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Panchayat and "Disaster Management"

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ROLE OF PANCHAYATS IN ENVIRONMENTAL MANAGEMENT

The views expressed in the articles are of the writers and not of the IES. Your views are solicited as a feedback, I.E.S. would be pleased to solve your queries.

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Do U Know ....

• **Disaster Management Act:**

The States have been advised to enact Disaster Management Acts to provide for authorities coordinating mitigation, preparedness and response as well as for various mitigation/preparedness measures required to be undertaken. Two States, Gujarat & Bihar, have already enacted such a law. Other States are in the process. A proposal for enacting a National Disaster Management Act is under examination.

• A High Powered Committee (HPC) of the Government of India, in its report submitted to the Government of India in October 2001, outlined the huge scope for Disaster Management by listing some three dozen different types of disasters India must prepare for. These were placed in five categories, namely, water and climate related disasters, geological disasters, chemical, industrial and nuclear disasters, accidents and biological disasters.

• Government of India [GoI], Ministry of Home Affairs [MHA] and United Nations Development Programme [UNDP] have signed an agreement on August 2002 for implementation of "Disaster Risk Management" Programme to reduce the vulnerability of the communities to natural disasters, in identified multihazard disaster prone areas.

Flood affected People sharing food and shelter with animals

To make such a house again must had became a dream for some one

Shelter and agriculture highly affected after a strong cyclone and storm

Our country's future affected by Natural disasters

Articles are invited on the topic of ***"Role of Panchayat in Wetland Conservation"****, for the next issue of this newsletter "PANCHAYAT".*

Editorial

I am very happy to place before you the newsletter on Disaster Management by the ENVIS centre on "Role of Panchayati Raj in Environmental Management". Disaster is a well known issue for India, as our country has been suffering for different type of disaster from time to time. Some part of the country is prone to flood and drought, some other parts are to earth quake while the northern and north-eastern Himalayan range has been facing the problems of land slide very commonly. There is no chance to stop the natural disasters as it depends on nature. But we can take the precautions and preparatory measure to reduce the impact of these problems.

It is essential to aware and sensitize the target groups like teachers, students, youth, women, NGOs/ CBOs etc. regarding the disasters and build their capacity through extensive training for better management of these problems. To popularize this issue at grass root level, it is essential to involve the leading organizations working at grass root level. Panchayati Raj Institutions can be the best one to take the leadership role to manage the disaster at local level. But, for getting the effective outcome, it is essential to build their capacity for disaster management.

We should be happy that, Government of India (GoI) and United Nations Development Programme (UNDP) have signed an agreement on August 2002 for implementation of "Disaster Risk Management" Programme to reduce the vulnerability of the communities to natural disasters, in identified multihazard disaster prone areas of our country. Many states have been covered through this programme and numbers of representatives from the Panchayati Raj Institutions have been trained.

This news letter describes the types of disaster we are facing from day to day and Role of Panchayati Raj to mitigate/ manage these problems. This publication also highlights the collaborative effort of Government of India and UNDP for effective disaster management. I am sure, after wide dissemination of this news letter, many of the stake holders including the representatives of Panchayati Raj Institutions will be aware and sensitized. I also hope that they will be motivated to work for the disaster management in their locality.

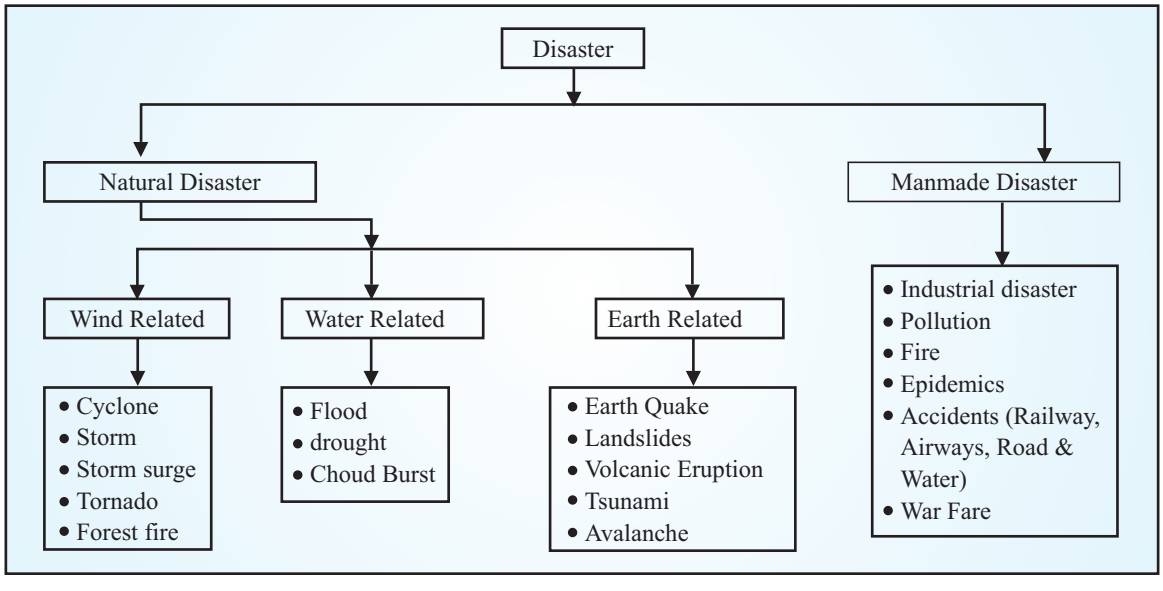
Dr. Desh Bandhu
President

NATURAL DISASTER: AN OVERVIEW

Compiled by: Mr. Sudhir Ranjan Swain, Project Associate, Indian Environmental Society
And Mr. Brajesh Choudhary, Project Associate, Indian Environmental Society

