



BEST PRACTICES FOR ADAPTATION AND DISASTER RISK REDUCTION

**CASE STUDY-1: < DURYUG PRATIRODH SAMITI-
INSTITUTIONALIZATION OF EMERGENCY SERVICE
DELIVERY MECHANISM IN FLOOD PLAINS OF RIVER
BASIN>**



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



TITLE: < Duryug Pratirodh Samiti- Institutionalization of emergency service delivery mechanism in flood plains of Brahmaputra River basin>

Duryug Pratirodh Samiti (DPS) is a community managed resource centre (blending of trained human resources, appropriate technology and physical resources) working towards reducing risks of disaster during emergency situation locally and before or in time.

ORGANISATION: <Rural Volunteers Centre (RVC)>

1. THEME: CBDRR mechanism for reducing risks locally.

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.
- Temporary or permanent displacement, crisis of water and sanitation facilities, health hazards are associated features of flood affecting the lives of the people every year.
- The depletion of agro based traditional livelihood practices has resulted in inter-District and inter state seasonal and permanent migration in large.

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

The Duryug Pratirodh Samiti is a good practice and is potential for scaling up/replication because it is community owned and managed resource centre equipped with trained human resources, appropriate technologies and physical resources to address emergency situation locally and immediately.

Brief on the local condition prior to Project initiation:

Flood is a perennial phenomenon in this part of the globe creating untold miseries to the live of the people inhabiting in the riverine villages. On the other hand the attitude of the state organs and other stakeholders working on the flood issue is mostly reactionary i.e. largely rescue and relief basis, ignoring the vulnerability and preparedness aspects to mitigate the disastrous impact. The Assam Relief Manual, 1976 of Government of Assam is primarily a Government response manual with its primary focus on flood related disaster with limited thrusts on preparedness, risk reduction and mitigation. Moreover, the reactionary approach largely excludes the affected people in the remotest areas and in case not excluded addressed after a prolong period of utmost miseries.

The crucial situation has led RVC to think alternatives so that in time and appropriate accessibility to emergency resources (human resources/physical resources/technologies) is ensured to the community inhabiting the remote affected/vulnerable villages, where the misery of the people goes unheard and unseen. Thus the concept of Duryug Pratirodh Samiti has come into being.



Project / Intervention Formulation:

On the backdrop of the above described crucial situation RVC started thinking alternatives so that in time and appropriate accessibility to emergency resources (human resources/physical resources/technologies) is ensured to the community inhabiting the remote flood vulnerable villages, where the misery of the people goes unheard and unseen. Thus the concept of Duryug Pratirodh Samiti has come into being.

Goal and Objectives:

Goal: The flood vulnerable/affected people of Brahmaputra River basin are trained and equipped to reduce risks of disaster in their own.

Objective: A community based, community owned resource centre is in place to safeguard flood vulnerable people's right to live with dignity.

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, Lakhimpur District and Majuli Sub-Division of Jorhat District (Presently).

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

The process started in the year 2002 through floating of democratically selected people's body in village meeting, comprises of 10 to 20 persons depending upon size of the village population, with appropriate numbers of representation from every section of the community within the village, including women. The body is meant to plan and coordinate action at village level to mitigate impact of natural calamities.



The floating of the body followed by, mapping out hazards, vulnerability and risks through PRA/PLA exercises facilitated by volunteers of RVC and the maps are shared with the PRIs. Once the documents get ready equipping the



Duryug Pratirodh Samitis with resources (pre positioning of emergency materials) to address disastrous situation before hand or at least in time is undertaken considering the area specific vulnerabilities and risks. The support encompassed country-boats Mega phone, torch-lights, petromax, emergency shelter materials (plastic sheet and bamboos/G.I Pipes with ropes to be used in revolving basis by the community), water purifying tablets, extension pipe for raising hand-pumps, easy to use materials to control water borne diseases, F.A Box etc.

Some of the members of the Samiti are trained with preventive health, management of rescue operation, basic sanitation etc. Hence after it is the responsibility of the Duryug Pratirodh Samiti to carry forward the action through participatory decision making process involving the whole community. Every Duryug Samiti has its own management and functional system worked out in village meeting facilitated by the volunteers of RVC with full focus on sustainability factors through ensuring strong safety provisions to the existing resources, community contribution as well as leveraging resources from different sources in favor of the Duryug Samitis.



