



Flagging of the "Smart City; Smart Citizen" rally in Bareilly on the occasion "World Disaster Risk Reduction Day"

# Smart Citizens Smart Habitat



District Disaster Management Plans in Bihar

An Initiative by Global Academy of Public Safety & Habitate Management (GAPSHAM)

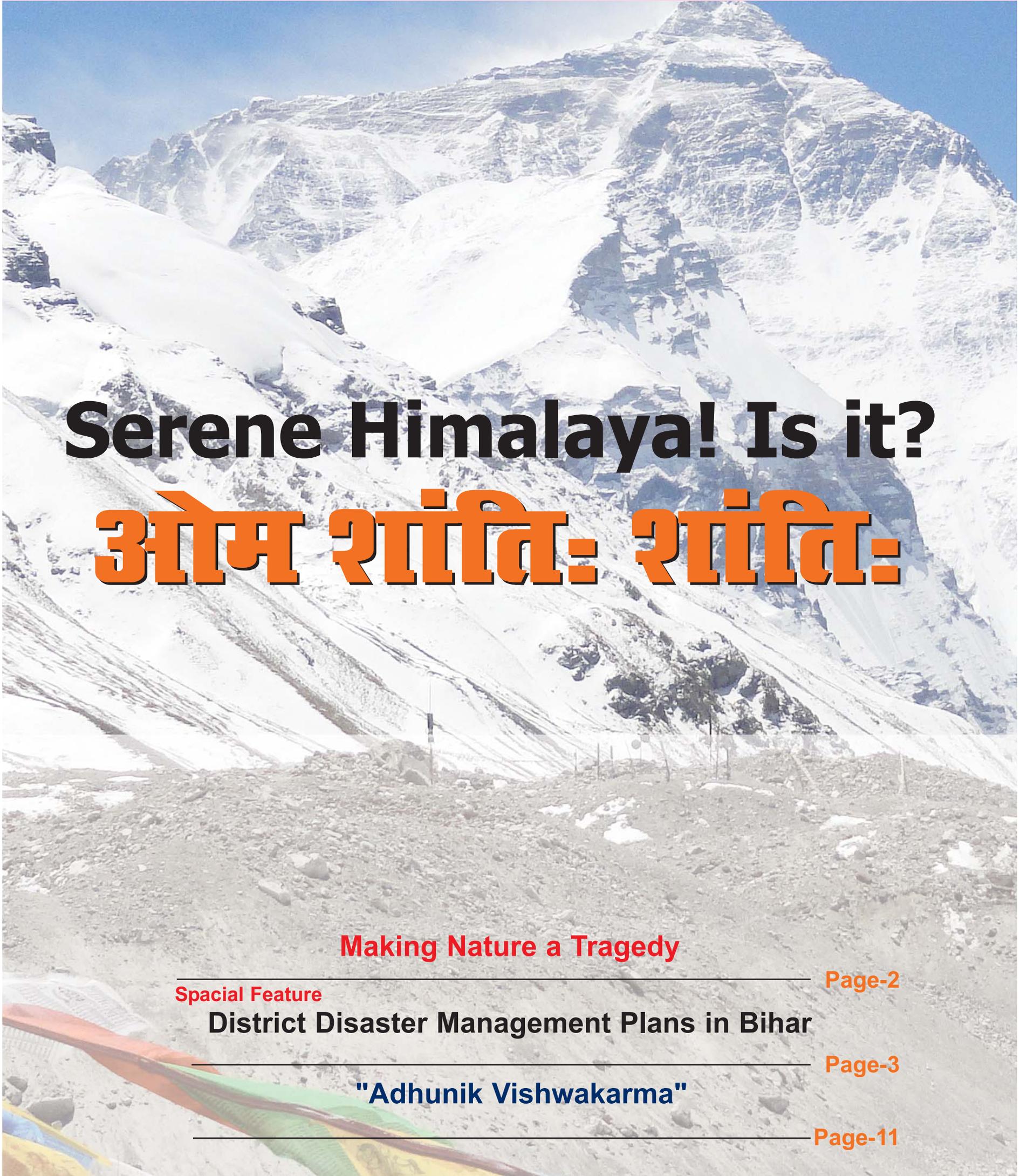
"The Art of Safe Living"

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## Serene Himalaya! Is it?

# ओम शांतिः शांतिः

**Making Nature a Tragedy**

Special Feature

**District Disaster Management Plans in Bihar**

Page-2

Page-3

**"Adhunik Vishwakarma"**

Page-11

# Making Nature a Tragedy

## Shall We Use the Lessons from Uttarakhand Flash Flood 2013?

**"D**rawing lessons from mistakes' – does it make sense? Answers are two 'Yes': yes, if we learn not to do the same mistakes again, and Yes – if we do 'new mistakes'. But this is certainly not the correct philosophy for 'disaster risk reduction' or what we term as 'safe habitat'. Fragile ecology with varying stage landslides in Uttarakhand on the land and buildings already earthquake-shaken several times – flashfloods though common but of 2013 triggered a havoc been called in media as 'Himalayan Tsunami'. There were numerous articles, analysis, workshops to draw lessons and to feed into future strategies of safer and sustainable development in this divine land of natural treasure. However, questions remain burning that whether these lessons are fed into implementable plans and ground actions or only are fashioned into research publications and luxurious workshops and media discussions.



**Dr. Anil Gupta**  
Head of Policy Planning and Environment Division at National Institute of Disaster Management (NIDM), New Delhi. He is also the Coordinator of Technical Advisory Group on Disaster Management.

- Building codes for earthquake safety exist in India for decades, yet engineering-contractor-economic lobbies stress on fast development keeping eyes closed on side effects on landscapes and ground stability. Landscape based planning is still a distant dream which actually holds the key to effective local planning.

