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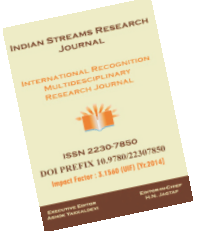

DISASTER MANAGEMENT: RECENT JAPANESE EXPERIENCE

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ABSTRACT

Natural catastrophe could be a bitter truth from that nobody will escape. such a big amount of deaths, diseases, economic and social loss square measure few results of natural catastrophe. Disaster risk is on the increase all the approach through the globe. The economic losses and also the variety of individuals UN agency are tormented by natural calamities have accumulated considerably over the past decades than the growth, that slows down the economic process of the affected country. The physical, social, significantly the emotional facet and economic losses caused by these disasters square measure significantly dearer for developing countries. to reduce the damages caused by disasters, numerous efforts are taken by government, society, NGO's and international communities. Despite highest disaster readiness by Japanese Government, on March eleven, 2013, northeastern a part of Japan has been severely ruined by magnitude nine earthquake followed by moving ridge (called Tohoku Earthquake) that killed twenty five,000 people, 50,000 individuals missing and created 250000 individuals homeless and preliminary loss of lives and properties price of $310 billion bucks. The severity of the disaster was on the far side imagination that caused such huge injury of valuable lives and properties. at the same time as horrific disaster that affected Japan continues to linger in our minds, one cannot however surprise what would happen if an analogous disaster were to strike India? For this reason, community ought to be a lot of aware regarding disaster interference culture and mitigation. they ought to be concerned in post disaster recovery and reconstruction method for facing the long run disasters and mitigate it. Japan Government's initiative and commitment to mobilize native and international community to reduce the injury and loss from Disaster is very commendable.

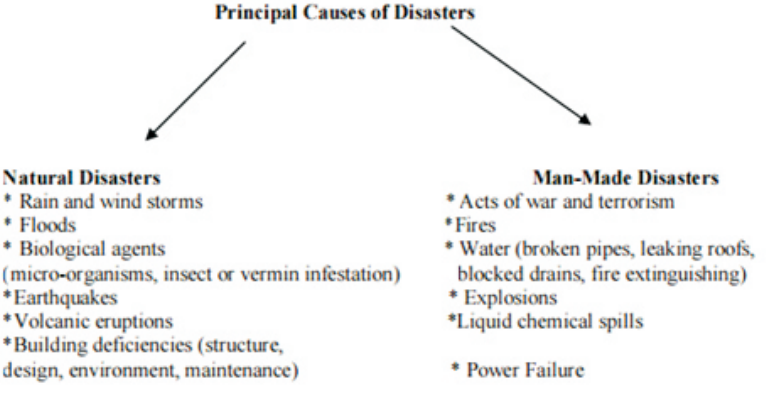
Japanese expertise of disaster management and mitigation and community involvement within the nice Hanshin-Awaji Earthquake had been well-tried most undefeated. Now days, Asian nation is additionally facing such consequences terribly often. Japanese lessons are often useful to Asian nation to beat with this difficult and vulnerable state of affairs. In this paper we tend to examine the main disaster development in Japan and Asian nation, a comparative study of disaster management system of Japan and Asian nation, techniques of community mobilization in Japan for undefeated implementation of disaster readiness designing and recovery from post disaster things. we might wish to replicate some experience; we tend to gained from Japan to our country and advocate some suggestions on effective community mobilization in Asian nation.

KEYWORDS :disaster, prevention, readiness, response, recovery, mitigation, risk reduction, disaster risk reduction, property development, risk Identification, disaster rehabilitation and reconstruction, calamity.

INTRODUCTION

A disaster could be a serious disruption of the functioning of society, inflicting widespread human, material or environmental losses that exceed the flexibility of affected society to cope on its own resources.' Source: UNDHA 2001 Natural disasters are some things from that there's no escape. it's forever been there since the start of human civilizations, however their collision on groups of people is increasing ever since it's started up. The emergency management program chooses to specialise in preparation initiatives instead of mitigation directly (Newton, 1997, p. 226). Natural disasters, despite of the actual fact that they're similar in nature and intensity, have an effect on the developed and developing countries otherwise in terms of the injury of property and loss of lives caused.

