

# FAMILY DISASTER RISK MANAGEMENT PLAN

Mehboobali Ajani

Research Scholar & Programme Officer, JJT University, Rajasthan  
Email: profmsajani@rediffmail.com

## ABSTRACT

*Disasters can strike at any time without warning. The vulnerability of the family is high because of risks posed by a multiplicity of natural and man-made disasters like earthquakes, fire, floods, etc, where loss of life and assets is at unacceptable levels. Family is the first responder in the crisis. Too often, families make mistake of waiting until a crisis occurs to react. 'It will not happen to me' is a myth that prevents most families from planning their responses to disasters.*

*The idea of Family Disaster Risk Management Plan (FDRMP) is conceived as a result of recognizing that citizens themselves are first responders needing education about the steps to be taken in times of emergency. FDRMP is unique for each family and for the use of their own safety before as well as at the time of the crisis. It can help to alleviate fears about potential disasters, reduce the level of stress and save precious time during an emergency, thus enabling the family to become more disaster resilient.*

*The main objective of FDMP is to prevent injuries and loss of assets of the family It is aim to enhance the state of preparedness, reduce physical risks, anticipate the disaster and think of response strategies to help survive evacuation or confinement to home. It guides the family on how to assess and plan to reduce their risks, take physical protection measures, and increase their response capacity with skills and material provisions.*

**Keywords:** Family, Educate, Disasters, Preparedness, Response

## INTRODUCTION

This paper investigates the 'Family Disaster Risk Management Plan' an innovative Disaster Risk Reduction (DRR) Initiative in building resilience in family.

Family Disaster Risk Management Plan (FDRMP) is a novel, simple and personalized plan for the family, to enhance its preparedness and capacity to anticipate and respond to emergencies. DRR is an upcoming field. The shift from risk reduction to resilience is the most recent one. This work reflects my experience in the implementation of DRR activities in communities and schools. I have gained skills in DRR by undergoing a number of 'Training of Trainers'.

The driving forces for me to write thesis on FDRMP to build resilience in the family are:

- Disasters occur frequently
- The Family is the first responder in a crisis
- People believe the myth that ‘It will not happen to me’
- Basic services are cut off
- Normal life is disrupted
- It is not so much “the plan” as the “planning process” that is the key cultural change needed.

Disasters can strike at any time without warning. The vulnerability of the family is high because of risks posed by a multiplicity of natural and man-made disasters like earthquakes, fire, floods, etc, where loss of life and assets is at unacceptable levels. Family is the first responder in the crisis. Too often, families make mistake of waiting until a crisis occurs to react. ‘It will not happen to me’ is a myth that prevents most families from planning their responses to disasters.

The idea of the FDRMP is conceived as a result of recognizing that citizens themselves are first responders needing education about the steps to be taken in times of emergency. FDRMP is unique for each family and for the use of their own safety before as well as at the time of the crisis. It is a **personalized action plan with allocated responsibilities for each member of the household**. A functional FDRMP can help to alleviate fears about potential disasters, reduce the level of stress and save precious time during an emergency, thus enabling the family to become more disaster resilient.

India has a high level of vulnerability to natural disasters due to its unique geo-physical and climatic conditions. Floods, droughts, cyclones, earthquakes and landslides are recurring phenomena. Hazard profile of India reveals that:

- 54% of landmass is prone to earthquakes
- 40 million hectares land is prone to floods
- 8% of area is prone to cyclone
- 68% of the area is susceptible to drought
- 30 million people affected by disaster every year.

The growing incidence of disasters correlates strongly with the increasing vulnerability of households and communities in developing countries. Recent experience confirms that investment in mitigation and a strong commitment to the implementation of a participatory mitigation strategy can lower the risks and vulnerabilities of poor households.

Preparing a disaster management plan reduces the potential anxiety and fear during a disaster as well as any physical losses that may occur. A relatively small investment in disaster preparedness saves thousands of lives as well as vital economic assets. It also reduces the cost and period of the overall relief assistance. There is growing evidence to show that most top down disaster management and response programs fail to address the specific needs of

vulnerable families and ignore the potential to use the prepared families in particular and the society at large.

To address the need for a first responder to be educated in the steps to take in the aftermath of an emergency, the FDRMP was conceived. A FDRMP is a personalized action plan that prepares each member of the family to take key decisions that directly improve their safety and security in a disaster scenario. By preparing a plan a family can bring down the level of risk as well as minimize losses as much as possible.

