

## **Challenges to Recovery in Urban Disasters**

Building communities through construction to promote resilience

Aloysius John

### **Introduction**

Urbanization is a complex phenomena which is both social and physical. The present needs and the planning for the future pushed by the globalization trends has contributed to the acceleration of the urbanization process, in particular the Asian Countries. Asia will be the epicenter of urban growth in the coming two decades (especially China, India, Pakistan, Vietnam Indonesia and the Philippines).

The cities are dynamic motors of economic growth and offer job opportunities which attract rural population to the urban areas. At the same time the urban areas, to cope un with the demands of the economic growth, are also fast developing without any attention to urban development process. The conjunction of these two factors raise a certain number of crucial challenges in terms of poverty, pollution, diseases and often unsafe living conditions for the displaced urban settlers.

Disasters have a disproportionate effect on urban places. Un planned, congested conglomeration of localities, dense by definition, cities and their environs suffer great damage to their complex, interdependent social, environmental, and economic systems. Social and medical services collapse, problems in terms educational access and quality become acute. Local economies cease to function. Cultural resources disappear.

In the coming years, urban disasters, both natural and man-made will be a major concern and will affect a massive number of people (as in the case of Haiti earthquake, tsunami in 2004, Pakistan earthquake, Syrian war etc. There is a need to promote a more people-centered approach to disaster risk management to build resilient communities.

This paper proposes to analyze the specificities of urban disasters and how they affect the victims ; urban vulnerability and resilience . From the different experiences like tsunami, Haiti and now Syria, we will discuss the disaster situations and the challenges to urban early

recovery, the resilience of the victims, the vulnerability capacity of those affected. The third part will lead through a reflection on taking up construction programs in urban environments in response to disaster situations. This paper argues that the urban post-disaster construction must be preceded by building the communities before building houses. The community organization process is capital for the success of the projects. The case study of the Bhavana disaster response in Delhi, India, will serve as an example to confirm this argument.

### **Urban disasters**

Urban systems have limited capacities to cope with unexpected shocks when disasters occur. The fragmented nature of the population, massive destruction of congested conglomeration, dire poverty conditions contribute to aggravate the risks created by disaster situations. Moreover the poor are often the worst affected and the most exposed to shocks. Because, not having political and financial influence, they receive the low priority in terms of access to basic conditions. Most of the time they live close to the hazardous zones and get affected very quickly.

Urban disasters when they occur have serious effects on the population and the environment. The unruly urbanization that some of the major cities are facing, contribute to multiple disaster risk at the community level. Cities like Mumbai, Calcutta, Cairo have extensively developed in the past two decades with a tremendous population growth. The risks levels in the urban sectors, are high due to the high potential dangers caused by highly vulnerable situations in the urban area mingled with poverty and precarious living conditions.

The impact of the rapid growth of the cities has lead to a dynamic pressure on the environment. There is an excessive use of energy (more needs in terms of transport, electricity, etc) leading to pollution and climate changes, an increased solid waste management for which the cities are not prepared, soil degradation and in the coastal areas, marine pollution.

When the disasters occur in the urban areas, they have very serious effects on the population and the environment. This is mainly due to the insufficient adaptation of the infrastructure to the phenomenon of rapid growth and concentration on economic activities with very little focus on infrastructure growth.

In the urban settings, the density of the population itself is a major challenge, and this is accentuated by high vulnerable conditions. In many cases the setting up of industrial zones,

attract rural workforce which tends to develop informal settings (shanties, slums, etc). They are exposed to different types of disasters like floods, cyclones and typhoons, which are aggravated by the recent climate change which causes extreme environment and new risk to the urban areas. This gives an understanding of how complex a process it is to restore the urban communities after experiencing a catastrophe

Human lives are subject to dual effect : on one hand the most vulnerable and poorest are pushed further, leading to more marginalization. Those coming into the urban area in search of job are living in highly precarious habitats, having left everything behind and often ill prepared for migration and sometimes inability to confront the urban cultural demands.