PRINCIPAL CAUSES OF DISASTERS



Organizing body machinery, addressing disasters, could be a very important responsibility of governance (Christoplos, Mitchell and Liljelund (2001); Waugh (2000)). robust and effective emergency management has been a felt would like altogether corners of the planet (Rosenthal (1988); Sakamura 2001. They mentioned vulnerabilities and disaster records of Holland and Japan). Responsiveness of governance becomes evident within the manner during which it addresses the crucial task of amelioratory suffering and reducing losses. Public servants have a responsibility for formulating policies and building capacities for addressing such things (Waugh (1999)). whereas the developed countries square measure well-equipped to survive with them through well functioning of managing

the disaster, attentiveness and response mechanisms; the developing countries, poorly equipped in terms of every of the on top of mentioned concerns, suffer most owing to natural disasters. The worst affected in such disasters, in any country, square measure without doubt the poor sections of the society. Not solely square measure they most vulnerable to losses from disasters, their ability to get over the shock brought by a disaster is additionally rock bottom. within the consequences of a disaster, the developing ones face an immediate and severe scarceness of resources and lose their contact to resource in several cases.

Among all the continents, Asia is taken into account to be most prone to disasters. During 1991 to 2000, Asia accounted for the maximum amount as eighty three % of the population laid low with disasters globally. India is extremely susceptible to natural disasters, and therefore the country has intimate terribly severe natural disasters at regular intervals. Among the assorted kinds of natural disasters moving completely different components of the country, floods, cyclones, earthquakes and droughts cause most harm to life and property; and warmth wave, cold wave, avalanches, landslides, fireplace also are taking serious tolls on life and property at regular intervals. The Latur earthquake of 1993-94, the state super cyclone of 1999, the Bhuj earthquake of 2001, and therefore the wave of December 2004, geographic area Earthquake of 2005, metropolis Floods of 2005, Uttarakhand Cloud Burst of 2013 square measure a number of the foremost severe natural disasters that have smitten the country within the recent past.

Now, if think about the case of Japan, despite highest disaster readiness by Japanese Government, on March eleven, 2013, northeastern a part of Japan has been severely desolated by magnitude nine earthquake followed by moving ridge (called Tohoku Earthquake) that killed twenty five,000 people, 50,000 folks missing and created 250000 folks homeless and preliminary loss of lives and properties value of $310 billion bucks. The severity of the disaster was on the far side imagination that caused such huge injury of valuable lives and properties. when horrific disaster that stricken Japan continues to linger in our minds, one cannot however marvel what would happen if an identical disaster were to strike India!

For this reason, community ought to be additional aware regarding disaster interference culture and mitigation. they ought to be concerned in post disaster recovery and reconstruction method for facing the longer term disasters and mitigate it. Japan Government‘s initiative and commitment to mobilize native and international community to attenuate the injury and loss from Disaster is very commendable. Japanese expertise of disaster management and mitigation and community involvement within the nice Hanshin-Awaji Earthquake had been tested most no-hit.

Our current paper goes to focus on the comparison between Japanese and Indian disaster management and the way will we tend to overcome with these issues.

REVIEW OF COMPETING THEORIES ON DISASTER MANAGEMENT

A very common argument is that socioeconomic conditions and demographics best predict however quickly areas reconstruct (Wright et al. 1979; Rubin et al. 1985; Rossi 1993; Berke, Beatley, & Feagin 1993). Ramakumar (2008) argues that the state of a menage before a disaster is also the foremost necessary consider deciding its standing days, weeks, and years once the event. In a sense, this approach, that argues that disasters just awaken the surface long standing social and economic conditions inside the affected space - mirror those created by Alexis American state Alexis de Tocqueville regarding the impact of the revolution on post-revolutionary France (1856). Despite the sturm und drang (storm and stress) of the event and its coverage and sensationalism within the in style

