

General Synthesis

The present edition of the Register take into account [nb_dams] dams.

Definition of a "Large Dam"

A dam with a height of 15 metres or greater from lowest foundation to crest or a dam between 5 metres and 15 metres impounding more than 3 million cubic metres (See ICOLD Constitution, Page 3)

The World Register is widely recognized as the best data basis on dams worldwide. But despite all our efforts, some data are lacking. In using the data basis for calculations, you should stay aware that those calculations are made on the basis of the available data. Therefore, the dams for which the data are lacking are ignored.

Purposes of dams

Runoff waters are a natural resource for nations. For developing countries, storing water is often vital and in any case, the only means to develop economically this natural resource.

Waters reservoirs mainly give them guarantee of water supply for irrigation, domestic and industrial use during droughts and reduce negative impacts of floods.

[histo_purpose]

Légende

H Hydropower

S Water Suply

C Flood control

I Irrigation

N Navigation

R Recreation

F Fish breeding

X Others

Number and Purposes of registered dams

[nb_dams] Dams data corresponding to registered dams only

Demand for water is steadily increasing and would reach 2-3 per cent per year over the coming decades. With their present aggregate storage of about [total_capacite] km³, dams clearly make a significant contribution to the efficient management of finite water resources that are unevenly distributed and subject to large seasonal fluctuations. Many more dams need to be built to ensure proper use of this resource, in accordance with ICOLD policy set out in the "Position Paper Dams and Environment".

Referenced dams can be broken in two main categories :

▶ single-purpose dams ([nb_unique_but]) or [pc_unique_but] % dams.

multipurpose dams ([nb_multi_but]) or [pc_multi_but] % dams.

a) single - purpose dams :

The distribution for each purpose lead to the following results :

[camembert_pc_unique]

b) multipurposes dams :

The distribution for purposes lead to the following results :

[camembert_pc_multiple]

Dam types

Earth dams predominate for some [pc_dams_terre] % of all reported dams. This is of course the oldest type and there are traces or earth dams in the remains of the most ancient civilisations. Furthermore this type of dam can accommodate a wide range of different foundations. The world's second highest dam is Nurek dam in Tajikistan (300 m high).

[camembert_pc_type]