

ABSTRACT: DRINKING WATER NETWORK AND SEWAGE NETWORK MASTER PLAN FOR “SUR DE LA LIBERTAD, MUNICIPIO DE NUEVA SAN SALVADOR (EL SALVADOR)”

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In 2001, the “Asociación para la Cooperación y el Desarrollo Comunal de El Salvador (CORDES), ONG Salvadoreña”, and the “Asociación Catalana d’Ingeniería Sin Fronteras (ESF-Catalunya)” decide that there is a necessity of an integrated study of hydraulic resources with an environmental point of view, for the villages in this area, based on the lack of an efficient hydrological resources management and of a land use planning in Sur de La Libertad.

The work carried out in this study is the result of the participation in the project “*Plan Director para el abastecimiento y saneamiento de aguas en el Sur de La Libertad, Fase 1*” (Drinking water Network and Sewage Network Master Plan for Sur de la Liibertad) during 2002, in El Salvador.

The necessary information for achieving the objectives of this study were obtained by the participation on the main project. The information was obtained using a methodology that implied the participation of the rural communities and of all the stakeholders as the local authorities of Santa Tecla. On the other hand a compilation of information on the nowadays situation has been carried out, including a review on land law, hydraulic resources management, studies on seismic risk, etc.

The first part of the study consists on exposing the political, economical and social context and the problems concerning hydrological resources that exist in El Salvador, particularly in Sierra del Bálsamo and in Nueva San Salvador. The study also defines the methodology, the instruments and the stakeholders implied in the Master Plan.

The second part of the study includes a diagnosis about the nowadays situation in Nueva San Salvador, and an analysis of the population data, identified water sources, existing networks and other aspects of these communities. At this point a study on water offer and demand was written, obtaining the following conclusion: there is enough drinking water for the inhabitants of the area taking into account natural springs of water. This study also identified two problems: the majority of natural springs are private properties and there is a growing interest on the area from building societies. The results of this study about the reality and the problems on drinking water management in the rural areas of Nueva San Salvador are based on the analysis of the information obtained on the fieldwork and from the local authorities.

On the third part of the study the criteria for planning and designing drinking water networks and sewage networks are defined, as well as the technical criteria. Finally, the study deduces a list of initiatives and investments on drinking water networks and on sewage networks for each community, and an application program. The initiatives have been calculated following a methodology developed on this study.