consciousness, American state Alexis de Tocqueville argues that the Revolution did very little to vary the dynamics of the recent management, several of that continuing in post-revolutionary France. Therefore, the disasters, whether or not it's wave or floods or earthquakes, it's going to merely uncover the inequities, like financial condition and discrimination, that were gift before the crisis. for instance, poorer residents with half time jobs in secondary fields associated with fishing in province were jobless for a really long amount once the incidence of wave, as officers radio-controlled relief towards those that lost ? capital,|| like boats, nets, and different instrumentation. instead, poorer households with less education and fewer job skills can have additional issue securing new livelihoods and also the most issue in extracting resources from the state and NGOs (Kamel and Loukaitou-Sideris 2004). Recently theories urged the role of social networks and ties have return to the fore in explaining the speed of recovery (Nakagawa and Shaw 2004). Social ties will function ? informal insurance mechanisms permitting victims to draw upon ready-made support networks. Table one summarizes these competitory theories.

KNOWLEDGE MANAGEMENT

Disaster may be a curse that can't be unheeded. however data is that the drugs to assist ourselves to cut back its result. Formal education for professionals and capability building or coaching for alternative target teams are explored here as a method for disaster risk reduction. this can facilitate the society to remember of the uncertainties. At the current situation, ways transfer between researchers and end-users are incompetent to sufficiently transmit knowledge to policy-makers and practitioners. they need conjointly unbroken data up to the limit of many authorities. Healthy participation of the society and sensible technical capabilities to grasp hazards and risk improvement ar without doubt a far better approach to cut back the impacts of natural disasters within the long haul. A positive involvement of the society, NGO's, the general public and personal sector, beside the acceptable and approachable technologies through economical suggests that like the electronic media, cellular phones, may be a confront still to be traumatize.

RECOVERY SPEED WHEN THE DISASTERS:

Due to inaccessibility of knowledge we've got taciturn our studies to solely few samples of destruction. allow us to think about varied examples just in case of Japan and India.

In case of Japan:

Japan is found on the northwestern Pacific Rim and therefore the therefore known as ? Ring of fireside wherever several volcanoes and active earthquakes area unit of times encountered. At 5:46 a.m. on Gregorian calendar month seventeen, 1995, the Kobe Earthquake smitten Japan. The injury caused by the Kobe Earthquake was the death and missing toll stands at half-dozen,437 persons and total financial loss for Hyogo and close areas stands around ten trillion yen. quite eighty,000 homes were lost and plenty of components of the urban infrastructure like specific means, bridges, port, and railway facilities were heavily broken. Recovery of life line and alternative urban functions was accomplished comparatively quickly (electricity half-dozen days, phone fourteen days, gas eighty four days, water ninety days, sewers ninety three days). however reconstruction of business and housing took longer.

To cite another example, allow us to think about the Chuetsu Earthquake that occurred once the floods of Gregorian calendar month thirteen and therefore the serious rain of storm. This has worsened

the conditions. This had untangled the bottom, and aftershocks continuing for a protracted time subsequently. instantly once the earthquake, some communities were discontinue attributable to broken roads. Evacuation of victims was thus troublesome and delivery of emergency provides and life line services were delayed.

Repair of roads wont to provide daily requirements was thus prioritized so as to quickly reinstate life lines. JAPAN is "open for business" and "recovering at shocking speed," from the earthquake that blasted the country on March eleven, Takeaki Matsumoto, the country's minister, wrote in International Herald Tribune:

If you imagine that the complete of Japan is roofed by scrap that's fully wrong. Most of Japan remains unscathed by the disaster, and therefore the streets have leapt back to life. the most important main road that runs through the foremost affected Tohoku region was reopened solely period once the earthquake. The Shinkansen, the passenger train that connects capital of Japan and Tohoku region, became totally operational once more on Gregorian calendar month 29. The Democracy in America surveyed the educational analysis on economic recoveries within the wake of disasters. Here's what they found:

