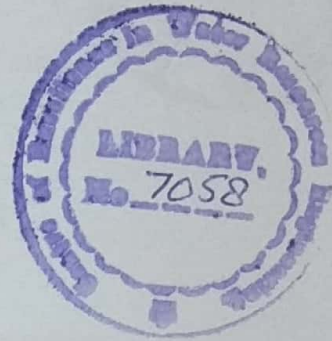


THESIS

**DEVELOPMENT OF AN OPTIMUM FRAMEWORK FOR
LARGE DAMS IMPACT ON POVERTY ALLEVIATION IN ARID
REGIONS THROUGH SUSTAINABLE DEVELOPMENT**



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ABSTRACT

A set of indicators for sustainable development were identified to be employed in developing countries. The selected indicators provided a good understanding of social and engineering outputs of water resources projects. The study meticulously looks into the pre dam bio-physical and socio-economic conditions in one of the arid region of Iran under the area commanded by Minab dam. This dam was constructed in Hormozgan province of Iran in 1983 and its irrigation system was completed in 1986 which was followed by progressive expansion of irrigated agriculture which almost doubled in year 2006.

Results of the study showed that there are significant positive impacts of irrigation network of the dam but they were not same as the targeted objectives envisaged in the feasibility report of the project for example literacy rate increased from 41 percent (pre-project) to 74 percent in 2006. Similarly significant improvements were observed in health care, sanitation, education, and other disciplines. On the other hand, only 50-60 percent of the planned objectives were met for some indicators whereas no significant achievements had been made in the others. It means that after construction of the dam and irrigation system, development didn't match with the planned goals of the project. Most of the deficiency in the performance of primary objectives have root in the managements, even after, many years of project completion. For optimization of project performance an institutional framework has been proposed suggested by introducing a new organization named as Sustainable Project Organization (SPO). This organization may overcome the deficiency through capacity building and training of social and engineering organizations in the project area in the direction of comprehensive poverty alleviation. This study argues the world-wide controversy against construction of dam in arid zones which is ill-founded and based on a few short term, mitigable negative impacts, ignoring many long term positive impacts leading to alleviating of chronic poverty in arid regions.