

**CRISIS, CONTROL AND CONFLICT MANAGEMENT**

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**ABSTRACT**

Crisis, control and conflict management is a tool to sustainable development. We need to undertake the first step of environmental friendly planning and the whole staircase automatically visualizes in its own unique manner dependent upon the type of crisis, leading to sustainability.

**Key words:** Crisis, control and conflict management

**1. Introduction**

A sudden and unexpected event arises on a short period of time, leading to major unrest amongst the individuals of a place is known as crisis. The art of dealing such emergency conditions may be called as crisis management which involves accuracy in analysis, proper response, effective communication and coordination to resolve the potential threats. While conflict is a state of intellect among a group of individuals discussing or acting at a point. While managing crisis, to attain effective communication among people, conflict management is an important issue.

**2. Crisis and Conflicts: Concept, Types and Origins**

By definition a crisis is an unexpected and detrimental situation or event. Crisis communication can play a significant role by transforming the unexpected into the anticipated and responding accordingly. Three elements important while describing a crisis are (a) a threat to the organization, (b) the element of surprise, and (c) a short decision time. The fourth defining

statement is the requirement for change. If change is not needed, the event could more accurately be described as a failure or incident.

### **Types of crisis**

Different categorizes of crises are as follows: (Lerbinger, 2007)

#### **Natural crisis**

Natural crises or natural disasters are considered as 'acts of God,' *e.g.* earthquakes, volcanic eruptions, tornadoes and hurricanes, floods, landslides, tsunamis, storms, and droughts that threaten life, property, and the environment itself. Case study: 2004 Indian Ocean earthquake (Tsunami).

#### **Technological crises**

Human interventions of science and technology *i.e.* urbanization leads to technological failures known as technological crises. Technological breakdowns caused numerous accidents when it becomes complex and coupled and something goes wrong in the system as a whole. Some technological crises occur when human error causes disruptions Examples: software failures, industrial accidents, and oil spills.

Case study: Chernobyl disaster, Exxon Valdez oil spill

#### **Confrontation crises**

Confrontation crises occur when discontented individuals and/or groups fight businesses, government, and various interest groups to win acceptance of their demands and expectations. The common type of confrontation crises is boycotts, and other types are picketing, sit-ins, ultimatums to those in authority, blockade or occupation of buildings, and resisting or disobeying police. Example: Rainbow/PUSH's (People United to Serve Humanity) boycott of Nike.

#### **Crises of malevolence**

An organization faces a crisis of malevolence when opponents or miscreant individuals use criminal means or other extreme tactics for the purpose of expressing hostility or anger toward, or seeking gain from, a company, country, or economic system, perhaps with the aim of destabilizing or destroying it. Sample crises include product tampering, kidnapping, malicious rumors, terrorism, and espionage. Example: 1982 Chicago Tylenol murders .

### **Crisis Management Planning**

**Crisis as Opportunity:** Crisis management is considered as a part of risk management which helps mitigate the chances of catastrophes occurring. Crisis management considers worst-case

scenario suggesting numerous solutions. As it's been said "necessity is the mother of invention". Organizations and individuals should always be prepared with a rapid response plan to emergencies which would require analysis, trial & error, drills and exercises. Crisis management methods are used to respond to both the reality and perception of crises. Establishing metrics to define what scenarios constitute a crisis and should consequently be controlled by the necessary response mechanisms. Crisis management methods of a business or an organization are called Crisis Management Plan. Crisis management plans have to adapt to actual events It is of greater importance in case of terrorism involving nuclear, chemical, biological or cyber weapons occurs, either in private sector facilities or public spaces that impact private employers.

### **Successful crisis management at Pepsi**

The Pepsi Corporation in 1993 has been claimed that syringes being found in cans of diet Pepsi. The pepsi cans were immediately been investigated, simultaneously not removed from the shelves. They also broadcasted the first video news, showing the complete production process to demonstrate that such tampering was impossible within their factories. A second video news release showed the man arrested. A third video news release showed surveillance from a convenience store where a woman was involved in tampering. The company simultaneously publicly worked with the FDA during the crisis. The corporation was completely open with the public throughout, and every employee of Pepsi was kept aware of the details (Times of India News). This indicates the effectiveness of public communications throughout the crisis.

