### **Avoidable Deaths: A Way Ahead**

Introduction By: G. Padmanabhan



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#### INTRODUCTION

### **ABOUT THIS ISSUE**

The essence of disaster risk I reduction lies in managing the underlying factors of disaster risk such as poverty, myopic planning, lack of building codes, environmental degradation, etc. If these risks are effectively managed then the death and destruction resulting from extreme events can substantially reduced. Over the past two decades, India has taken considerable strides to minimize the deaths associated with disasters. However, even despite disaster advancements in management science and weather forecasting systems, increased sophistication of human-built environments and ongoing economic and policy development deaths continue to occur in disaster situations.

This issue of Southasiadisasters.net is titled "Avoidable Deaths: A Way Ahead" and tries to highlight the importance of reducing disaster mortality. Even the global level policy instrument Sendai Framework that guides the actions of nations in disaster management has enshrined "substantial reduction disaster mortality" as a veritable target to be pursued by its 185 signatory countries. This issue explores the theme of avoidable deaths in disaster situations in an inter-disciplinary and systemic way. Disasters are often complex phenomena that impact the world in a variety of adverse ways. The possible triggers that can lead to large-scale death and destruction have been explored in this issue. This issue is also a valuable resource to researchers, practitioners and students interested in expanding their understanding on this particular theme.

- Kshitij Gupta

### **Moving Towards Avoidable Deaths**

ccording to UNISDR, disaster-According to Grade Alitect Ahit countries experienced direct economic losses of USD 2,908 billion during 1998-2017, out of which USD 2,245 billion (77%) was due to climate-related disasters. Between 1998 and 2017 climate-related and geophysical disasters resulted in 1.3 million deaths and affected 4.4 billion people. According to another report by the Asian Development Bank, Disasters in Southeast Asia region accounted for 400,000 deaths and affected 397 million people during 1988-2017. Studies have also proved that low-income countries are paying a heavy price, close to 2% of the GDP compared to 0.41 % of GDP in high income countries. These figures indicate that impact of climate change in low income countries has to be addressed to reduce losses (assets and people).

Most of the countries are in the process of addressing the priorities and targets recommended under the Sendai Framework for Disaster Risk Reduction (SFDRR). The very first target set under the SFDRR was on "reducing mortality" and there has been a perception that the level of preparedness in the context of natural hazard induced disasters has gone up, and the countries are successfully reducing the loss of life. However critics have been questioning this perception and rightly asked whether this applies to potential major earthquakes, especially since the unsafe housing and building stock have been increasing. In this background, it is important to look at "Loss of Life" as a critical element towards disaster risk reduction.

Disaster management practitioners have been making efforts to reduce the mortality due to disasters. The Government of Odisha was praised by the UN for its demonstration to the World at large that "investment in disaster preparedness pays" when the loss of life during events of similar intensity was curtailed due to better early warning, preparedness and governance capacity - 23 during the Phailin Cyclone in 2013 against 10,000 during the super cyclone in 1999. Almost at the same time, another state lost more than 50 people during a religious event due to poor crowd management. These deaths could have been avoided.

While taking several measures, there is a growing consensus that the countries could reduce the avoidable deaths. Better crowd management, reducing accidents, preventing heatwave deaths, better fire safety measures are all relatively easy steps to prevent avoidable deaths. In India, while inaugurating the Second meeting of National Platform for Disaster Risk Reduction on 15-16 May 2017, the Union Home Minister of India Mr. Rajnath Singh appealed to the stakeholders to prevent "preventable death" caused by disasters and also prepare an action plan for vulnerable communities of societies.

Climate change has made risk reduction complex, but scientific improvements in our approach to disaster risk reduction is definitely required. Most of the action seems to be based on the current level of risk without taking into account the extreme conditions that one can expect. In India, the destruction and loss of life due to the Uttarakhand floods in 2013 and the recent floods in Kerala are to be seen as eye openers. It is important to introspect the ability to reduce the mortality rate in the recent context when the level of early warning and state response capacities have improved.

