

THE ROLE OF GEOGRAPHICAL INFORMATION SYSTEM FOR DESIGN AND ENCOUNTER MANAGEMENT WITH ENVIRONMENTAL HAZARD

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ABSTRACT

Environmental hazard in the form any ecological phenomenon that has a high intensity for manage that needs to help out of organization. Conforntation with natural hazard after they occur, whitaut any predetermined plan and management after crisis, a clear solution in todays world after occuring manage with thw situation. Infact it can be assumed after an accident all facilities will be ready to dealor with a predicted plan are ready and available that in both cases for manage and outreach will need located information. According necessity and priority of processing of location data in management process and assistance and for preventiing the unnecessary expenses and waste of sources, measures must be essential in regional and national scope. In othe word, located information in the collection topic quantity and information is diffreut and the record is necessary. In this regard, a system that and in the collision course in necessary for accounting or removing. So GIS (geographic information system) due to capacity and for orincipled solution based on available information the best option to help improve in natural hazard management. To avoid confusion due to the natural disaster in the country, deal with it should be continued. Disasters or natural hazard, at the beginning and end, that its time can be short and sometimes continuous. At the end mention that every hazard will be end, providing the conditions in the face of that for prevention especially dealing with in crisis.

Keyword: *Design, GIS, conforntation, environmental hazard, management.*

ÇEVRE TEHLİKESİ İLE TASARIM VE KARŞILAŞMA YÖNETİMİ İÇİN COĞRAFI BİLGİ SİSTEMİNİN ROLÜ

ÖZ

şeklinde çevresel tehlike organizasyon yardım gerektiğini yönetmek için yüksek yoğunluğa sahiptir herhangi bir ekolojik fenomen. oluştuktan sonra doğal tehlike ile Yüzleşme whitaut kriz sonrası herhangi önceden belirlenmiş bir plan ve yönetim, thw durumla yönetmek oluşan sonra günümüz dünyasında berrak bir çözelti. Infact tüm imkanları öngörülen plan dealor hazır olacak bir kaza sonrası kabul edilebilir her iki durumda da yönetmek ve sosyal bulunan bilgilere ihtiyaç duyacaksınız için bu hazır ve kullanılabilir. gerekliliğini ve yönetim süreci ve yardım ve gereksiz harcamalar ve kaynakların israfını preventiing için konum verilerinin işlenmesi öncelik göre önlemler, bölgesel ve ulusal kapsamda gerekli olmalıdır. tasarımlarıyla kelime, toplama konu miktar ve bilgi bulunan bilgiler diffreut ve kayıt gereklidir. Bu bağlamda, bir sistemde bu ve muhasebe veya çıkarılması için gerekli çarpışma sırasında. Yani kapasitesi nedeniyle ve en iyi seçenek mevcut bilgilere dayanarak orincipled çözüm için CBS (coğrafi bilgi sistemi) doğal tehlike yönetiminde geliştirmemize yardımcı olmak. nedeniyle ülkede doğal afet karışıklığı önlemek için, onunla anlaşma devam edilmelidir. başında ve sonunda Afetler veya doğal tehlike, onun zaman kısa ve bazen sürekli olabilir. Sonunda her tehlike önleme especially kriz ile başa çıkmak için bu karşısında koşullarının sağlanması, sonu olacak söz.

Anahtar kelime: *Tasarım, CBS, conforntation, çevre tehlike, yönetim.*

INTRODUCTION

Conforming with disasters in nature after happening without any specified and managed predominated program after crisis, is the obvious solutions in the world that led with a situation. It can be considered that after the event, all facilities and forces will be ready or with predominated planning, it is possible for management and wide spread helping with helping of located information. The time which we live is indeed management and communication era that. Called universal village. The age that expected for developing technology. In today's world to achieve sustainable development encompasses environmental protection is not the bases.

And the new concept of economic growth is concerned. Growth and justice for all peoples and all generations living facilities without degradation over the world have had limited capacity and resources. Entries said corner of said concept of sustainable development, which was studied in 1991 in the Hague conference. (Pareschi et al, 2000). The occurrence of natural disasters, the development of effected countries of the accident is changed. But in a number of events caused by natural disasters opportunity to accelerate the restructuring process development. In some countries natural disaster halt development programs and sometimes then go to those countries. Because all societies are somehow threatened by natural disasters. The condition is very important in reducing the impact of natural disasters is too reduce the risk of accident (Van Asch et al, 1997). Mahdi Fallah the first time in 2015 years in the study of environmental risk. Management with GIS in Iran and discribed the advantages of this system on all countries said that the results of the study, the ability of many geographical information system in disasters especially fastin the management of natural disasters shows (Fallah,2016). In fact, we can say that much depends on the ability of countries to deal with the risk management policy to control disasters and environmental hazards.

