



Biological Observation

THE SITUATION OF FLOOD IN SHKODRA DURING JANUARY – FEBBRARY 2010

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SYNOPSIS

Key words:

Natural disaster,
flood,
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In this article we consider the situation of flood in Shkodra during January – February 2010. We have prescribe the situation and the measures given from multi - sectorial assistance in key areas (water, sanitation, nutrition, food, shelter). The data are taken from the Statistic Office of Public Health of Shkodra, Public Health Institute of Albania, Red Cross Albania.

The method is simple, descriptive and evidences the microbiological situation of quality of water certified by the microbiological analyses.

INTRODUCTION

In emergencies, major loss of lives due to injuries and increased incidence of diseases has been documented. Natural disasters (earthquakes, floods, volcanoes etc.) warfare and conflicts, and technological disasters contribute to excess mortality and morbidity. The responsible diseases for that increases are measles, diarrheas (dysentery, cholera), acute respiratory infections, malnutrition. The high incidence of diseases is due to the environmental factors to which the population is exposed, namely overcrowding, insecurity, inadequate quantities and quality of water, poor environmental sanitation, inadequate shelter and inadequate food supply (The Sphere project, 1998a,b,c,d).

Shkodra prefecture is located in the north – western part of Albania, 120 km far from the capital of Tirana. It is situated beneath three high hydroelectric power dikes that present a great risk for the area. Due to the rainfall at the end of 2009 and the beginning of 2010, accompanied with the melting of snow in the northern area of

Albania, the Drin river flows have been increasing. Consequently, the levels of water in the three hydroelectricity power lakes of Fierza, Koman and Vau I Dejes that built on this river have been increasing. The authorities were obligated to release water from the lakes, which together with heavy rainfalls, caused flooding in the north west of Albania, first in Prefecture of Lezha and later in Shkoder's` Prefecture. The most problematic situation was in the prefecture of Shkodra (See figure 1, 2).

METHODS AND MATERIAL

In this article we consider the situation of flood in Prefecture of Shkodra during January – February 2010. We have described the situation and the measures given from multi - sectorial assistance in key areas (water, sanitation, nutrition, food, shelter). The data are taken from the Statistic Office of Public Health of Shkodra, Public Health Institute of Albania, Red Cross Albania.

The method is simple, description of flood situation in Prefecture of Shkodra and evidences the microbiological situation of water quality, certified by the microbiological analyses.

RESULTS AND DISCUSSION

According the official information, we have this data:

About 2600 houses, 3500 families in district of Shkodra and the countries as Dajç, Bërdicë, Ana e Malit, Guri I Zi, Velipojë, 11500 ha surface were under the water. Also were damages in animals, animal food, furniture, agriculture areas. (Annonymos, 2010d).

In Lezha the Shengjin islands Vain and Kune were under the water. 75 houses had damage in furniture and the agriculture areas but not as in Shkodra district.

In mean time the Albanian government reacted in this situation and decided to:

- declare the emergency situation in district of Shkodra;
- creating the emergency Headquarter and decided to face the situation;
- creating the inter ministry commission for the situation;
- creating the plane of evacuation and evacuated 2600 families to their familiars;
- the evacuation of the families in the hotels and boarding schools , about 600 peoples
- mobilization of all Government structures, police, army, firemen, the directory of civic emergency. They asked help to the international structure as: UNDAC, OCHA, MIC, Red Cross, DREF, EU.

The Ministry of Health approve “The Plane Emergency of Health for the flood situation”. In this plane were included:

The Health Services (primary health care and the health services in the critic areas, Primary health care and the health services for the evacuated, hospital services)

The Public Health responsible for: (drinking water, food security, prevention of injuries and accidents, control of infection diseases, mental health).

The actions consists in the: evaluation of situation, monitory for 24 hours, health care service in 24 hours, information of population about the water quality and to don't use the water, monitory by analysis of water quality and inspection of building, access to water points and water quantity, hygiene promotion and disinfection of water with chlorine, hygiene promotion about the consumption of quality and safety food, interruption of electric power to prevent the injuries, information about the relief and the situation of building in risk, control of communicable diseases, attacking the source, protecting susceptible groups with immunizations and better nutrition, interrupting transmission by improvements in environmental and personal hygiene, health education and disinfection and sterilization, mental health services and psycho - social support in allocated centers. The actors and the responsible institutions were: the Ministry of Health, the Directory of Public Health of Shkodra District, Institute of Insurance of Health Care, Regional Directory of Insurance of Health Care, Ministry of Defense, Ministry of Agriculture, Public Health institute of Albania, national and local authorities, Army and Non Governmental Organization in Disaster Relief such as Red Cross. To address the situation, the Red Cross Society of Albania with support from the International Federation assisted 2200 families with food and non-food items (See figure3)



Figure 1: The situation of flood on Shkodra city on 08.01.2010.



Figure 2: The situation of Buna river and Shkoder's lake on 09.01.2010.



Figure 3: Flood donation from Albania Red Cross on 21/01/2010.

According to the official information from the Public Health Institute, we have this data about the monitoring of water quality. From microbiological analyses of water samples taken during the monitoring period from our side, the water from Shkoder water supply resulted good. With exception in a few cases with a presence of bacterial pollution. In special points of the water supply net of Shkoder city. Meanwhile, the quality of water on 26/01/2010 in the pumping station of Berdica and on 04/01/2010 in the water supply net of Bahçallek has resulted with bacterial pollution. For this situation, in collaboration with the primary health service directory, necessary recommendations were given. From our side, in table 1, only the cases that resulted with bacterial pollution are presented. From physico-chemical analyses of water samples for pollution indicators (Ammonia, Nitrite, Nitrate), the values of ammonia

from water of Shkodra water supply, in most cases have resulted in these values from 0.03- 0.05 mg/l.

Tabela 1: The data about the monitory of water quality.

No	Place of sampling points	Coliforms total	Coliforms faecal	Str. faecal
1	D.t 10.01.2010			
	Water supply net of Shkodra city			
	- Bar Drini	-	2	1
2	Dt 11.01.2010			
	Water supply net of Shkodra city			
	- Bar Drini	-	0	1
	- Pumping station (before chlorification)	-	1	0
3	Dt 26.01.2010			
	- Pumping station of Berdica	46	8	1
4	Dt 04.02.2010			
	Water supply net of Bahçallek	48	25	5

CONCLUSION

According the official information the situation of flood in Shkodra during January – February 2010 was very difficult. The Albanian government reacted in this situation emergency and decided to: declare the emergency situation in district of Shkodra, creating the emergency Headquarter and decided to face the situation, creating the inter ministry commission for the situation, creating the plane of evacuation of the families to their familiars, in the hotels and boarding schools, mobilization of all Government structures, police, army, firemen, the directory of civic emergency. They asked help to the international structure as: UNDAC, OCHA, MIC, Red Cross, DREF, EU. About 2600 houses under water as 3500 families in district of Shkodra and the countries as Dajç, Bërdicë, Ana e Malit, Guri I Zi, Velipojë, 11500 Ha surface under water. Also damages in animals, animal food, furniture, agriculture areas but not in people.

From microbiological analyses of water samples taken during the monitoring period, the water from Shkodra water supply result good, with exception in a few cases with a presence of bacterial pollution. From physico – chemical analyses of water samples for pollution indicators (Ammonia, Nitrite, Nitrate), the values of ammonia from water of Shkodra water supply, in most cases have resulted in these values from 0.03- 0.05 mg/l. This situation was successful supported.

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