In the year 2005 on the basis of three years working experiences the volunteers of RVC felt that the members of the Duryug Pratirodh Samitis should be assigned with specific responsibilities for more organized functioning of the same. The understanding of the situation led the volunteers of RVC to identify the most vital concerns that need immediate

attention during flood and accordingly the following chapters- *Early warning, Rescue, Communication and Health* have been identified jointly by the volunteers of RVC and the members of Duryug Pratirodh Samiti. It is worthy to mention that the identified chapters for mitigation of disastrous impact have been done taking into consideration the strength, weakness, opportunities and threat for the same.

The identification of the chapters followed by constitution of Task forces





(Task force for early warning, task force for Rescue operation, task force for communication with various stake holders working on or responsible for addressing disaster issue, task force for safe health) involving 5 -members in every task force from the Duryug Pratirodh Samitis barring the president and secretary who are responsible for coordinating the whole action.

Special training for each task force is organized by RVC through mobilizing resources from concerned Government department as well as other agencies.

CASE STUDY:

Incorporating pre-positioning in relief works through Duryug Pratirodh Samiti:

In the year 2004 the District Dhemaji along with almost all the states of Assam has witnessed the worst flood of the present time. The onslaught , started from the early morning of 19th July encompassed more than 700 numbers of villages out of the total 1050 numbers of villages in the District affecting 350 000 plus population. The maximum numbers of breaches in a single year occurred in the embankment of Brahmaputra under Water Resource Department, Dhemaji. People of almost all the affected villages have lost their transplanted Sali Crops where as damage has been caused to the harvested AHU crops in numbers of villages. The unprecedented raising of the flood water within the villages has compelled a huge chunk of people to shift to safer places. 160 numbers of camps have been opened by the Government to provide shelter to around 50,000 affected people. Apart from people taking shelter on Government relief camp a huge numbers of people, reluctant to shift to the distant Government camps (generally in the roadside school) have shifted to embankment, dykes and highlands adjacent to their respective villages.

Panbari village, on the bank of the River Brahmaputra, of Muktiyaar Panchayat is one of the villages which have been largely affected by the devastating flood. The level of the flood water within the village and high current of the water have compelled the most vulnerable families to shift to the nearby embankment on Brahmaputra. Houses of almost 20 families have been either totally or severely damaged. In this given situation, the volunteers of RVC visited the village and made a thorough assessment of the situation to take in depth step of the situation. It has been widely felt that to ensure a secured and dignified life shelter materials would have to be provided to the people taking shelter on the embankment. In the meantime it has been felt that the 20 numbers of families which have lost their houses will require shelter materials for a longer duration because materials for roof will not be available immediately. The other concerned area that most of the volunteers of RVC have brought into discussion is that in such a devastating situation that too being the sole agency focusing on shelter materials it would not be possible to provide more resources in one village.

After going through intensive discussion it has been decided that the tarpaulins will be provided to the community forming Duryug Pratirodh Samiti. Although RVC has started working in the line of DPS from 2002, but it was part of the flood preparedness and never been incorporated with emergency relief works. After agreeing upon the decision by all the volunteers 20 numbers of tarpaulins, has been provided to the village through formation of DPS. It has



been decided in village meeting that the tarpaulins will be used by the people taking shelter on embankment in community basis. Once the camps are over the DPS will collect the tarpaulins and would provide to the people who have lost their house to use as roofs. Once the people have managed to arrange roofing materials the DPS would collect the same and would store it to address any coming disastrous situation. The meeting of the decision has been followed accordingly and has proved extremely beneficial to the community in later years. In the month of February 2005 a storm of very high intensity ripped through the bank of River Brahmaputra severely affecting several villages.



Numbers of houses have been severely damaged. 15 numbers of houses of Panbari village have been blown away by the storm. But when the people of other villages are running from door to door of Government office seeking assistance, the people of Panbari village equipped with their own resources immediately addressed the situation through the DPS.

The intervention in Panbari has initiated a new chapter of incorporating sustainable preparedness measures with relief works. The success of the Panbari case has influenced largely the emergency response mechanism of RVC. In the year 2007, during emergency intervention at Matmora, Lakhimpur District, RVC followed the same strategy.

Thus a small support in terms of relief has strengthened a process and has made significant impact both at community level as well as organization level.

Key Technical Inputs:

The key technical inputs provided to the task forces are- how to disseminate early warning message through traditional methods as well as using mega-phones, how to build temporary shelter immediately using tarpaulins and G.I. Pipes, how to lift and carry injured persons safely, how to treat minor injuries, how to bring out water from the stomach of a drowned person, how to raise hand-pumps using nipple pipes, how to install a hand-pump, how to prevent and treat minor ailments etc.

Impact – Social / Environmental/ Economical/ Policy Changes.