THE PURPOSE OF THE STUDY

Environmental hazards in the form of ecological phenomena that have been strongly and for management of foreign aid organizations need to be defined. In this study, according to a review of risk management and crisis management and how to deal with the disasters to which some of the effects of environmental disasters and hazards in sustainable development show. A hybrid approach to disaster management and environment hazards can minimize unpleasant results, as well as to maximize the chance of a positive outcome to ensure pleasant.

Development can be the evolution of living standards and achieve the ideal conditions in the area of economic, social and cultural rights is the realization of the concepts of freedom, justice, social and cultural dynamic brings. The most important factors in getting a better concept of sustainable development, is explaining of the concept of sustainability. In a dynamic system like the human community, sustainability means balancing stability over time. So the concept of a quality that can not be easily magnesium non fixed size is not a fixed point, defined in this simple act, that there are forces, which over time can disrupt the balance. Because sustainability is a dynamic concept thus has several characteristics. Such as speed or rate of change, the factors affected by the changes caused by it and the amount and rate of the changes that are related to the initial and final state. In fact, the concept of sustainable development, which reflects the responsibility of the present generation and future generations. In June 1992, the United Nations Environment Development Conference held in Rio de Janeiro in the document called Agenda 21 was proposed and adopted, which has 40 chapters and special care for the environment, the economy and social concepts. In this document the status of environmental issues, including indicators of geological markers have been proposed. Natural disasters is one of the main obstacles to sustainable development is considered. Always happen as a barrier in the way of economic development, social development is located. If the severity of the disaster is, the national programs will be more problems. Because many civilizations and societies destroyed by natural disasters. Irrational human exploitation and mismanagement of natural resource exploitation on the history of natural disasters can be realized in this issue. Increase of population as one of the obstacles in the correct use of natural resources. Population growth and the resulting increase in food need of agriculture and animal husbandry, settlements and urban development, education, health and welfare facilities to follow. This is needed to boost unethical, inappropriate and

wasteful of natural resource. As a result of the unfortunate consequences of natural disasters caused medium-term planning and long-term risks. Therefore, it is necessary to evaluate and control the sustainable development of these two issues (Mantovani, 1996).

ENVIRONMENTAL RISKS CONDITION IN WORLD AND IN COUNTRY

Unfortunately, according to international statistics, about 6.3 million people in the past 3 decades as a result of natural disaster around the world have lost their lives. The disaster damaged more than 3 billion people and more than 250 billion collateral damage has put in place. The statistics show that natural disasters are growing in the world. Between 1990 and 2002, has four times the intensity of the disaster. Average per year of every 34 disaster damaged one out of every 31 thousand as a result of natural disaster lost their lives. World statistics injury accidents and natural disasters show that 2008 was one of the riskiest years. This year more than 220 thousand as a result of floods, earthquakes and other disasters around the world have been killed. Several times that number are also involved in the consequences of the disaster. Most casualties in Myanmar that 135 thousand people lost their lives. In 2008, as a result of cyclone more than a million people were missing in the accident caused 5 million people were left homeless. The effect of 70 thousand people were killed and 18 thousand people were missing in the accident caused 5 million people were left homeless. After about a thousand people in Afghanistan, Georgia and Tajikistan have died due to the cold and in August and September, the floods in India, Nepal and Bangladesh, 635 people died. Iran also according to geographic location and geological disaster-prone world, including the ten countries considered. Always caused by disasters such as floods, earthquakes, droughts, hurricanes and other significant human and financial losses to the country. At least about 86 percent of Iran's earthquake-prone region in such circumstances and given the large amount of its gross domestic product is spent on compensation for natural disasters. Planning for natural disaster reduction has a special significance (health new portal, 2008). The necessity and priority processing of spatial data management process and assistance, as well as prevent the creation of vain expenses and waste of resources, would be essential in this regard in this regard in the field of national and regional measures to be taken.

The Lack Of Environmental Risk Management In The Country

To manage the environmental hazards, the system that manage and resolve the crisis is necessary. For example: some environmental disaster in Iran's north khorasan in 2001 and continual droughts in different area of Iran are not a catastrophe but are a national event. These events must be seen different. The problem in Iran when happen that we think that just the solution is in use of tools and stereotype sentences. Some of these are responsibility and option. That all the executive officers claim that they don't have any option. This is an unbased word. Because if any person can not do anything he or she must not accept the responsibility. In this situation is two ways: 1. Following to required tools. 2. If it is not possible, abdicate the responsibility. Management in force major incident is a combination of science, art and acts. Planning is a tool to reach a good condition. So the first step for planning is understanding the situation that needs an realism rather than optimism.