### **Categories: Crisis Management**

#### **(a) Environmental crisis (caused by natural hazards)**

A natural hazards is considered as environmental crisis by causing adverse vulnerable land-uses, including human-life and resources, food, shelter, health supplies, property, and overall wellbeing – sustaining and during time. Disasters were identified as developmental problem and much of the risk that we are exposed today could be reduced through appropriate development policies that take into consideration disaster prevention and mitigation as integral part of the development process. The natural disasters are classified due to their causes:

- (a) Water: Flood, Drought, Land/mudslide/Avalanche, Vector-borne epidemics, Pathogenic disaster, *etc.*
- (b) Air : Windstorm, Duststorm, Cyclone, Inversion, Fog/Smog, Aero-allergens, *etc.*
- (c) Temperature : Fire, Heatwave, Coldwave, Ligtning, *etc.*

Global change, population growth and ecological concern can be summarized as environmental crisis, has lead to the emerging concept of conflict. The concern has arisen little late. However, there are various research papers involving integrity of ecological factors and conflict studies. This also indicates human intervention to such a larger extent that leads to environmental disharmony. Especially in developing countries, environmental issues escalate the current conflicts in terms of poverty leading to economic decline, crimes, natural resource crisis and political instability. Environment and conflict project (ENCOP) investigates into the relationship of environment and conflict studies (Conference of environmental crisis, Switzerland, 1994). Environmental pollution and natural resource crisis (*viz.* land degradation, scarcity of fresh water, deforestation, depletion of minerals, crisis of energy resources are the prime causes of eco-conflict generation. Poverty further aggravates the disputes. Livelihood problems emerges when demands increases beyond the production capacity. There may be certain natural calamities leading to crop failure, adversely affecting the livelihood of farmers in case of drought, non-seasonal rainfall *etc.*

#### **(b) Chemical crisis (caused by chemical accidents)**

Chemical crisis is a condition representing unsuccessful crisis management. This is an indication towards chemical accidents leading to tremendous socio-economic loss.

#### **Bhopal Gas Tragedy**

Accidental release of Methyl Iso Cyanate (MIC) in Bhopal from a Union Carbide Factory caused death of large number of people. The reason behind the huge socio-economic loss is poor communication before, during, and after the crisis. American University's Trade Environmental Database (1997) declared that local residents were not sure how to react to warnings of potential threats from the Union Carbide plant. Operating manuals were printed only in English. This indicates the lack of a clear management plan.

#### **Exxon**

On March 24, 1989, a tanker belonging to the Exxon Corporation ran aground in the Prince William Sound in Alaska. The Exxon Valdez spilled millions of gallons of crude oil into the

waters off Valdez, killing thousands of fish, fowl, and sea otters. Hundreds of miles of coastline were polluted and salmon spawning runs disrupted; numerous fishermen, especially Native Americans, lost their livelihoods. The CEO, Lawrence Rawl, did not become an active part of the public relations effort and did not appoint a public relation officer. The company had neither a communication plan nor a communication team in place to handle the event.

### **Japan's Reactors**

A potentially catastrophic technological problem occurred at exploding Fukushima Daiichi nuclear power plant and its six reactors. These events indicate effective crisis management involving complex science and technology is wholly dependent on well-thought-out and actively practiced crisis response plans.

### **Civil crisis (caused by socio-political or security threats)**

### **3. Conflict**

As discussed in the issues of crisis, environmental crisis has lead to massive conflict situations. While no single definition of conflict exists, most definitions seem to involve the following factors that there are at least two independent groups, the groups perceive some incompatibility between themselves, and the groups interact with each other in some way. Two example definitions are, “process in which one party perceives that its interests are being opposed or negatively affected by another party” (Wall & Callister, 1995), and “the interactive process manifested in incompatibility, disagreement, or dissonance within or between social entities” (Rahim, 1992).