? On the complete, the disaster lit says that the expansion result of disasters depends. Poor countries with weak establishments rocked by misfortune could lack the fabric resources and structure wherewithal to induce back to the establishment ante, during which case the disaster is probably going to possess deeply negative long-run effects. (Think Haiti.) collectively would expect, wealthy countries with high-quality establishments and populations with high levels of human and social capital recover additional quickly, and square measure presumably to showing intelligence allot resources toward enhancements over lost capital stock and infrastructure. (Think Japan.) But, of course, recovery from a disaster that kills a large range of highly-skilled individuals can not be accomplished by merely commutation the dead with newer, additional highly-skilled models. And, not amazingly, the size of the disaster matters. the larger the human and economic loss, the longer it takes to come back to trend.

Return to trend economic process doesn't catch up on the direct human and economic loss created by the disaster. within the case of Japan, the ultimate toll are going to be Brobdingnagian. The unofficial toll is up to ten,000, and over fifteen,000 individuals stay unaccounted for. Economists at Barclays have calculable the loss at fifteen trillion yen, or regarding $186 billion—about third of Japanese gross domestic product. and therefore the prices of the continuing knock-on disaster at the Fukushima Daiichi nuclear plant stay unclear. this is often horrific pure loss at a offensive scale. there's no consolation during this.

In case of India:

The world has touched on to alternative preoccupations deed the 2004 ocean moving ridge so much behind. however the affected countries still struggle, and therefore the recovery can still take a few years. Further, significant rain falls and their impact worsened by deforestation, LED to the death of such a big amount of individuals, with several others forced from their homes. the large earthquake within the ocean, off the coast of the Indonesian island Sumatra, on Dec twenty six, 2004 triggered a series of deadly tsunamis that hit the coastal regions of Republic of Indonesia, Thailand, Malaysia, Bangladesh, India, Sri Lanka, and Maldives in South/ South-east Asia and therefore the coasts of Somalia, African nation and United Republic of Tanzania in jap continent. The combined toll during this new disaster was on top of a pair of, 30,000 even by conservative estimates and over ten hundred thousand individuals in these countries were left homeless. In India, the moving ridge caused

devastation within the coastal areas of 3 southern States, Andhra Pradesh, province and Kerala, and within the Union Territories of Andaman & Nicobar Islands and Pondicherry.

Since the govt equipment in India had ne'er recognized the threat of a moving ridge of such a large magnitude, pre-disaster mitigation and preparation measures for this disaster were virtually entirely non-existent. Consequently, the devastation caused by the moving ridge within the affected areas in India, particularly in Andaman Nicobar Islands, Pondicherry and therefore the coastal districts of province were monumental. In province, the areas of Nagapattinam, Cuddalore, Kanyakumari, Chennai, Villupuram, Tuticorin and Tirunelveli were the worst hit. whereas most tsunami-affected territories have re-emerged physically, if not psychologically higher, not all over has recovered at an equivalent pace, as well as India's province.

"What is unhealthy is that within the villages on the coast there has been very little clean-up. we will still realize boats left 5 years on that had been washed up and haven't been clean up. It's over AN ugliness," same Bhatkher male monarch, chief military officer of the organisation Development Promotion cluster. Some observers say that solely concerning one third of the reconstruction aid that was secure when the tidal wave that happened in Dec 2004 has really been distributed, and an oversized portion of the number has been wasted as a result of corruption, misdirection and supernumerary duplication of aid efforts. As a result, many tidal wave survivors still await permanent homes.

The key propositions for BUILDING BACK higher, in some report, United States President, the UN Special Envoy for tidal wave Recovery, points to ? major achievements like the close to one,50,000 homes that are designed, and therefore the speedy re-enrollment of youngsters in faculties when the disaster. however among the 10 ? key lessons learned given within the report, the subsequent particularly have however to be translated into reality on the ground:

• Governments, donor and aid agencies should acknowledge that families and communities drive their own recovery.
• Recovery should promote fairness and equity
• Governments should be higher ready for future disasters
• native governments should be authorized to manage recovery efforts, and donors should devote larger resources to strengthening government recovery establishments
• Agency partnerships should expeditiously deliver to those in want while not ? rivalry and unhealthy competition
• sensible recovery should cut back risks and build resilience in communities.

