

## EXTENDED ABSTRACT

# THE HYDRAULIC HERITAGE IN CHILE: CULTURAL AND TOURIST CONSIDERATION

*Gregorio Castejón Porcel*

Universidad de Alicante

gregorio.castejon@ua.es

<https://orcid.org/0000-0001-7353-6082>

Chile is a country located in South America, whose total extension exceeds 756,000 km<sup>2</sup>, a very unevenly distributed sum since the geographical space of this nation is extremely long, with an average width of approximately 180 km and a nearby length at 4,300 km. Geographically, in the west the coast is caressed by the Pacific Ocean, while in the east, a large part of its territory, the geographical limit is the extraordinary Andes Mountain Range. At the administrative level, its broad territory is divided into fifteen regions: Arica and Parinacota, Tarapacá, Antofagasta, Atacama, Coquimbo, Valparaíso, Metropolitan of Santiago, Libertador General Bernardo O'Higgins, Maule, Biobío, Araucanía, Los Ríos, Los Lagos, Aysén and Magallanes and Chilean Antarctic. In addition, it should be noted that the north limits with Peru and the west with Bolivia and Argentina.

Altogether, in this country there are more than 17.5 million people, almost half of whom live in the large metropolitan areas of Santiago (6 mill.), Concepción (1 mill.), Valparaíso (1 mill.), La Serena (0.4 mill.) And Antofagasta (0.3 mill.). In this way, the population density barely exceeds 23 h / km<sup>2</sup>, reflect of the vast territory that this South American nation possesses, a characteristic that also influences the great diversity of its landscapes and culture.

It is a space with a multitude of natural, historical and cultural resources that are promoted tourism, to a greater or lesser extent, from different local, regional and national institutions. However, despite the innumerable heritage of Chile, based on its natural attractions, in its history and important archaeological resources, and in a culture with thousands-year-old indigenous roots, the consideration of their heritage, has some gaps. The tangible and intangible heritage linked to water, the hydraulic heritage, has been scarcely studied, hardly considered culturally as an element of interest and poorly promoted by state tourism agencies. Incomprehensible situation in a space in which the control and the use of water through infrastructures and inventions, has been, since historical times, a matter of enormous importance, both in the territories of hydric scarce, and even zero rainfall, as in those in which the values of precipitation are very high.

According to this statement, taking into account the large number of tourist resources present in the country, the objective of this work is to highlight the consideration that is held of the hydraulic heritage from a cultural and tourist point of view, expressing, with it, the visibility that these elements have in the national territory. However, it should be noted

that there is only a small number of studies analyzing the hydraulic heritage of Chile and, more specifically, the marked lack of works related to the possible use of these resources as tourist attractions and its potential source of income. In this sense, the works carried out, for the most part, correspond to recent research on water mills and waterwheels, although there are also numerous studies on hydraulic management in both humid and arid climatology areas, as well as other specific examinations of certain issues related to water.

To get the proposed objective, different research tasks have been carried out. In the first place, has been examined the existing bibliography related to the subject of study with the intention of knowing the state of the question before approaching the work. Next, had been analysed of the elements cataloged as National Monuments by the Council of National Monuments (CMN) and had been identified the tourist attractions by the National Tourism Service (SERNATUR) has been carried out. The intention of this work is to identify all those goods that are linked to water in one way or another. In this way, the degree of perception that both institutions have of this heritage is displayed quantitatively. In addition, in a second phase of study of this section, it have proceeded to define those goods (tangible and intangible) which from the SERNATUR and the regional governments of each region of the country are promoted touristy. This thereby allowing know a vision of the tourist offer that is offered from these organisms. Finally, from the singularization of hydraulic monuments and the tourist attractions linked to the culture of water, we proceeded to perform a statistical treatment and a graphic representation of the results. The aim of this task is to use this tool to express the degree of esteem of the hydraulic heritage within the group of assets considered as monuments and of those supposed as tourist attractions.

