

How and why
strategies of river
basin management
are different between
ledcs and ...



Less economically developed countries are countries whose economic growth and therefore development are significantly below the standards of more economically developed countries, which are the richest countries in the world with economies that have grown, usually through industrialisation.

Being at different stages of development these countries are likely to approach problems such as river basin management in different ways, due to the differences in financial resources available. This essay looks at differences in river basin management between the Colorado River in South-western USA (an MEDC) and the Ganges-Brahmaputra River in Bangladesh (a poor LEDC). The most significant and obvious difference between the river management strategies is the intensity of management. The River Colorado, which is 1470 miles long, is the most managed river of its size in the world. Eighteen dams lie along the river, which have the significant effect of reducing the water flow downstream and reducing peak discharge, thus reducing the flood risk. On the other hand, the intensity of river basin management in Bangladesh for the Ganges-Brahmaputra is significantly less.

The only permanent form of flood management is the 3500 km long embankment that was completed as part of the 1987 Flood Action Plan drawn up and financially supported by the World Bank. Furthermore, even greater differences lie in the usage of these schemes. The dams built along the Colorado River are multi-purpose dams in that, besides the main purpose of reducing the flood risk, the river is used extensively for irrigation, generation of hydro-electric power, recreation and domestic and industrial uses. Read about causes and effects of flooding in Jakarta Thus the river has <https://assignbuster.com/how-and-why-strategies-of-river-basin-management-are-different-between-ledcs-and-medcs-flashcard/>

become an essential resource for the local economy as it supports agriculture, tourism, electricity supply and water supply to industry and homes. In stark contrast, the only prominent use of the embankments along the Ganges-Brahmaputra is to protect the people of Bangladesh, their homes and their land from the ever-present threat of flooding. The only other significant use of the water would be as a supply to the agricultural business, which is merely a side effect of the scheme and not the main reason for the building of the embankment. Whereas the US see the Colorado as a resource to exploit for the commercial benefits it brings, in Bangladesh the only issue is how the risk from flooding can be minimised. There are a range of reasons that can explain the stark differences in river basin management between the Ganges-Brahmaputra and the Colorado River. These reasons can be split into political and socio-economic.

Certainly political factors play a large role on river basin management. Bangladesh lies on the delta and lower reaches of the Ganges River, which for the most flows through India and Nepal. Consequently, Bangladesh has little political control over the river, making it even more vulnerable to flooding. As a country they have no control over what India and Nepal do along the river or in its upper catchment area. For example, during the 1988 floods in Bangladesh, the Indian government opened the flood gates to the Farakka dam in India which worsened the already severe floods in Bangladesh.

On other occasions, Bangladesh has been short of water during the dry season because India has extracted more and more water from the Ganges.

This highlights the extreme lack of control Bangladesh have over the amount
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of water in the Ganges and explains why their level of river management is so low. The political situation in America though is completely different. Over 90% of the River Colorado flows through America, with only 100 miles of flowing through Mexico.

Therefore the US has complete control over the river and can build as many dams or implement as many schemes along the river as they wish whereas Bangladesh lacks the political power to do so. The main socio-economic reasons why river basin management schemes differ between the two countries concern finance. The USA has one of the world's largest economies, second only to Japan. Consequently they have the funds to build as many dams or implement as many schemes as they wish. Conversely, Bangladesh is one of the world's poorest countries and do not have the funds to research and develop sophisticated management schemes like the US.

Furthermore, the USA is arguably world leaders in technological progress and has the expertise to research and develop new and more sophisticated management schemes. Bangladesh on the other hand is decades behind in terms of technological progress and whilst they do have experts in the field, cannot afford to fund their research. The clear differences in the strategies of river management between Bangladesh and America reflect their relative success in reducing the flood risk. The intensive management along the Colorado since 1935 has more than halved the peak discharge in the region and transformed a previously wild, fluctuating river into one that is reliable and uniform. In comparison flood defence schemes in Bangladesh have been minimal; hence the country is still prone to severe flooding where homes and lives are constantly at risk.

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