It is assumed that a prepared family is a safer family. With this plan the family can reduce risks and minimize losses. The initiative addresses key issues related to risks faced by a family during crisis. The **FDRMP can help to prevent injuries and loss of assets in the target families through disaster risk reduction initiatives.**

This important aspect I believe has great potential of being explored and the outcome would be having interest and helps many.

In my view the best way to try out the importance of the proposed research work, as planned, to understand the expected results and possible policy implications as an outcome of the research work.

It is expected that the below mentioned supports will be available

- Support of the family, community / society leaders and volunteers in training, initiation, propagation and monitoring and follow up of the intervention.
- Documents on 'do's and don'ts of disasters', first aid and details of local hazards and emergency contact detail.
- Traditionally monetary reason was considered as the key aspect that retains / motivates human resources. It is expected that this notion will stand negated.
- The aspects of ethics and integrity within the community / society volunteers in rendering support to family to complete their plans.

The above expected results would be of great value today as most of the community / family would be able to better invest their time to get the best to secure their lives and livelihoods.

Development research tells us that the success and the sustainability of interventions at the community / family level depend, among a number of factors, on the availability of relevant local culture, knowledge and indigenous practices that can combine with new ideas to generate innovation. The participation and integration of these communities / families in all disaster-related processes as a necessary means for pursuing the importance of their DRR knowledge in assisting to mainstream disaster risk reduction practices.

Good practices and lessons learned from experiences in the DRR aims to build resilience in the community /family as an effective tool for reducing risk from natural disasters. By improving the understanding of DRR knowledge and providing concrete plan of how it can be successfully used, I hope this study will inspire all practitioners and policy makers to consider the knowledge held by local communities / families and act to integrate this practices into future disaster-related work.

## **STATEMENT OF PROBLEM**

“A study to develop and assess the effectiveness of Family Disaster Risk Management Plan in terms of knowledge and preparedness amongst families of the selected clusters in Mumbai city during 2010 – 12”

## **OBJECTIVES**

The main objective of the research is to develop the ‘Family Disaster Risk Management Plan’ which makes the family safe during crisis situation.

The specific objectives are as under

- To evaluate and compare what family knows about the disasters that are most likely to happen in their living zone and their impact.
- To know the state of preparedness of family to respond in crisis.
- To guide family how to protect assets, documents and records and to keep an emergency kit ready
- To inculcate ethos in family to anticipate the disaster and think of the response plan.

## **HYPOTHESIS**

**H0.** There is no significant difference between the responses of the prepared families and the unprepared families in crisis.

**H1.** There is a significant difference between the responses of the prepared families and the unprepared families in crisis.

## **LITERATURE REVIEW**

I, being the member of the Inter Agency Group – IAG of the National Disaster Management Authority, Government of India, and a number of national and international NGOs of the great reputation, I have accessed to the latest journals, research articles and books in DRR. Though there are very few references are available in the area of my research work, but my exposure to DRR initiative in the targeted community and participation and presentation of the papers at the national and international levels are of great asset in the endeavors.

I have completed literature review in detail. The research documents, articles and papers listed under Bibliography were reviewed. Some interesting findings are summarized below:

According to the recent UNDP Report, Reducing Disaster Risk: a Challenge for Development, more than 180 deaths per day is recorded in different parts of the world as a consequence of natural disasters.

Natural disasters are unpredictable, destructive and often deadly. In countries exposed to natural hazards, disasters put a high toll on human development. The growing incidence of disasters correlates strongly with the increasing vulnerability of households and communities in developing countries. Recent experience confirms that investment in mitigation and a strong commitment to the implementation of a participatory mitigation strategy can lower the risks and vulnerabilities of poor households.

USAID (2008) states that the single most important cause of natural disaster casualties and economic losses is the vulnerability of people living in risk-prone areas. Population growth, increased settlement in marginal lands, environmental degradation, and unstable socioeconomic conditions make populations extremely vulnerable to the impacts of natural disasters. Technological advances and large modern infrastructures increase the economic impact of disasters while exposing populations to additional hazards. Risk identification, reduction, and management are vital for increasing the resilience of vulnerable populations to potential disasters, and ultimately for supporting sustainable development.