- Externality based disaster preparedness – hoping that it's the defense forces or disaster response force which have to save people, or thinking that risks are for others and not to them, had set the background of near-no preparedness for disasters in Uttarakhand locals.

- Once in the forefronts of disaster management planning and preparedness at local levels, Uttarakhand state gradually went in the darkness making such plans un-updated, obsolete and out of use. It is important to note that temple-towns like Kedarnath had a well-designed urban master-plan decades back but never updated or re-validated and was kept out of reference in land-use planning and locating infrastructure and housing.

- Despite of Central Government's notification of state's land

as eco-sensitive, State Government never agreed or adhered to, and the conflict was never resolved to arrive at some sustainable middle path to ensure development and safety at same time. Role of decision making tools like EIA, Risk

Analysis and Safety Analysis for Hydro-power and other infrastructure

projects looked primarily aiming to project's safety and sustainability and rarely addressed secondary and lower order impacts.

- Inter-relations between earthquake impacts on buildings & infrastructure, effect of forest fires and vegetation pattern changes on snow cover and catchments, and messages of changing courses of rivers and tributaries was seldom incorporated for enabling carrying capacity based local development planning process.

- The analysis tells that common models of development as

applicable to other regions or the country or other cities/towns would be much irrelevant for Uttarakhand. In fact, it required to develop locally sustainable – ecologically compatible models of economic and infrastructure growth for smaller units. Since Uttarakhand is known for tourism, issues of sustainable tourism along with protecting ecosystem services need to be ensured, with effective tourism management and control system.

- There has been varying versions on interpretation of forecasts. Drawing lessons and enabling an effective coordination system for immediate but correct onward dissemination is crucial to prevent such events from being a disaster.

- Most important and broad understanding that emerged

from this disaster is to look from a system perspective, i.e. relationship between eco-geo-hydrological components, implications of climate change on people's resources and livelihood, and preparedness to deal with uncertainties and sudden events.

- There is

need of greater awareness and public perception on the underlying factors

of risk and vulnerability that increase disaster risk, especially related to land and its use, occupations and housing, and for balancing human aspirations Vs. physical limitations posed by nature. The 'living with risk – but with effective mitigation and adequate preparedness' holds the mantra. Besides this, it is equally important to screen each and every major actions or projects post-disaster to look from sustainability and safety perspective which unfortunately doesn't seem much obvious in recent cases.



kedarnath floods

Photo : Internet



“No school found to be properly prepared on disaster or emergency management. Schools are either superficially or pathetically prepared and may not be in a position to safeguard lives of children, teachers & staff in case any natural or man-made hazard strikes schools. Schools have not learnt any lesson from the past incidents or increased frequency of natural & man-made disasters in 21st Century.”



“School Safety” is a very common phrase which any one can understand if one goes by the dictionary meaning of these two words “School” & “Safety”. But in real sense it is not so simple. If you ask someone a question “What do you visualize or what comes in your mind as soon as you hear the word “School”, The answer will not be a one or two or ten phrases/words but it may be up to more than 100 words/phrases starting from the School’s main gate to bell to students to teachers to canteen to lab to headmaster to guard to playground to music room and so on. In the same manner ask a question “What comes in your mind if you hear the “Safety” in terms of school or what do you want to safeguard in a school?” And there is no prize if someone guesses about the reply to comprise words/phrases of same quantum as for the word “School” above.

And if you put together the replies to these two questions, you will come out with many permutations & combinations explaining or indicating about the “School Safety” that needs to be ensured. I am talking about this through our real life experiences while asking these two questions during various training sessions on school safety.

So, one should not take

“School Safety” as a remedy available off the shelf. It is very serious and deep in nature and needs a well planned & systematic approach to achieve.

Through this column I am not going to focus on the regular features on school safety i.e. Why it is needed, what needs to be done or how to ensure this or what are the guidelines etc; but I would rather like to share some very vital inputs required to be understood by all stakeholders of “School Safety” on the gaps existing in schools and current practices being adopted by schools towards school safety. This will give some idea on what needs to be done while working towards this. Rest of the article will focus on these two aspects which are the outcome of survey conducted by us and also of our vast experience of working with schools in Delhi, Uttar Pradesh, Haryana etc.

The Conclusion of our learning while working with schools on disaster risk reduction (DRR) is that

No school found to be properly prepared on disaster or emergency management. Schools are either superficially or pathetically prepared and may not be in a position to safeguard lives of children, teachers & staff in case any natural or man-made hazard strikes schools. Schools have not learnt any lesson from the past inci-

**Pratibha Sharma**  
 Director (School Safety Program)  
 Global Academy of Public Safety & Habitat Management (GAPSHAM)  
[www.gapsham.org](http://www.gapsham.org)

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Training Session at a School in Bareilly

dents or increased frequency of natural & man-made disasters in 21st Century.

**Silver Lining :** But one should not feel hopeless. Below are some of the submissions by schools which show a silver lining for the administration to push forward the real capacity building of schools on DRR:-

■ Until & unless someone will continuously hammer upon us, schools will not take disaster management seriously and will never be able to implement safety guidelines.

■ We admit that whatever little we are doing on disaster management is just eyewash and is on papers only. There is nothing concrete on grounds. Whenever we get some circular from

authorities, we do some exercise and send the report to concerned authorities to complete the formalities.

■ We would like to have proper & continuous guidance from authorities for the implementation of school safety guidelines.

■ The survey was an eye opener for us and we were not aware about the depth & gravity of this issue (school safety). Schools should themselves take initiatives to implement school safety guidelines and remain prepared on disaster management.

***Our discussions shall continue in next edition on this vital subject. Good bye till then! And a very happy, prosperous and safe New Year to all of you!***



Student Learning Evacuation at a School in Bareilly



Student Learning CPR skills at School at delhi.



