



## **Meteorology and society : specific case of Chad**

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### **1 History of meteorology in Chad**

*Meteorology was born in Chad with colonial era.* The first meteorological observations had started about the years 1900 (pluviometric in 1903 and climatological stations in 1907 at Fort Lamy). Well before 1959, all the existing aerodromes in Chad were equipped with the synoptic, climatological and pluviometric stations. In 1959 the ASECNA was created with the aim of managing the installations and the services intended for the aerial navigation in Africa at Madagascar.

With the greatest dryness in 1973, it was felt that need of studying the influences of weather parameters on the plants. Thus the National Meteorology Department (DMN) was created in 1975 and become the Department Resources and Water management (DREM) on May 10, 1984. Meteorology in Chad is managed by three entities noting :

- principal synoptic stations by the ASECNA
- secondary synoptic stations by the Delegation of the ASECNA for the National Aero mantic management (DAGAAN);
- the agrometeorological, climatological, hydrological and pluviometric stations by the DREM.

The national weather network is composed of 153 pluviometric stations including 119 functional, 7 climatological stations, 28 agrometeorologic stations and hydrological brigades.

## **2 Assistance for the rural world in terms of agrometeorological informations**

The assistance for the rural world was the diffusion of the opinions and advices of agrometeorologic to the peasants, through the simplification of the agrometeorology pilot project in rural area. This project managed by the DREM, thanks to the Swiss Co-operation support, in 1991. With this project, the DREM had ensured the effectest follow-up rural agriculture. To facilitate the diffusion of informations, the peasants at large were chosen by site of the project. The project is in with its 3rd phase which is the phase of extension, after the 2<sup>nd</sup> pilot phase and experimentation.

The women had only integrated in the project in 1995. They were approximately 147 in 1995 and 174 in 1996 but their participation was minimal. The opportunity was not offered to them to express their concerns. However, use note a massive entry of female groupings in the project since 1977. 224 women project and more than 300 belonging to the grouping. Currently the project counts more than 500 women. This massive entry was coincided with the phase of extension where the assistance was only the councils. It seemed that these women had actually not profited from the asset of the project. To overcome this insufficiency, the women of the DREM had submitted a project assistance to the women as regards to the information agrométéo to the OMM but this note remained without continuation.

## **3 The climate approach the study**

In collaboration with the ACMAD, the experts in climatology and the epidemiologists proceed to the study of the influence of the climatic elements on the proliferation of the bacterial agents and the rate of prevalence of the cases of epidemics. The most frequent epidemics are the cholera, meningitis and malaria.

Methodology: seeking a correlation between an element or phenomenon and an epidemic. One carries-out the data collection on the weather phenomenon and the cases of epidemic during one year. The evolution of the phenomenon or climatic element and the epidemic were studied and a response time between the phenomenon and the proliferation of the cases of epidemic or the agents vector is released. The correlation is all the more significant as the evolution of the curves of the phenomenon and that of the epidemic have the same pace. It should be noted that this study is still at the early stage.

## **4 Daily weather forecasts**

In addition to these activities, the forecasts are worked out by the agents of the DREM and are diffused daily for the public. For the exception of rural world, the majority of Chadian the populations did not know how to exploit these forecasts. This means the meteorologists should sensitise people.