogged area.



The budget prepared by BBF was reviewed and was found to have been prepared after studying the site requirement and local market rates. However, it did not include four

components as follows. The Horticulture Coordinator would prepare a budget for these components and submit it for review shortly.

- Establishing organic manure pits and running cost of the same
- Irrigation arrangements (if not supplied water from TUL system)
- Drainage and nalla training
- Additional technical person and watchman required

The proposed nursery would also require a full-time supervisor (para-professional familiar with nursery operations) to look after day-to-day management. It is suggested to identify such person and engage it at the earliest.

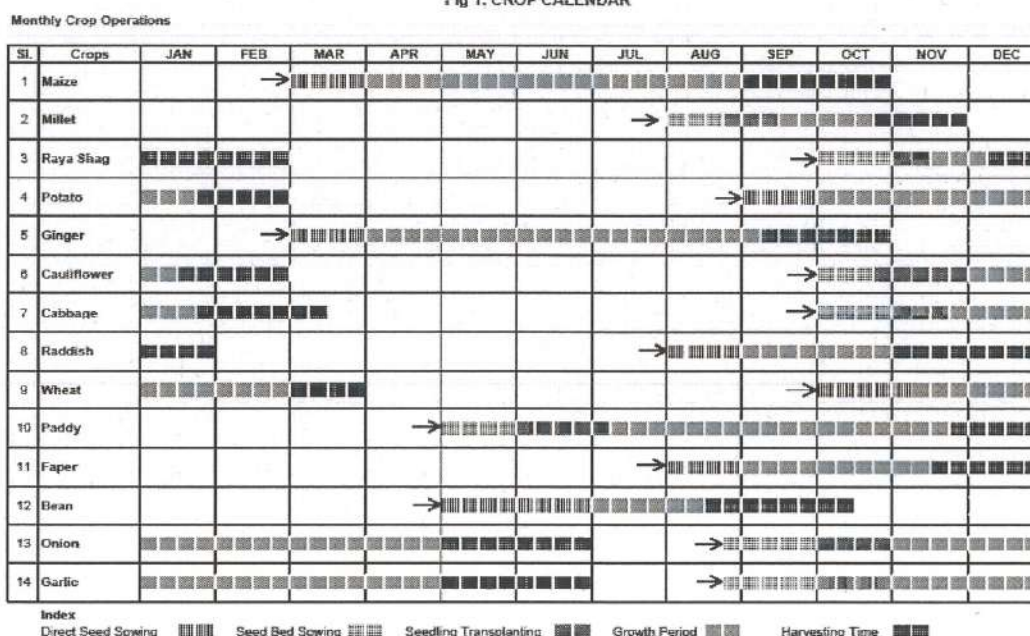
Part III : Livelihood Promotion

Bhavishya Bharat Foundation is promoting land based livelihoods in form of horticulture and vegetable cultivation in the area. The Study Team had detailed discussion with the Horticulture Coordinator, Mr C R Foning, and had informal interaction with farmers on the prevalent agriculture and horticulture situation in the area. Based on the observations during the field visits to the six villages and interactions, the livelihood plans prepared by BBF were reviewed and modified. The main aspects of the revision are as follows.

1. Agriculture scenario

In North Mangan district, wage labour and agriculture are two main sources of income for most of the rural families. Large cardamom constitutes the major crop for market, followed by potato, oat, wheat and paddy. Maize and sunflower are gaining popularity in recent years. On marginal lands, kodu millet is grown in summer season, but is rarely sold in the market. Many farmers grow vegetables, but largely as kitchen garden for home consumption. The agro-climatic conditions are favourable to grow crops throughout the year. The crop calendar of the main crops grown in the area is presented below (Fig 1).

Fig 1. CROP CALENDAR



2. Main crops to be promoted

As a part of livelihood interventions, it is proposed to promote large cardamom, vegetable and fruit cultivation in the project villages by establishing demonstration plots in each villages. It is recommended to focus on four kinds of fruits (orange, pear, guava and Nashpati) and five vegetables (cauliflower, cabbage, tomato, Dhalli chilli and ginger). It was decided to establish demonstration plots to show the scientific method of cultivation.