Student Learning Casualty Transportation at Delhi..



Teachers Learning Earthquake Responce skills.



Student Learning First Aid at School at delhi.

# आपदा, आपकी जान और अस्पताल

**कि** सी भी आपदा के तुरंत बाद जिस सहायता की सबसे अधिक आवश्यकता होती है वह है बचाव कार्य और बचाये गए लोगों को तुरंत चिकित्सा सुविधा उपलब्ध करवाना। पूर्व में और हाल ही में आई आपदाओं में यह देखने को मिलता है कि प्रशासन और सरकार के तमाम प्रयासों और इंतजामों के बावजूद बचाये गए लोगों को जिस स्तर की चिकित्सा सहायता उपलब्ध होनी चाहिए (विशेषकर बड़ी आपदाओं के बाद) वैसा हो नहीं पाता और संपूर्ण व्यवस्था में एक अस्तव्यस्तता या अव्यवस्था का माहौल रहता है। इसमें जो सबसे बड़ी कमी सामने आती है वह है तुरंत उपलब्ध की जाने वाली उत्कृष्ट श्रेणी की एवं कुशल प्राथमिक सहायता जिसके अभाव में बहुत सी जानें जो कि बचायी जा सकती थीं नहीं बच पातीं। सबसे साधारण प्राथमिक सहायता अर्थात् घायलों को चिकित्सा शिविर तक पहुंचाना या फिर उन्हें सुरक्षित जगह तक ले जाना भी सही तरीके से न हो सकने के कारण या तो घायलों की स्थिति और खराब हो जाती है या वे गलत हैंडलिंग के कारण जान गवां बैठते हैं।

आपदा के बाद घायलों की संख्या में होने वाला अप्रत्याशित इजाफा अक्सर उस क्षेत्र विशेष की स्वास्थ्य सुविधाओं की क्षमता से काफी अधिक होता है। इन परिस्थितियों में बाहर से आने वाले चिकित्सकों को या आपदा साइट पर ही लगाये जाने वाले चिकित्सा शिविरों के लिए बहुत से प्राथमिक सहायता (फर्स्ट ऐड) में प्रशिक्षित स्वयंसेवकों की भी आवश्यकता होती है। यह क्षमता अस्पताल के साथ-साथ कम्युनिटी के स्तर पर भी विकसित करनी होती है जिसका वर्तमान में नितान्त

सुनिश्चित करना एक महती जिम्मेदारी बन जाती है। जरा कल्पना कीजिए कि आपदा के समय या तुरंत बाद जिसकी सबसे अधिक आवश्यकता है वही या तो धराशायी है या सहायता देने की स्थिति में नहीं है। अस्पताल इसी श्रेणी में आते हैं। इनका खड़ा रहना और कई गुना क्षमता के साथ सेवा देना, आपदाओं की विभीषिका को कम करने के लिए अति आवश्यक है।

“सभी नए अस्पतालों के भवनों का निर्माण उस क्षेत्र विशेष की हैजर्ड प्रोफाइल या भूकम्प संवेदनशीलता के हिसाब से करना जिसमें भूकम्प रोधी संरचना सबसे आवश्यक पहलू है। तथा पुराने अस्पतालों के भवनों का प्राथमिकता के आधार पर रेट्रोफिटिंग करना। इसके लिए सरकार सोशल रिस्पांसिबिलिटी फण्ड और संसद या विधायक निधि का प्रयोग सुनिश्चित कर सकती है।”

अस्पतालों की आपदा प्रबंधन क्षमता बढ़ाने के लिए जिन बातों या कार्यों को सुनिश्चित किया जाना आवश्यक है वह है कि

सबसे पहले इनका “हैजर्ड, वलनेरेबिलिटी, रिस्क एंड कैपेसिटी” एनालिसिस किया जाए। उसके बाद एक बृहद एवं प्रभावी “अस्पताल आपदा प्रबंधन कार्य योजना” बनाई जाए। इस कार्य योजना में जिन बातों का विशेष ध्यान देने की आवश्यकता है वह हैं (1) प्रभावी एवं कुशल प्राथमिक सहायता (फर्स्ट ऐड) की क्षमता का निर्माण (2) नॉन-मेडिको स्टाफ की क्षमता का निर्माण ताकि आपदाओं



डा. प्रियंका सिंह  
हस्पिटल डिजास्टर  
मैनेजमेंट डिवीजन  
ग्लोबल एकेडमी ऑफ पब्लिक  
सेफ्टी एंड हैबिटेट मैनेजमेंट  
नई दिल्ली। ईमेल-  
academypshm@gmail.com



doctors learning evacuation techniques at Sitaram Bhartiya Institute, Delhi



File Photo

अभाव है। भारत सरीखे देश में जो कि आपदाओं से अत्यंत प्रभावित है इस ओर ध्यान देने की तत्काल आवश्यकता है। अस्पताल के नॉन-मेडिको स्टाफ को भी इसमें प्रशिक्षित किया जाना चाहिए ताकि “मास कैजुअल्टी इंसिडेंट” के समय ये लोग भी मेडिको स्टाफ और डॉक्टर्स को घायलों की प्राथमिक सहायता या चिकित्सा में मदद कर सकें।