- G. Padmanabhan

# **Incentivizing Transparency, Expediting Humanitarian Assistance, and Strengthening Civil Society**

When disasters happen, the wrong types of organizations often receive the most financial support. Improved transparency and location-specific "how to help" lists can improve the effectiveness of disaster relief and strengthen local civil society.

Despite the outpouring of generosity that follows many disasters, local civil society organizations rarely benefit. Most donations are first sent to international NGOs, often located far from each disaster. These outside NGOs may have capacity to respond directly or, in most cases, they regrant or subcontract to local organizations or other large, outside NGOs. This circuitous path for donations often delays and diverts funds. Local organizations rarely receive the majority of donated funds and often exhaust their resources. This occurred after the earthquakes in Haiti in 2010 and Nepal in 2015.

We can do better to make sure donations reach local civil society organizations after disasters. That is we launched Response.org, a new platform where organizations can register and share location-specific information prior to disasters. The platform will serve as a global how-to-help list after disasters, natural hazards, and other humanitarian crises and allow organizations that are most local to get better noticed by individual, corporate, and foundation donors. In addition to donors, Smart Response can be used by other key stakeholders including:

- Survivors seeking information about available services;
- Journalists seeking local sources and improving local coverage of disasters;



- Governments and international organizations seeking improved oversight and coordination;
- Aid organizations to improve coordination, partnerships, and service delivery.

Smart Response collects information about each organization's staff numbers, types of staff, direct and indirect services provided, preparedness/relief inventory, policies, partnerships, and more.

Smart Response includes all types of organizations and incentivizes transparency as organizations are only included on "how to help" lists after they share information via the site's surveys. Organizations are asked to update their surveys at least four times per year. When disasters happen, Smart Response smartly curates "how to help" lists using information collected in the quarter prior that feature the organizations with the greatest capacity to respond. organizations are able to get back online, we ask them to complete post-disaster surveys that detail their activities.

By allowing donors to identify and directly support local civil society organizations, Smart Response reduces the need for intermediaries that often delay and divert funds. Many intermediaries take anywhere from 30-60 days, or even years after recent disasters, to re-grant funds to other groups. Smart Response will not process transactions itself. Instead, it will allow donors to directly support organizations on the platform, shortening transaction times to days.

As an independent organization, Smart Response and Disaster Accountability Project do not charge organizations to register and share information.

Since the launch of Smart Response in September 2017, over 200 organizations registered from over 20 countries, including nine (9) from India, seventeen (17) from Bangladesh, thirty-five (35) from Pakistan, and three (3) from Sri Lanka. Ultimately, we want thousands of organizations included in Smart Response.

Ben Smilowitz, Executive Director,
 Disaster Accountability Project,
 Rockville, MD, USA

### Women take the Lead: Turning Crises into an Opportunity for Development

The worst of disasters have a silver lining. Hidden are many inspiring stories of change, led by ordinary people. We often never hear of the roles played by survivors – men or women.

The strategy of converging disaster response with development dates back to the experience of Prema and the Swayam Siksha Prayog (SSP) team after the Latur earthquake. On September 30, 2018, 25 years after the earthquake a lot of positive change has taken place. Since then, SSP has expanded the depth and breadth of its initiatives in the most drought prone, water scarce districts of Maharashtra, earthquake hit districts of Gujarat and post Tsunami in Tamil Nadu and post 2008 floods in Bihar. SSP operates in disaster-hit geographies by choice.

#### **Agents of Transformation**

When a massive earthquake hit Latur, in Maharashtra, I took a leap of faith along with a bunch of motivated professionals to involve affected people in the reconstruction of their houses. From 1994-1998, SSP worked with the ambitious Government rehabilitation project. Around two years from the start, the progress was still slow. At this time, SSP negotiated with the district authorities, that women belonging to the Mahila Mandal in 500 villages if trained can act as effective intermediaries between people and the Government. The goal: To ensure full entitlement and involvement of women and families whose homes had been damaged and ensure safety features are embedded in construction of houses. In less than two years, Samvad Sahayaks had covered more than 100,000 families. They put the community at the centre of the R&S process. Maharashtra government passed an order recognizing the Sahayaks as key change agents Repair and Strengthening Program (R&S)<sup>1</sup>.