2.1 Large Cardamom with black pepper as intercrop : Large cardamom forms an important component of agricultural livelihoods of Sikkim, but in recent years, it was attacked with fungal infection and viral infection, thereby reducing the yields and income to farmers. Three varieties, namely, Golsey, Ramala and Ramsey, popular in the region, but other varieties like Verlangney, Sawney and Seremna are also suitable for the area. The main characteristics of these varieties are as follows.

Table 1 : Main Characteristics of Large Cardamom Varieties

S No	Variety	Growth	Altitude	Yield	Adaptation
1	Verlangney	Tall	Over 1500 m	High	Prone to fungal attack
2	Ramala	Tall	Over 1500 m	Moderate	Virus prone
3	Ramsey	Dwarf	Over 1500 m	Moderate	
4	Golsey	Dwarf	Under 1000 m	Low	Suited for dry conditions
5	Green Golsey	Dwarf	Under 1000 m	Low	Grows without shade
6	Sawney	Tall	1000-3000 m	High	Needs water
7	Seremna	Dwarf	1000-3000 m	Moderate	

Large cardamom can be propagated either from seeds or from tussocks, the former takes about 8 years to mature while the latter starts yielding in 3-4 years. It is generally planted in summer from tussocks and irrigated. The bud formation takes place in January to February and flowering in March to May. Fruit formation takes place during monsoon, when good amount of rainfall and humidity is available. Harvesting could be done in October in lower valley and in November-December in higher altitudes. The productive life span of such plants is likely to be around 15-20 years. Large cardamom has potential to give sizable income to the farmers, with reported net earnings of over Rs 2 lakh per hectare a few years ago, when the market price was over Rs 300 per kg and the crop yields around 600kg to 800kg per hectare. The objective of BBF's promotion programme could be to reach such high level of productivity within the next few years.

Currently, the yields have come down below 200 kg per hectare and the prices are low due to diseased fruits. In the villages on northern side (Chungthang, Pegong and Theng), the area under crop has gone down drastically and it is severely affected by diseases, whereas in villages Kajor, Safffu and Singhik, the damage had not been so severe. There are no known remedies for viral infection, but the fungal infection can be controlled using chemical fungicides, which are reportedly banned in Sikkim. However, homemade fungicides like Bordeaux mixture could be effective to some extent.



The main challenge to overcome the crisis is to motivate farmers to destroy the diseased plants and replace the rootstock. This has to be done on a contiguous area basis, so that the spread of the disease could be arrested. Further simple precautions like not using the same knife used on diseased plants while trimming the healthy plants could be helpful.

Demo Plot : It is proposed to promote Black Pepper vine as an intercrop with cardamom, so as to stabilise the income across seasons and over years. The demonstration would include plantation of 2000 saplings of suitable variety of large cardamom intercropped with 500 saplings of black pepper vine on half hectare of farmer's plot. The total investment per demo plot unit would be Rs 37,240 in three years as per the following table (Table 2). It is proposed to promote 150 units of demo plots in the project area.

Table 2 : Cost of Demo Plot - Large Cardamom with Black Pepper

S No	Items	Qty	Unit	Unit Cost	Total
1	Cost of large cardamom seedling	2,000	Nos.	3	6,000
2	Cost of black pepper cuttings	500	Nos.	5	2,500
3	Sickelling, weeding up-root diseases old infected Plants and destroyed	25	Labour	120	3,000
4	Pit Preparation and Plantation	48	Labour	120	5,760
5	Manure and soil treatment	8	Labour	120	2,880
6	Pesticides (sprey)	6	kg	500	3,000
7	Manure (10 MT=200 Doko@Rs.30)	250	Doko	30	7,500
8	Maintenance after planting	45	Labour	120	5,400
9	Harvesting and Curing	10	Labour	120	1,200
	Grand Total				37,240

2.2 Horticulture Promotion : It is proposed to promote three main fruit crops, namely orange, pear and Nashpati, using scientific cultivation practices by establishing plots on unit of a quarter hectare each in the project areas.