When hazards happen, poverty and environment vulnerability lead to crisis situation. These crisis situation created by disasters impoverish the Most Vulnerable Groups (MVG). It goes without saying that the overcrowding of the urban space often lead to environment degradation especially at the time of disasters.

### **Impact of the urban disasters**

When disasters affect the urban cities they affect largely the MVG and the poorest. Some of the common risks are :

1. Household fire in the slums, where houses are built of poor raw inflammable materiel like wood, plastics and strings.
2. Unsafe living conditions due to dangerous buildings and infrastructure (poor housing, slums, etc.)
3. Lack of access to clean water and hygiene leading to health degradation.
4. Lack of sanitary facilities leading to health problems in the cities with the risk of diseases outbreak.
5. Major disaster provoke massive internal displacement of the population (haïti, tsunami, Gujarat earthquake and the Kashmir earthquake in Pakistan.
6. In the event of war, the destruction are massive leading to loss of human lives, difficulty to give primary health care to the victims and above all difficulty to take th people to safe conditions.

7. Highly unexpected event in urban areas is the community is in the State of Shock, especially children and women .
8. Chaotic conditions and lack of an immediate relief further worsens the conditions
9. Drinking water contaminated with the sewer and drainage water getting mingled into it, leaving behind the local communities without any water
10. Women's condition are awful as they have to stand out all alone to face the hardship on loss of husband, house or the only earning member

### **Challenges to Early Recovery in the Urban Space**

Urban disasters are complex and the disaster management is a rather challenging exercise. There are multiple obstacles to be confronted when dealing with urban disasters :

1. The housing or shelter is the first major obstacle. The most vulnerable have been living in unsafe conditions, unsafe housing and at the time of disaster, their houses are the first to be affected. People become shelter less and it is a real challenge to get them to safe places.
2. Due to unsafe living conditions, the victims are subject to serious health and sanitary problems. Moreover they are unaware of their health hazards and are not in position to understand the seriousness of the problems. This may sometimes lead to epidemical and other health problems.
3. Solid waste management is another important problem that affects the urban cities, when the people out of ignorance are lack of alternative solutions, tend to contribute to the aggravation of the unhygienic conditions. Public toilets or bath rooms are often inaccessible to the MVG who tends to do everything in the open air in total unhygienic conditions creating environmental problems.
4. Lack of access to infrastructure is another issue. The victims are often either not inclined or do not have the possibility to have access to health infrastructures for primary health care or other health problems. This leads to outbreaks of diseases in the camps or in the settlements., leading to compound disaster situations as in the case of Haïti.

5. The Critical Recovery Time Objective is sometimes a major issue, leading to the prolongation of the emergency period, difficult to enter into the early recovery phase. This is due to the fact that the people are scattered, not organized and lack of culture of solidarity. In this situation there is a need for high coordination among NGO and also relevant coordination between the NGO and the government mechanisms [identifying safe places, infrastructures etc.].
6. Most of the poor people in urban areas are involved in the informal sector, such as vendors, coolies, carrying weights or domestic workers. At the time of disasters there is a high risk of loss of resources, especially when there is massive displacement or difficulty for them to get their stocks.

### **Engineering the disaster Response**

The major focus of any activity in the disaster response should contribute to the resilience of the population. This implies a recovery plan that is comprehensive, immediate, short and long term. In the urban context the challenges are very important because restoring life to normal in post disaster situations, ensuring urban resilience through implementation of quick restoration is not so easy. Secondly the urban context are facing long history of poverty, inappropriate land use, environmental problems, which lead to cumulative chain crisis or compound disasters which are sometimes very difficult to tackle as it was in the case of Haiti.