"Disasters do not just lead to a breakdown of houses and walls they break the walls for women in these disaster hit communities" said Parvatiben a Gujarat quake survivor. By participating in rehabilitation efforts, they gained the agency to set up self-help groups, handled community micro-credit funds and set up Federations and win community contracts from district administrations<sup>2</sup>.

Repeat experiences in Gujarat, Tamil Nadu, Sri Lanka and later Bihar, confirmed that women who organize into spontaneous community groups to reclaim their

- 1 A home owner-led, self-help initiative for the repair and construction of partially-damaged homes. R&S covered 1300 partially-effected villages and accounted for the largest share of government-aid.
- 2 After the closure of the R&S program, the *Samvad Sahayaks* pooled their resources to construct public information centers (Mahila Mahiti Kendras) hubs of peer-training and information exchange- that are active till today.



Sakhi Melava at Latur on March 14, 2016.

lives after a disaster, can be facilitated to build their own SHGs, peer-learning clusters and federations.

Over time they pool their collective will, human capital and resources into community-owned businesses and drive local governance and policy initiatives. From this organic base of post-disaster women architects, emerged the SHG networks and Sakhis who are now agriculture decision makers and business leaders.

#### **Managing Community Funds**

SSP's experience of building community resilience has an innate focus on getting women's collectives to access and manage a Resilience Fund that they use to support disaster/climate resilient practices. This effort has grown over the years across India. Having demonstrated success in difficult, disaster-hit geographies, the World Bank directly funding provided recognition to women's groups at the grassroots as leaders in building climate resilience. Innovations supported by the community fund such as collective farming, agri-allied businesses, water conservation have



Planning by women's collectivs after Latur Earthquake.

leveraged funding from the Government and banks. And the women led Resilience Fund managers and teams have transferred their learning globally through exchanges.

### Women's Collectives as Effective Partners

Having operated across varied disaster-hit geographies on a time scale, SSP successfully demonstrated time and again that grassroots women's collectives can function as effective intermediaries and "partners" first during recovery, rehabilitation and later in building community resilience if they are given formal roles to lead development, instead of being treated as beneficiaries.

- Prema Gopalan, Founder and Executive Director, Swayam Shikshan Prayog, Pune, Maharashtra, India

TECHNOLOGY FOR DRR

# Disaster Risk Reduction – Save the Nature and Nature will Nurture you

Atural disasters are inevitable in the current scenario of developing countries. The reason behind the inevitability of disasters is the immense pressure put on nature because of excessive utilization of non-renewable energy resources beyond their coping capacity. Leveraging technology for more sustainable ways of producing energy can go a long way in mitigating the adverse impacts of disasters.

The latest example of unconscientious implementation of

technology is the severe tragedy that happened in the form of flash floods in Kerala (God's own country) in the month of August, 2018 which is one of the richest spot of elevated biodiversity (Western Ghats) in India. Rampant construction of dams in the districts of Kerala without adoption of proper measures for landslides mitigation/slope stability gives the clear-cut view of the development by disturbing nature. A total of 42 dams are present in Kerala, for whose construction a substantial amount of deforestation

was done accompanied by dynamite blast to clear the stretch of mountains. Dynamite blasts done for tunnel making have got the potential to generate an earthquake of magnitude 4 on Richter scale, which may cause heavy landslides or debris flow when aggravated by flood waters.

It is quite easy to forecast the amount of rainfall in an area by the weather forecasting authorities but in the case of mountainous areas like Western Ghats where forest cover

Table 1. Causes and Mitigation measures behind Nature's Wrath	
Probable Causes behind Increasing Disasters (Majorly Floods)	Method to mitigate the aftermath.
Unplanned Convergence of Tourism	Strict Implementation and keen checks of the rules by local authorities to avoid constructions being done nearby the dried stream of river.
Rampant Construction of Dams	Implementation of Landslide Mitigation measures in mountainous areas consisting of dams, ex-drilling and grouting.
Deforestation	Afforestation.
Improper weather forecasting	Preparation and Implementation of Nature friendly reports in a vulnerable area.
	Increasing the preparedness level of the stakeholders.