The term "Disaster" is originated from a French word "Disaster" which is the combination of the article "Des" and "Astre" meaning study. The World Health Organization (WHO) defined disaster as any occurrence that causes damage of materials, economic destruction, loss of living beings, deterioration of health and health services etc on a large scale.

Type of Disaster



Natural Disaster: Few of the major natural disaster are explained below

A) Earth Quake: It is the sudden release of energy which accumulated slowly in a local region of the earth's crust or upper mental. The point at which the energy is released is called the focus or hypocenter and the point on earth surface directly above the focus is known as epicenter. When an earth quake takes place, it emits a vibration or waves which can cause considerable distraction in the vicinity of the epicenter.

B) Landslide: A landslide (or landslip) is a geological phenomenon which includes a wide range of ground movement, such as rock falls, deep failure of slopes and shallow debris flows, which can occur in hilly areas, coastal and onshore environments. Although the action of gravity is the primary driving force for a landslide to occur, there are other contributing factors affecting the original slope stability. Typically, pre-conditional factors build up specific sub-surface conditions that make the area/slope prone to failure, whereas the actual landslide often requires a trigger before being released.

C) Volcanic Eruption: When pressure from the molten rock beneath the earth's surface becomes too great, the rock, usually accompanied by lava or gases, escapes through a fissure or vent in the crust of the earth. More than 80% of the earth's surface comes from volcanoes. Innumerable volcanic eruptions formed the sea floor and some mountains; gaseous emissions from volcanoes formed the earth's atmosphere.

D) Tsunami: A tsunami is a series of water waves (called a tsunami wave train) that is

caused when a large volume of a body of water, such as an ocean, is rapidly displaced.

E) Flood: It is well known that existence of life is not possible without water and also with the excess of water beyond capacity. Flood is the surplus of water which destroys life, infrastructure etc with its velocity.

F) Drought: It is the condition that arises due to the scarcity of water. In this condition, an area does not get enough water because of lower precipitation then normal and having higher temperature than normal. A drought exists when rainfall is 70% below average for a period of 21 days or longer. When the monsoon rainfall deficit for the country on the whole is 10 % below normal or less and 20 % or more area of the country suffer from rain deficit it is recognized as drought year.

G) Cyclone: Cyclone is a severe storm in which the wind spins in a circle with a high speed on water body. It is large revaluing vertices in the atmosphere extending horizontally from 150-1000 km and vertically from surface to 12-14 km with fierce wind spiraling anticlockwise around the centre. The cyclone pickup energy from the worm water of ocean. A mature tropical cyclone consists of a tropical region of light wind known as its eye which is about 20-30 km in radius.

Natural Disasters in India

India is one of the most disaster prone countries in the world. Due to unique and widely varying geographical and geological conditions of our country virtually all type of natural hazards takes place with various intensities and in different regions. Almost all the states and union territories are prone to disaster of one type or another. The country has been facing major natural disasters form time to time which are affecting the economic & social development activities it push the country to many years back by destroying human resource, natural resource, infrastructure etc.

Some of the major natural disasters faced by our country in the last two decade are Uttarkashi Earth Quake in 1991, Latur Earth Quake in September 1993, Chamoli Earth Quake March 1999, Orissa Supper Cyclone in October 1999, Bhuj (Kuch) Earth Quake in January 2001, Tsunami in December 2004, Mumbai and Gujurat flood during July-August 2005, India Pakistan Earth Quake in October 2005, Bihar Koshi River flood in August 2008 etc.

Among the manmade disasters faced by India includes; Bhopal Gas Tragedy in December 1984, Sriram Chemical Industries (Delhi) Oleum gas leakage in 1985, Terrorist attack in Kargil, Taj Hotel Mumbai, plain hijacking and many railway and road accidents.

A) Earth quake in India: As mentioned before, India has been facing earth quakes very frequently. The country has already lost valuable human resource, natural resources and infrastructure due to natural disasters like earth quake. According to the scientist of the National Geographical Institute (NGRI), Hyderabad the seafloor in the Indian Ocean is spreading and there by pushing land inward in north east direction at the rate of 5 cm per year. At the same time Saurastra region is rotating in an anticlockwise direction. The advancement of seafloor against Indian plates amount to nearly 125 to 150 cm in 20 to 30 years. It causes earth quakes not only at the edge of Indian plates but also in the Himalayan region

B) Tsunami in India: Almost all the countries situated around the Bay of Bengal were affected by the tsunami waves in the morning hours of 26 December 2004. The killer waves were triggered by an earthquake measuring 8.9 on the Richter

