Discuss the importance of using gis in disaster management and the highlight the ...



Running head: GIS in Disaster Management GIS in Disaster Management s GIS in Disaster Management Disasters and mishaps are the ugly reality of this world. No matter, how developed a nation or a country is disasters are inevitable most of the time. Disasters are a sudden event of destruction that brings along with itself, huge losses of lives, labor, material and devastation and destruction as a whole. Disasters are of two kinds: man-made and natural. Man-made disasters are those that are those that occur because of human activities, errors, or neglect. While natural disasters are those that result due to natural calamities and human beings have lesser degree of control over, for example, earthquakes and hurricanes. Disasters can disrupt the whole routine and activities of the affected country, nation or city. It can result in serious accidents, mishaps and calamity. Therefore, it is essential that the disasters are processed, managed and useful steps be taken to ensure that the routine of the affected place can get back to normal (Mishra, pp. 172-173, 2002). Geography Information System, also known as GIS, is one of the effective methods of disaster management. This ensures that least of the wastages happen once after the disaster have taken place, or it completely tries to curb the foreseen disasters from happening altogether. GIS, is a method of looking into the geography, topography, of the affected place, or the vulnerable places to disaster so that effective methods of preserving the areas could be brought up to handle the situation in the best possible manners. GIS allows the Disaster Management Departments to closely look into the issues, recognize, examine and make trends of the issues that are occurring, through high technology softwares that helps the investigators to come up with the best possible and accurate results.

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Therefore, the system of GIS can help the disaster management teams to come up with the most effective ways of ensuring that the mishaps that have happened should not happen in the future, and try to prevent the expected disasters to happen in the present time (United Nation Center for Regional Development, pp. 6, 1996). In spite of all the advantages to GIS, it tends to have a few drawbacks as well. GIS has developed through the years as an advanced means of preparing countries, or other disaster struck areas against the perils of mishaps and wastages. Nevertheless, GIS can be a very problematic method of understanding and evaluating the concerned situations. One of the problems while using GIS or other mapping methods to investigate for and plan regarding disaster management is that, GIS involves studying large areas of lands even outside the area of study, and involves huge amounts of elaborated details to ensure that the best decisions be made. Secondly, GIS also involves other detailed information while investigating areas of concern apart from the GIS information that is recorded. This causes the whole procedure of investigation very hectic and tiresome for the investigators. Also, it makes the management process to be very time consuming that can result in ineffective measures (Nadine, pp 86, 2004). Also, the fact that the process of using GIS is itself very technical; it involves critically analyzing each and every factor on the maps and analyzing the best results is not something that everyone can do. The process of effectively using the methods of GIS involves very skilful workers and critical analysis of every single detail. Any individual but trained professionals cannot do this (Drew, pp 103-104, 2001). The method of GIS helps countries, cities, and other security and management departments to

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analyze any sort of disasters or threats that may occur in the future and help them come up with the best possible ways of tacking them. However, it is essential that the methods of GIS used while keeping in mind their drawbacks as well, to ensure that the best possible results come up (Nadine, pp 163, 2004). References Decker, Drew. 2001. GIS Data Sources. John Wiley and Sons. Mishra, P. K. 2002. Maps and Disaster Management. Indian Cartographer. Schuurman, Nadine. 2004. Thinking about GIS: Geographic Information Systems planning for managers. ESRI Inc. Schuurman, Nadine. 2004. GIS: A short introduction. Wiley-Blackwell. United Nation Center for Regional Development. 1996. GIS for Disaster Management. UNCRD Press.