has got reduced by 35% in the last few decades, it becomes extremely difficult to forecast the rainfall that the area will be subjected to as rainfall in a deforested area happens quite erratically. Negligence of the Madhav Gadgil committee's report on fragile ecosystem of Western Ghats by Ministry of Environment Forests Climate & Change (MoEF&CC) and acceptance of K. Kasturinrangan report was also somewhere the reason behind the brutal aftermath. Also, the case of Kerala Floods, 2018 is quite similar to Kedarnath Tragedy, 2013. But, nevertheless NDRF, Kerala SDMA and Indian Defence have made outstanding and highly commendable effort to minimize the aftermath of the catastrophe. A comprehensive war-like effort has been conducted to save the Keralite's employing GIS mapping technique by Kerala SDMA to find

out the evacuation routes to save the peoples, usage of Unmanned Aerial Vehicle (UAV) to search the people trapped in tragedy, employing risk map techniques through mobile app to get the view and understanding of flooding in an area and many more.

Technology is something which does not comes only by the usage of machines, it is us, we the human beings who are supposed to innovate & implement technology in an efficacious way into our projects by taking proper care of 'Prakriti or Nature'. An example of the development without making compromise with the nature is a man from Kerala itself, Rajgopalan Vasudevan also known as Plastic Man of India who discovered the method to build roads made of plastic which are far economical and durable than current roads being

made, also he had made more than 1 lac kilometres of plastic roads in India

- Ankur Gupta, Department of Management Studies, Centre of Excellence in Disaster Mitigation and Management, IIT Roorkee, Uttarakhand, India

#### References:

- 1. Bangalore Mirror. (2018). Western Ghats lost 35% of forest in 90 years. [online] Available at:https://bangaloremirror.indiatimes.com/news/state/western-ghats-lost-35-of-forest-in-90-years/articleshow/51030220.cms [Accessed 23 Aug. 2018].
- 2. Daily Hunt. (2018). River returned the garbage back to us after Kerala Flood ApHerald | DailyHunt. [online] Available at: https://m.dailyhunt.in/news/india/english/apherald-epaper-apherald/river+returned+the+garbage+back+to+us+after+kerala+flood-newsid-95181818 [Accessed 23 Aug. 2018].
- 3. The Indian Express. (2018). Kerala tragedy partly man made: Madhav Gadgil, expert who headed Western Ghats report. [online] Available at:https://indianexpress.com/article/india/kerala-floods-rains-disaster-western-ghats-report-5314873/[Accessed 23 Aug. 2018].
- Constructionworld.in. (2018).
   Plastic waste to be used in 1 lakh
   km of road construction. [online]
   Available at: https://
   constructionworld.in/
   News.aspx?nId=hXWv74yycP
   3eNupQWICAKw==[Accessed 24
   Aug. 2018].



River returning the garbage given to it by humans (After Dailyhunt, 2018).

### **How Can Asia Address Avoidable Deaths?**

A voidable deaths are preventable deaths from the intensity of natural hazards/ disasters due to advancements in information technology, human interaction and effective policy interventions (Ray-Bennett, 2017a, 2017b). Currently, avoiding disaster deaths is the first global target of the UN's 'Sendai Framework for Disaster Risk Reduction', which is the successor to the Hyogo Framework and has been ratified by more than 180 UN Member States in Sendai, Japan in 2015. As erratic weather patterns increase due to the effects of global warming and climate change, the necessity for concerted efforts to promote disaster risk governance to avoid disaster deaths is now vital, more than ever before.

Asia is the largest and most populated continent in the world, comprising of 50 independent countries. These countries are diverse in their heritage, culture, geography, politics and socio-economic development. They are not a coherent entity. Yet, a 'common context of struggle' exists and is desirable to invoke a 'mode of understanding to combat the impacts of natural hazards on human beings for sustainability. This begs the question: how can Asia avoid disaster deaths?