Necessity Of Purpose Of Environmental Hazards

Unexpected events and disasters always threaten human and financial resources. Earthquakes, floods and put Iran among the world's top ten accident-prone. So that 43 type of that, 32 happen in Iran. After it became clear how much we are exposed to serious injury and environmental hazards and how can we deal with the crisis. In the next step we must declare that in what level of success in control of crisis we want to achieve, in expert point of view no crisis does not happen without any previous warning. Crisis are expectable. In modern countries the occurrence of natural disaster has become into opportunities for development. Planning is not easy but can be done with this attitude. Events may be considered for development as a new start because it is possible that a situation happen that the resources can response the progress of societies. Goals in the face of natural disasters an extensive exchange of information and experiences in relation to the risks and human vulnerability and disaster among data users including public and private institutions. In other words no better way overcome the availability of information about natural disaster. In the past 15 years a large number of information centers specialized in supplying and evaluation of information have done substantial cooperation. International efforts to standardize the information and the data disaster is underway. Improvement

has been progress in producing statistics on international base data obtained by natural disaster. Integrated partnerships with several organizations has done to identify acceptance of global rare disasters and system of the reference code. So natural hazards requires the identification and assessment of historical events, population affected by natural disasters and its consequences (Carrara et al., 1990). given that one of the important indicators of developing countries, the impact of the different types of natural hazards. A small number of countries with comprehensive programs of disaster management in their development, attended the preparatory phase. And more a large deal to phase the crisis is growing. The pattern of crisis management, by reducing the effects of prevention measures or four phases, preparedness, response, reconstruction, which also includes program planning and management therefore, it can be seen in table 1.

Table 1: Template Editor based on the principles of crisis management and program management mode

The principles	Crisis management and planning phases
Non-structural methods should be prioritized	Prevent and mitigate the effects of
The main organizations that should act during the crisis have already been identified and their roles and responsibilities are clearly defined	Ready
should be Among organizations that do have traditional roles and new tasks to organizations that are doing a balance to be established	opposition
Activities related to the return to normalcy and reconstruction have already been planned and are part of the social development programs.	Return to normalcy and reconstruction

GEOGRAPHIC

GIS a set of software, hardware, data, experts and models for obtaining. Storing, retrieving, processing, analysing, transmission and display of spatial data in support of decision-making to solve will be a problem. Government officials can determine the risk carefully. They may start to assess the effects of the crisis or disaster. When the risks of earthquake fault lines, areas of fire, flood prone areas, coastal logic and etc. other information with map, roads, pipelines, buildings, residential areas, power lines, storage facilities, etc... compare them. Crisis management officers can reduce recovery needs and operation and response plan. Before an effective crisis management plan to be completed, a thorough analysis of the program and should be done. A geographical information system allows planners to the right combination of spacial data in a map made by computer view. For example, the earthquake is said. What early development in areas affected by earthquake damage should be done? According to forecasts of an earthquake, soil and other characteristics of geographic information what may cause damage? What is necessary to facilitate a restart of the building or location. What facilities are in the high risk area? Reduction may include rules that limit urban development in the earthquake and floods. You can expand the potential flood zones along the beach or on the wave and wind determined. When longer-term reconstruction was completed it can be diagnosed and followed through geographical information system and thereby calculate the cost of the disaster is possible. Or when the budget was allocated for the reconstruction of accounting records and other information connected locations. In fact the calculated geographic location and how to use the funds necessary that the system will do the job easily. And should be noted that there is a need to overcome the lack of fast and efficient decision will be that all these activities are dependent on the efficient use of a geographical information system. Another unexpected and terrible events, accident and the nature of the toll roads which, in this regard, the GIS can be fully optimized and has many benefits. In figure 1, a model based on a geographical information system for the management of black spot on the road is shown, which represents the relationship between environmental factors and challenges are manifold. Interestingly, only a few clicks on computer system can be achieved. According to figure 2, can be any of the blue incident considered. And the red line to assist the optimal route to the goal that is easily

visible. That helper will be easily accessible and a few seconds to help rescue centers will be accelerated.

