



BEST PRACTICES FOR ADAPTATION AND DISASTER RISK REDUCTION

CASE STUDY-4: <COMMUNITY HEALTH VOLUNTEERS (BARE FOOT DOCTORS) - MECHANISM TO ADDRESS “NON-ACCESSIBILITY/POOR ACCESSIBILITY OF THE REMOTE FLOOD AFFECTED POPULATION TO EMERGENCY HEALTH SERVICES”>



RURAL VOLUNTEERS CENTRE
VILLAGE+P.O=AKAJAN, VIA-SILAPATHAR
DISTRICT-DHEMAJI (ASSAM), INDIA
PIN-787 059



TITLE: < Community Health Volunteers (Bare Foot Doctor) - Mechanism to address “Non-accessibility/poor accessibility of the remote flood affected population to emergency Health Services”>

RVC has understood that to ensure people’s accessibility to quality health services in the remotest villages mainly the villages which remain cut-out for a long period during flood and post-flood session, a village based health provider’s network would have to be in place. The understanding led RVC to come up with the Community Health Volunteers (CHV), a network of Health Service providers within the community.

ORGANISATION: <Rural Volunteers Centre (RVC)>

1. THEME: CBDRR mechanism for emergency health services

2. STATE/REGION/COMMUNITY: Assam/Upper Brahmaputra River Basin/Flood vulnerable population of Brahmaputra River Basin

3. BACKGROUND

Context: The economic, social and geographical situation:

Geographical context: The geographic area of operation of RVC covers the flood plains of Dhemaji and Lakhimpur District and Majuli Sub-Division of Assam in particular and whole of the 8 North Eastern states of India in general.

The District emerges from the foot hills of Arunachal Pradesh and stretches to the Brahmaputra River with Subansiri one side and the river Siang on the other. Geographically situated between the 94° 12' 18" E and 95° 41' 32" E longitudes and 27° 05' 27" N and 27° 57' 16" N latitudes, the district covers an area of 3237 Sq. Km and is a basically plain area lying at an altitude of 104 m above the Mean Sea Level.

The District Lakhimpur lies on north bank of the mighty river Brahmaputra. It is bounded on the north by Siang and Papumpare District of the state of Arunachal Pradesh and on east by Dhemaji District. Majuli, the largest River-island belonging to Jorhat District is on the south and Gahpur sub division of Sonitpur District is on the West. The exact location of the district is 26048' and 27053' northern latitude and 93042' and 94020' east longitude (approx.).

Being situated in a strategic location where the steep slope of eastern Himalaya abruptly drops, forming a narrow valley which makes the region, as well as the whole Upper Brahmaputra River-basin, immensely vulnerable to flooding, affecting 50% - 70% population every year for the last 3 decades. The mighty Brahmaputra River, the Subansiri River and numbers of their tributaries originating from the hilly terrain of Arunachal Pradesh account for the perennial flood problem of the region which has already caused irreparable damage to the region. In addition, extensive human interventions (deforestation, river stripping, construction of mega dams etc.) on the Brahmaputra River Basin compounded with probable impact of climate change are gradually making the whole of the Brahmaputra Basin immensely vulnerable to multiple hazards.



Socio Economical context:

- The District Dhemaji and Lakhimpur i.e. the immediate area of working of RVC is of rural character (98.5% populations are rural) and the economy is largely agro based.
- Livestock rearing is the main secondary livelihood practice of the community but the sector is yet to be commercially organized.
- Sericulture, fishing and driftwood business are practiced in smaller scale.
- Sand deposition, bank line erosion, shifting of river course and other adverse effects of chronic floods on fertile agricultural land have made even the affluent farmers land-less.
- The depletion of agro based traditional livelihood practices has resulted in inter-District and inter state seasonal and permanent migration in large.
- Access to public services (health, education, irrigation, sanitation etc) to the rural population is largely denied.

Rationale/ Justification for being a good practice and potential for scaling up /replication:

Community Health Volunteers (Barefoot Doctors) is a good practice and has the potential for scaling up because it is community based and community managed, women focused and ensures round- the- clock services to the people in distress not only in emergency situation but also in normal time. The backup mechanism with the Community Health Volunteers (CHVs) has made it unique to provide not only preventive and remedial services but also referral services.

