

# Disaster Management: A Case Study of Uttarakhand

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## *Abstract*

*A disaster may strike any given destination without warning, this being one of the many aspects that hamper a destination's image and the locals as well as tourist sense of safety, so to avoid raising any such concerns, in a given situation any destination must be well equipped to combat the catastrophe. In light of the disaster that occurred in Uttarakhand, where a cloud burst caused flash floods that swept the state, resulting in massive destruction, loss of life and left thousands of tourists stranded. The paper discusses Uttarakhand in the plight of this disaster through a case study and recommends several steps to be taken for disaster management, and touches upon how to restore a destination back to normalcy, how to tackle marketing for a destination in the midst of a crisis as well as the importance of destination management through the implementation of Destination Management Organizations (DMOs).*

Key words: Disaster management, Uttarakhand, Destination marketing, Destination Management Organizations

## Introduction

The vulnerable nature of global tourism is one of the major concerns for contingency management. Disaster management is an important aspect for any tourism destination (especially in the face of a crisis). The specific contingencies such as war, terrorism, crime waves, epidemic and natural disasters have devastating impacts on any community, region, state or nation. Any potential destination is exposed to one or more of the above threats, which can question the safety of residents, tourists and can hamper the market perception of that destination. Consequently, it is crucial for all destination stakeholders to analyze and develop contingency plans to respond to varying levels of threats.

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Either a specific episode or a series of those may create a change in the perceptions towards a destination. There are a number of factors which can question the safety and security image of tourist destinations and result in a destination crisis. Some of them are: international war / prolonged demonstrations of internal conflict; terrorism which can affect the tourism sector of the state; crime wave, especially when tourists are targeted (murder, sexual exploitation, theft etc); natural disasters, such as an earthquake, storm or floods, causing damage to urban areas or the natural environment and consequently impacting on the tourism infrastructure and health concerns related to epidemics and diseases; these may be diseases which impact on humans directly or diseases affecting animals, which create constraints for tourism.

These events can cause massive aftermaths, individually or in combination, to create a negative image on the safety, security or desirability of tourist destinations. Thereby, it poses challenges for the concerned authorities and local communities to examine the ingredients of disaster management strategies. The degrees to which emergency service is initiated to face crisis can always be critically examined when crisis overrules. Certainly, those factors do not represent the totality of issues which can impact negatively the destination image. However, the concern can extend to analyze how a destination and its tourism industry conduct a marketing campaign to restore its image and recover its market from the damage caused by these events (Varghese, 2012).

This study envisages on the repercussions of Uttarakhand as a destination in the plight of a disaster and provides the various steps that make an effective disaster management plan and it seeks to provide a means of disaster recovery through a systematic approach which will help restoring the destinations success, the paper also goes a step ahead in discussing the marketing strategies and campaigns so as to restore the destinations image which would be tainted due to the devastation and finally recommends the importance of destination management by implementation of Destination Management Organizations(DMOs).

## A Case Study of Uttarakhand

At the peak of the monsoon season the northern state of Uttarakhand was face to face with floods caused due to the cloud burst that hit three of the four famous Char Dham pilgrim sites, “2013 North India floods” (n.d.) leaving tens and thousands of inhabitants as well as pilgrims stranded or swept away due to the floods, and not to mention the damage cause to life, property and business. The famous Char Dham pilgrimage is now discontinued for three years for repair and restoration (“Plan ahead”, 2013).The National Institute of Disaster Management (NIDM), in one of its first reports on the Uttarakhand floods, has blamed “climatic conditions combined with haphazard human intervention” in the hills for the disaster (“Down To Earth”, 2013, para.1).

Besides the natural disaster various other factors have contributed to the downfall of this famous religious/ tourist site. Uttarakhand’s huge potential in tourism lead to the state in

tapping its potential towards becoming a major tourist and pilgrim destination, also has a hand in this disaster. The uncontrolled rise of tourism inflow into the state of Uttarakhand, took a toll on the ecology of the state. With Uttarakhand's proximity to the national capital, the weekend revelers soon found Uttarakhand to be the destination to beat the heat. Plus, the religious tourists found it much easier to travel to-not-so accessible Badrinath, Kedarnath, Gangotri and other shrines, all this led to an unsustainable rise in the number of people traveling to Uttarakhand (Bisht, 2013).

