Abstract______ vii

Abstract

Analysis of the conflicts caused by the use of water resources of basin Alto Sapucaí – M.G.: Master's degree dissertation in Energy Engineering, Federal University of Itajubá, UNIFEI, MG., 2005. 77p.

Knowing that the definition of conflict is the natural divergence between people or groups whose ideas, beliefs, values or needs are different, this work intends to study the conflicts caused by the use of the water of basin Alto Sapucaí (south of the State of Minas Gerais) and propose solutions, aiming at sustainable development.

Two case studies were used. The two small basins, which present water use problems, are located in the town of Itajubá. In the first one, Ribeirão Pedra Preta small basin, there is a conflict among its dwellers because of the water shortage, both qualitatively and quantitatively speaking. The second small basin, Ribeirão Pedralva, the conflicts mainly take place during the dry periods, when the dwellers that need the water to irrigate their crops complain about the shortage, for the stream natural course was deviated so that the water could be used for supplying the town of Itajubá.

The methodology used fore carrying out this study employed simple tools such as GPS and computational programs. It was also efficient because it is easy to be applied, this way, it can carry out a good diagnosis of the problem and help to find solutions for the existing problems caused by the use of the water.

Key-words: Water resources management; Water conflicts; water shortage; sustainable environmental: small basins.