Considering the results obtained, there is no doubt that Chile is a territory inhabited since ancient times and in which the different human groups that lived in it left their mark on the way in which their people channeled and took advantage of the running waters by gorges, valleys and rivers. Water used for both human consumption, the development of agriculture and industrial supply, which led to transformations of the landscape and the human groups that inhabited them. Indigenous, colonial and postcolonial channels, represent an extensive heritage compendium approached by different authors, as well as the great reservoirs of artificial water. Different investigations have investigated in the same way the agricultural and cereal industry linked to the existence of mills and waterwheels, one of the most outstanding cultural and bibliographic assets. The management of water and the legislation applied in its use, also bring together an important number of scientific references, as do allusions and examinations of festive traditions linked to water resources. Finally, as a remarkable singularity, a small amount of publications has opted to study or promote different routes or tourist-cultural itineraries in which the hydraulic heritage is the protagonist in different degrees.

On the other hand, it could be said that in Chile the hydraulic heritage is not considered enough as a cultural and tourist resource, a statement resulting from: 1. the low representation of these elements within the total number of monuments cataloged by the CMN (65 of a total of 1,689 inventoried, that is, 3.8%) and its low diversity; 2. the reduced representation in the catalog of "tourist attractions" identified by the SERNATUR (138 out of a total of 4,413, which is 3.13% of the total) and from which zonal analysis shows that

this minimum interest. This is a matter national since the consideration of these attractions linked to the hydraulic heritage is equally insignificant in the three defined zones: in the northern zone 29 elements of a total of 1,334 (2.2%), in the central zone the ratio is 53 of 1,748 (3.0%), and, in the southern zone 56 of 1,331 (4.2%); and 3. the insignificant inclusion of these heritage assets in the digital tourism promotion carried out by two public agencies, SERNATUR and regional governments, in whose offer hardly ever elements linked to water are represented.

Consequently, it is exposed that from the state and regional institutions, the hydraulic heritage, both physical and intangible, is the great forgot within the cultural valuation, as well as an tourist resources potentially attractive and economically exploitable. It has even been shown that a large part of the properties cataloged linked to water remain outside the tourist circuits defined by SERNATUR, despite the fact that some are located in nearby areas to these. In this state and on the basis of the results presented, the erroneous conclusion can be reached that Chile has a limited and very uninteresting hydraulic heritage. Nothing is further from the truth, as can be deduced from the bibliographic review and with whose reading the existence of an interesting compendium of resources is verified throughout the country.

Goods that sometimes are taken into consideration while in others they lack recognition despite the fact that, without a doubt, they are also interesting. In accordance with this, only with the references found in the consulted bibliography, it has been possible to distinguish a whole series of hydraulic infrastructures and intangible elements that, by themselves, constitute a hydraulic heritage of value and deserve recognition, whether they are existing works as works those that have disappeared but whose existence was and is relevant to explain the current Chile.

Considering that the hydraulic heritage is made up of a series of material and immaterial manifestations that reflect part of the human activity on the territory and the way in which its inhabitants have adapted to the environment since historical times, it is evident that this group of goods, they are of cultural and patrimonial interest, so, in view of the lack of cultural and tourist consideration of the hydraulic heritage treasured by Chile, it is proposed: 1. to carry out a national inventory of heritage assets linked to the hydraulic culture, both material and immaterial, to a scale of local, regional and national research; 2. create figures of state protection for these heritage elements that allow knowing, both their degree of cultural interest, and justify the value of their inclusion in projects of recovery, conservation and dissemination; 3. encourage scientific research (through research seminars, colloquiums, conferences, monographic studies, ...) focused on the analysis of this type of heritage and its potential as potential tourism resources that could be generate economic and cultural wealth, especially in rural areas; 4. stimulate the tourist promotion of the hydraulic heritage, both individually, as authentic cultural, historical and ethnographic landmarks, as well as creating tourist circuits that integrate them as an attraction or incorporating them into those pre-existing routes; and 5. include this type of heritage in the offer of cultural and recreational activities with the aim of helping to improve the perception and appreciation that the population has of these goods.