As stated by Jacob (2013) during a live television interview on CNN-IBN that, "the number of 'pilgrims' has been steadily increasing, with people from the plains interested in a quick guided tour of the hills in a vehicle...the local authorities have ignored the carrying capacity and cumulative impact of dams and illegal construction on the fragile Himalayas" (para.8). This steady rise in tourist inflow resulted in other detrimental issues such as heavy traffic and roadblocks, with tourists routinely complaining about the bad roads and how it affected their travel time, the government resorted to widen the roads so as to accommodate the tourist's inflow. Considering the fragility of these mountains, Himalayas being the youngest of the mountain ranges in the world with very poor soil stability the roads would routinely cave in or get washed away during monsoons (Bisht, 2013).

The rising tourism industry lured the land sharks and they erected multi-storied hotels, flouting all environmental norms. Thousands of such resorts and hotels have mushroomed in this eco-sensitive zone in the last few years. Some of these hotels were built on banks of several small and big rivers just to give the tourist a bird's eye view of the pristine river flowing through the valley. The number of hotels has also seen a similar rise in the recent past. For example, Kedarnath Valley has hundreds of such hotels that were vulnerable to these natural calamities. So, when flash floods struck the valley, many of these hotels got swept away and so did the people staying in them (Bisht, 2013). As addressed by Jacob (2013), that "rampant illegal construction of buildings by locals had also contributed to the problems and made a bad situation worse. On top of it all, traffic in the hills has increased hugely, with the number of vehicles registered in the hills going up sharply. Remember the hills are delicate and unstable, so it takes little to set off landslides. More infrastructure has in fact worsened the situation since much of it is poorly made and constructed by people who have no idea of building in the hills"(para.3).

All the above factors have had a crucial role to play in the disaster, but as the report provisioned by the Comptroller and Auditor General (CAG) showed that not only was the disaster aggravated due to rise in tourism but also blame lies in the faults of the State Disaster Management Authority which was formed in 2007, but never was a meeting convened nor were there any rules, regulations, policies or guidelines framed, "the state disaster management plan was under preparation and actionable programmes were not prepared for various disasters," the report says. Going to show that the state was unprepared to face a sudden crisis, furthermore as Varma (2013) stated, "citing examples of the mismanagement by the Uttarakhand government, the CAG said that although the Geological Survey of India had identified 101 villages as 'vulnerable' in June 2008, the state government did not take any measures for their rehabilitation till date".

Besides this there are also allegations against the government based on the construction of several dams along the river, which is as good as handing out an invitation to disasters, as Jacob (2013) reflects on the same, “illegal construction - of buildings and dams...the government has sanctioned an absurd number of hydro electric power projects that actually overlap with each other” (para.6). All this only goes to show the state and in turn the nation’s lack of competency, lack of planning and absences of political accountability is evidently seen through this extensive damage.

To highlight the main factors that aggravated the disaster are as follows: the unregulated tourist inflow; the absence of an early warning mechanism as the CAG report mentions “The communication system was inadequate.”(As cited in "Plan ahead", 2013, p.10); a lack of trained medical staff at hospitals; the climatic conditions the India Meteorological Department (IMD) had issued advance warnings predicting extreme weather conditions in Uttarakhand before the flash-floods though no appropriate action was taken ("Warning had been," 2013) and finally the fact that the state had no action plan in case a disaster struck.

"Plan ahead" (2013), states that “Disasters are not learning processes. The authorities will have to do all they can to ensure against such recurrences...the starting point is for the State Disaster Management Authority to put place a disaster management plan” (p.10).Thus, unforeseen disasters calls for having an effective disaster management plan in place and for the State Disaster Management Authority to prepare actionable programmes to deal with disasters. One such action plan is as suggested below, will help in restoring the destinations success.