Orange : The demonstration would include plantation of 100 saplings of suitable variety of orange on 0.25 hectare of farmer's plot. The total investment would be Rs 14,610 per unit in five years as per the following table (Table 3). It is proposed to promote 100 units of orange plots in the project area.

Table 3 : Cost of Demo Plot - Orange

S No	Items	Qty	Unit	Unit Cost	Total
1	Cost of Seedling	100	Nos.	15	1,500
2	Sickelling, levelling and pit preparation	20	Labour	120	2,400
3	Planting	4	Labour	120	480
4	Manure and soil application	20	Labour	120	2,400
5	Pesticides	5	kg	800	4,000
6	Manure (520kg=120 Doko@Rs.30)	65	Doko	30	1,950
7	Maintenance after Planting	20	Labour	120	2,400
8	Harvesting and Curing	4	Labour	120	480
	Grand Total				15,610

Pear : The demonstration would include plantation of 70 saplings of suitable variety of pear on 0.25 hectare of farmer's plot. The total per unit investment would be Rs 12,190 in five years as per the following table (Table 4). It is proposed to promote 100 units of pear plots in the project area.

Table 4 : Cost of Demo Plot - Pear

S No	Items	Qty	Unit	Unit Cost	Total
1	Cost of Seedling	70	Nos.	15	1,050
2	Sickelling, levelling and pit preparation	10	Labour	120	1,200
3	Planting	3	Labour	120	360
4	Manure and soil application	10	Labour	120	1,200
5	Pesticides	5	kg	800	4,000
6	Manure (520kg=120 Doko@Rs.30)	50	Doko	30	1,500
7	Maintenance after Planting	20	Labour	120	2,400
8	Harvesting and Curing	4	Labour	120	480
	Grand Total				12,190

Nashpati : The demonstration would include plantation of 70 saplings of suitable variety of Nashpati on 0.25 hectare of farmer's plot. The total investment would be Rs 6,590 per demo plot in five years as per the following table (Table 5). It is proposed to promote 100 units of Nashpati plots in the project area.

Table 5 : Cost of Demo Plot - Nashpati

S No	Items	Qty	Unit	Unit Cost	Total
1	Cost of Seedling	40	Nos.	15	600
2	Sickelling, levelling and pit preparation	8	Labour	120	960
3	Planting	2	Labour	120	240
4	Manure and soil application	5	Labour	120	600
5	Pesticides	2.5	kg	800	2,000
6	Manure (520kg=120 Doko@Rs.30)	25	Doko	30	750
7	Maintenance after Planting	10	Labour	120	1,200
8	Harvesting and Curing	3	Labour	120	240
	Grand Total				6,590

2.3 Vegetable cultivation : Vegetable cultivation is not new to North Sikkim, as people have been growing vegetables in the backyard for home consumption for generations. However, very few farmers have used it as an income generation activity. It is proposed

to promote vegetables with relatively simple farming technology and high market price, so that they could contribute to family income.

It is proposed to promote five species vegetables, namely, cauliflower, cabbage, tomato, Dhalli chilli and ginger, on farmers' plots of meaningful size (ideally 0.2 ha, but a minimum of 0.1 ha) in the project area. The package would comprise of technical guidance and subsidy for modified interventions for a target of 300 units in three years. The total investment would be Rs 4,260 per unit for the crop season as follows (Table 6).

Table 6 : Cost Analysis Demo Plots for Vegetables

S No	Items	Qty	Unit	Unit Price	Total
1	Digging, cleaning, making bed	15	Persons	120	1,800
2	Manure (Cow-Dung)	20	Doko	30	600
3	Maintenance and harvesting	10	Labour	120	1,200
4	Pesticides	1	kg	800	800
5	Seed material with transport		LS	200	200
Grand Total					4,600

3. Approach of Promotion

It is recommended that the promotion of land-based livelihoods to follow a decentralised approach based on clear scientific guidelines. The approach may comprise of three clearly defined components, namely selection criteria, method of selection and nature of support and subsidy. These are broadly defined in the meeting of Community Organisers towards the end of the field visits. These may be further refined and finalised as programme approach of BBF in livelihood promotion.