अब हम आते हैं सबसे जरूरी बात पर। आपदा के समय स्वास्थ्य केन्द्रों अर्थात् अस्पतालों पर काफी दबाव होता है। यह दबाव एक तो मरीजों को स्वास्थ्य सुविधा उपलब्ध करवाने का होता है जो कि पहले से ही कम पड़ रही होती हैं ऊपर से अपनी और अपने परिवार की सलामती सुनिश्चित करने का भी दबाव होता है। अतः स्वास्थ्य सुविधाओं की क्षमता निर्माण करते समय एक ऐसी प्रणाली भी विकसित की जानी चाहिए कि जो घायलों और मरीजों की देखभाल कर रहे हैं उनकी भी उन परिस्थितियों में सही देखभाल होती रहे ताकि वे अपना काम बिना किसी तनाव के अधिक क्षमता के साथ कर सकें जो कि उस वक्त की जरूरत होती है।

स्कूल, अस्पताल और प्रशासनिक भवन आपदाओं की दृष्टि से “जीवन रेखा इमारतें” (लाइफलाइन बिल्डिंग्स) कही जाती हैं। अतः इन इमारतों की सलामती

“आपदा के बाद घायलों की संख्या में होने वाला अप्रत्याशित इजाफा अक्सर उस क्षेत्र विशेष की स्वास्थ्य सुविधाओं की क्षमता से काफी अधिक होता है। इन परिस्थितियों में बाहर से आने वाले चिकित्सकों को या आपदा साइट पर ही लगाये जाने वाले चिकित्सा शिविरों के लिए बहुत से प्राथमिक सहायता (फर्स्ट ऐड) में प्रशिक्षित स्वयंसेवकों की भी आवश्यकता होती है। यह क्षमता अस्पताल के साथ-साथ कम्युनिटी के स्तर पर भी विकसित करनी होती है जिसका वर्तमान में नितान्त अभाव है। भारत सरीखे देश में जो कि आपदाओं से अत्यंत प्रभावित है इस ओर ध्यान देने की तत्काल आवश्यकता है। अस्पताल के नॉन-मेडिको स्टाफ को भी इसमें प्रशिक्षित किया जाना चाहिए ताकि “मास कैजुअल्टी इंसिडेंट” के समय ये लोग भी मेडिको स्टाफ और डॉक्टर्स को घायलों की प्राथमिक सहायता या चिकित्सा में मदद कर सकें।”

के समय वे मेडिको स्टाफ और डॉक्टर्स की सहायता कर सकें (3) आपदाओं के समय और पश्चात आवश्यक साइको-सोसियो, जेंडर एवं रिप्रोडक्टिव हेल्थ केयर क्षमता का निर्माण (4) आपदा के बाद बच्चों, बूढ़ों और अपंगों की जरूरतों के हिसाब से उनकी देखभाल करने की क्षमता का निर्माण (5) “मेडिकल विस्क रिस्पांस टीम” का गठन और समुचित प्रशिक्षण (6) “बेसिक ट्रामा लाइफ सपोर्ट” एवं “एडवांस्ड ट्रामा लाइफ सपोर्ट” में प्रभावी क्षमता का निर्माण (7) “मास कैजुअल्टी मैनेजमेंट” की क्षमता का निर्माण (8) अस्पताल के इंसिडेंट कमांड सिस्टम को डेवेलोप करना। यह सब होने के बाद जो बात रह जाती है वह है अस्पताल की आपदा प्रबंधन कार्य योजना का जिले की आपदा प्रबंधन कार्य योजना के साथ समन्वय करना या जोड़ना।

अंत में सबसे जरूरी बात। सभी नए अस्पतालों के भवनों का निर्माण उस क्षेत्र विशेष की हैजर्ड

प्रोफाइल या भूकम्प संवेदनशीलता के हिसाब से करना जिसमें भूकम्प रोधी संरचना सबसे आवश्यक पहलू है। तथा पुराने अस्पतालों के भवनों का प्राथमिकता के आधार पर रेट्रोफिटिंग करना। इसके लिए सरकार सोशल रिस्पांसिबिलिटी फण्ड और संसद या विधायक निधि का प्रयोग सुनिश्चित कर सकती है।

# औद्योगिक इकाइयां : विकास जरूरी पर सम्हल के



## वि

श्व की सर्वाधिक खतरनाक और दिल दहलाने वाली औद्योगिक दुर्घटना 2-3 दिसंबर 1984 को भोपाल में घटित हुई जबकि यूनियन कार्बाइड फैक्ट्री से मिथाइल आइसोसाइनाइड गैस के रिसाव से 5.50 लाख लोग प्रभावित, 8000 लोग 2 हफ्तों के अंदर तथा उसके बाद लगभग 8000 लोग और इस गैस के प्रभाव से मारे गए। देश में लगभग हर-दिन कोई न कोई औद्योगिक हादसा जरूर होता है चाहे वह छोटा हो या बड़ा। औद्योगिक आपदाएं अधिकांशतः मानव निर्मित होती हैं सिवाय इसके कि इन दुर्घटनाओं की जड़ में भूकम्प या सुनामी या कोई अन्य प्राकृतिक आपदा नहीं हो।

देश में औद्योगिक इकाइयों में सुरक्षा से सम्बंधित व्यवस्थाओं को निर्देशित करने के लिए अनेक कानून बने हुए हैं। इनका सही कार्यान्वयन सुनिश्चित करना प्रबंधन की जिम्मेदारी होती है। औद्योगिक आपदाओं या दुर्घटनाओं से जान और माल के साथ-साथ प्रकृति, प्राकृतिक संसाधनों और पारिस्थितिक तंत्र को भी बहुत नुकसान पहुंचता है। और कभी-कभी तो इन आपदाओं के दुष्परिणाम आने वाली कई पीढ़ियों को भुगतने पड़ते हैं जैसे कि भोपाल गैस कांड से हुआ था। 2010 तक देश में 1894 'मेजर एक्सीडेंट्स हैजर्ड यूनिट्स' कार्यरत थीं। उसके पश्चात इस संख्या में इजाफा ही हुआ होगा।