MEASURES TAKEN TO DECREASE THE IMPACT OF NATURAL DISASTER BY JAPAN

In August 2012 the International Labour Organization started a technical cooperation project ? Dissemination of Employment and Labour Measures for convalescent from the nice East Japan Earthquake as International Public Resources, supported by the govt. of Japan. The project aims to gather and publicize lessons learnt and sensible practices associated with employment and labour measures, taken from the reconstruction method. These can kind the idea of a report which will be given to a conference to be command in Japan in 2014

This was one in all its own kind and 1st technical cooperation project that has been enforced in Japan, and in March 2013, as a part of a project knowledgeable cluster meeting, seven specialists from Government‘s, workers‘ and employers‘ organizations visited Kamaishi town, to examine however one in all the places most unrelentingly plagued by the tidal wave was ill . The specialists, from Asian

country, Cambodia, Indonesia, Malaysia, Pakistan and also the Philippines, met the people that somehow survived from the terrific disaster hit. They were running little and medium size businesses. There was a whole social protection mechanism in situ wherever the disaster hit. the govt. was able to use existing measures to increase employment and resource support to those plagued by the disaster. while not these existing systems, the recovery efforts would have taken for much longer and price additional because it typically happens with the developing nations.

The government was conjointly fast to style and implement nationwide disaster response measures for employment protection and creation. The five-year ? Japan as One‖ Work Project, launched in Gregorian calendar month 2011, created two hundred,000 short-run jobs and five hundred,000 mid-term jobs to semi permanent jobs. The personal sector was conjointly fast to activate support. Some retail firms opened new branches in disaster-affected communities so as to form employment opportunities. The ILO can continue assembling lessons and sensible practices from the recovery method and air them at a conference in Japan in 2014.

MEASURES TAKEN TO DECREASE THE IMPACT OF NATURAL DISASTER BY ASIAN NATION

Humans have managed disasters and an outline of our past experiences shows that management of disasters isn't a replacement thought. for instance, in ancient Asian nation, droughts were effectively managed through standard conservation strategies, that area unit still in use in sure components of the country - like Rajasthan. native communities have devised autochthonic safety mechanisms and drought-oriented farming strategies in several components of the country.

The late Nineties and also the early a part of this century marked an occasion purpose in Disaster Management in Asian nation. The state Super Cyclone and also the Gujarat Earthquake educated the state a tricky lesson. A welcome step during this direction was putting in of a High powered Committee on Disaster Management in 1999, that submitted its report in 2001. a crucial recommendation of the committee was that a minimum of ten % of arrange funds at the national, state and district levels be earmarked and doled out for schemes that specifically address areas like bar, reduction, state and mitigation of disasters. conjointly for the primary time within the coming up with history of Asian nation, arrangeners devoted a separate chapter titled 'Disaster Management: the event perspective' within the tenth five-year plan document (Planning Commission, 2002).

More recently, many establishments with a targeted authorization on disaster management have return up in numerous components of the country. The Ministry of Home Affairs (Disaster Management Division), National Institute for Disaster Management (New Delhi), Gujarat State Disaster Management Authority (GSDMA), state State Disaster Management Authority (OSDMA), Disaster Mitigation Institute (Ahmedabad) will be seen as initiatives taken within the right direction.

