

The Management of Natural Risks in the Framework of Algerian Legislation

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Abstract

Algeria is affected by various natural hazards such as: earthquakes, landslides, desertification and floods which sometimes act simultaneously in the same area. Faced with the resurgence of natural risks in Algeria, which requires the authorities to take charge by integrating the policy of natural risk management.

The Algerian experience in the field of natural risk management started with the dramatic earthquake of El Asnam on 10 October 1980 and was enriched after the serious floods of Algiers on 10 November 2001 and the devastating earthquake of Boumerdes on 21 May 2003.

Algeria had a first legislation in this field by the decree 231-85 and 232-85 and the last one by Law 04-20 of 25 December 2004 relating to the prevention of major risks and disaster management in the framework of sustainable development. Are the Algerian regulations sufficient to manage natural risks and their effects?

Today the natural risks are still treated in a sectorial way; In addition, the country suffers from the lack of evaluation and inspection networks as well on the country level as for the local. there is also a lack of data bases for each type of natural risk, the number Algerian specialists in the treatment of the risks is still insufficient.

In this work we have presented the national policy for disaster prevention and management, which relies mainly on national and local institutions and concerns both the prevention of natural hazards and the organisation of interventions and relief.

Key words: Algeria- risks natural – législation- management of zisks- sectorial

INTRODUCTION

Algeria is among the countries most vulnerable to natural disasters. Over the last decade, it has been marked by large-scale natural disasters such as floods and earthquakes.

The Vulnerability of the Algerian Space

Earthquakes

Algeria, which is part of the Mediterranean basin, is known to be the seat of moderate to strong seismic activity. The numerous tremors that have affected it (elAsname 1980, Constantine 1985 Tipaza 1989, zemmouri 2003) are there to attest to the active nature of the tectonic activity throughout the Tellian Atlas (Photos.1,2)



Photos 1,2. The Boumerdes earthquake 2003

Floods

Floods are among the most frequent and devastating natural disasters in Algeria, affecting several regions and sometimes reaching the scale of a national disaster (Photos.3,4)

- The autumn 1969 floods in algeria
- The march 1973 floods in eastern algeria
- The floods of december 1984 in eastern algeria
- The floods of 09/11 november 2001 on the algerian coast
- The floods of the ouedm'zab valley 2008



Photos 3,4. The floods of Bab El 2001

Landslide

The risk relating to landslides is certainly the most widespread on the national territory: (Photos.4,5)

- In eastern algeria: constantine. Guelma, skikda, bejaia
- In the centre: tiziouzou, blida
- In the west: oran



Photos 5,6. Landslides

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The earthquake that hit the region of El Asnam (now Chlef) in 1980 caused economic losses of 3 billion dollars, the Mascara earthquake in 1994 caused 50 million dollars in material damage, not counting human losses, the Bab El Oued floods in Algiers in 2001 cost 544 million dinars, while those of Ghardaïa in 2008 cost 250 million euros and recently those of El Bayadh cost 6 billion dinars. The Boumerdes earthquake in 2003 remains the most important natural disaster in terms of material losses with 5 billion dollars of damage recorded (CCR2011).

MATERIAL AND METHOD

Natural Risk Management in Algeria

The estimation of risk depends on how society integrates or perceives the occurrence of a crisis or disaster in their daily lives (christian .L al 2002).

The perception and management of risk often progresses after a crisis has occurred and thanks to the post-crisis feedback which allows the various and even contradictory perceptions of the different actors to be clarified (figure N°1) (André. D 2003)