इसके अलावा लाखों की संख्या में मध्यम और छोटी औद्योगिक इकाइयां हैं।

औद्योगिक इकाइयों की जिम्मेदारी न केवल अपने कर्मचारियों की सुरक्षा की होती है बल्कि उन्हें आस-पास की आबादी की सुरक्षा का भी ख्याल करना होता है और इसके लिए उन्हें ऑन-साइट तथा ऑफ-साइट आपदा प्रबंधन कार्य-योजना बनानी होती है। 2009 में जयपुर में इंडियन आयल के डिपो में आग लगी थी। इस दुर्घटना में 12 लोग मारे गए थे और 200 से अधिक घायल हुए थे। एक हफ्ते तक यह आग जलती रही और 5 लाख से अधिक लोगों को वहां से हटाया गया। यह हादसा इतना बड़ा था कि इसके विस्फोट से 3 किलोमीटर दूर तक खिड़कियों के कांच टूट गए थे।

सरकार द्वारा गठित एक समिति की जांच में यह पाया गया कि इस दुर्घटना का कारण था सुरक्षा उपायों में कोताही तथा मानव त्रुटि। समिति ने अपनी रिपोर्ट में इसे 'घोर लापरवाही' बताया। अब यह कोई अपने किसम की अकेली औद्योगिक दुर्घटना नहीं थी जिसका कारण लापरवाही और सुरक्षा उपायों में कोताही था। देश में होने वाली तमाम औद्योगिक दुर्घटनाओं के पीछे ये दो कारण अन्य कारणों के साथ-साथ अवश्य मिलेंगे। आखिर ऐसा क्यों? क्यों अपने देश में जान सस्ती है और माल महंगा? क्यों सुरक्षा उपायों के तमाम



स्वाति सिंह  
क्लाइमेट एंड हाइड्रो-मेट  
डिजास्टर डिवीजन  
ग्लोबल एकेडेमी ऑफ पब्लिक  
सेफ्टी एंड हैबिटेट मैनेजमेंट  
नई दिल्ली।  
ईमेल-  
academypsh@gmail.com

“ आपदा प्रबंधन की दृष्टि से सभी औद्योगिक इकाइयों को सबसे पहले सेफ्टी ऑडिट करवाना चाहिए जिसे चैजर्ड, वल्लेरेबिलिटी, रिस्क एंड कैपेसिटी एनालिसिस भी कहा जाता है। इसके बाद एक कारगर और व्यवहारिक आपदा प्रबंधन कार्य योजना बनानी चाहिए। यह कार्य योजना ऑन-साइट और ऑफ-साइट दोनों पहलुओं पर फोकस होनी चाहिए। सभी कर्मचारियों का समुचित और सही प्रशिक्षण होना इस पूरी योजना की रीढ़ है। ”

दिशा-निर्देशों के बावजूद हादसों की जांच-पड़ताल में यह निष्कर्ष जरूर आता है जैसा कि इंडियन आयल के केस में हुआ।? इस सबकी जड़ में यदि आप जायेंगे तो पाएंगे कि दिशा-निर्देशों के कार्यान्वयन में घोर लापरवाही है और सुरक्षा से सम्बंधित अधिकांश दिशा-निर्देश कागजों में तो अवश्य पूरे हो रहे होंगे पर धरातल पर सिर्फ और सिर्फ एक बड़ा शून्य है।

आपदा प्रबंधन की दृष्टि से सभी औद्योगिक इकाइयों को सबसे पहले सेफ्टी ऑडिट करवाना चाहिए जिसे चैजर्ड,

वल्लेरेबिलिटी, रिस्क एंड कैपेसिटी एनालिसिस भी कहा जाता है। इसके बाद एक कारगर और व्यवहारिक आपदा प्रबंधन कार्य योजना बनानी चाहिए। यह कार्य योजना ऑन-साइट और ऑफ-साइट दोनों पहलुओं पर फोकस होनी चाहिए। सभी कर्मचारियों का समुचित और सही प्रशिक्षण होना इस पूरी योजना की रीढ़ है। अब एक और सबसे आवश्यक पहलू जो कि औद्योगिक इकाइयों और उसके आस-पास रहने वाली जनता को समझना चाहिए वह है एक व्यवहारिक और कारगर मॉक-ड्रिल फ्रेमवर्क।

अभी जो भी मॉक-ड्रिल होते हैं वे इकाई की आपदा प्रबंधन कार्य योजना पर आधारित नहीं होते हैं। तथा ऑफ-साइट प्लान को टेस्ट करने के लिए मॉक-ड्रिल लगभग न के बराबर ही होते हैं। ऑफ-साइट मॉक ड्रिल में जनता की भागीदारी भी सुनिश्चित होनी चाहिए और उस औद्योगिक इकाई से संभावित सभी प्रकार के खतरों के बारे में और उनसे बचने के बारे में जनता को सतत जागरूक करना अत्यावश्यक है। भोपाल गैस कांड में यूनियन कार्बाइड का एक भी कर्मचारी नहीं मरा था जबकि बाहर 16000

लोग मारे गए थे। ऐसा इसलिए हुआ क्योंकि बाहर की जनता को मालुम ही नहीं था कि यदि कभी गैस लीक होगी तो उससे कैसे अपनी जान बचानी है। अंत में एक जिम्मेदारी जनता पर भी आती है कि आस-पास की औद्योगिक इकाइयों से अलग-थलग न रहकर उनसे होने वाले खतरों के बारे में जाने और उससे बचाव के साधनों के विषय में भी जानने का प्रयास करें तथा प्रशासन पर दबाव भी डालें कि यह सुनिश्चित किया जा सके कि सभी औद्योगिक इकाइयों की आपदा प्रबंधन कार्य योजना दुरुस्त रहे।

“ भोपाल गैस कांड में यूनियन कार्बाइड का एक भी कर्मचारी नहीं मरा था जबकि बाहर 16000 लोग मारे गए थे। ऐसा इसलिए हुआ क्योंकि बाहर की जनता को मालुम ही नहीं था कि यदि कभी गैस लीक होगी तो उससे कैसे अपनी जान बचानी है। ”



# Initiatives on Building Community Resilience



Dr. Mukta Girdhar,  
Asstt. Professor,  
CDMS, Guru Govind  
Singh Indraprastha  
University(GGSIPU)

## Introduction

Geographically each part of India is vulnerable to some or the other disaster. So it is important to make Community Resilience.

