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**Analysis of Water Demand and Water Availability in the
Catchment of the “Haute Ouémé”; Benin / West-Africa**

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Abstract

In the course of two dissertations which are part of a co-operation project named “IMPE-TUS” between the University of Cologne and Bonn, research is done on the water demand and water availability in Benin. The average quantity of renewable fresh water per person has declined due to the increasing size of the population and on the other hand, demand of water is rising due to higher living standards, which in the end creates competition and conflicts between consumers. In the international comparison Benin, with a fresh water quantity (surface and ground water) of at present 4.770 qm per capita & year, does not belong to the “water-stressed” countries of the world. But there are serious problems in making the ground and surface water useable to the population. The aim of the investigations is to demonstrate supply deficits depending on the season of the year, the socio-economic factors and incomplete institutional framework.

-Methods-

Water demand:

1. Structured questionnaire
2. Data collection of socio-structural informations
3. Participatory observation (well observation)

The main target of the water demand investigation is to find out correlations between socio-economic factors and the development of water consumption.

There are many socio-economic factors influencing water consumption, but easy water access seems to be the most influencing factor. The different methodological approaches give insight into most of the socio-economic aspects of water demand.

Water availability:

is a combination of the amount of the existing surface and ground water and its redistribution to the people. The following investigations take place:

1. Inventory of water resources with GPS (Global positioning system) and its presentation in a map.
2. Time analysis (investigation of the distance between the settlements and the water resources / rainy and dry season).
3. Analysis of the institutions.

The administration and melioration of the rural water supply system lies in the responsibility of the “Direction de l’Hydraulique” or their regional counterparts, the “Service de l’Hydraulique”. There are also several NGOs (national and international), which are occupied in water projects (well building etc.) in Benin. A co-ordination of their work could make the water supply system much more effective.

Keywords: Benin, resource management, water, water availability, water consumption, water demand, water management, water using habits, West-Africa