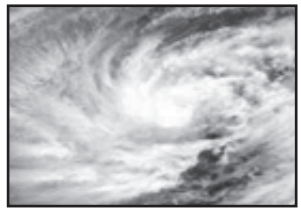
scale that had an epicenter near the west coast of Sumatra in Indonesia. The first recorded tsunami in India dates back to 31 December 1881. An earthquake of magnitude 7.5 on the Richter scale, with its epicenter believed to have been under the sea off the Coast of Car Nicobar Island, caused the tsunami. The last recorded tsunami in India occurred on 26 June 1941, caused by an earthquake with magnitude exceeding 8.5. This caused extensive damage to the Andaman Islands. There are no other well-documented records of Tsunami in India. Except the latest is which epicenter in Indoneia but affected many countries including India on the Bay of Bangal.

C) Flood in India: India is the second most flood affected country where flood is a common natural disaster. The first being the Bangladesh Very frequently the country has been facing flood in one or other part of the country. According to Indian Meteorological Department (IMD) about 80 % annual rainfall occur during the south-west monsoon season and flood in India are caused by heavy rain storms during this season.

The most vulnerable states where floods occur are Bihar, West Bengal, Uttar Pradesh, Assam, Orissa, Andhra Pradesh etc. It has been estimated that more than 6.7 million hectors of land and more than 30 million people has been affected annually due to floods. Main flood prone region in India are as follows;

- Bramhaputra River Region-Assam, Tripura etc
- Ganga River Region- Bihar, West Bengal, Uttar Pradesh etc
- North West river region- Haryana, Punjab, Rajasthan, Jammu and Kashmir etc.
- Kosi-Bihar
- Central India and Deccan region- Andhra Pradesh, Karnataka, Tamil Nadu, Maharastra etc.
- Mahandi and Kathajodi River Region-Chhattishgarh, Orissa and jharkhand

D) Drought in India: Drought has quite perennial feature in India especially in Gujarat, Rajasthan, and parts of Madhya Pradesh, Maharastra, Karnataka, Tamil Nadu, and certain areas of Orissa. When the monsoon rainfall deficit for the country as a whole is 10 % below normal or less and 20 % or more areas of country suffer from rain deficit then it is recognized as drought year. The years which are declared as Drought years are 1951, 1968, 1972, 1974, 1979, 1985, 1987 etc.



E) Cyclone in India: Mostly India is facing tropical cyclones, The Indian costal region i.e. Bay of Bengal and the Arabian Sea are among the six major cyclone prone regions of the world. In India, cyclone usually occur between mid April to June and mid October to mid December, mostly in Bay of Bengal.

Conclusion

India is a Country having geological, geophysical, cultural and many more diversities in and around its boundary. It has vast natural resources which are sufficient for taking the country to front line. But, most of the time our country has been severely affected by the natural disasters such as flood, drought, cyclone, earth quake, tsunami etc. These natural calamities has been breaking the backbone of the state and pushing the state back in economic and Social Development. Special attention is required to have a preplanned mitigation measures to mitigate these kinds of

natural disasters. To aware and sensitize people at grass root level, Panchayat bodies should be encouraged and involved in the mission to mitigate the natural disaster. The role of Panchayt bodies should be clearly defined and conveyed to them through educative and sensitization workshops and training programes for effectively mitigating the effects of such deserters. We achieved a lot by planning to set up a Disaster Management Authority in all the states and union territories. These authorities should take up the charge to involve panchayat bodies of their region in disaster management activities. We are sure that involvement of panchayat bodies will finally lead to the active involvement of the community people and thus mitigating the effects effectively.

GOI-UNDP DISASTER RISK MANAGEMENT PROGRAMME: AN EFFORT TO MANAGE DISASTER WITH THE INVOLVEMENT OF PRIs/ VILLAGERS

Mr. Abhaya Kumar Tripathy, Project Manager, Indian Environmental Society

Introduction

Among various natural hazards, earthquakes, landslides, floods and cyclones are the major disasters adversely affecting very large areas and population in the Indian sub-continent. Among the developing countries, India is a one of the most vulnerable to suffer from various natural disasters very often. The variety of natural disasters observed in India includes (i) geophysical origin such as earthquakes, volcanic eruptions, landslides and (ii) climatic origin such as drought, flood, cyclone, locust, forest fire. These natural disasters have been causing a devastating impact on human life, infrastructure, economy and environment. If proper management plans will be prepared and implemented for each type of disaster, then it will be easy to face them. The disaster management plan specifically for each type of disaster will help to minimize the loss of resources during the disaster and also help in rehabilitation and post-disaster reconstruction activities. The Panchayati Raj Institutions (PRIs) can play a crucial role in the disaster management activities. GoI- UNDP Disaster Risk Management Programme is an effort to manage the disasters in the locality by involving the PRIs and community people.