There has conjointly been a determined effort on the a part of the state to thought Disaster Mitigation initiatives in Rural Development schemes. one among its example is that the coordination between the Ministry of Rural Development and also the Ministry of Home Affairs, that is currently the nodal ministry for coordination of relief and response and overall natural disaster management, for dynamical the rules of schemes like Indira Awas Yojna (IAY) and Sampoorn Grameen Rojgar Yojna (SGRY) in order that the homes made below IAY or faculty buildings/community buildings made below SGRY area unit earthquake/cyclone/flood resistant

World Development Report (IFRCRC, 2001) categorizes natural disasters into hydro earth science (earthquakes, volcanic eruptions, etc) and geology (landslides, droughts, etc) classes. The scope of unnatural disasters broadly speaking encompasses conflicts, civil strife, riots and industrial

disasters.

Comparison between Bharat and Japan

One Year after the Disaster...

Case	Business sector	Shops/ schools	Housing
Kobe, Japan	80% exports, 90% manufacturing restored	80% shops, majority of schools reopened	Close to 85% in permanent housing
Tamil Nadu, India	Almost all fishermen back at work	Old schools rebuilt, new schools being created	50% housing restored

Disaster Plan Disaster Plan involves four phases:

1. Prevention
2. preparation
3. Response
4. Recovery

Phase 1: Prevention

1.establish and minimize the risks display by the building, its instrumentality and fittings, and also the natural hazards of the world.

2.do a building scrutiny and alter factors that represent a possible hazard.

3.Establish routine housework and maintenance measures to face up to disaster in buildings and encompassing areas.

4.Install automatic hearth detection and termination systems, and water-sensing alarms.

5.Take special precautions throughout uncommon periods of enlarged risk, like building renovation.

6.build special arrangements to make sure the security of library or repository material once exhibited.

7.offer security copies of significant records like assortment inventories, and store these off-site.

8.shield computers and information through provision of uninterrupted power provide.

9.Have comprehensive insurance for the library or archives, its contents, the value of salvage operations, and potential replacement, re-binding and restoration of broken materials.

Phase 2: preparation

1. preparing to cope.
2. Develop a written preparation, response and recovery arrange.
3. Keep the arrange up-to-date, and take a look at it.
4. Keep along provides and equipments needed during a disaster and maintain them.
5. Establish and train an in-house disaster response team. coaching in :

Phase 3: Response

When disaster strikes

1. Follow established emergency procedures for raising the alarm, evacuating personnel and creating the disaster website safe

2. Contact the leader of the disaster response team to direct and transient the trained salvage personnel

3. once permission is given to enter the location, build a preliminary assessment of the extent of the injury, and also the instrumentality, provides and services needed.

4. Stabilize the atmosphere to forestall the expansion of mould.

5. Photograph broken materials for claim functions.

6. originated a part for recording and stuff which needs state change, and a part for air-drying slightly wet material and different minor treatment.
7. Transport water-damaged things to the closest obtainable state change facility.

Phase 4: Recovery

Getting back to traditional

1. Establish a programme to revive each the disaster website and also the broken materials to a stable and usable condition.
2. confirm priorities for restoration work and ask for the recommendation of a conservator on the most effective ways and choices, and procure price estimates.
3. Develop a phased conservation programme wherever massive quantities of fabric square measure concerned.
4. Discard things not price holding, and replace or re-bind things not justifying special conservation treatment.
5. Contact insurers.
6. Clean and rehabilitate the disaster website.
7. Replace treated material within the refurbished website.

CONCLUSION

There has been an increase in natural disasters in recent years that have drug pressure each moneyed and poorer nations, leading to humanitarian crises of vast proportions. These incidents are a significant setting out to international bodies. The adoption of the International Strategy for Disaster Reduction (ISDR) 2000, the globe Conference on Disaster Reduction 2005, the Hyogo Framework for Action 2005-2015, and also the recent 2010-2011 World Disaster Reduction Campaign square measure efforts therein direction.

From the higher than paper, it'll be troublesome to mention that the developing nations square measure so much behind the lag. we've to adapt the new methods and policies so we will face the issues additional with confidence and completely. Natural disaster could be a threat that cannot be prevented, however measures may be taken to try to away with or cut back the likelihood of its impact on the society, economy and atmosphere. Loss of lives cannot be recovered however excluding these human losses different losses may be secured.

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