The different urban disasters in the past do give indications about the different challenges that exists :

1. Gathering the people into a specific resettlement area for undertaking disaster response activities (tsunami in Asia 2004, Kashmir earthquake, etc)
2. Difficult to rely on community involvement, because they do not exist as such {although there are groups but they are artificial.} and the psychological trauma is quite important
3. All intervention need a high level of coordination among the NGO and between the NGO and the government.
4. In the urban disaster the critical recovery time objective must be shortened, in order to ensure the rapid short term recovery takes place. This needs coordination, logistics and means to bring help to the victims quickly and efficiently.

5. It has been confirmed by the recent major disaster experiences {tsunami, Kashmir earthquake, Haiti etc.} that there is a need to shift from individual or family oriented disaster intervention to collective or community oriented interventions? In the urban context this is highly complicated and must be carried out with tact.
6. There is a major challenge to get the community involvement, because it does not exist in normal times. This has to be quickly undertaken in order to give the victims a collective existence and facilitate collective resilience. This requires a strategic approach to disaster response.
7. As in the case of the Tsunami disaster response, there is a need to promote a multi pronged approach to resettlement, which means the victims must be given shelter, livelihood means, psychosocial accompaniment in order to become resilient. This can be hampered due to the fragmented nature of the urban population and secondly due to their individualistic attitude.
8. The economic recovery through livelihood activities is not so easy in the urban context. There is a need to analyze the job aptitude which is difficult due to the informal economic activities. Before these challenges, it is necessary to do relevant need and capability analysis in order to identify the right activities to be introduced and facilitate the economic recovery of the victims and lead them to the development process.

Before these challenges, the urban disaster response needs to be undertaken in more systematic manner, keeping in mind the past post experiences and also the failures :

1. **Promote a collective or neighborhood approach than an individual approach.**

Most of the time in urban disasters, the response is given on the basis of individuals in need and not as the group of beneficiaries because they do not exist. Since almost a decade the need for a collective neighborhood approach has been tried in the urban disaster response (as in the case of Gujarat Earthquake, tsunami ). This new way of dealing with the urban disaster brings the humanitarian actors to organize the victims or the beneficiaries into groups so that they are prepared to undertake collective action. Building the communities for collective empowerment is a means to enhance community resilience.

## **2. Improve the outreach to the poor and vulnerable.**

The poor and vulnerable population are the most at-risk category in the urban context. They need to be organized and facilitated to have access to infrastructure such as health care units, job opportunities, psychosocial counseling etc. It is also important to keep in mind that a big majority of these category are often involved in informal economical activities which are the first affected sector, leading the victims to economical inactivity due to covariate shocks created by the Hazards. The affected population often cannot continue the normal informal work because they are either displaced, injured or put far away from their working areas.

## **3. Quick access to shelter after the disaster event**

In the urban disaster one of the important challenges is shelter for the affected population. Due to poverty, most of them live in precarious conditions. At the time of disaster the population gets scattered and sometimes move into remote, safer areas, because there are no common space to receive them.

It is necessary to identify immediate safe areas where they can be gathered and once in safer places the disaster response must integrate the search of new safer areas which does not take them away from their traditional work place. The immediate response must also be used as an opportunity to build them into groups.

## **4. Provide adequate social safety nets to the urban risk categories.**

As seen earlier, the victims are often deprived of access to basic needs : poor housing, poor sanitation, health needs not catered to etc. They have limited safety nets such as property, skills, savings or social network. These basic needs must be catered to in order to make them resilient and capable of getting back to normalcy when affected by disaster.

## **5. Establish clear criteria for selecting the beneficiaries.**

In the urban disaster the lower middle classes must also be a priority focus group for intervention. Living, in poor and fragile housing, and, in economically precarious conditions, they are sometimes the worst affected in urban disasters. The tsunami experience brings to evidence that the lower middle class must also be one of the priority target population for disaster response.

Community empowerment must be a priority because this will enhance community resilience leading to a better capacity to get back to normal life.