GoI-UNDP Disaster Risk Management Programme

(Reference: http://www.ndmindia.nic.in)

It is very encouraging that Government of India [GoI], Ministry of Home Affairs [MHA] and United Nations Development Programme [UNDP] have signed an agreement on August 2002 for implementation of "Disaster Risk Management" Programme to reduce the vulnerability of the communities to natural disasters, in identified multihazard disaster prone areas. Goal of the programme is: "Sustainable Reduction in Natural Disaster Risk" in some of the most hazard prone districts in selected states of India". The programme has many objectives out of which following are the important objectives from which benefit can be taken by the panchayat bodies existing at grass root level. These objectives are as follows:

(I) Multi-hazard preparedness, response and mitigation plans for the programme at state, district, block and village/ward levels in select programme states and districts

(II) Environment building, education, awarenes programme and strengthening the capacity at all levels in natural disaster risk management and sustainable recovery

This programs proposes to have greater impact on the PRIs for building their capacity to manage the disasters. Following table shows the impact of the programme in few states.

S. N.	Name of the state	Work done for Disaster Management by involving PRIs	Work done for Disaster Management by involving villagers	Other target groups trained / involved
1	Orissa	• Through this programme 145 block DMC formed & training completed in 140 blocks. • Block DM plans prepared in 94 blocks. • 5970 PRI members form 16 districts already trained on Disaster Management.	• 8734 Village DMCs formed • Volunteers training for preparation of village DM plans in 105 blocks & already 4135 volunteers completed training through the programme. • 104878 DMC members trained	• Training of NCC/NSS/NYKS/ Scouts & Guides Volunteers completed in 09 districts • 1221 volunteers & programme officers sensitized • Teachers training completed in 11 districts & 559 teachers trained
2	Bihar	• 249 Panchayat Disaster Management Plans have been finalized & approved on the basis of Village Disaster Management Plans.	• 784 Village Disaster Management Plans have been completed and approved • Identification of 3 volunteers per village for Search, Rescue and Evacuation & First-Aid activities and trained them at Panchayat level by Panchayat level DMTs.	• Trained Home-guards & Local Govt. Doctors are involved in the training process of the DMTs
3	Sikkim	89 PRIs representatives trained in Disaster Management at the District Level.	77 volunteers have been trained in West and North who have been oriented on Disaster Management ans Plan preparation.	• 20 teachers trained on Disaster Management at the District Level. • 205 NYKS/NSS Volunteers trained • Nodal Officers/Senior Officers/Policy Makers oriented
4	Gujarat	• 38 DRM Taluka/ Blocks covered. Sensitization of all PRIs have completed • Training and capacity building of 86PRIs completed successfully • 2951 PRIs representatives trained on disaster management	• 2215 Gram Sabhas have been covered • Total Participatory Rural Apprisal (PRA) is being carried out are 2058 • Village plan finalized 1824 • 2137 Village volunteers trained out of which 586 are women	• Taluka level officers, elected representatives, NGOs, collector, DDO, Addl Collector, Dy. Collector, information officer, teacher, fire man, engineers etc • 40 trainings organized covering 938 participants • Specialized rescue training organized through Monters club in which 117 volunteers get trained
5	Uttar Pradesh	• PRI trained: 58 • Committees formed in District: 12 • Committees formed in Block: 13	- -	• District, State and block level officials, Teachers, NYK,/NSS members etc
6	Uttaranchal	• 1976 PRI members/Officials oriented	• 24 Village level Programs organized • 20 members of Village Disaster Intervention Teams from 04 Districts are trained	• 504 Teachers, 1192 NSS/NCC volunteers get oriented • Engineers/Architects (38 under DRM & 34 under other program)oriented and trained

Contact details of the designated State Nodal Agencies under the GOI-UNDP Disaster Risk Management Programme

Name of the State	CONTACT INFORMATION
Arunachal Pradesh	**Mr Manish Gupta** Secretary to Government of Arunachal Pradesh, Department of Home and DisasterManagement, Government of Arunachal Pradesh, Itanagar, Arunachal Pradesh
Assam	**Mr M.K. Barooah** Commissioner and Secretary to the Government of Assam, Department of Disaster Management, Government of Assam, Dispur, Assam
Bihar	**Mr Ashok Wardhan**Relief Commissioner-cum-Secretary, Department of Disaster Management, Government ofBihar, Old Secretariat, Patna, Bihar
Delhi	**Mr G.K. Marwah** Divisional Commissioner, Office of the Divisional Commissioner and Secretary (Revenue), Government of National Capital Territory of Delhi, 5, Shamnath Marg, Delhi - 110 054
Gujarat	**Mr S.K. Mohapatra** Chief Executive Officer, Gujarat State Disaster Management Authority (GSDMA), Block No 11,5th Floor, Udyog Bhawan, Gandhinagar - 382 017
Maharashtra	**Mr Krishna S. Vatsa** Secretary (Relief and Rehabilitation) and Relief Commissioner, Revenue and Forest Department, Government of Maharashtra, Mantralaya, Mumbai
Manipur	**Dr J. Suresh Babu** Commissioner (Relief), Government of Manipur, Secretariat: Relief Department, Government of Manipur, Imphal, Manipur
Meghalaya	**Mr W. M. S. Pariat** Principal Secretary, Revenue Department, Government of Meghalaya, Rilang Building, Shillong - 793 001
Mizoram	**Mr Pu. C. Thanchhuma** Secretary to the Government of Mizoram, Relief & Rehabilitation Department, Government of Mizoram, Aizwal - 796 001
Nagaland	**Mr Temsuwati** Special Secretary (Home), Home Department, Government of Nagaland, Kohima, Nagaland
Orissa	**Mr N. Sanyal** Managing Director, Orissa State Disaster Management Authority (OSDMA) and State Relief Commissioner, 2nd Floor, Rajiv Bhawan, Bhubaneswar, Orissa
Sikkim	**Mr N. D. Chingapa** Secretary, Land Revenue Department, Government of Sikkim, Pashilling, Gangtok - 737 101
Tamil Nadu	**Mr R. Santhanam** Special Commissioner and Commissioner of Revenue Administration, Revenue Administrative, Disaster Management and Mitigation Department, Government of Tamil Nadu, Chepauk, Chennai - 600 005
Tripura	**Mr S. Chattopadhya** Revenue Commissioner, Revenue Department, Government of Tripura, Tripura, Agartala
Uttaranchal	**Mr N.S. Napalchayal** Principal Secretary (Disaster Management), Department of Disaster Management, Government of Uttaranchal, Secretariat Complex, Rajpur Road, Dehradun - 248 001
Uttar Pradesh	**Mr Anant Kumar Singh** Secretary and Relief Commissioner, Department of Revenue, Government of Uttar Pradesh, UP Civil Secretariat, Lucknown - 226 001
West Bangal	**Mr Trilochan Singh** Secretary to West Bengal, Department of Relief, Government of West Bengal, Writers Building, Kolkata, West Bengal