Since the declaration of the UN's 'International Decade for Natural Disaster Reduction' in 1990 ensued by the 'Hyogo Framework for Action' in 2005, the efforts to avoid disaster deaths have been focused on indirectly by enhancing structural and non-structural mitigation measures. However, with the declaration of the first global target of 'reducing global disaster mortality by 2030', the Sendai

Framework has brought the agenda of avoidable deaths to the fore.

To achieve this target, it is argued that the following efforts are now required:

- Advance multi-hazard early warning systems for the generation of accurate early warning messages information, as well as effective coordination communication this information with the relevant responders to develop an effective response system. In light, the disaster management system needs to be conceived as a system that works in interface with humans and technology (a sociotechnical system). As such, policy makers and UN bodies should invest in both technology and capacity development in order to promote effective coordination and communication.
- ii) Introduce the 'goal' of avoiding disaster deaths 'at any cost' for the entire disaster management system. In management science, "the goals are called the objectives or objective functions to be maximized" (Pfeffer, 1981: 19). Setting a goal for avoidable deaths will bring clarity in everyday disaster management practice.
- iii) Involve political leaders to adopt and implement the 'goal' of avoidable deaths through national and local policies and programmes. When and where there is proactive political leadership, a disaster response system can be aligned with the 'goal' of saving lives. Political leadership can also promote a culture of disaster preparedness. All these are essentials for

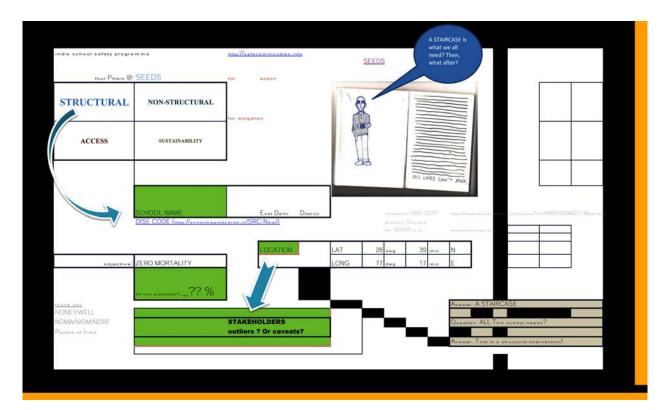
- avoidable deaths (Ray-Bennett, 2016, 2017a, 2017b).
- iv) Mainstream the 'theory of justice' (Sen, 2009) at the heart of disaster management practice in order to complement the 'goal' of avoiding disaster deaths. The theory of justice should usher 'accountability' to improve our 'mode of understanding' on: what actors and organisations do, or do not do, to save lives; and how deaths can be reduced.
- Dr. Nibedita S. Ray-Bennett,
   Associate Professor in Risk

   Management, Programme Director for
   the MSc in Risk, Crisis and Disaster
   Management, School of Business,
   University of Leicester, Leicester, UK

#### References

- 1. Pfeffer, J. 1981. *Power in Organization*. Pitman Publishing Inc, London.
- 2. Ray-Bennett, N.S. 2016. Learning from Deaths in Disasters: The Case of Odisha, India. MEI Middle East-Asia Project (MAP) on Humanitarian Assistance and Disaster Relief: Rising to the Challenge? MAP Bulletin. http://www.mei.edu/content/map/learning-deaths-disasters-case-odishaindia
- 3. Ray-Bennett, N.S. 2017a. Avoidable Deaths: A Systems Failure Approach to Disaster Risk Management. Springer Nature: Switzerland. Environmental Hazard Series.
- 4. Ray-Bennett, N.S. 2017b. Disasters, Deaths and the Sendai Goal One: Lessons from Odisha, India. *World Development*. 103(2018): 27-39. https://doi.org/10.1016/j.worlddev.2017.10.003
- 5. Sen, A.K. 2009. *The Idea of Justice*. Penguin Books, London.
- 6. UN. 2005. Hyogo Framework for Action 2005-2015: Building the resilience of nations and communities to disasters. World Conference on Disaster Reduction, Kobe, Hyogo, Japan: 18-22 January 2005.
- 7. UN. 2015. Sendai Framework for Disaster Risk Reduction 2015-2030. UNISDR, Geneva. http://www.unisdr.org/ we/coordinate/sendai-framework. Accessed 24 June 2016.