Community resilience is about to strengthen community with support of local resources, their unique knowledge to mitigate emergency in a way that complements the local emergency services.

Building community resilience starts from to create awareness that what type of risk they are in or community might face. How individuals can help themselves and group can help others at the time of need or emergency. So the community will be better prepared to cope during and after an emergency when everyone works together using their local knowledge. Things like understanding what requirements most-at-need groups may have in an emergency can make a real difference. Identifying and planning for the risks could help in reducing the potential impact as individual and the wider community. Being prepared and able to respond to an emergency can often help people recover more quickly.

There are many NGOs, self help group and much other organization who are already taking steps to pre-

pare community to cope with an emergency. It is important to document these initiatives and share this document with other communities who are into such type of risk. This will raise awareness and understanding amongst other communities, who may seek to adapt these to suit their own local need.

## Objective

To find out ways and means of Building community resilience, we have to develop a case study to collect information that what technique local people are using to pro-

“ **Local emergency responder and stakeholders meet regularly and discuss their resources, strength, what they need to improve what is the planning etc. It is also important to identify other risk in local area, for example road is broken, Big hole, drainage is open etc which should be either avoided or get modified before it becomes more risky. We also need to include other aspects like.** ”

tect themselves and spread those technique to all the communities through pamphlets, drama, and training etc.

- Improve resilience as individual, family, and community against all threats, emergency.

- Support and enable initiative of local community and help to disseminate these initiatives in other areas.

- Remove difficulties which prevent participation in community resilience at local level.

## Methodology

Collect information related to particular disaster which affects particular part of India. We need to create a Questionnaire. Questionnaire should include what initiatives community has taken and what impact it achieved. What were the key lessons learnt, what inspired the event? Why was it planned? Who was involved? Summary of stake-

holders, partners) what were the problems? How were they tackled? How did you solve the problem? What resources were needed /time taken? What were the outcomes? What was the impact? Positive and negative results; Any evidence of impact? What could have been done better? Evaluate conclusions regarding the initiative. What are the next steps? Are any other sim-

## Analysis

### 1-Identifying and preparing for risk

In order to build community resilience, individual and communities should prepare for the risk.

Local emergency responder and stakeholders meet regularly and discuss their resources, strength, what they need to improve what is the planning etc. It is also important to identify other risk in local area, for example road is broken, Big hole, drainage is open etc which should be either avoided or get modified before it becomes more risky.

We also need to include other aspects like

**A- Social Risk:-** Vulnerable people groups in the area. Like old age people, children, handicapped, People who are in different sector of hospital, people who don't access to



Community level training programs



Community Involvement in CBDRM exercise

## Initiatives on Building Community ...

transport, people who are having a language problem, transient group such as travelling communities.

**B- Environmental Risk :-** Are there any

**Supplies:-** In the emergency we require food, water and shelter. Volunteer who are willing to work should discuss the community and list out those people

which help to save so many People. If not possible to train all the community at least responder need to learn these first aid techniques.

**Reviewing and updating plan:-**

It is important to regularly review and update community emergency plan to meet the changing need of community. It is also important that plan should work during an emergency for that we need to do exercise and this allow to identify problems, remove these problem and regularly update contact list to ensure it is accurate.

**Conclusion**

Building community resilience is process which needs a lot of initiatives and support of local leadership. Local leader need to be supported and encouraged to take responsibility to develop community resources, volunteers. Most successful communities are those who join hands with diverse range of resources and include more and more individuals. Group and communities with better connectivity and communication form a more resilient community – a community more able to respond and adapt to future challenges. It also highlights how new ideas need to be made locally relevant and considerable care and time is needed to embed them. If we take good life initiative and right kind of practical support, communities can take on more responsibilities, can take local decision and encourage environmentally sustainable and resilient development.



**Community capacity building**

environmental risk, for example any area which is flooded regularly, or facing drought problem or any other kind of problem. Information also needs to be collected if there is any site which has a historic importance or scientific interest.

**C- Infrastructure risk:-** This risk include whether there is major transport hub in the area. Are there any bridges or main road which needs strengthening, Any large industrial site which might come under disaster prone area and needs to be plan.

**2-Assessing community skills and resources**

Very important to build the community resilience are to know the skills of the community and what are the resources as individual, group and community has. Skills of the community should be assessed under the following categories

**Volunteers: -** Many communities and individuals automatically come forward to help others during time of need. What are the skills they are having; list should be prepared along with their contact number and expertise. Volunteer should be trained and aware with a emergency planning.

**Tools:-** List has to be prepared about what tools and machinery might be needed during an emergency. Responsibilities have to be assigned to those who are qualified, capable, expertise area, and willing to operate these tools and machinery in an emergency.

who are ready to provide support and supply during an emergency.

**Shelter:-** Community has to identify a safe place which is safe in disaster and can be used as a shelter. It is also important to complete all the formalities to use their building as a shelter during emergency.

**Communication:-** People need to be trained how to use walky talky and setup Amateur radio station and group so the volunteer can communicate to a local people as well as stake holders without interruption.