Brief on the local condition prior to Project initiation:

Assam ranks 14th amongst the 15 low performing States when ordered in the descending order in terms of Human Development Index (HDI) where as Dhemaji District (Immediate working area of RVC) ranks 20th among the 23 Districts when placed in descending order. When the HDI value derived for the state Assam as a whole is 0.407 the HDI value of District Dhemaji is 0.277. In case of Health the index for whole of Assam is 0.343 where as for the District Dhemaji it is 0.186. Rural urban disparities are high in all of the indicators. Life expectancy at birth is 54.1 in rural as compared to 63.3 in urban areas. 52 per cent of children are underweight in rural compared to 37 per cent in urban areas. These disparities are a matter of concern especially if we consider the fact that the level of urbanization in Assam is quite low. Around 10 per cent of the population lives in urban areas in Assam, where as 1.85% for Dhemaji District. The corresponding figure at the all India level is 30 per cent.

As per Assam HDR 2003', Planning & Development department the infant mortality rate (IMR) of the District is 114 which is higher than the national average (64) and state average of 70. There is also difference between IMR within the boys and girls. When the IMR among the boys is 113 it is 117 among the girls. The child mortality rate is also higher in the District it is 140 for boys and 138 for girls. The working experience of RVC in this part of the country reveals that the IMR and CMR would be quite higher than the District average in the remotest part of the District and the real situation of these regions is never assessed. The state sponsored health services hardly reach to



the community because of dilapidated surface communication system out of flood, lack of resources both infrastructure and skilled health personal combines with state monitoring mechanism.

Apart from the above stated facts and figures working experiences of RVC in the flood plains of Dhemaji reflect that high rate of morbidity and mortality prevails out of water borne and vector borne diseases. A pilot study has been conducted by RVC in 26 riverine villages of Dhemaji District in the year 2003 with support from Karpunpuli Gaon Bikash Kini Kebang (a Community based organization) on prevalence of water borne and vector borne diseases in the Riverine villages during the pre-flood period (month of February 2003 and March 2003). In the study 3422 numbers of morbidity cases (Jaundice/Diarrhea/Viral Fever/Severe Cough/Skin disease) has been recorded and of which more than 80% sufferers are children (0 to 14 years). Moreover 28 numbers of mortality cases has been reported from 11 villages of which 18 are children.

Critical insight into the above facts and figures reveals that the perennial flood problems plaguing the rural health scenario of Dhemaji District as well as through out the North bank of Upper Brahmaputra River basin are inadequate physical health infrastructure viz. Sub-Centre, Primary Health Centres (PHC) and hospitals, etc; low quality of service provision, lack of adequate complementary infrastructure such as roads, etc have made health services effectively inaccessible to people. Moreover, poor living conditions in villages with inadequate infrastructure facilities such as electricity, roads and sanitation demotivates the Doctors and other health workers to work in rural Public Health sector.

Project Intervention Formulation

On the basis of the above understanding RVC decided to address the following concerns on the flood plains of Brahmaputra through generating a chain of Community Health Volunteers network.

- "Non-accessibility/poor accessibility of the remote flood affected population to Emergency Health Services" which includes non-existence of trained/skilled health personals to address social and preventive medicines aspects;
- Non-existence of emergency service delivery mechanisms (immediate access to treatment measures for the people in distress);

Goal and Objectives:

Goal: The flood vulnerable/affected people of Brahmaputra River Basin have access to emergency health services during flood and post flood session.

Objective: A community based, community owned self sustaining health volunteer's network is in place to safeguard flood vulnerable people's right to health

4. KEY ELEMENTS

Target Beneficiaries: The initial targeted beneficiaries are the flood vulnerable/affected people inhabiting the Upper Brahmaputra River Basin.

Geographical Coverage: Dhemaji District and Lakhimpur District.

Key Project Activities/ Key Innovative Features - (capacity building, institution building, awareness, empowerment, etc) and methodologies/practices:

Process: The process started in the year 2004 with 30 Community Health Volunteers (CHVs) all village daughters-in-law from 30 remote villages of Sissiborgaon Development Block of Dhemaji District. The CHVs are selected by the community through village meeting to ensure that she is accredited by the community as well as she remains accountable to the community on providing services.



The selected volunteers have to go through intensive in-house training for 15 days conducted by experience health personals working on preventive and social health medicine. The training mainly focuses on 4 chapters- (1) Understanding socio-economic implications of health issues in the context of flood (2) Identification of diseases (3) Preventive measures of diseases (4) Curative measures of diseases. (5) Introduction to essential common medicines. The core components of the training process are learning through analyzing social case studies & learning through repeated practices. This first phase training follows by weekly orientation camp of the CHVs conducts by MBBS doctor(honorary)/Alternative Medicine Doctor/ANM that RVC supports by mobilizing resources from different sources who also acts as a support mechanism to the CHVs.

Successful completion of the training is followed by providing a medicine- box containing wide ranges of essential medicines (generic) to address common diseases. The promotion of generic medicines to address the common diseases has been adopted to cut down people's health expenditure. These medicines are provided as one time assistance along with a rate chart at which she is asked to provide the same to the community. Hence onwards the CHVs replenish her medicine-box out of her earnings from the depot in RVC premises.