Role of Panchayat in Disaster Management

Panchayat is an important body which can aware and sensitize human resource available at grass root level. By involving the villagers, it can carry out the developmental and rescue activities. It can also play a major role in managing the disaster in the locality for the safety of the local people. Following are the activities/ responsibilities that can be provided to the panchayat bodies;

- Awareness, sensitization and mobilization of the community.
- Motivating the youth by forming disaster management committees/ clubs/ Preparation & Approval of the plans
- Development of preparedness & Mitigation Plans under the leadership of the PRIs. Identifying of volunteers and coordination with local CBOs, NGOs etc.
- Panchayat can prepare a database of volunteers, social workers, SHGs, NGOs etc and prepare a relief and rescue cell to help people who suffer from disaster
- A network of panchayat should be established that will help to support the people of one panchayat to other during the time of disaster
- Panchayat should take the responsibility for convergence of the Plans in the Annual Action Plans, Annual Social Audit etc.

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DISASTER MANAGEMENT AND PANCHAYATI RAJ

Shabarni Das Gupta, Project Coordinator, Indian Environmental Society

Panchayats are the constitutional grassroots units of governance in India that can play a prominent role in managing disasters at local level. More over they can be an effective institutional arrangement to deal appropriately with the emergency responses with in its jurisdiction. Panchayat can certainly strive to manage disaster efficiently because of their proximity to the local communities and better information of local issues. The role of Panchayati Raj Institutions (PRIs) is pivotal. Due to their grass root presence, they are in better position to assess the risk and vulnerability and are also able to take the step to mitigate the disaster at the local level.

The 73 rd and 74 th constitutional amendments recognize Panchayat Raj Institutions as "Institutions of self government". The amendment has also laid down necessary guidelines for the structure on their composition, powers, functions, devolution of finances, regular holding of election, and reservation of seats for weaker sections including women. These local bodies can be effective instruments in tackling disaster through early warning system, relief, distribution, providing shelter, to the victims, medical assistance etc.

Possible Pre-disaster Actions and Panchayati Raj

Panchayat can plan for mitigating the disaster occurring in the locality. It can be done by the preparation of an effective pre-disaster plan which can help the villager to suffer less during the disaster and less amount of resource will be spoiled by the disaster. Thus panchayat can adopt the following activities;

- Punchayat can create Public awareness on various aspects of disaster management by involving different target groups such as youth, women, students, SHGs/NGOs/CBOs etc.
- Panchayat can coordinate with the district disaster management cell or State Disaster Management Authority for updated information regarding the natural disasters.
- Panchayat can also organize a training programme for the identified stakeholders in its

locality. For providing training, panchayat can take the help of experts from the field of disaster management. The experts can be identified with the help of Disaster Management Authority of the state/ Disaster Management Cell of the district (If any).

- Panchayat can carry out activities in repairing restoration of infrastructure such as roads, bridges, public amenities etc
- It can promote and support community based disaster management plans suggested or developed by villagers
- With the help of target groups/ stakeholders, panchayat can perform activities like cleaning the drainage channels. These activities should be organized before the mansoon season.
- With the help of villagers, it can construct alternative temporary roads/ paths to restore communication to the villages during the time of disaster
- Every panchayat should have a relief fund which contributions from the villagers could can be added from time to time. Every panchayat should also have a relief store containing relief materials like clothes, candles, match box, food etc.
- Encouragement of tree plantation & forest restoration can be an activity that panchayat can planand under take from time to time.
- Most importantly, panchayat should remain alertto respond to for the signal of a natural or manmade disaster and have to have a proper channel to disseminate the warning to villagers living in vulnerable pockets