**First aid:** it is very important. Community should be trained for First aid,



**Community Training at Delhi**

## Serene Himalaya! Is It? ओम शांति: शांति:

**हि**मालय विशाल, अडिग, शांत, गंभीर आदि आदि न जाने कितने विशेषण और उपमा अलंकार हिमालय के साथ जुड़े हुए हैं। परन्तु अब लगता है कि हिमालय खुद भी अपने इन विशेषणों से उबा हुआ लग रहा है और किसी तरुण की तरह अंगड़ाई लेकर पूरी दुनिया को कुछ नया करना और दिखाना चाह रहा है और इसमें कुछ जल्दी बाजी में भी लग रहा है।

अभी कश्मीर भूकम्प, सिक्किम-नेपाल भूकम्प आदि स्मृति पटल से गायब भी नहीं हुए थे कि नेपाल भूकम्प ने पूरी दुनिया को हिला दिया और नेपाल विनाश के अवशेष अभी पूरी तरह से हटाये भी नहीं गए थे कि फिर अफगानिस्तान-पाकिस्तान क्षेत्र में एक और विनाशकारी हलचल।

हिमालय क्षेत्र में सिर्फ भूकम्प ही नहीं वरन अन्य हलचलें भी एक के बाद हो रही हैं जैसे कि वर्ष 2013 की केदारनाथ तबाही, कश्मीर बाढ़, लेह बाढ़ आदि। इन सब से पहले की भी अनेकों त्रासदियां। मानों एक बच्चे की तरह हिमालय क्षेत्र दुनिया का ध्यान अपनी ओर आकर्षित करने के लिए कुछ नया हरदम और हरपल करना चाह रहा हो। फ्रीक्वेंसी भी बढ़ गयी है।

अब अगर हिमालय यही चाह रहा है कि हम उसकी ओर पर्यटन, दोहन और शोषण के अतिरिक्त अन्य एंगल से भी देखें तो हमें उसका इशारा समझना पड़ेगा अन्यथा हमारी उपेक्षा इस विनाश लीला को और भी भयावह रूप में सामने ला सकती है।

थोड़ा एक्सपर्ट्स की दृष्टि से देखते हैं :-

"We know there is a huge amount of accumulated strain in this area. It is due for a major earthquake, perhaps a series of earthquakes, bigger than 8 on the Richter scale. That is the kind of energy that is estimated to be accumulated there. This was certainly not one of those earthquakes that is probably imminent. In terms of energy release, I would say this would not have released even four or five percent of the energy that is estimated to be stored there," --Mr Harsh K Gupta, former director of the Hyderabad-based National Geophysical Research Institute and a former member of the National Disaster Management Authority-in an interview to Indian Express after Nepal Earthquake.

"This earthquake would only be classified as medium in terms of energy released. That area, the 2500-km stretch from the Hindukush region to the end of Arunachal Pradesh, is capable of generating much bigger earthquakes, even nine on Richter scale,"-- Prof Sankar Kumar

Nath of IIT Kharagpur, who has studied seismic activity in the Himalayan region in an interview to Indian Express after Nepal Earthquake.

"The lesson, once again from this earthquake, is that we need to adapt and plan and prepare ourselves for these earthquakes. More than 90 per cent of the destruction that is caused by the earthquakes is avoidable if we plan for it. An earthquake of magnitude 7.5 is routine in Japan but no one dies there, no property is damaged. We can also do it. There is no knowledge gap. We know exactly how to do it. The buildings have to be constructed in a certain fashion; habitations have to be settled in a particular manner. All this is very well known,"--- Ajay Paul of the Dehradun-based Wadia Institute of Himalaya Geology, after Nepal Earthquake.

हम इस चर्चा को आगे ले जायेंगे लेकिन सिर्फ हमारे अपने दृष्टिकोण से नहीं वरन सभी पाठकों के दृष्टिकोण से भी। अतः जो कोई भी इस खुली चर्चा का हिस्सा बनने का इच्छुक हो वह हमें हमारी ई-मेल [emag.gapsham@gmail.com](mailto:emag.gapsham@gmail.com) पर अपने विचार भेजें। अपना संछिप्त परिचय और पासपोर्ट साइज फोटो भी जरूर भेजिए। हम इन सारे विचारों को अपने अगले अंकों में शामिल करके इस चर्चा को वृहद बनाना चाहते हैं और अंत में इन सारे विचारों और उपायों को भारत सरकार तक पहुँचाने का दायित्व हम निभाएंगे ताकि हिमालय क्षेत्र के विषय में भविष्य में बनने वाली किसी भी कार्य योजना में इनका उपयोग हो सके।

We wish to take this discussion forward through the readers. So whosoever wishes to be the parts of this discussion just send your views/inputs/suggestions to our e-mail-ID

"[emag.gapsham@gmail.com](mailto:emag.gapsham@gmail.com)". Do not forget sending your brief CV (2 lines) and a passport size photo (jpeg format) along with your inputs for incorporation in next issues of this e-magazine. We will publish those inputs in our next issues and also will send all suggestions/inputs on this vital topic to Govt of India so that any future plans regarding Himalayan region may be prepared by taking clues from these inputs/suggestion as well.



Photo : Shri Sanjay Kumar (IAS)

# Launch of “Adhunik Vishwakarma”

*A Campaign for Masons Training on Earthquake Resistant Construction*

**G**lobal Academy of Public Safety & Habitat Management (GPASHAM) recently launched a campaign to train masons in the country on earthquake (hazard) resistant construction. The campaign was formally launched on 14 Oct 2015 at Allahabad, the world famous city in Uttar Pradesh in presence of District Magistrate Allahabad, Mr Sanjay Kumar who took initiative in this direction and supported the ambitious task by formally inaugurating the campaign from the city of “Sangam” and “MahaKumbh”.