**Table 1: Type of societal conflicts due to following causes (Spillmann, 1995):**

<b>Anthropogenic/ Man-engineered</b>	<b>Unplanned environmental transformations</b>	<b>Non-anthropogenic</b>
Large engineering actions affect a known societal group.	Cumulative effect of large number of small actions which are individually useful.	Environmental transformations by natural hazards
Mega developmental projects viz. river valley projects, airports, highways, railway tracks-construction lead to massive deforestation and displacement of the people residing there.	Overgrazing, clearing of land, waste disposal in air, water and soil.	Floods, droughts, earthquakes, cyclones, volcanic eruptions, tides
Affected people due to the loss of their own natural resource and habitat, suffer and it lead to major conflict situations and movements among public e.g. Narmada Bachao Andolan to protest the displacement of people living nearby the Sardar Sarovar Dam, Chipko movement in Tehri Gahrwal, Appiko movement in Karnataka.	Can lead to conflicts between the groups that struggle for damage control and survival.	Can generate conflicts in the society who gets displaced and struggle for livelihood.

Natural disasters occur independently of human planning or decision making, induce conflicts. Frequency and intensity of disasters increasing due to tremendous pressure on natural resources caused by exponentially increasing population. Urbanization further increase natural resource exploitation and cause damage to natural resources which enhance the conflicts generated among the sufferers and also enhance the occurrence of natural disasters. Another type of conflict-prone ecological change is caused by humans. Certain necessary individual actions cause cumulative adverse environmental impacts known as unplanned environmental transformations *e.g.* clearing of farmland for selling purpose by a farmer.

### **Eco-conflicts**

Most of the wars are the source of huge conflicts and occur in ecologically sensitive regions. Fertile land and loss of habitat are the two major adverse impacts of wars which propel the local population to search the place to live, livelihood, social and cultural development. Loss of fertile land also reduce the availability of local food supply and further enhance the conflicts caused due to competition among the population of specially developing or agriculture based countries.

Adequate water supply is an important environmental issue and concern of ‘national security’. Water shortage is an environmental problem which propels violent conflicts and wars because it is an important natural resource, vital for human survival. Many rivers are transboundary and water is utilized by different riparians. Upper riparians can utilize large amount of water, putting downstream under tremendous pressure (Malin, 1995).

Global climate change is an important factor contributing towards massive conflicts. Water scarcity, occurrences of droughts and floods elaborate the issues generating massive conflicts. Local environmental issues e.g. deforestation, soil erosion due to over-grazing, loss in productivity of agricultural land, displacement of local population due to river valley projects & mining and degradation of water resources pose direct adverse effects to the affected people. The exhaustion of natural resources leads to their scarcity *viz.* pressure on non-renewable energy resources and renewable energy resources known as Eco-conflicts. Population-Environment-Development linkages are addressed. Soil fertility decline, water-related problems, water scarcity, ground water pollution, eutrophication of water bodies and disputes of water quality deterioration are the issues of concern and discussed below.

Table 2: Types of environmental conflicts (Bachler, 1995).

<b>Types of conflicts</b>	<b>Country/ regions</b>	<b>Environmental problems</b>	<b>Parties involved</b>	<b>Conflict intensity</b>
<b>Socioecological conflicts</b>				
	India (Tamilnadu & Karnataka)	Water distribution among the two states	Tamilnadu & Karnataka govts	Cauvery water dispute
	India (Punjab & Haryana)	Water distribution among the two states	Punjab & Haryana govts	Conflict of Satluj-Yamuna link (SYL) & Ravi river
	Thailand	Large scale eucalyptus plantation	Govt. Vs local people, Karen immigrants	Social conflict, burning of plantations, forced displacement
	Karnataka	Deforestation	Industry, Govt. Vs Local people (Initiated by Amrita Devi)	(Appiko Movement)