Social impact:

- The major social impact that the “Duryug Pratirodh Samiti” mechanism has initiated is “community based collective action” to reduce risks of disaster through own management system i.e. since inception Duryug Pratirodh has been working as a cohesive mechanism within the community for disaster risk reduction.
- The Duryug Pratirodh Samiti mechanism has largely influenced the mindset of the community regarding “external relief dependency syndrome” of the affected community and have initiated a process of self-reliant mechanism to reduce risks of disaster.
- The other impact is inception of Duryug Pratirodh Samiti has grounded the practice of vulnerability and risk mapping, action plan to reduce risks of disaster through household level and community level planning.
- Women’s participation on planning, implementing, monitoring and evaluating disaster risk reductions has increased manifold.

Environmental impact:

The major environmental impact of the “Duryug Pratirodh Samiti” is maintaining a hygienic environment during emergency as well as in post emergency situation which is largely maintained



by safe WatSan practices and taking up frequent cleanliness drive. The process has largely attributed towards control of water borne and vector borne diseases in the affected areas.

Economical impact:

The economical impact of Duryug Pratirodh Samiti can be understood from several angles:

- Using of the materials (mainly emergency shelter materials) on revolving basis has reduced the capital cost incurred on disaster response (mainly on temporary shelters) every year.
- It has minimized the lost of community by providing immediate access to emergency materials and thereby attributing to the household economy of the affected population.
- The actions of camp management and health task-forces largely attributes towards controlling health hazards and in turn household economy of the affected population.
- Sharing of vulnerability and risk maps with the PRIs enable the PRIs to appropriate their development plans, ensures sustainability to the assets and in turn optimizes the investment.

Policy change:

The major change in policy that the inception of Duryug Pratirodh Samiti has brought about is development agencies (both Governmental and non-governmental) have adopted the process of mainstreaming DRR in development plans.

5. COST INCURRED:

So far development of human resources (orientation of DPS members, training of the task force members) is concerned it is "0" budgeted. Equipping the DPS/task forces with physical resources depends upon volume of the support. A standard package (early warning/rescue/emergency shelter/WatSan and health) for an ideal size of village (50-60 families with 300-350 population) comes around Rs. 30000.00

6. MONITORING MECHANISM:

- The volunteers of RVC attend the monthly meetings of the DPS on regular basis.
- The members of DPS are engaged in various trainings/workshops conducted by RVC mainly on policy advocacy.
- Regular orientation of the task-forces is carried on both in fields as well as centrally in RVC premises which helps in monitoring the whole efforts.
- The DPS members as well as RVC maintains a stock registrar and same are updated when new materials received by the DPS as well as when materials are written-off out to depreciation.
- On the month of February 2009 an apex body of the 30 DPS(DPS of Sissiborgaon Block has been formed) and same is going to get itself registered under Society Registration Act



to work as an independent body. The approach will institutionalized the process and a self-monitoring mechanism will come into place.

7. CHALLENGES:

1. Mobilizing community initially and bringing out them from “relief mentality” to “do ourselves” mentality.
2. Selection of beneficiaries by the DPS in time of emergency.
3. Recollection of materials disbursed by the DPS.
4. To ensure effective participation of women in the task forces.
5. To ensure that the disbursed materials are used only for disaster response.
6. Capacity building of the DPS to influence policy and mobilize resources for sustainability of the approach.
7. Influencing policy to adopt the mechanisms by the PRIs and other concerned Government stake-holders.

8. LESSONS LEARNT (both Positive & Negative)

Positive:

1. Disaster affected population have access to emergency materials in no time and have a prior plan for using the same.
2. Community’s ownership over the emergency resources increases life span of the resources manifold.
3. Women’s participation in Disaster Risk Reduction planning, actions, monitoring and evaluation crops up.
4. Disaster related women’s issues, children’s issues and issues of other most vulnerable groups (disable persons, core-poor, older persons etc.) are better discussed and accordingly interventions are designed.
5. Shift from “relief mentality” to do “ourselves” mentality is realized.
6. Advocacy works are undertaken in more organized way.

Negative:

None significant.

9. CONCLUSION

In the process presently 160 numbers of Duryug Samitis have been actively working in 160 floods vulnerable/flood affected villages, enabling the community to mitigate/eliminate the miseries of flood in their own initiative before hand or in time reflected in the year 2002, 2003, and 2004 and largely during the year 2007 and 2008. The effort has ensured immediate shelter provision for the displaced people, safe drinking water provision and control of water borne diseases in the time of emergency. The conventional practice of total dependency on external support in the time of crisis



has been eliminated to some extent by the Duryug Pratirodh Samitis resulting in lessening of miseries of the affected people.