### Why Zero Mortality in Schools is a Myth



**7** hat does a structural engineer on the civil side like to achieve in these post postmodern times? At the end of the day, perhaps, a good hand sketch so abstract that he has never drawn before or a large girder for the longest of the neatest of the restressed bridges whose span or thickness he has never calculated mathematically before. Anyways, getting either or both done to the satisfaction of the requirements of the immediate bosses are their own extremes to handle, all structural engineering experts who practice or think conceptually will agree.

I am thankful to the editor for giving me three boundary conditions on this issue of zero mortality not-atall possible in India, our motherland. These three distinct regions within the country areSunderbans, Kutch, and Mumbai; the fore helping me with defining bounded spatial conditions, if not time, to put forward a point of view. In addition, the last time I had heard about the answer to inadequateness of time to life saving response was from Japan, a foreign country, that all schools can install alarms which ring loud within 8 seconds of a credible earthquake triggered at its source. Not even a decent sample size here to decide the zero mortality to schools of the entire country of India's in hand here, the evident risk in these three regions is sure to answer that zero mortality does not exist in reality.

However, give me a few more paragraphs within the bind here to deliver another inch towards the better future of lesser mortality than the past, if not zero mortality. I hope a simple analysis using the theory of sets will still provide some questions if not the answers. Risk analysts ought to agree with me here.

Also any risk estimation exercise, within the confining limits of however-conservative on one end and however-liberal on the other extreme, tells us that the answer to definite zero mortality brings nausea which either holds them to the ground or there is a dislocation of grief somewhere in the air. The best of the firemen might agree with me here.

Some fishermen will still not agree with me here.

Now, this takes me back to the theory of sets, where Risk equals Hazard multiplied with Vulnerability. Disaster Management experts can agree with me here that it becomes simpler for me to explain this using the example of Sunderbans. Sunderbans is a significant seismic hazard zone but little or no development in the region essentially means zero vulnerability, which ideally leads to negative risk, effectively Zero. Most tribals who live in the region will also agree with me- probably because they believe in either God or the master.

Now, let us move to the Urban context of Mumbai, and, also Kutchh, at least Bhuj. With a significantly higher number of bad buildings i.e. high vulnerability, the risk in the region therefore is a lot higher. In no way there will be no loss of life. Gods are also disappearing with time, Gods will seldom agree. Kutchh region has witnessed loss of life in 2001 and Mumbai waits the

same destiny. Most businesses will not agree. It is business as usual scenario- and a good economy is perhaps as important for the best definition of a holistic sustainable development. Now, some will definitely not agree.

We all will also agree there is lack of real data. At the same time we all may also agree there is enough data for the desktop experts. If we all act as one, think about it, we are still living in a paradoxical world. The answer perhaps is the ability to break out of the paradox, a devout Parsi kid once convinced me a long time ago. I agree with him.

Joe Cocker and Bob Dylan tried hard to find dignity, moaned and groaned from inside, shook people so hard in confines of five notes that most people agreed and then they dispersed. It was only my own Labrador waiting for me in the staircase landing for months to get back to the good old morning walks reminded me that perhaps Dignity can be found at the staircase landing, if nowhere else. I cannot agree more with these flawed musicians awarded Nobility in the end.

Once the above cynics are out of the equation, you may agree there is a hope, a little begin-again thought perhaps, which will inch humanity towards zero mortality collectively, if not alone. Hopefully sooner than those hopeful eight seconds. Am I again expecting too much? All I ask for is zero mortality.

Definitely not in the hands of an individual, the collective is our only hope. Who else is there? The unknown?

Back to strain gauges Sir!