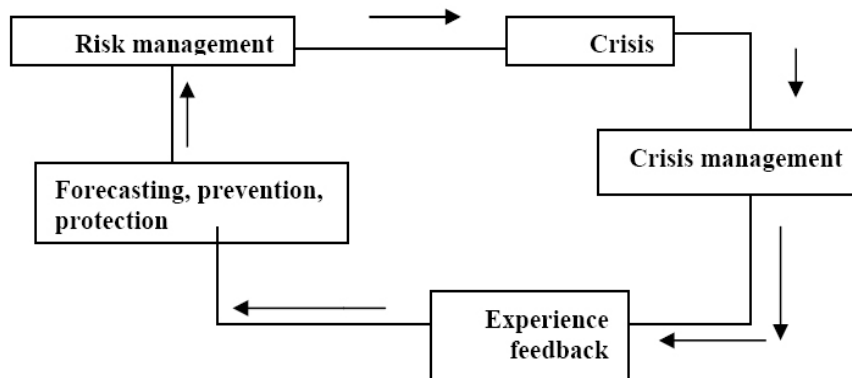


Figure 1. Relationship between risk and crisis

National Institutions

The national policy for disaster prevention and management relies mainly on national and local institutions and concerns the two areas of natural risk prevention and the organisation of interventions and relief. (Belazougui, M2008)

In order to present this management policy in Algeria, all regulatory texts are collected

Natural Hazard Prevention

Specific Laws on Natural Hazard Prevention and Disaster Management

The notion of disaster risk coverage was non-existent before 1980, after the Asname earthquake in 1980 Algeria had regulatory texts on risks (Ramoul.S 2010).

Before 1980: no regulations on risks

Between 1980 and 2004

Implementing the national plan for disaster prevention and the organisation of interventions and relief This resulted in the promulgation of two decrees

Decree 85-232 of 25 August 1985 on disaster risk prevention

Decree 86-231 of 25 August 1985 on the conditions for the organisation and implementation of disaster response and relief Creation un fond d'indemnisation des victimes

Decree 90-402 of 15 August 1990 on the organisation and operation of the natural disaster and major technological risk fund, amended in 2000

Inter-ministerial decree of 3 Rabie El Aouel 1432 corresponding to 6 February 2011 fixing the nomenclature of the receipts and the expenditure of the account of special appropriation of the Treasury n° 302-042 entitled fund of natural disasters and major technological risks

2004 to present: New legislative and institutional arrangements

After the catastrophic consequences of the Bab El Oued floods and the Zemmouri earthquake, the Algerian government has updated and reinforced the national policy and action programmes related to the field of prevention:

a) Adoption and promulgation of "Law 04-20 of 25 December 2004 on the prevention of major risks and disaster management within the framework of sustainable development". This law, in addition to prescribing all aspects of disaster prevention and management to be handled by institutions, communities and the various partners concerned, provided for the creation of a "National Delegation for Major Risks" (Article 68).

This delegation is responsible for advising, evaluating and coordinating actions aimed at reducing the impact of major risks on the country's economy and on the safety of goods and people. This national delegation also acts as the "National Focal Point for the UN International Strategy for Disaster Risk Reduction ISDR" and coordinates, as such, the Algerian participation in related activities and events, mainly in the "Hyōgo Framework for Action 2005-2015" and the "Sendai Framework for Action 2015-2030".(Belazougui, M 2008)

b) An insurance obligation has been enacted, by Ordinance 03-12 of 26/08/2003 relating to the insurance obligation of natural disasters and the compensation of victims (05 executive decrees).

Algerian insurers are similarly obliged to provide coverage for CAT-NAT risks, and replace the public authorities in the organisation of compensation.

General Laws Containing References to the Field of Natural Hazards

-Law No. 87-17 of July 1982 relating to the water code modifying and completing by 13-96 of 1996

Article 78: the submersible surface of the main wadi constitutes the major bed, delimitation of the major bed is fixed by regulation

Elaboration of a flood forecasting and control plan

-No planting or construction on the floodable areas

-Law No. 01-20 of 12 December 2001 on land use planning and sustainable development

The protection of territories and populations against natural hazards is one of the aims of the national land use planning policy (article 04)

-Law No. 01-20 of 12 December 2001 on the protection and enhancement of the coastline

Specifies the specific provisions for the coastline as well as the instruments for management and intervention on the coastline in the framework of protection of biological and ecological balance, the fight against erosion, the prevention of sites and landscapes and the natural and cultural heritage

-Law No. 02- 80 of 08 May 2002 relating to the conditions of creation of new towns and their development

Initiating a policy of creating new towns in the high plains, the south, rebalancing the urban system from below