Post Disaster Actions and Panchayati Raj

Panchayat need to take the responsibility of post disaster management of the locality. After a disaster has happened in the locality, panchayat need to carry out following activities;

- Assist in clearing the communication path
- Coordination with the district head quarter for necessary support
- With the help of the committees formed locally, panchayat can carry out the search & rescue operation at the site
- Arrangement of a First Aid camp at the site and providing treatment to the affected people
- Transportation of severely affected to nearby habitat.
- Mobilizing the relief distribution team for providing relief to the affected people

DISASTER RELATED FACTS FOR INDIA

Damage due to Natural Disasters in India

Year	People affected (Lakh)	House & building, partially of totally damaged	Amount property damage/loss (Rs. Crore)
1985	595.6	2,449,878	40.06
1986	550.0	2,049,277	30.74
1987	483.4	2,919,30	20.57
1988	101.5	242,533	40.63
1988	30.1	782,340	20.41
1990	31.7	1,019,930	10.71
1991	342.7	1,190,109	10.90
1992	190.9	570,696	20.05
1993	262.4	1,529,916	50.80
1994	235.3	1,051,223	10.83
1995	563.5	2,088,355	40.73
1996	549.9	2,276,693	50.43
1997	443.8	1,103,549	Not Available
1998	521.7	1,563,405	0.72
1999	501.7	3,104,064	1020.97
2000	594.34	2,736,355	800.00
2001	788.19	846,878	12000

Source : Annual Reports, NDM Division, Ministry of Agriculture

Fact Sheet 02: List of Some Significant Earthquakes in India

Date	Epicenter		Location	Magnitude
	Late (Deg N)	Long (Deg E)		
Jun 16, 1819	23.6	68.6	Kutch, Gujarat	8.0
Jan 10, 1869	25	93	Near Cachar, Assam	7.5
May 30, 1885	34.1	74.6	Sopor, J&K	7.0
Jun 12, 1897	26	91	Shillongplateau	8.7
Apr 04, 1905	32.3	76.3	Kangra, HP	8.0
Jul 08, 1918	24.5	91.0	Srimangal, Assam	7.6
Jul 02, 1930	25.8	90.2	Dhubri, Assam	7.1
Jan 15, 1934	26.6	86.8	Bihar-Nepalborder	8.3
Jun 26, 1941	12.4	92.5	Andaman Islands	8.1
Oct 23, 1943	26.8	94.0	Assam	7.2
Aug 15, 1950	28.5	96.7	Arunachal Pradesh-China Border	8.5
Jul 21, 1956	23.3	7.0	Anjar, Gujarat	7.0
Dec 10, 1967	17.37	7375	Koyna, Maharashtra	6.5
Jan 19, 1975	32.38	78.49	Kinnaur, HP	6.2
Aug 06, 1988	25.13	95.15	Manipur-Myanmar Border	6.6
Aug 21, 1988	26.72	86.63	Bihar-Nepal Border	6.4
Oct 20, 1991	30.75	78.86	Uttarkashi, UP	6.6
Sep 30, 1993	18.07	76.62	Latur-Osmanabad Maharashtra	6.3
May 22, 1997	23.08	80.06	Jabalpur, MP	6.0
Mar 29, 1999	30.41	79.42	Champoli, UP	6.8
Jan 26, 2001	23.40	70.28	Bhuj, Gujarat	6.9

Source : As compiled form various sources

The area affected by flood in the country from 1953 to 2004 is given below:-

Year	Flood affected Area (Million Ha.)	Year	Flood affected Area (Million Ha.)
1953	2.290	1979	3.990
1954	7.490	1980	11.460
1955	9440	1981	6.120
1956	9240	1982	8.870
1957	4.860	1983	9.020
1958	6.260	1984	10.710
1959	5.770	1985	8.380
1960	7.530	1986	8.810
1961	6.560	1987	8.890
1962	6.120	1988	16.290
1963	3.490	1989	8.060
1964	4.900	1990	9.303
1965	1.460	1991	6.357
1966	4.740	1992	3.645
1967	7.150	1993	11.439
1968	7.150	1994	1.805
1969	6.200	1995	5.245
1970	8.460	1996	8.049
1971	13.250	1997	4.569
1972	4.100	1998	9.133
1973	11.790	1999	3.978
1974	6.700	2000	5.166
1975	6.170	2001	3.008
1976	11.910	2002	7.090
1977	11.460	2003	6.503
1978	17.500	2004	8.031

Source : *www.wrmin.nic.in

From the Print Media

TSUNAMI : KERALA SURVIVORS STILL WAITING FOR HOUSES, AID

Three years after the killer waves took away 171 lives and destroyed thousands of homes in parts of Kollam and Alappuzha district, a section of Kerala's tsunami victims are still waiting for the Government to pull its support and rehabilitation act together.

Angered by the Government's failure to keep its promises, people of Arattupuzha, a coastal hamlet which was among the worst hit, observed the disaster's third anniversary as 'deception day', with speakers lashing out at the Government for its apathy to their cause. Earlier, sensing the local mood, the Government shelved its plans to hold a commemorative public function there, which Chief Minister V.S. Achuthanandan was expected to inaugurate.