## Steps in Disaster Management

One of the many means of avoiding extensive damage caused by disasters is by being well prepared to face them. So as to ready the state of Uttarakhand with ways of combating unexpected disasters, an effective disaster management plan is to be implemented. The following are some of the steps that can be taken toward framing a disaster management plan.

### **The Pre-Disaster Stage:**

This stage focuses on minimizing the damage to life, property and environment is that before the disaster strikes and at the prohibition stage, various schemes are drafted for controlling the losses to lives and property to minimize the effects of disaster. There are several techniques to embark upon this stage where the disaster has not occurred, wherein

there is a call for being better prepared and to have an effective of warning mechanism prior to the disaster.

### Preparedness

It refers to the readiness, on the governmental, social and personal levels, to effectively face the disaster that has already visited and it includes practical disaster-layouts. Here, the local residents along with the state officials need to be sensitized regarding the measures to be taken when faced by a crisis, such as landslides, floods, earthquakes etc. So in case of such emergencies they can take necessary action.

### The Warning of Disaster

It is very crucial that immediately after receiving slightest hint of a disaster, the information about its advent reaches the entire danger-prone area. In the case of Uttarakhand it was seen that the State Disaster Management Authority did not have a scheme so as to curtail the disaster nor were the warnings issued by the meteorology department taken seriously.

### **Response and Relief Measures:**

This includes a wide range of activities including the erection of control booths, action according to the action-plan drafted, the broadcasting of danger notice. Post the disaster various relief measures were initiated by the authorities in forms of rescue missions by the Indian Armed Forces, so as to rescue victims and provide rehabilitation and in monetary terms to reconstruct the destination.

### **The Post – Disaster Stage:**

While restoring the state to normalcy, it is also equally necessary to ensure that if, unfortunately, the disaster revisits, the extent of damage is lesser. Restoration includes assistance, rehabilitation and reconstruction. “In addition to this, many protective steps will be taken to prevent if same calamity recurs in any case. It is decided to keep a track of the pilgrims – Indian as well as foreigners. Moreover, this time efforts will be made to handle things thoroughly and systematically” returns (“Char Dham yatra”, 2013, para.3).

## **Revival / Resurrection:**

In revival, the focus is on the erection of facilities of greater competence than those built in pre-disaster stage. Erection of new buildings, taking ultra care of durability while erecting various essential facilities – are some illustrations of revival activities. During this stage care is to be taken to see to it that building do not encroach nature and that they are built in a sustainable manner. The government has curtailed the Char Dham yatra for three years for the purpose of repair and restoration as quoted by B.D. Singh, chief executive officer of the Badrinath - Kedarnath Temple Committee told IANS (2013), that the chances of reviving the pilgrimage "for the next few years" was grim, "what we are seeing is very painful and unbelievable," he said. "We don't expect the Char Dham Yatra to resume in the next three years." (para.2). A survivor claims that there is nothing left In Kedarnath except for the temple, which now will take these three years to restore, as from the building to the roads were washed away in the flood (IAN, 2013). Thus this stage will require this ample time to plan appropriately for the revival of this holy destination.

## **Development:**

The reconstruction of the affected region and bringing back people's lives to normalcy is a pretty long process – especially because of the existence of severe financial constraints. The government is taking initiative to raise fund from both the public and private fronts. To facilitate the above various funds and relief funds are raised throughout the country to mention a few the donations sent to Doctors For You, Uttaranchal Daivee Aapada Peedith Sahayata Samiti, Uttarakhand relief fund, individuals contributions and relief funds such as the Chief Ministers relief fund, Prime Ministers relief fund etc. all have come to aid the state of Uttarakhand. Besides this the chance of the Char Dham Yatra to resume excluding Kedarnath is also expected by the end of 30th September, 2013 so as to help the locals who survived solely on tourism returns ("Char Dham yatra," 2013).

An apt means of ensuring that the destination thrives in spite of being in a crisis is through the adoption of an effective means to restore the destination post the disaster. The following approach showcases a step by step means in destination restoration. This can be an example of how Uttarakhand can be restored to its former glory.