#### **6. Vulnerability Capacity Analysis needs to be undertaken**

Need to undertake systematic VCA and risk assessment to know the exact situation, the context of the disaster prone area, the potential risk etc. This must be done in conjunction with the community organization process, where the people are also empowered.

#### **7. Integrate the DRR component into the Disaster Response**

Integrate systematic DRR component in order to, prepare the people in the risk zone to confront any eventual disaster that may strike and mitigate the impact of such disasters. This means systematic hazard identification and exposure analysis which could lead to integrating them in the disaster response ( construction of anti seismic houses, cyclone proof houses, cyclone shelters etc.)

#### **8. Gender Approach to the disaster response**

In the Urban disaster Recovery in particular, women must be given utmost importance because they are the most vulnerable and at the same time resilient. The gender approach has proven to be an important factor in the success of the post disaster recovery programs. Giving special attention to women, helps in dealing with the health problems, peri-natal care etc. Organizing women into groups is also a means to ensure the economical recovery of the affected population.

Women's participation is of capital importance especially when there is a need to introduce economic recovery into the disaster response as a long term strategy that will accompany the house construction. Creation of SHG or women's groups or village development associations are all means to ensure that the potentials of the women are relevantly tapped and taken into due consideration.



## **The Bhavana urban Disaster Recovery**

### **Case Study and lessons learned**

On the outskirts of Delhi, the bank of Yamuna has been the long time abode of many illegal settlers. Working as “coolies” (daily wagers) or engaged in other menial jobs, these settlers have access to the informal job market as daily wagers; They work long hours to earn enough for a day’s physical survival of their families. Some are involved in urban agriculture on the fertile river bed of the Yamuna river, when it dries up. However they live in unsafe and unhealthy conditions with absolutely no sanitation facilities nor good hygienic conditions.

These “illegal dwellers” settled in such unhygienic conditions are highly vulnerable to different kinds of hazards both natural and manmade. During the rainy season the Yamuna gets flooded and they lose everything, because their houses and belongings are washed away. Some times their cultivation, the sole means of livelihood is washed away. In the same way manmade disasters are also highly affecting them. Household fire sets ablaze their homes made of thatched houses and they lose everything. They are also an easy prey to different kinds of sickness when affected by such disasters.

The Delhi government, in a move to make Delhi tourist-attractive has been trying to intimidate them to leave the settlement without giving them any alternatives. Since their livelihood depended on these settlements, the population was shifting but had not decide to move out. On a hot summer day in 2002 there was an outbreak of fire which destroyed all the houses and deaths were reported.

A local government authority doing welfare activities with her own NGO decided to take up their cause and help them. She worked with the Delhi authorities and ultimately the population was given a barren land at Bhavana on the outskirts of Delhi and the affected population moved into this land to put up their tents. In the beginning they started to put up tents with plastic sheets clothes and started to occupy the land. About more than a hundred families were gathered.

The NGO of the government authority contacted Chetanalaya, a faith based organization to help these victims to be rehabilitated. Chetanalaya has been involved in emergency response and also in community organization in the surroundings of Delhi and is a well known NGO. Along with the above NGO, Chetanalaya took up

the cause of the people and got involved with them in order to provide them with a long term solution. Different measure were undertaken to organize the affected people into small communities, the Delhi Municipality authorities were contacted to get the land entitlements and Chetanalaya agreed to construct them a permanent house for each family.

*Before any urban construction, the beneficiaries must be organized in order to socialize them and also to get the land entitlements for the group*

One of the major aim was to build the affected families into self help groups in order to mobilize them towards a collective approach. For this it was indispensable to socialize them and this was achieved through the animation programs which consisted of using community organization methodology to form them into SHG. These groups composed of 10 -15 families, were motivated to act together and take up action as a community. Such community activities were necessary for ensuring community resilience. The SHG formed on the basis of social affinities were also a means to bring them together in order to create interdependency among the members and create a relevant neighborhood

*Animation programs and community Organization techniques contribute to form the beneficiaries into SHG, VDA necessary for the empowerment and community resilience*

Once these groups were formed and began to exist, Chetanalaya analyzed their capacity to undertake economic activities through IGP. Their capabilities were analyzed, their capacity to undertake other kind of income generating activities were also analyzed and ultimately they were motivated to undertake savings and Chetanalaya through the animation program also invested a matching amount so that they could go for a income generating programs through the money lent out by the SHG.