A few hundred survivors are still in relief camps. Some of the NGOs that has committed to build them homes for free had later backed out, and the Government had no immediate back-up plans in place. As a result only 2,790 out of the 2,909 homes have come up yet.

The Forum for the Dependents of the Deceased in Tsunami, claiming to represent 110 families of victims, is already on an agitation asking the Government to honour its promises. Forum leaders claimed the CM had assured them that outstanding bank loans of the survivors would be written off.

Later, the Government had also announced that it would intervene to ensure that no revenue recovery measures were taken against tsunami survivors, mostly fisherfolk who could not pay back bank loans after losing most of their equipment and property. However, the banks are still sending them recovery notices for the Rs. 33 lakh due from them. The forum is now demanding an aid of Rs. 10 lakh for each of the affected families.

State Revenue Minister KP Rajendran said the Government was working on special schemes worth Rs. 1,188 crore for the tsunami survivors, which includes a Rs. 1,100 crore Central package. The minister said the Government was committed to completing the scheme's implementation by the first quarter of 2009.

The minister said the Government was thinking of giving jobs to the survivors in two PSUs in the affected areas, and reiterated that no revenue recovery proceedings will be allowed against them for failing to pay back loans. Rajendran said the rehabilitation work was affected largely be cause some NGOs did not keep their word.

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DIAL 1077 FOR HELP IN DISASTER

A new disater Management Emergency Operation Centre with a call center has been installed at 5 Sham Nath Marg here to ensure immediate and effective activation of emergency support function in case of any disaster in the city.

This State-level emergency operation would have a four-digit helpline number, 1077, and has been created in keeping with the statutory provision of the Disaster Management Act, 2005.

Inaugurating the facility, Chief Minister Sheila Dikshit said the call centre would work on the toll-free helpline.

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समाचार पत्रों से

दो सप्ताह में ही सूखा बाढ़ में कैसे बदल गया ?

सिर्फ दो सप्ताह पहले बुंदेलखडमें सूख से गंभीर स्थिति थी। लगभग चार साल से यह संकट चल रहा था। लेकिन एक–दो सप्ताह की बारि से ही बांदा में बाढ़ा आ गई।कुछ अन्य स्थानों में बाढ़ जैसी स्थिति बनने लगी है।ऐसा क्यों हुआ ?

बुंदेलखंड की भौगोलिक वि ोशता यह है कि यहां पहाड़ी व पठारी क्षेत्रों से मैदानों की ओर पानी अत्यधिक वेग से बहता है।पथरीली चट्टानी जमीन में पानी समाने की क्षमता वैसे भी कम है और वनों के बड़े पैमाने पर विना के बाद तो यह क्षमता और भी कम हो गई है।

बुंदेलखंड मे साल में औसतन 950 मिलीमीटर बारि ा होती है। इसका बहुत बड़ा हिस्सा चंद दिनों व चंद घटों में बहुत वेग से होने वाली वर्शा से प्राप्त होता है। अगर घने वन खासकर पर्वतीय पठारी क्षेत्रों में होंगे, तो वे भारी वर्शा के पानी को भी धरती में संरक्षित कर सकते है।पर वन विना के बाद यह सारा पानी तेजी से मिट्टी का कटाव करते हुए नदियों की ओर बढ़ता है जिससे बाढ़ का खतरा रहता है।

सारा पानी नदियों की ओर न बह जाए इसके लिए पहले बहुत से तालाब व अन्य स्त्रोतों की अच्छी व्यवस्था थी, जिनमें यह पानी इकट्ठा होता था। इनमें से अनेक तालाब एक–दूसरे से जुड़े हुए थे। एक तालाब का अतिरिक्त पानी दूसरे में पहुंच जाता था। हाल के वर्शों में तालाबों व परंपरागत जल स्त्रोतों की अपेक्षा के कारण यह व्यवस्था भी पहले की अपेक्षा कमजोर हो गई है। अंधाधुंध खनन ने भी बाढ़ की समस्या का बढ़ाया है। वि ोशक सदी से बड़े पैमाने पर बालू खनन के कारण बाढ़ जैसे कई स्थानों पर बाढ़ है। खनन के लिए आने वाले ट्रक, म ाीनों आदि से भी बाढ़ के पानी के आबादी की ओर बढ़ने के नए रास्ते बन जाते हैं। यदि बाढ़ और सूखे के दोहरे संकट का सामना नहीं करना है, तो पर्वतीय क्षेत्रों में वनीकरण व भूमि तथा जल संरक्षण कार्य बहुत जरूरी है। इसे लोगों के सहयोग से बहुत व्यापक स्तर पर करना होगा।

बुंदेलखंड के अनेक बांधों–बैराजों जैसे गंकऊ, बडियापुर आदि के बारे में कई बार ि ाकायत मिली है कि यहां से अधिक मात्रा में पानी छोड़ने से बाढ़ के हालात पैदा हो जाते है। बांदा, चित्रकूला व उरई में हाल के वर्शों में बहुत खतरनाक अचानक बाढ़ या फलै ाफ्लड की आपदा कहर ढा चुकी है।