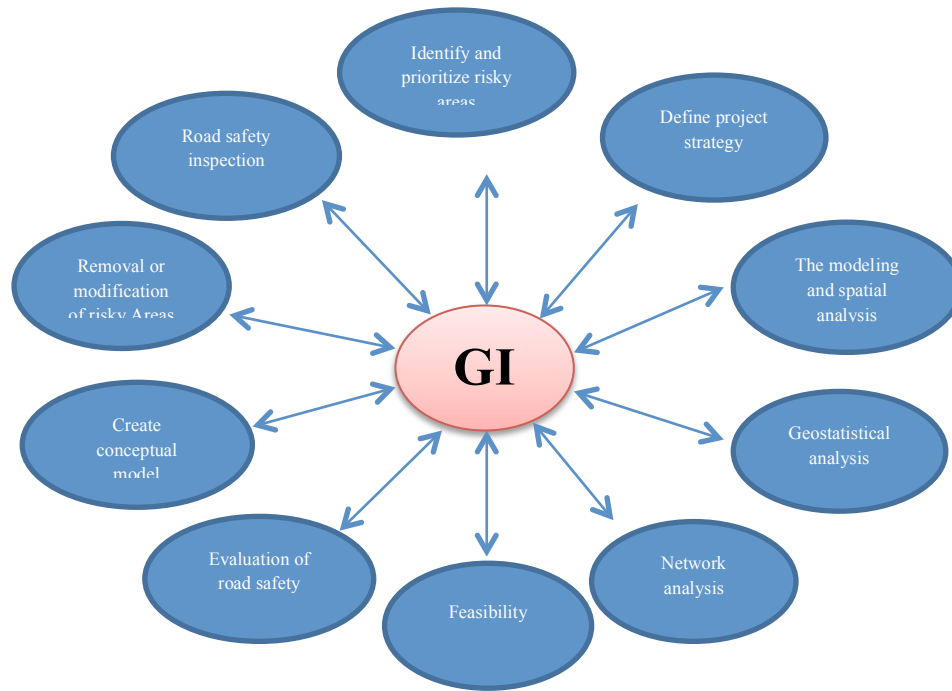


image 1: a model based on management of event points

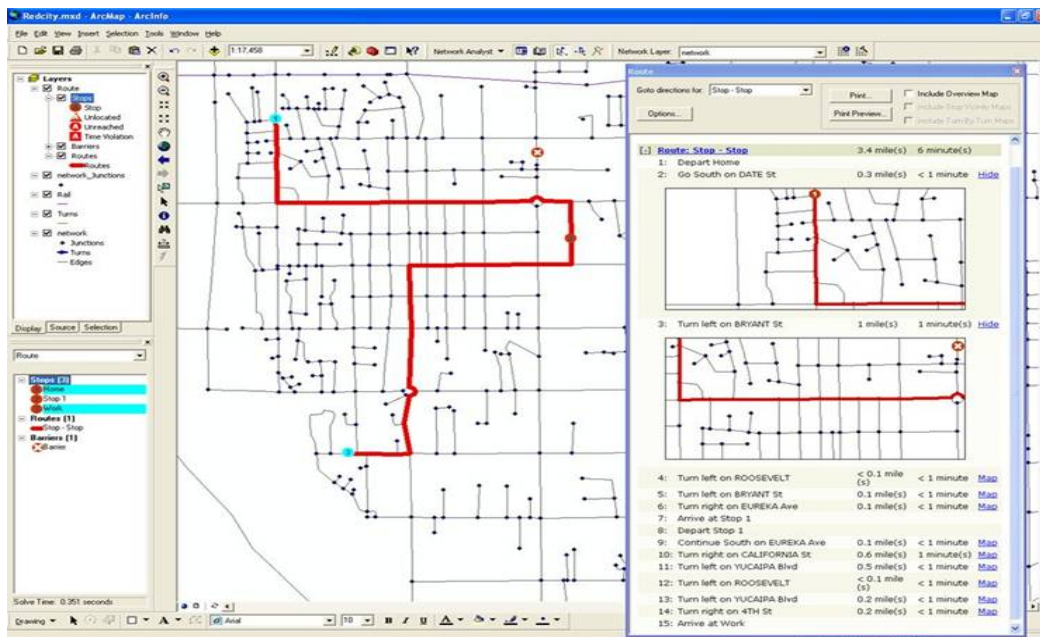


image 2: Relief using geographic information systems

According to a study can be loaded. That GIS can creat favorable conditions for timely care for victims, in addition to reducing human casualties complication such as injuries, disabilities and psychological problems stemming from it less. And in harness to tackle the crisis and restore normal conditions to reduce the cost of primary and secondary crisis will be very useful. And with documentation of event and activities crisis, assessment and evaluation of training provides personnel with the help of GOD we will see effective management of the crisis. Review the role of risk management in the face of climate disasters and achieve sustainable development. The fifth bi-annual national conference of the association of environmental professionals.

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