	Tehri Garhwal	Deforestation	Industry Vs indigenous people (Leader: Sunderlal Bahuguna, Chandi Prasad Bhatt).	Chipko movement: People protested by hugging trees.
<b>Ethanoecological conflicts</b>	Sudan (North-South)	Environmental scarcity due to modern agriculture	Government Vs. SPLM	Civil war/ intertribal violence in Southern Sudan
	Sudan (Jebel Marra)	Sahel drought, desertification, overgrazing	farmers Vs. Arab nomads	Civil war
<b>Displacement conflicts</b>	China (Northern Henan Province)*	Long distance migration, environmental refugees, population pressure, loss of arable land	Local population Vs migrants or refugees	Non-violent, high risk of exacerbating ancient provinces
	India, (Narmada)	Flooding of nearby areas	Govt. vs local people	Narmada Bachao Andolan
<b>Intrastate conflicts</b>				
<b>Migration conflicts</b>	Southern Algeria / mali, niger	Sahel desertification	Govt. vs immigrants	Low-intensity criminal violence
<b>Degradation of transboundary ecoregion</b>	Bangladesh / India	Farraka barrage over the Ganga river, Flood Vs. drought	India govt Vs Bangladesh, up downstream	Political conflict
	Uzbekistan/ Tajikistan	Shared irrigation system	Uzbek Vs. Tazik population	High conflict of ethics, tensions
<b>International conflicts arising from distant sources</b>	French /Polynesia	Environmental pollution due to nuclear testing	French govt. Vs. local people Vs. immigrants	Low intensity protest, intervention by an NGO-GREENPEACE.

**\*Case study of China's inter-regional conflict**

China has reported rapid industrialization in mid 1990's but being unsustainable; it has lead to rapid environmental degradation, which is associated with variety of environmental conflicts in the residents. Modern agricultural techniques were followed at the cost of soil fertility,

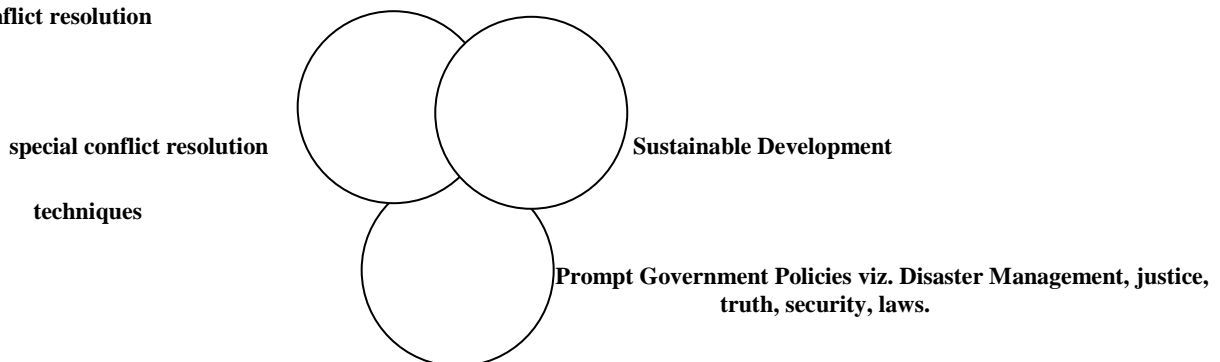


waterlogging & salinity, eutrophication, ground water pollution and biomagnification of the toxic compounds which are excessively used as pesticides. Forest land is converted to agricultural land at a very fast rate. Monoculture further degraded the soil fertility and also made pest-attack an easier process. Due to the extensive natural resource crisis, poverty & loss of livelihood more than 20 million people have been uprooted and 40 million people will leave the country by 2025 as per recent estimates (Vaclav, S. 1995).