- Chandra Bhakuni, Principal Structural Engineer, Ahmedabad, Gujarat, India

LOCAL LEVEL RECOVERY

## Non-Traditional Approaches to Finance for Disaster Recovery: A Few Examples for Consideration

A climate t a time when forces like change, expansion, and population growth are increasing incidence of disasters and their cost, the number of people getting affected by these extreme events has increased exponentially. In 2016<sup>1</sup> alone, the number of people affected from disasters rose to 569 million around the world. For the same year, six of the top ten countries<sup>2</sup> for disaster mortality were classified as low-income or lower-middle income economies. This constitutes a serious challenge when it comes to financing disaster recovery.

As stated by the United Nations Office for Disaster Risk Reduction (UNISDR), recovery can be defined as "the restoring or improving of livelihoods and health, as well as economic, physical, social, cultural and environmental assets, systems and activities, of a disaster-affected community or society, aligning with the principles of sustainable development and "build back better", to avoid or reduce future disaster risk"<sup>3</sup>.

In most high-income countries, disaster recovery is traditionally carried out by the state or private insurers who provide security against financial shocks for the victims both in the forms of postdisaster assistance and monetary compensation. These traditional mechanisms are usually not available in low- and middle-income countries. First, because they are too costly for many of the households, farmers and businesses and because among themselves, the poorest are the most vulnerable to disasters since they tend to live in dangerous locations (river banks, flood plains, highly populated settlements shanty towns). Second, government budgets for contingencies are usually low

<sup>1</sup> https://www.emdat.be/sites/default/files/adsr\_2016.pdf

<sup>2</sup> idem

<sup>3</sup> https://www.unisdr.org/we/inform/terminology



Micro insurance programs enhance recovery of local markets.

Source: http://www.elrha.org/map-location/innovating-disaster-micro-insurance-local-market-recovery/.

and even more constrained after major disasters. Even accounting for post-disaster international aid, the financing needs for emergency relief and reconstruction are not sufficiently covered.

This lack of resources forces us to find new, innovative approaches to finance for disaster recovery.

Recent innovations in financial management regimes range from micro insurance, extended partnership between governments, NGOs and international financial institutions to social fund.

### The Andhra Pradesh Disaster Micro insurance Scheme, India

Micro insurance instruments are emerging to provide affordable cover to low-income households and businesses. This is the intent of the micro insurance services provided in India's coastal Andhra Pradesh region. Since 2004, the Oriental

Insurance Company is providing coverage for natural disasters to vulnerable families as part of the region's disaster preparedness program. As a regular insurance, client's losses after a disaster are indemnified but insurance premiums are kept low thanks to savings made on transaction costs, the insurer is dealing with organized groups of women with a minimum size of 250 members-, and a subsidy and training of insurance agents by an INGO. Under this scheme more than 9,000 claims have been reported and settled between 2016 and 20174.

### The Kecamatan Development Program (KDP), Indonesia

Disaster recovery programs usually target individual households or national governments. As a result, the need to match such assistance with infrastructures needs at community levels is often not fulfilled. Social funds, such as the Kecamatan Development Program

(KDP) in Indonesia try to bridge this gap through supporting invest communities to development of facilities and services that contribute community risk reduction. After the Indian Ocean Tsunami of 2004, the KDP was used as an innovative approach to community-driven development, allowing local stakeholders themselves implement subprojects and manage the funds.

Other innovative financing tools can be used in post-disaster recovery context. They include for instance conditional cash transfers, the use of alternative currencies, catastrophe bonds and catastrophe pools. However, pre-disaster prevention is equally important and continues to be underfunded despite broad recognition that investing in resilience before a disaster can save lives and money.

- Elisa TAIWO, Research Assistant, Action Against Hunger, France

### **Impacting Lives through Skilling**

For a country like ours, where approximately 65% of the population is below 35 years of age, human resources are a vital component of the economy. It is because of this reason that tapping this rich potential through gainful employment is crucial, which is why adequate education and skilling are essential. A number of initiatives have been launched to enable the skilling of our rich demographic dividend, resulting not only in gainful employment, but also in a change in the lives of the students skilled, their families and their communities. Sarah Berry explores some of these journeys.

