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Community engagement & acceptance

Gosho Dam, Japan

During the construction phase of Lake Gosho, Japan, the formation of a community driven development association to work alongside government agencies resulted in maximizing community benefits from the development, including creation of a multifunctional community asset and tourist attraction.

Overview

Gosho Dam was built on the Shizukuishi River, Japan, and is surrounded by Mt. Iwate to the north, Mt.Komagatake to the northwest and the Tohne Mountains to the south. It is a multipurpose dam for Morioka City, providing flood control, irrigation water, domestic water supply and power generation functions.

Dam Name

Scheme operator

Ministry of Land, Infrastructure and

Transport

Country

Japan

River

Shizukuishi River

Construction years

1972-82

External recognition

Nil

Size of scheme (MW)

13

Catchment area

 635km^2

Effective reservoir capacity

 $45 \times 10^6 \text{m}^3$

Reservoir size

Details

Social impacts created significant challenges during the planning and construction phases of the Gosho Dam project, especially in terms of displaced population and loss of productive farmland.

The Lake Gosho Development Association was formed in May 1973 following the commencement of construction the preceding year. During the period 1973-79, the (then) Ministry of Construction and the river administrator, delivered conferences and workshops aimed at "Establishing the Basic Concept of Environmental Improvement Around Lake Gosho". Community and business stakeholders were encouraged to participate and contribute to the planning process for development of the region.

In parallel with this initiative, the association harvested and sold gravel from the bottom of Lake Gosho and used the funds raised to acquire land at the lake foreshore. This land then underwent the following works:

- Improvement of 2.6ha natural forests
- Development of a 2.0ha cherry plantation
- Planting of 1,095 trees
- Development of a 0.56ha aquatic nursery
- Slope protection using vegetation
- Development of the 6.8ha Lake Gosho Sports Park (baseball field, tennis courts, etc.)
- Improvement of the 2.0ha Children's Square
- Development of the 9.8ha Amanuma Green Square

The Ministry of Construction performed further developments to enhance the area, including the leveling of land in 12 areas totaling 41.3 ha, greening, road management, and the creation of recreational parks. These works included:

- A park with a statue of the Maiden in Zion, the symbol of Lake Gosho.
- A multipurpose swimming center, the largest in scale in the Tohoku district, fully equipped with a slide, facilities for swim events and so forth.
- An establishment integrating the Morioka Local Industries Promotion Center and 14 ateliers for visitors to experience, learn and participate in making items
- Establishment of the Lake Gosho Boat Course
- Other facilities include aquatic plant gardens, the Vehicle Plaza and a cherry orchard.

The ability to maximise community benefits from the project was possible as a result of community embracing the Lake Gosho Project.

Other Aspects

Distribution and sharing of benefits

In this instance, the Ministry of Infrastructure has allowed the local Development Association to profit from the harvesting and sale of gravel from the dam site prior to inundation. Whilst the funds raised could have been used to subsidise the construction project, the Association was instead allowed to invest in infrastructure and remediation projects that ensured the local community received additional benefits from the project.

Resource use

Gravel from the bed of the lake was excavated and sold prior to inundation, ensuring that the resource was not lost when the dam was commissioned.

Erosion and Sedimentation

Funds raised through the sale of gravel were used to stabilise banks using vegetation and to undertake tree planting on peripheral land, reducing potential for erosion and improving water quality.

Further information

Further Information

Source: Hydropower Good Practices Workshop, Annex VIII - Examples for Good Practice Report, Villach, Austria, October 2005. International Energy Agency.

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