## **A Systematic Approach - Improves Destination Restoration Success**

To assist planners in conducting cost-effective monitoring for destination restoration, techniques can be developed consisting of four components, following which is the brief explanation regarding the four components: planning, construction and implementation, assessment of performance and management of the system.

## **Planning:**

The key element in planning the restoration project would require: conceptual modeling, site assessments, and cost estimation. A conceptual model details the structural aspects of the system that must be developed to meet the goals. Whereas as site assessment is essential where the site lacks the characteristics necessary to reach performance goals, the restoration project will likely fail. Thus in the case of Kedarnath an assessment of the destination must be made prior to any constructions made. Also cost estimation is to be made to the end of the planning stage. Restoration managers must account for land acquisition, engineering design, and construction, among other factors.

## **Construction and Implementation:**

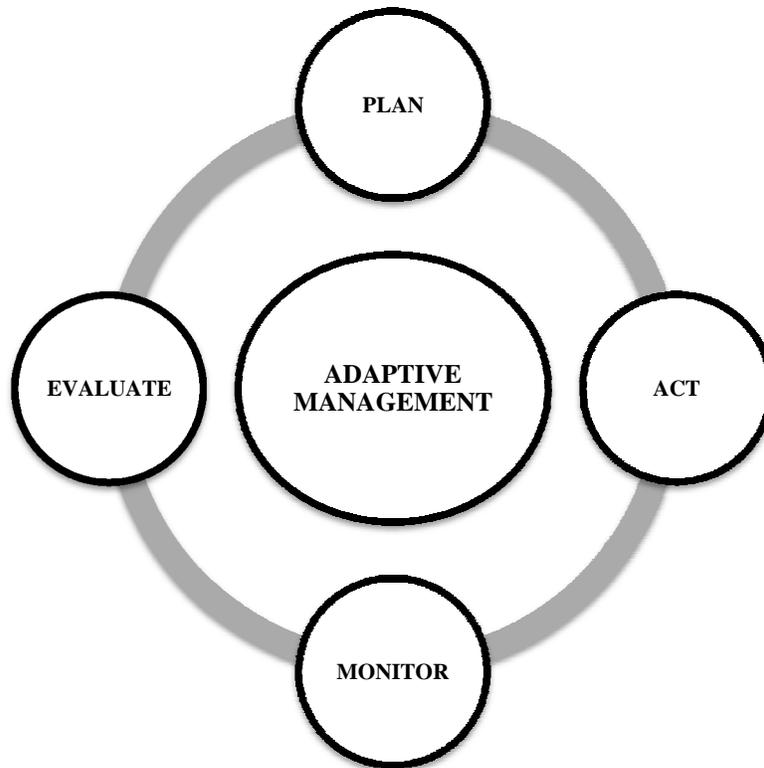
Projects that require less physical restructuring of the site are more likely to develop successfully without human intervention. Projects requiring more engineering to massively rework the site often have a higher degree of uncertainty. These factors are to address while restoring the disaster hit regions of Uttarakhand.

## **Assessment of Performance:**

Post-implementation monitoring should focus on a parameter indicative of the original goal. There are numerous low-cost ways to effectively monitor a restoration project. Within the span of the three years there is a need for continuous assessment to see to it that the destination is being restored as per the action plan and no deviations occur.

## **Management of the System:**

Restoration management plans should be modified according to the principles of adaptive management, which is nothing but decision making in times of uncertainty, where policies and practices are altered according to learning from outcomes. Thereby restoration policy can be understood well, depending on the application of alterations so as to accommodate changes if necessary. This is further explained through the means of the following diagram.



“Applying the continual evaluation process of adaptive management leads to cost-effective, successful restoration projects” (Beirman, 2003)

## Marketing Management of a Destination in Crisis

Marketing management is another important criteria, while dealing with a destination in crisis and certain criteria's needs to be noted such as: identifying the event/problem as either a crisis or a hazard the next step is to establish a crisis management team and define roles, thirdly to promote the destination during and after the crisis, this must be done with utmost care so as not to negatively affect the sentiment to the people and to send out a positive reassuring message to the audience and lastly to monitor recovery and analyze the crisis experience. These measures should ensure a strong base for drafting a better marketing management system. Regular liaison between national, local and regional tourism authorities is vital during a crisis.