-Law No. 03-10 of 19 December 2003 on the protection of the environment in the context of sustainable development

Its objectives include

-To promote the rational ecological use of available natural resources and the use of cleaner technology

-To strengthen information, awareness and participation of the public and different stakeholders in environmental protection measures

-Law 04-05 of 14 August 2004 modifying and completing law 90-29 of 1 December 1990 relating to development and urban planning

It deals with a better definition of hazards and risk zones where construction is prohibited or limited, but above all stipulates two very important prescriptions

-Law No. 04-03 of 19 December 2004 on the protection of mountainous areas within the framework of sustainable development: It defines and classifies mountainous areas according to their natural characteristics.

-Law No. 06-06 of 20 April 2006 relating to the orientation and promotion of the city

It is wished to accelerate the procedures of adaptations, reserves a whole section to the natural risks, It confirms thus that the state and the communities are held to ensure the prevention of the natural risks (article 36)

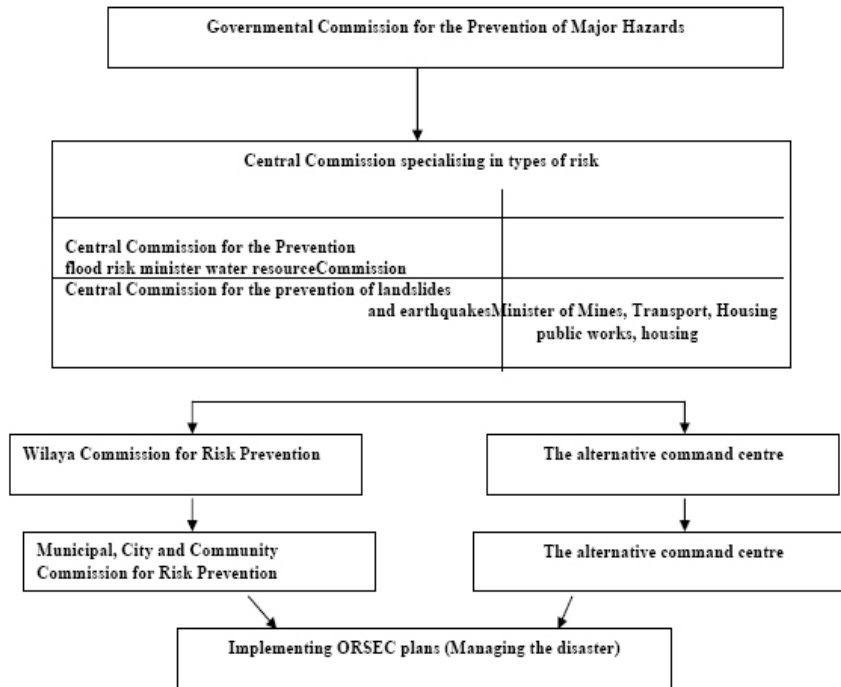
-Ensure that town planning instruments are maintained, complete mapping of risk areas-(Article 37)

-Raising awareness of the population to prevent and combat the effects of natural hazards

RESULTS AND DISCUSSION

In order to improve the management policy in Algeria, the following scheme is proposed:

The Main Steps of the Natural Risk Management Policy



The Actors of Natural Risk Management

The management of a risk is articulated around forecasting, prevention and protection of the population (Yvette v 2003, 2004)

- The actors of risk management in Algeria are
- The politicians
- Scientists and technicians to define the hazard
- Lawyers to draft legislation

State or Local Authorities were Involved in the Establishment of the Regulations and in their Application

<p>Knowledge of the phenomenon (hazards)</p>	<p>- Minister of the Interior and Local Government Minister of Environment and Tourism National Agency for Risk Prevention and Management Minister of Water Resources -Minister of Scientific Research-</p>
<p>Vulnerability awareness</p>	<p>- Minister of the Interior and Local Government Minister of Environment and Tourism National Agency for Risk Prevention and Management Minister of Water Resources Minister of Housing and Construction</p>