As commercial practice of generic medicines in this part of the globe does not exist hence RVC takes the responsibility to run a mini-depot at its premises to ensure that the CHVs and in turn the community have not to suffer for want of medicines.

All though in initial day's people's confidence in generic medicines was low but today after taking services for 3 years the people have adopted the same. The rate of the medicine is determined in such a way that the CHVs providing services can earn at least Rs. 60.00 to Rs. 150 if she targets 30 patients in a month.



The network of CHVs are today providing services in and around 400 flood affected remote villages on regular basis with an average of 2.5 villages per CHV. The whole process has attributed in large towards reduction of morbidity as well as mortality cases out of easily curable common water borne and vector borne diseases prevalent in these villages during the monsoon period. The returns that the CHVs are getting out of the services that they are providing to the people in distress and immediate accessibility of

the community to result oriented low cost health services has ensured sustainability to the process.

In the year 2007 an apex body of the CHVs has been formed known as **“Gramya Swasthya Sewa Samiti”(GSSS)**. In the first half-yearly meeting of the CHVs held on 28.05.2007 it has been decided unanimously that in near future the CHV federation would prefer to work as an autonomous organization with legal status of it's own and following the decision they have got themselves registered under the Trust registration Act on December 2008.

Key Technical Inputs:

The main technical inputs provided are identification of diseases, preventive techniques of common diseases, curative measures of common diseases, measurement of blood pressure etc.

Impact – Social / Environmental/ Economical/ Policy Changes.

Social impact:

- The main social impact of the initiative is it has established a life with dignity to the CHVs and in turn attributing towards boosting up the status of the women within the community.
- The other social impact is that it has brought about behavioral changes regarding water and sanitation practices within the community mainly during the emergency period.

Economical impact: The economical impact of the initiative can be viewed from two aspects:

- First, introduction of low cost generic medicines and delivering the same at village level has cut-down the expenditure on health of the people in distress.
- Second, the average population covering by the CHVs under curative services per month is 1600 to 4800 which in turn enable each CHV to earn RS. 300 .00 to Rs. 1500.00 per month.

5. COST INCURRED:

The cost involves the cost of the training including one time medicine support with boxes for storing medicines comes around Rs. 3500.00 per CHVs.



6. MONITORING MECHANISM:

The monitoring is done in weekly basis. Since inception a system has been put in place that the CHVs of a defined cluster come together to a common place on a definite day of a week where the Doctors/ANMs/ Health Guides visit and interact with them. The same also serve the purpose of orienting the CHVs. Apart from these field visits are scheduled by the volunteers of RVC to monitor the impact at field level through discussion with the community. From 2009 the CHVs federation(Gramya Swasthya Sewa Kendra) has decided to meet twice a year involving all the CHVs which will further strengthen the monitoring mechanism.

7. CHALLENGES:

1. Identifying an appropriate CHV with social responsibilities.
2. Trained the CHVs and sustained their initial zeal.
3. Generating community's acceptance towards the CHVs.
4. Eliminating the resistance put by the Pharmacies etc.

8. LESSONS LEARNT (both Positive & Negative)

Positive:

1. Effective preventive and emergency remedial health services can be ensured to the people in distress at nominal cost at door level.
2. Community based disaster risk reduction mechanism to address health hazards can be put in place.
3. The health problems of women and adolescent girls can be effectively handled.
4. Behavioral changes regarding water and sanitation can be addressed appropriately.
5. The status of women within the community can be boosted up by scaling up the mechanism.

Negative:

1. Over confident on the CHV s may aggravate the health condition of an ailing persons.
2. Erosion of social responsibilities of the CHVs may crop up once they start earning which can intensify community's problem in time of emergency, because community becomes dependent on the CHVs and they give up thinking alternative preparedness measure to address health issues in time of emergency.
3. CHVs may take up some practices (giving injection etc.) which are not permitted by medical norms to barefoot practitioners.

9. CONCLUSION

Thus a process started on 2004 today include 170 CHVs (95 from Sissiborgaon Development Block and 65 from Jonai Development Block of Dhemaji district, 10 from Dhakuakhana Block of Lakhimpur District) who plays the pivotal role of educating the flood vulnerable community on



social and preventive medicines on ranges of common issues of the region viz. water borne diseases, vector borne diseases, MCH, RCH etc. under supervision of one MBBS doctor(honorary), 2 alternative medicine doctors, 2 ANM and 2 Health guides. Apart from the preventive measures, the CHVs also provide curative services to the affected population and also take initiatives for referral services in case any complications arise.

10. Submission may include photographs, graphs, charts, and other illustrations.

Photos are included.