## Maintaining an effective website

Many destination authorities now realize that an effective website is one of the most cost-effective marketing tools they have. It is an especially useful marketing aid during and

after a crisis. E-Marketing campaigns are highly track able and measurable, and can be targeted and customized. Travelers can use the same social media platforms to express themselves and communicate with each other. The media are heavily reliant on websites with visuals as a source of news and feature articles on tourism. The website serves as an integrated marketing medium featuring information on sites, operators, special deals and events. The qualities of a good website are at ease of access for the comprehensive and up-to-date provision of information.

During a crisis and the recovery phase, the website is rapidly replacing the traditional press release as a means of updating all concerned parties. During a crisis and in a post-crisis recovery phase, the most brilliant marketing campaigns and the most comprehensive websites are no substitute for firsthand independent testimonials from opinion leaders. Influential travel writers, travel-orientated television shows, radio programs and influential travel industry identities who report a positive impression of eyewitness accounts of those who visit the destination, especially during the restoration phase, are important elements in recovery stimulation. Uttarakhand government portal has regular updates on the region along with the official website of Disaster Mitigation and Management Centre of Uttarakhand, has regular updates on the progress of the rescue mission and relief offered.

## Best Practice of Destination Management

A destination should practice effective management within itself so as to deal with unprecedented events such as flash floods, earthquakes and other such disasters. Various developed and developing countries have adopted destination management through Destination Management Organizations (DMOs), which is one such take on destination management. It caters not only to management, but also several other aspects as mentioned by Varghese (2013) briefing on the general meaning and functions of DMOs being a, “non-governmental technical body voluntary in nature, supported by the Host Government. DMO is a body to initiate a standardized procedure to market a destination by attracting right quantum of tourist, to synergize activities on tourist destinations. DMOs are also perceived as marketing organizations designed to bring buyers (visitors) in contact with marketers (providers of tourism products and services). DMOs can flourish with Destination marketing as a proactive function. Visitor centered approach to the economic and cultural development of a destination will balance and integrate the interests of visitors, service providers and the community” (p.50). These destination management organizations are duty bound to deal with the crisis that the modern day destination has to face, as it directly or indirectly affects the destination image and in turn affects the marketing of that destination as Borzyszkowski & Marczak (n.d.) asserts the credibility of DMOs in destination crisis “it seems to be particularly essential...the occurrence of various phenomena that are related to a crisis forces destinations to undertake specific actions aimed at a minimization of the effects of a crisis. Those organizations that are responsible for the development of tourism in a destination during the occurrence of crisis situations possess numerous possibilities to interact with the market and consequently to limit the effects of a crisis” (p.37). Thus the role of a Destination Management Organization is essential in any destination especially to cater to its every need and rise to assist the destination even in the plight of a disaster.

## Conclusion

The highlight is on the tourism disasters vulnerability of the tourist trade to unforeseen events which also signifies the principles of disaster management, the content also elaborates on how to pro-actively deal with the potential for future crisis related to tourism, steps in disaster management would give a brief overview about the various stages involved in disaster management. Further discussion in this paper leads to a systematic approach – which improves destination restoration techniques and also describes about the reasons for the collapse of tourism destination areas and enumerating on the aspects of an ideal area development, with relation to Uttarakhand.

In terms the losses faced by the tourism industry, due to the disaster are extensive as said by an official to Madhav (2013) that, “speaking on the possible losses...the season accounted for 30 per cent (around Rs 3,500 crore) of the tourism sector's annual earnings. Due to the calamity, they were witnessing 99 per cent cancellations from the affected travelers and from pre-bookings.”(para.6). Thus when the Char Dham yatra has been cancelled for three year the possible losses can be imagined. So through the implementation of destination management and the several disaster management techniques, such losses can be avoided and the credibility of a destination restored.

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