### Learning a Skill Facilitates Financial Independence — Deepak Rai's Story

Deepak Rai resides in Badarpur, Delhi; his two brothers, and his parents, complete his family; having completed his Diploma in Mechanical Engineering, he is now pursuing graduation. Despite the

studies undertaken, securing a productive and lucrative employment eluded him till someone informed him about acquiring a skill. What caught his attention was the course of a CNC Operator, which not complemented his studies, but also cemented the knowledge imparted through practical training. After completion of the course, Deepak was placed with a firm in Faridabad, where he has been working ever since. Though he works in shifts, and standing long hours is a challenge he has got used to, the remuneration at the end of the month of approximately INR 12,500/- (in hand) helps him contribute to his family's income and savings. So does he not find the work in shifts and the long-hours standing challenging: "We do have breaks in between, in addition to areas demarcated for rest; besides, one gets used to a routine; nothing can be achieved without hard work; and,

every job brings with it its challenges. Is it not?" says the youngster. So how does he see his future unfold? "I want to be a good engineer. That is all," says Deepak succinctly. Any message for the youth of today? "Yes; work hard; do your best; learn a skill, if possible." There is an important lesson learnt from Deepak's account: everything in life, whether in the professional or personal sphere, needs adaptation; no matter what position, no matter what domain.

### Skilling Enhances One's Personality too, Increasing Confidence, and Expanding Horizons – Tabbasum Siddiui's Journey

Says the young and bubbly Tabbasum Siddiqui: "I always wanted to study Hotel Management. After completing my class XII, I started pursuing my graduation, but that dream of joining the hospitality sector kept pursuing me. It was from my sister that I learnt about the





Okhla skills center, where a number of courses are offered; to my delight, I also got to know about the F&B -Steward skill training programme. I almost jumped at the offer. I have made it my principle in life that no job is too big or too small; everything should be done with sincerity and integrity." Tabbasum goes on to praise the professionalism of the institute, where she acquired skill training, the amalgamation of practical learning with the theory imparted, and the never-ending support of teachers. Hailing, originally from Uttar Pradesh, she stays with her family of 4 sisters and 1 brother, along with her parents, in Govindpuri. "Initially, I could not even speak properly in front of strangers; my personality has now changed - I am confident; the training has not only helped me secure a job, where I earn around Rs. 13,000/- every month (in hand), but it has also changed my outlook of life, expanding my horizons manifold." Though Tabbasum faced some initial resistance from her grandmother, she says her parents were always "cool". She excitedly explains how the C.E.O. of the organization, she is currently

working with, met the 'best trainees' of the month, which included her too. Her inspiration? Says the youngster: "I see young girls around me becoming managers; that is so inspiring; and, that is my dream too." Tabbasum also spreads the good word around as she explains how she encouraged a friend of hers to take up fitness training. "Skilling is important, especially if you want to be something in life."

Learning is a Continuous Process;

Skilling encourages All-round **Development - Laxmi's Determination** Laxmi hails from a family of 5 - her parents, 2 brothers and herself. While her brothers are still studying, Laxmi completed her class XII in 2016. Despite being physically challenged, the gritty young girl does not know the meaning of the words "to give-up"; she got to know about the possibility of placement based skill training programmes from a friend of hers, who stays in her neighbourhood, in Badarpaur. "I needed a job - a job that does not involve too much of moving

around, but yet provides me a

dignified remuneration. When I

visited the IL&FS skill center, I was

counselled, and I decided to undergo training for a BPO executive. Though English was, initially, a problem, I never lost my confidence. I knew I would learn with the passage of time, which I also did. Now, I work with a company in Okhla in the outbound sales domain." She adds that challenges only lie in the mind; if they do not exist there, there are none. Laxmi's ambition is to settle in a government job, eventually, one day. She emphasizes though how important skilling has been for her: "Undergoing a skill not only inculcates a sense of self-esteem and self-value, but also grants you financial independence." Laxmi thanks her parents for their unconditional support, especially during the hard times, when she was not skilled, did not have a job, and post an unsuccessful operation for the treatment of her leg (she suffers from polio). "Never give up; if you do, how can you expect others to support you or trust you; you are your biggest strength." Words of wisdom, indeed.

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