अतः बांधों–बैराजों के प्रबंधन को सुधारना व पानी छोड़ने पर उचित समय पर इसकी चेतावनी बहुत जरूरी हैं। लोगों को यह जानकारी मिलनी चाहिए कि विभिन्न कारणों से इन बांधों–बैराजों की बाढ़ के नियंत्रित करने की क्षमता अब कितनी सीमित हो चुकी है।

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आग की चपेट में असोला वन

दक्षिणी दिल्ली। असोला–भाटी माइंस वन में भा नि वार की सुबह आग लग गई।आग इतनी भीशण थी कि उसके ओर–छोर का भी ठीक–ठीक पता नहीं चल पा रहा था। आग में पड़े–पौधों की काफी क्षति हुई है। मौके पर पहुचें फायर ब्रिगेड, और सिविल डिफेंस के कार्यकर्ता आग बुझाने के काम में जुटे रहे, लेकिन देर भा म आग बुझाने की कवायद जारी थी। आग कैसे लगी और वन संसाधन का कितना नुकसान हुआ, इस पर वन प्र ाासन ने कुछ भी कहने से फिलहाल इनकार किया। दक्षिणी दिल्ली के तुगलकाबाद से सटे असोला–भाटी माइंस के वन क्षेत्र में सुबह करीब 11 बजे जब आग लगी तो वनकर्मियों में अफरातफरी मच गई। करीब 11 बजकर 30 मिनट पर फायर ब्रिगेड को सूचित किया गया। जानकारी के मुताबिक फायर ब्रिगेड की चार गाड़ियाँ व लगभग 40 कर्मी मौके पर पहुंचे और आग को बुझाने में जुट गए। सिविल डिफेंस के कार्यकर्ता व वनकर्मियों ने भी आग को बुझाने में काफी म ाक्कत की। यह वन क्षेत्र करीब 40 किलोमीटर की रेंज में तुगलकाबाद के भाूटिंग रेंज, संगम विहार से लेकर भाटी माइंस तक फैला हुआ है। इस कारण आग का दायरा कहां तक फैला था, इसकी जानकरी नहीं मिल सकी।

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Messages

पंचायत में प्रकाशित सामग्री पर्यावरण संरक्षण की दिशा में नयी सोच और जागृति पैदा करने वाली है। अतः निःसंदेह पत्रिका के नियमित प्रकाशन से सचमुच एक बेहतर भविष्य की आशा कर सकते हैं।

अवतार सिहं (अंनेदकर शिक्षा समिति)

Panchayat Newsletter is very informative and covers useful articles to environment, agriculture & specially organic farming & pollution.

Dr. A. Noor (Chemitech Corporation, Jodhpur)

In which areas / what issues, NGOs can work together with the Panchayats.

Malay Dewanji (Liberal Association for Movement of people, Kolkata)

कृपया पंचायत के अंक में हिन्दी लेखों का अधिक संकलन करें और ''सौर उर्जा'', जैविक खाद वागवानी आदि संबधित जानकारी देने का प्रयास करें।

अभय यादव (हरिशचंद्र सिहं संपर्क सेवा समिति, आगरा)

Kindly send us the 'Panchayat Newsletter' regularly & also send us the dates of your Seminar & Exhibitions.

Dr. Jaswinder Singh Bilga (Amritsar)

Give information about Food Technology & Send us your Newsletter.

Dr. T. Viruthagiri (Tamil Nadu)

Please publish a detail article on e-waste management pertaining to Indian Condition.

Dr. V.S. Yadav

आपके द्वारा ''पंचायत'' नामक प्रकाशित पत्रिका बहुत ही अच्छी हैं। इसमें पर्यावरण संरक्षण में महिलाएँ अच्छी भूमिका निभा सकती है।

रज्जन लाल शर्मा(अखिल भारती पर्यावरण एवं समाज कल्याण समिति)

ENVIS Newsletter

Glimpse of the Website

www.iespanchayat.net.in

ENVIS CENTRE ON
ROLE OF PANCHAYATS IN ENVIRONMENTAL MANAGEMENT

The website has compiled all the relevant data and comprehensive information on different components of Panchayati Raj and Environment. The website contains information on databases developed; geographical distribution of Panchayats; success stories, areas of Panchayati Raj co-operation; elections, finance, query services; bibliography; resource repository etc.

We hope that the information contained in the website will suffice your requirements.

We would appreciate your comments & suggestion about the website so that we can update it as per the requirements of our browsers.

Wish you a Happy browsing on www.iespanchayat.net.in

The Centre invites for Publications :

- Reports on Panchayati Raj (specially related to environmental management).
- Short report on seminars/workshops on the related topics are also invited. Those found suitable will be published in the newsletter.
- Articles for the newsletter "Panchayat" are invited.

Forthcoming Events

- **VIIIth Global Conference on Environmental Education**
  Date : November 4-5, 2009, at Goa, India
- **International Conference on Environmental Education, Climate Change & Global Warming**
  Date : July 6-8, 2010, Ljubljana, Slovenia
- **National Conference on Environmental Education**
  Date : August 2010, New Delhi
- **Resettlement and Rehabilitation Policy: Need for a Relook in the Context of SEZ's**
  Date : February 2010 at Chumbi Residency, Gangtok, Sikkim

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To _____