3.1 Criteria of selection of farmers : is based on the economic considerations and the farmers' inclination to try out newer methods and techniques in farming. The selection criteria could include the following aspects related to farmer.

- Adequate land holding
- Willingness to try out new methods (experimentation)
- Ready to spare requisite area of his farm (0.2-.0.5ha) for demonstration
- Has reputation of being a sincere/ hardworking farmer
- Has a few cattle/ livestock (for raw material for organic manure)

3.2 Method of selection : It is recommended to select the farmers in a village meeting, and if village meeting is not possible in a gathering of village opinion leaders and progressive farmers in the village. Prior to this meeting, the community organiser is expected to collect the data on indicators pertaining to selection criteria and tabulate the same. In this meeting, the proposed approach should be clearly narrated and the nature of scheme should be explained. The basic principle should be highlighted that the farmers would have to put in the efforts and material that they have been doing in the past for the particular crop, and BBF would subsidise those components (material and labour) that may be required as per the improved method of cultivation. The detailed components of the scheme have to be explained, along with the cost break-up. The meeting then could select the prospective farmers to be selected under the programme through discussions and by consensus, and may use the tabulated data if needed.

3.3 Nature of support : Apart from the periodic guidance from the BBF team, the farmer would receive the subsidy as per the scheme designs. Crop wise scheme details, along with the year wise phasing of expenditure, are presented in Annexure 3. The summary of the quantum of support is presented below (Table 7). The total expenditure on promotion of various fruit and vegetable crops is expected to be Rs 1.04 crore spread over five years. Out of this, BBF's share would be Rs 66.7 lakh.

Table 7 : Projected Scale of Horticultural Interventions

Demo Unit	Duration	Unit size	Unit Cost	Farmer's Share	BBF's share	Units planned	BBF's Total Share
Large Cardamom + Pepper	3 years	0.50 ha	37,240	13,840	23,400	150	3,510,000
Orange	5 years	0.25 ha	15,610	5,610	10,000	100	1,000,000
Pear	5 years	0.25 ha	12,190	3,590	8,600	100	860,000
Nashpati	5 years	0.25 ha	6,590	1,990	4,600	100	460,000
Vegetables	4-12 m	0.20 ha	4,600	1,800	2,800	300	840,000

4. Livestock interventions

Livestock forms an important part of rural livelihoods and local culture in North Sikkim. However, the potential has largely remained untapped in this sector. The Animal Husbandry Department has been promoting Jersey, Holstein and Swiss Brown cross-bred animals in the district. Its influence was visible in near vanishing of indigenous cattle and draught animals. Although the local breed, Siri cows, give less milk, they are good for meat and draught purpose. The possibility of promoting the local breed may be explored. Reportedly, some Buddhist Monasteries have experimented with crossing Siri Cows with Yak, but the results may have to be studied further. In case of cattle, there is a need to promote proper management practices, irrespective of the breeds reared.

Similarly, the goats and pigs are popular meat species in the region. There is a need to promote proper feed/shelter/disease management practices in goats and pigs, too. BBF could consider it as a part of its long-term agenda for livelihood promotion in Sikkim.

5. Farmers' Clubs

Apparently, the local knowledge about agriculture and livestock has not been given adequate attention by the state policy makers and administrators. At grassroots level, it is possible to initiate a dialogue on technology of farming by launching farmers' clubs on village basis. They may establish a mechanism of periodic dialogue on pertinent aspects of crop husbandry, plant protection and marketing. At a later stage, these groups could be federated into a body for marketing and business development services.