*Once the SHG are formed, undertake IGP to give them economic capabilities and facilitate the economic recovery.*

Thus the economic recovery process was introduced and this not only gave the possibility for the beneficiaries to act together but also to earn a living and do savings. While undertaking these activities, Chetanalaya also introduced a health care project which consisted of taking charge of the people from the health point of view and this

*Undertake other community based activities (health and hygiene) to give them a spirit of community and togetherness.*

again built them into a socialized community. The SHG were empowered through training to undertake long term activities and also become self reliant. The beneficiaries given the sound progress that they made, were ready to contribute to building their homes and were now ready to get a house and lead a better life.

While continuing the community empowerment process and to respond adequately to the request of the people, Chetanalaya also explored possibilities for entering into Strategic alliances with partners who can fund the construction of the houses. Two major funding partners were identified : UN-Habitat and Caritas. A project for building 150 houses was first worked out and was presented to these partners.

*Explore strategic alliances to construct the houses for the beneficiaries. The construction should respect the safety and security standards.*

In 2003, Chetanalaya Worked with community leaders and the families to plan the construction which would respect the anti seismic norms, will have the minimum basic facilities and will be built with the contribution of the people. Given the motivation of the people and at their request, the Delhi municipality gave the possibility of building a community hall which would give the possibility for the people to gather and work together once the housing was finished.

*Motivate the communities to ask for their rights .Common space is indispensable for creating healthy neighborhood*

In 2004 Chetanalaya in cooperation with the people undertook the building of about 150 houses and the beneficiaries were selected according to criteria fixed by the SHG leaders. Their readiness to be part of the SHG and undertake regular activities, engage in IGP and reimburse their debts to the group and also their readiness to be part of a community and engage themselves in the community based activities were some of the criteria. These initial spadework were necessary to ensure the success of the project and its sustainability.

*Construction of houses in urban post disaster context must be preceded by sound community preparation*

During the implementation of the program the women folk in the community was given training and skill in IGP in order to continue to earn a living while the husbands found their jobs in the surroundings. Children's health was also taken care of through the local dispensaries and their schooling was also ensured.

*Gender based approach is indispensable for a holistic sustainable development*

The program brought to evidence that the women are an important development vector if well prepared from the beginning of the project itself.

Chetanalaya also initiated the disaster risk reduction dimension in the program through different ways. Being in a seismic belt, care was taken to build houses with the anti seismic norms ; the people were given awareness on health hazards during the time of the rainy season and the right

*Introduce Disaster Risk Reduction and Risk prevention awareness building to the beneficiaries.  
Use international security standards to avoid futures disasters.*

attitude to be taken when there are health problems. The women were given training on the utilization of combustibles for cooking and the precautions to be taken in order to avoid and prevent household fire prevalent and common in hot summer days.

Women and children through the animation programs were given input on the different risks that could affect them and were trained to be cautious.

### **Conclusion**

The above case study brings to clear evidence that the urban post disaster construction is complex and needs a systematic planning. The beneficiaries must be trained and socialized into organized communities in order to act collectively and receive the project as right holders. Their cooperation and participation is indispensable for the success of the project and its sustainability. Animation and community organization methodology is important to achieve these results.

It is important to take into consideration the gender dimension which is essential for the long term sustainability of the program and also for the promotion of the condition of women who are the most vulnerable.

The Disaster Risk Reduction component is also necessary to ensure that the beneficiaries are empowered to confront future disasters when they happen.

Aloysius John

Part-Time Lecturer – Paris XII university, Créteil