### **Conflict Management**

**Conflict management** involves implementing strategies to limit the negative aspects of conflict and to increase the positive aspects of conflict at a level equal to or higher than where the conflict is taking place (Bodtker & Jameson, 2001). Conflict management involves designing effective macro-level strategies to minimize the dysfunctions of conflict and enhancing the constructive functions of conflict in order to enhance learning and effectiveness in an organization. The aim of conflict management is to benefit from appropriate types and levels of conflict. (Luthans, Rubach, & Marsnik, 1995).

#### **Conflict resolution**



Source: (Developed by authors)

### **International conflict management**

Special consideration should be paid to conflict management between two parties from distinct cultures. In addition to the everyday sources of conflict, "misunderstandings, and from this counterproductive, pseudo conflicts, arise when members of one culture are unable to understand culturally determined differences in communication practices, traditions, and thought processing" (Borisoff & Victor, 1989).

Indeed, this has already been observed in the business research literature. Renner (2007) recounted several episodes where managers from developed countries moved to less developed

countries to resolve conflicts within the company and met with little success due to their failure to adapt to the conflict management styles of the local culture. As an example, in Kozan's study noted above, he noted that Asian cultures are far more likely to use a harmony model of conflict management. If a party operating from a harmony model comes in conflict with a party using a more confrontational model, misunderstandings above and beyond those generated by the conflict itself will arise. International conflict management, and the cultural issues associated with it, is one of the primary areas of research in the field at the time, as existing research is insufficient to deal with the ever increasing contact occurring between international entities.

## **6. Crisis Management Planning**

Crisis management is proactive, not merely reactive process by which an organization deals with a major event that threatens to harm the organization, its stakeholders, or the general public. The study of crisis management originated with the large scale industrial and environmental disasters in the 1980s. Crisis management is sometimes referred as incident management. Crisis management involves dealing with threats before, during, and after they have occurred. It is a discipline within the broader context of management consisting of skills and techniques required to identify, assess, understand, and cope with a hazard, throughout its life-cycle.

### **(a) Crisis Risk Assessment and Warning**

Risk management involves assessing potential threats and finding the best ways to avoid those threats, Risk and Crisis Management. Prevention Risk management forms the backbone of business management. It will not work properly if divisions are not consistent in the measures they take.

One of the prioritized issues of the IRP Forum is how to assess and respond to a crisis condition. Some of the environmental issues typically encountered in a recovery setting are the release of hazardous substances and debris into the environment; water salination and contamination; sanitation and solid waste management; ecosystem damage and loss; sustainable reconstruction; re-establishing livelihoods; and the environmental impact of relief and recovery operations.

To assist decision makers, good practices in respect of the following elements are needed: How to assess environmental impacts post-disasters effectively? What constitutes environmentally sound relief and recovery operations? How to engage environmental actors early in disaster recovery? What environment related support and guidance is available in disaster contexts? Response and recovery efforts can either increase or decrease the risk of future disaster events,

depending on how they are managed. Reviews of recent disaster recovery and rehabilitation efforts (2004 South Asian Tsunami, Hurricane Mitch, *etc.*) have concluded that such operations too often built back previous risk and in some case even increased pre-existing risks. The second issue is therefore how to take advantage of the unique opportunities arising from crises for promoting sound environmental and natural resource management that reduces future risk and maximizes the benefits for livelihoods, longer term development objectives and climate change adaptation.

#### **(b) Risk Management**

“A crisis” as an event caused by “A Risk.” Risk management covers risks arising in the business process. For natural disasters and fires, the traditional system that has already been established is applied. Risk management does not include financial risk cover such as exchange risks or enterprise risks.

#### **(b) Crisis Communication**

Crisis communication includes “messages,” often tested by research and polling, for handling a crisis situation in government, organization or business. Responding quickly, efficiently, effectively and in a premeditated way are the primary objectives of an effective crisis communication strategy and/or solution. Effective crisis communication strategies includes Maintaining connectivity, Be readily accessible to the news media, showing empathy for the people involved, allowing distributed access, streamlined communication processes, maintaining information security, ensuring uninterrupted audit trails, Support multi-channel communications, less paper work. Some of the most effective recent examples of crisis communication include Richard Branson's (Virgin) and John Armit's (Network Rail) dignified press conference after the Grayrigg rail disaster of 2007 and US Airways handling of the media after their crashlanding on the Hudson river (Masters of Disaster, Communicate magazine, June 2009).