Risk awareness	Minister of the Interior and Local Government Minister of Environment and Tourism National Agency for Risk Prevention and Management Minister of Water Resources Minister of Housing and Construction Minister of Communication Insurance agencies
Disaster management actors	
Preparation of ORSEC plans	Minister of the Interior and Local Government The alternative command centre - National agency for risk prevention and management
Crisis management	Minister of the Interior and Local Government - Minister of National Defence - The Red Cross - Associations - Private companies
Compensation	Minister of the Interior and Local Government Minister of Finance Insurance

CONCLUSION

The main problem recorded in the activity of prevention of natural risks is related to the weakness of the application of the regulation and the responsibility of the actors of the risks and disasters, to improve the management it is necessary.

Informing the Population About Natural Hazards

Awareness and knowledge of natural hazards are based on raising the population's awareness through the media learning about the culture of risk.

Preparing pupils by means of documentation included in the official curricula at all levels of education.

Preparation of specialists involved in the field of protection and damage reduction.

Implementation and Adaptation of Regulations and Natural Hazards

The study of natural risks and the production of maps are the most important factors induced by the regulations that control planning and land use.

-Existence and strengthening of a large number of specialized institutions and organisations

Responsibility of Risk Management Actors

-Participation in the implementation of a programme to raise public awareness of disaster protection and response.

-Formulation of regulations for the prevention of natural risks in specific areas and participation in the design of risk prevention strategies.

-Work to develop the activities of the "Délégation Nationale aux Risques Majeurs" (National Delegation for Major Risks), whose resources need to be strengthened. Le rôle de la protection civile

-Raise awareness of protections standards

-Set up regional and local risk prevention and management committees.

Insurers and Their Role in Risk Management

The insurance sector plays an important role in reducing the consequences of natural disasters by providing compensation to insured individuals and companies:

Training of agents specialised in the field of natural risks

The quality of information on natural risks is crucial in order to find the most suitable insurance and to set up efficient reinsurance programmes

REFERENCES

1. André Dauphine 2003 risque et catastrophe Édition Armand colin paris-christian Lefèvre – Jean –Luc Schneider 2002 : les risques naturels majeur Édition contemporain publishin International paris
2. Belazougui Mohamed 2008 :La politique nationale de gestion des risques de catastropheconférence nationale sur la gestion des risques de catastrophe (Alger, 22 et 23 octobre 2018)
3. Compagnie centrale de réassurance. CCR (2011, Juillet), Les assurances contre les catastrophes naturelles-bilan et perspectives.
4. Conseil national des assurances. (2004, Novembre).Assurance catastrophes naturelles. Le bulletin des assurances.
5. Conseil national des assurances. (2013, Juillet). L'assurance CAT-NAT 2003-2013 ; 10 ans après. Revue de l'assurance.
6. Conseil national, d. (2009, 11, 23). L'assurance contre les effets des catastrophes naturelles. Algérie. Consulté sur <https://www.cna.dz/En-savoir-plus/Assurances-bligatoires/L'assurance-contre-les-effets-des-catastrophes-naturelles>
7. Jean –Claude, Thouret Org 2004 : risques naturels ; risques sociétés
8. Yvette verets2004 : Géographie des risques naturels en France paris
9. Yvette verets, Gérald Garry, Nancy Meschinet De Richemond 2004 : Risque naturels et aménagement en Europe ; édition Armand colin paris.
10. Yvette verets 2003 : les risques collection dirigée par AndreGamblin paris
11. Ramoulsihem2005 : les risques naturels dans la wilaya de Guelma étude de cas bassin d'oued Seybouse moyenne-thèse de Magister – université de Constantine 228 P
12. Ramoul.S.2010 :La gestion des risques naturels dans le cadre de la législation algérienne Séminaire international Euro-méditerranéen Aménagement du territoire, gestion des Risques et sécurité civile Batna Algérie
13. Ramoul. S. 2021 : La protection des villes algériennes contre les effets des catastrophes naturelles par l'intégration de l'assurance CATNAT dans la gestion des risques naturels en Algérie-état et perspectif – séminaire international sur l'ingénierie de la construction des villes Oran Algérie

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