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Annex 1 & 2 of the report

Summary of RWS Components Recommended

Particulars	Village					
	Saffu	Ramom	Pegong	Theng	Singhik	Kajor
New Collection Chambers	2+1	2	4+2+1	2	5	3
Refurbishment of old tanks	4	2	4+3+1	3	Nil	3
New storage/ pressure adj tanks	Nil	Nil	Nil	Nil	4	2
Refurbishment of distribution line	Partly	Partly	In Sympher	Small part	Nil	Partly
New distribution pipeline & taps	Partly	In upper part	Mostly	Almost all	All	Mostly
Public standposts with taps	At Gumpa	No	No	At bazar	No	At View Pt

Dimensions of tanks and pipes to be used in Water Supply Systems

Note : This file is structured in a database format. Each row represents a record that refers to a particular length of pipeline or tank dimensions (in distribution system)

Part A : Tanks (Ignore all tanks other than mentioned below)

Village	Tank Id	Location	Size in metres (inside)			Repair needs
			L	B	D	
Saffu	T1	Above T2	2.20	1.20	1.20	Plaster and inlet/outlet plugs
Saffu	T2	Near village	1.70	1.40	0.75	Plaster and inlet/outlet plugs
Saffu	T3	Below ICDS	2.15	1.35	1.15	Plaster and inlet/outlet plugs
Saffu	T4	Southern end	1.20	1.20	0.75	Plaster and lid. For Liching
Ramom	T1	E of Gumpha	2.20	1.90	1.10	Plaster and inlet/outlet plugs
Ramom	T2	W of Gumpha	2.35	2.00	1.30	Plaster and inlet/outlet plugs
Pegong	T1	Western hills	4.50	4.50	1.50	Plaster and inlet/outlet plugs
Pegong	T2	Western hills	4.00	2.00	1.60	Plaster and inlet/outlet plugs
Pegong	T3	Western hills	4.00	2.50	1.60	Plaster and inlet/outlet plugs
Pegong	T4	Western hills	4.00	2.50	1.60	Plaster and inlet/outlet plugs
Sympher	T1	NW side				Plaster and inlet/outlet plugs
Chholo basti	T1	Western hills	2.50	1.25	1.25	Plaster and inlet/outlet plugs
Chholo basti	T2	NW of village	1.00	0.95	0.90	Plaster and inlet/outlet plugs
Theng	T1	Western hills	1.35	1.00	0.85	Plaster and inlet/outlet plugs

Theng	T2	Below Com Centre	3.00	2.20	1.20	Bottom repairs and plaster
Theng	T3	Private, N of T2	1.00	0.90	0.80	Cover, Plaster and plugs
Singhik	T1	Lingding-Ringdang	1.00	0.90	0.80	Connect inlet/outlet pipes
Singhik	T2	On way to Keydong	1.10	1.00	0.90	Connect inlet/outlet pipes
Singhik	T3	Near Old Bugalow	2.00	1.65	1.25	Already repaired by TUL
Singhik	T4	Blue Tong Vok				Connect inlet/outlet pipes
Singhik	T5	South of Gumpha	2.00	1.40	1.20	New tank proposed
Singhik	T6	N of Lingding-Ringdang	1.60	1.20	1.00	New tank proposed
Singhik	T7	Near ICDS	1.20	1.20	1.00	New tank proposed
Singhik	T8	N of Kydong basti	1.20	1.20	1.00	New tank proposed
Kajor	T1	On Rabang khola	1.45	1.45	0.95	Plaster and inlet/outlet plugs
Kajor	T2	Devithan khola	2.50	1.60	1.30	Cover, Plaster and plugs
Kajor	T3	NE corner of village	2.40	2.30	1.00	Cover, Plaster and plugs
Kajor	T4	E of road near JHS	2.50	1.75	1.20	New tank proposed
Kajor	T5	Near Horti tank	1.60	1.20	1.00	New tank proposed

Dimensions of tanks and pipes to be used in Water Supply Systems

Part B : Pipelines

Village	Length	Type	From	To	Dia, mm	Nature of intervention
Saffu	~ 20 m	Riser main	Source	T1	50	New pipe
Saffu	~ 120 m	Main Distributory	T1	School	25	Repair broken portion
Saffu	~ 400 m	Main Distributory	T1	Gumpa	40	Repair broken portion
Saffu	~ 30 m	Riser main	Source	T2	40	New pipe
Saffu	~ 20 m	Main Distributory	SP line	Gumpa	25	New pipe
Saffu		Distributory	T1	Houses	19	Repair broken portion
Saffu		Distributory	T2	Houses	19 to 13	New pipe
Saffu		Distributory	Gumpa	Houses	13	New pipe
Saffu	~2 km	Riser main	T4	Liching	19	New pipe
Ramom	~2.1 km	Riser main	Source	T1	39	Repair broken portion
Ramom	~ 20 m	Riser main	Source	T2	39	Repair broken portion