World Bank Institute (2007) reports that the growing incidence of disasters correlates strongly with the increasing vulnerability of households and communities in developing countries. Recent experience confirms that investment in mitigation and a strong commitment to the implementation of a participatory mitigation strategy can lower the risks and vulnerabilities of poor households. The vulnerability stems both from risk and the incapacity of households and communities to respond to, and recover from, shocks.

Catastrophic events triggered by natural hazards, related technological and environmental disasters are increasingly threatening both sustainable development and poverty reduction initiatives. The loss of human lives and the rise in the cost of reconstruction efforts have forced national governments and international organizations to place disaster management and risk reduction at the forefront of their policy agenda. International agencies, existing and newly created, are coordinating the efforts of governments, donors, private sector and civil society to build a culture of prevention and preparedness.

It is imperative that actions aimed at reducing risk address both the social factors of vulnerability and for the change in paradigm shift that could increase resilience. A social consciousness regarding hazards, risks and disasters should exist, specifically in a more inclusive context of residential community and natural resource sharing. A shared perception of risk and vulnerability brings people together, leading to develop and implement preparedness and mitigation programs and promote self-reliance, mutual aid, and community obligations through these programs. Local people have knowledge, skills and capacities which they can use for making necessary changes and adjustments in their living conditions and environment. These community capabilities too need to be harnessed to improve preparedness of individual families.

Above review of literature indicates that preparing a disaster management plan reduces the potential anxiety and fear during a disaster as well as any physical losses that may occur. A relatively small investment in disaster preparedness saves thousands of lives as well as vital economic assets. It also reduces the cost and period of the overall relief assistance.

## **RESEARCH DESIGN AND METHODOLOGY**

This research design used was exploratory and comparative and will cover in-depth study of the Family Disaster Risk Management Plan.

### **Sources of Data**

#### **Primary Source**

Personally approaching the families in the selected areas and obtaining relevant details by questionnaires.

### **Secondary Source**

The secondary data has been collected from various books, journals, periodicals, magazines, proceedings, annual reports, case studies, etc published by the National / International Government and Non-government Organizations; MHA, NIDM, NDMA, SAARK, ISDR, ADPC, UNDP, UNICEF, USAID, UNOCHA, FEMA, IAEM, CalIMA, RiskRED, ALNAP, OXFARM etc, along with my experience and exposure to the disaster risk reduction domain will address the various aspects of the Family Disaster Risk Management Plan as detailed under Research Area.

### **Sampling**

#### **Research Area**

Mumbai

#### **Sample size**

100 families of the community / Society in Byculla, in South Mumbai and Dahisar, in North Mumbai shall be interviewed to solicit their response on the disaster preparedness and responses.

#### **Sampling Technique**

Cluster and convenience sampling technique shall be used in the survey.

#### **Tools of Analysis**

Data shall be presented with the help of tables, bar graph, pie charts, line graphs etc. The analysis shall be carried out using SPSS; it shall carry out descriptive as well as inferential statistics.

#### **Data Collection Instrument Development**

The mode of collection of data will be based on Survey Method and Field Activity. Primary data collection will be based upon personal interview. I have prepared the questionnaire accordingly to the necessity of the data to be collected.

#### **Challenges that can be faced**

- Whether the family will receive and heed early warning messages for floods and cyclones and be prepared to follow them.
- Ensuring provisions within the FDRMP to practice the plan i.e. practicing evacuation drills (for earthquake or fire) with family members.
- While explaining the hazard hunt in the home and reviewing the evacuation strategy it should be considered whether the surroundings might increase the risk for the family.
- There is premium on times of the volunteers; as such to complete FDRMP within the deadline is a challenge.
- The FDRMP document to be accepted by the family as one that needs to be updated regularly.

- Matching the evacuation plan to that of the neighboring community to avoid cross flow.
- Will the family respond as per FDRMP in a real crisis scenario?

### **Expected Outcome**

Enhanced state of preparedness and capacity for individual families to anticipate and respond to emergencies. A Prepared Family = A Safe Family

### **FUTURE STUDY**

All goes well, as per the hypothesis as envisaged, the research work will help to develop a tool that can be used by any family to enhance their capacity to respond in the crisis effectively and helps protect themselves from injuries and minimize the loss of assets.

If the result is inferior, it will definitely provide the remedies and correction and scope for the further research, which should give correct direction for its further application and use in the country, in particular and the globe in general.

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