### **7. POST-CONFLICT DEVELOPMENT AND ENVIRONMENTAL ISSUES**

Sophisticated social engineering approach is recommended for post-conflict peacebuilding (PCPB). Some of the environmental issues typically encountered in a recovery setting are the release of hazardous substances and debris into the environment; water salination and contamination; sanitation and solid waste management; ecosystem damage and loss; sustainable reconstruction; re-establishing livelihoods; and the environmental impact of relief and recovery operations. Response and recovery efforts can affect the risk of future disaster events, depending

on management. The important issue is to promote sound environmental and natural resource management that reduces future risk and maximizes the benefits for livelihoods, longer term development objectives and climate change adaptation. The infusion of large amounts of resources to rebuild communities and can deteriorate environmental integrity and increase community vulnerability to future disasters if not designed and implemented according to local environmental conditions.

Disaster events frequently cause human suffering and loss of life. International Recovery Platform (IRP) discussed environmental issues in recent recovery operations and the challenges of climate change will pose to communities already vulnerable to natural hazards. Adapting to the increasing frequency and intensity of hazards, environmental conservation is necessary to promote sustainable development.

The key environmental concerns for the post-conflict development are: *Livelihoods*: Restoring jobs, economic opportunities, food sources and a sense of purpose within communities, *Construction*: Rebuilding homes and other structures with sound spatial planning, while avoiding damage to local ecosystems, minimizing community exposure, and ensuring future generations have a sustainable supply of building materials, *Water and Sanitation*: Helping communities restore their water systems to provide clean, safe water for agriculture, aquaculture, washing and cooking, while also protecting streams, rivers and marine environments. *Disaster Management*: Preparing communities and their environment to deal with future disasters with a minimum of human suffering and environmental degradation.

### **Communicating Environmental Advice**

Advice on environmental issues must be available, but should also be requested, to have maximum impact. Positively, questions raised by various UN agencies, including FAO, IOM, UNICEF and UNDP on environment issues have been answered as needed. Examples include advice to IOM on sourcing materials for rebuilding 300 dwellings and to UNICEF on environmental education for the curriculum that they are developing for the Nargis-affected areas. The government, however, should be further encouraged to request / accept advice on environmental matters when needed. Long-term Disaster Risk Reduction A project concept has been prepared on environmental vulnerability and risk reduction in cyclone affected areas, and for capacity building to formulate plans and policies for disaster risk management. An initial draft was prepared after consultation with government officials, UN agencies and NGOs. If

funded, the project would contribute to long-term preparedness. The overall goal of the proposed project is to promote sustainable livelihoods and disaster risk reduction in the Nargis-affected areas through strengthened systems for the sound management of environment and natural resources at community, local authority and national levels. This goal would be achieved through the implementation of three inter-related objectives that focus on capacity building and institutional strengthening at the community level and local authorities and national government levels (Objective Two), supported by the strengthening of systems for assessment and monitoring of natural resources in the An integrated approach to the implementation of these project outputs would help to strengthen ownership of activities by communities and government agencies, thus helping to promote sustainability of the project outcomes at all levels.

While the past saw only partial environmental integration into recovery, usually with a stronger priority on credit and infrastructure assistance, the post-Sidr recovery strategy prioritizes “building back better”: improving the local capacity and utilizing environmental management. Rebuilding of houses, schools, shelters, rural roads, embankments and markets will provide local economic opportunities and “introduce and mainstream new standards and upgrading that will help protect them against future disasters” (JDLNA March 2008). This also includes rehabilitation of the Sundarbans coastal forests ecosystem, which is listed (although last) as one of the Medium-to Long-term Recovery and Reconstruction Interventions.

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