**“training program first will be taken up in all 31 districts of Uttar Pradesh falling under seismic zone-IV. Then in second phase, all cities in Uttar Pradesh shortlisted to be made “Smart Cities” by Govt of India, shall be the focus point of this training. This campaign will not only concentrate on training of masons but also on the awareness generation drive among the citizens wherever this training program shall be held.”**

The launch program was made some sort of a workshop for masons. 156 masons were present in the workshop and interacted very freely with Dr Chandan Ghosh, Head, Geo-Hazard division, National Institute of Disaster Management (NIDM), Ministry of Home Affairs, Govt of India. Dr Chandan Ghosh gave a



Mr Sanjay Kumar, District Magistrate, Allahabad (in the centre on dais) in Adhunik Vishwakarma launch program on 14th Oct 2015

detailed presentation to masons on some common techniques on earthquake resistant construction of houses. He also replied numerous queries of masons in detail through photographs, movies and



Left to Right: Mr Atal Rai (CDO), Mr Sanjay Kumar(District Magistrate, Allahabad), Dr Chandan Ghosh(NIDM) in the workshop



sketches on paper. Mr Saurabh Gautam, CEO, GAPSHAM gave a brief presentation on the overall working of the GAPSHAM and also on the Adhunik Vishwakarma campaign process & phases.

Mr Sanjay Kumar, District Magistrate, Allahabad, on this occasion, while interacting with the masons and other participants, came out with his mind on this important exercise for the benefit of the people of Uttar Pradesh and emphasized on the need of such program on a sustainable basis. He very categorically pointed towards the on-field training to

masons in batches and assured all his support to this campaign. On the occasion he even felicitated a female mason present in the workshop who is the first ever female mason in the district.

*Dr Chandan Ghosh interacting with masons during the workshop. Mr Sanjay Kumar, District Magistrate on the dais.*

All masons who will undergo the designed training program on earthquake resistant construction by GAPSHAM, shall be awarded with a certificate honoring them with the title "Adhunik Vishwakarma". This training program first will be taken up in all 31 districts of Uttar Pradesh falling under seismic zone-IV. Then in second phase, all cities in Uttar Pradesh shortlisted to be made "Smart Cities" by Govt of India, shall be the focus point of this training. This campaign will not only concentrate on training of masons but also on the awareness generation drive among the citizens wherever this training program shall be held.

*Mr Sanjay Kumar, District Magistrate, Allahabad felicitating female mason. In the background is Dr Chandan Ghosh.*





Flagging of the “Smart City; Smart Citizen” rally in Bareilly on the occasion “World Disaster Risk Reduction Day” on 13th October 2015. The rally was organized by “Dainik Jagran” newspaper and “GAPSHAM” was part of this awareness generation drive in the city concentrating two aspects: Disaster Risk Reduction and Environment Friendly city.



# From the desk of “Angel Typhoons”

## The Final Message

A grey sky, a shroud oppressing,  
hangs above as dawn gives to light  
Not a trace of the bright blue sky remains,  
To tell the people how it was once so bright

Even the sun seems fuzzy, the air like mist,  
The smoke closes around like the devil's fist  
All devices tried, all balms applied  
But nothing seems to be getting it fixed

'What has gone wrong?' the thought arises  
We had but left the Earth to its own devices.  
Why isn't it feeling like it used to before,  
though the waves still bang across the shore?

Nature's song, unheard, unsung  
For centuries has remained on parchment  
Five millennia since Rome, and three since  
Chrome  
Yet nature endures mankind's torment

In this future world, in the city of cities  
That rose up to choke the land

The concrete monsters hold us with in  
Miles and miles from soft warm sand

That grew our food once seems useless now  
For the screws do all the making  
Photosynthesis has become artificial,  
And all we want is for our taking.

Though many rejoice at the new found  
knowledge  
There are some things that we miss  
The smell of rain and warmth of sun  
Oh! What wonderful feelings

Sadly, it's been a long time  
Since the face of Earth was happy  
Now it's crying and dripping around  
And feeling rather too snappy

And now, the Earth's going to disintegrate  
All life will be destroyed  
The crust will break, the mantle shake  
And the world become a void

'this quite a sad prospect we face

But this we must accept  
That it was us who did this to the Earth  
With our high heads and deep concepts

Can something be done? Of course it can,  
But a steep price must be paid  
Back in time when it all began,  
Foundations must be laid

If you read this, you are lucky  
For you have seen the future  
Stop the acts that harm the land,  
Let mother Earth be your tutor

Spread this message far and wide  
Let people know what becomes of them  
And perhaps you be the turning point  
Of our precious blue-green gem

This is the future, with all its hopes Resting in  
this final letter  
Our fate was bleak, but perhaps,  
just perhaps Next time it will be better.

-Ashwin Kumar ,  
Rosary School, Delhi

## The First Responder's Contribution

### The Power...

Let the aqua blues swish and splash  
Let the fish and dolphins flip and flap  
Let the birds soar high tweet and chirp  
Let the clear blue skies be flakes and fluffs  
The Power to let that happen rests with you and me

Let the green grass shake and sway  
Let the cool breeze whisper and caress  
Let the golden flush proclaim a cheerful morn  
Let the glittery stars herald of another new dawn  
The Power to let that happen rests with you and me

Let the shimmering rivers rush and gush  
Let the winding hills lush and blush  
Let the myriad flowers bloom and swoon  
Let the fluttering butterfly pause and woo  
The Power to let that happen rests with you and me

Let the planet face no being's continuous blunder  
Let mankind halt this raid and plunder  
Let progress and environment be partners that care  
Let the bounties of nature be responsibly shared  
The Power to let that happen rests with you and me

Sapna Bakshi, Faculty,  
Suncity School, Gurgaon