Ramom		Main Distributory	T1	School	19 to 13	New pipe (upper portion)
Ramom		Distributory	T2	Houses	19 to 13	Repair broken portion
Pegong	~50 m	Riser main	Source	School	25	New pipe
Pegong	~20 m	Riser main	Source	T1	40	New pipe
Pegong	~ 30 m	Riser main	Source	T4	40	New pipe
Pegong		Distributory	T1 & T2	Houses	25/19/13	New pipe
Pegong		Main Distributory	T5	Gumpa	19	Repair broken portion
Pegong		Distributory	T4 & T5	Houses	25/19/13	New pipe
Symphar		Distributory	Source	Houses	19 to 13	Repair broken portion
Chholo	~15 m	Riser main	Source	T1	25	Repair broken portion
Chholo	~10 m	Riser main	Source	T2	25	Repair broken portion
Chholo		Distributory	T1 & T2	Houses	25/19/13	Repair broken portion
Theng	~15 m	Riser main	Source	T1	40	New pipe
Theng		Main Distributory	T1	T2	25	Repair broken portion
Theng		Distributory	T1	Comm centre	25	New pipe
Theng		Distributory	Comm Centre	Houses	19 to 13	New pipe
Theng		Distributory	T1	Houses	19	New pipe
Theng		Distributory	T2	Houses	19 to 13	New pipe
Theng	~30 m	Main Distributory	CC 3	Houses	19	New pipe
Singhik	~50 m	Riser main	Source	T1	25	New pipe
Singhik	~ 10 m	Riser main	Source	T6	40	New pipe
Singhik	~15 m	Riser main	Source	T5	50	New pipe
Singhik		Riser main	Source	T3	40	New pipe
Singhik	~15 m	Riser main	Source	T8	25	New pipe
Singhik	~10 m	Riser main	Source	T7	25	New pipe
Singhik		Main Distributory	T2	T4	25	New pipe
Singhik		Main Distributory	T6	School	25	New pipe
Singhik		Distributory	School	Houses	19 to 13	New pipe
Singhik		Distributory	T1	Kazak Houses	19	New pipe
Singhik	~ 150 m	Distributory	Source CC	Houses (3)	13	New pipe
Singhik		Distributory	T5	Houses	25/19/13	New pipe
Singhik		Distributory	T7	ICDS/Houses	19 to 13	New pipe
Singhik		Distributory	T2	Houses (2)	13	New pipe
Singhik		Distributory	T3	Houses	19 to 13	New pipe
Singhik	~ 250 m	Distributory	T8	Kydong Houses	19 to 13	New pipe
Singhik		Distributory	T4	ICDS/Houses	25/19/13	New pipe
Kajor	~10 m	Riser main	Source	T1	25	New pipe

Kajor		Main Distributory	T1	Road	25	New pipe
Kajor		Distributory	Rad	Houses	19 to 13	New pipe
Kajor		Riser main	Source	T2	40	New pipe
Kajor		Riser main	T2	T3	25	Repair broken portion
Kajor		Main Distributory	T3	Road	25	Repair broken portion
Kajor		Distributory	Road	Houses	13	Repair broken portion
Kajor		Distributory	T3	View point	19	Repair broken portion
Kajor		Distributory	Viewpoint	Houses (3)	13	New pipe
Kajor	~20 m	Riser main	Source	T4	40	New pipe
Kajor		Main Distributory	T4	T5	40	New pipe
Kajor		Distributory	T4	Houses	19 to 13	New pipe
Kajor		Distributory	T5	Houses	19 to 13	New pipe