



ICOLD BALI 2014 INTERNATIONAL SYMPOSIUM ON

“DAMS IN GLOBAL ENVIRONMENTAL CHALLENGES”

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**Study of Social and Economic Impacts of Construction of
SIAHBISHEH Dam Using Rapid Matrix Method**

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ABSTRACT:

Considering to the growing needs of society for more water and energy resources, Nowadays construction of dams and hydroelectric power plants appear as an applicable solutions for the problem. Hence many countries have turned to the construction and use of these resources. Such that from 1950 the number of large dams with a height of over 15 meters in 5700 has reached more than 41,000. Dam construction along with the benefits and valuable impacts has disastrous effects on the environment and surrounding community and that's why having provided grounds for so many criticism. Industrial processes in the world to protect the environment and its associated parameters are in more attention and development by the day. In dam construction industry, this monumental task of screening is responsibility of professionals of this scope that are work In order to more correspond and coordinates between this industry and environmental factors. On the other hand, due to the growth and development of science in various fields, deployment of new and modern ways seems necessary and useful to achieve different and useful results. One of these methods is the analysis of the effects that reported by EIA. In order to fulfill these tasks and to reduce the social and economic consequences and improvements in the construction and operation of dams and case study of SIAHBISHEH pumped storage dams in Iran, extensive research has been conducted by the present authors. This paper with considering the current situation, proceed to assess the social and economic impacts of the project on the rapid matrix in EIA and have to offer the results were analyzed to improve the situation and solutions, strategies and experiences in this area.

Keywords: Dam, Environment, Rapid Matrix, EIA.



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PUBLIC SAFETY AROUND THE DAMS IN SLOVENIA

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ABSTRACT

Until recently, public safety has been a rather neglected topic in Slovenia. To ensure public safety, safety-aware companies have used the existing legislation governing the provision of safety in construction sites and on identified bathing waters. As in Slovenia, water and waterside land (watercourses, water bodies) is mostly characterised as public asset, there was, in general, a lack of legislative basis that would enable the managers to restrict movement and activities in the areas lying within close proximity to dams.

However, the accident at the Blanca HPP and the recent review of the state of water management works in Slovenia have shown the necessity of dedicating more attention to the problem of public safety and public awareness. As an upgrade of the analysis of the current state and instructions for improvement of public awareness and emergency procedures for the population, an on-line presentation of dams, their characteristics and problems associated with their existence, which also touched upon the problems originating from insufficient maintenance, problems and risks caused by improper operation, exploitation of the dams and the reservoir area was prepared for the Ministry of Defence.

The paper presents the current situation of public safety in Slovenia and searches for the opportunities to make a better use of the existing legislation and for rapid actions that could contribute to improve the situation in this area.

Keywords: *Dam safety, upgrade of the monitoring system, operative monitoring, early warning system, public defense*

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Strategies of public awareness on dams and reservoirs

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ABSTRACT:

Public awareness relating to dams and reservoirs has become one of the main concerns of professionals and therefore of ICOLD and National Committees.

The evolution of society in this subject has gone from a clear support to the construction of large dams to provide water needed for life and human and social development, to a contrary position. Especially in countries with a high level in the development of their water resources, this allows them to think that these needs are already resolved.

This approach has two serious drawbacks: 1) in many countries water is needed to have a reasonable standard of living and to alleviate the effects of arid climates and droughts, and 2) the expected effects of climate change make it clear that we need to adapt the strategy in water management to a new scenarios, even in developed countries, as seen in the flooding of large areas of Europe and America in the years 2012 and 2013.

Given these new situations ICOLD, through its Department of Communication and its Committee on Public Awareness and Education (COPAE), is developing a comprehensive information strategy to provide the public with objective data on the benefits of dams, reservoirs and regulating rivers.

This strategy is being implemented in some countries by their National Committees. A good example of these new activities is the SPANCOLD mirror Committee of COPAE, named CIPE, which has a composition in which, besides engineers (some with extensive experience in communication), there are journalists, environmentalists, historians, geographers and other professionals with experience in communication.

The strategy implemented by SPANCOLD and its special features are given in this paper.

Keywords: *public awareness, benefits of dams, communication with media*



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**ENVIRONMENTAL MANAGEMENT
ON THE PRE-CONSTRUCTION STAGE OF UCPS HEPP DEVELOPMENT**

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ABSTRACT:

Based on RUPTL 2012-2021, stated that PLN will prioritize the development of geothermal and hydropower. These two types of energy can go into the power system whenever they are ready, even though still must consider the power demand and the plan of another power plant development. In the RUPTL 2012-2021 also mentioned that if there is a potential, PLN prefer the power generation using hydro energy, such as pumped storage, peaking hydroelectric power plant with the reservoir. Hydro energy potential as a renewable energy in Indonesia is quite high. One of hydroelectric power plant that will be built by PLN is Upper Cisokan Pumped Storage hydroelectric power plant (UCPS HEPP) which has a power of 1040 MW (4 x 260 MW). UCPS HEPP will use two dams, Upper Dam and Lower Dam. The land area that must be acquired is covering 765 Ha, consisting of citizen lands and forest lands. UCPS HEPP development will use government loans from the World Bank (World Bank). The World Bank pays close attention for the impact that will arise from projects which use their loans. This paper will discuss generally about environmental management related to UCPS HEPP development plan on pre-construction stage, both from the Indonesian government and the World Bank, which is contained in the EIA, Land Acquisition and Resettlement Plan (LARAP) and Environmental Management Plan (EMP).

Keyword: HEPP, Upper Cisokan Pumped Storage, EIA, LARAP, EMP

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