Three gorges dam project(pros: include energy impact)

Engineering



Benefits of the Three Gorges Dam There are several benefits that are as a result of the Three Gorges Project that extends from one area to the other. The project is geared towards the elevation of the China's economic prosperity by providing cheaper and reliable source of energy for the peoples' use in various sectors of the economy. The higher demand for electricity in China is readily met with the advent of this project; this is because the project is able to produce a huge amount of energy that can be comfortably shared in various sectors of the economy (Kite, 2011). There has been an extensive power transmission of the electricity from the project to the rest of the country; the power is sold to the national grid hence the entire country and economy can enjoy it. With the onset of the project there has been an increased reliability in terms of transportation of persons and their goods from one point of the country to the other. This has been made possible due to the fact that the dam can easily accommodate freighters of up to 10, 000 tons and boats of 1500 tons to navigate to the interior parts of the country (Benson, 2006). The navigation from Shanghai to Chongqing that is 2000km apart has been made easier by this project. There has been an integration of different modes of transport ranging from the use of rail, road and the river As witnessed. The project has cut the cost of transportation drastically as well as boosting the volumes of cargo from three million tons to 50 million tons within a short time. Use of five tiers system and the ship locks have enabled smooth operations of larger ships, and the risky shipping conditions witnessed there before have been largely reduced.

Due to its uniqueness, the government has seen it wise to make it a tourist attraction center thus there has been vigorous campaigns in promoting this

site as a tourist destination with various fascinating features that they can easily enjoy while there. Most tour boats have been availed by the government for various trips of local and foreign tourists to the site so that they can witness the famously referred as 'lofty gorges projecting peaceful lakes'. There have been various catastrophes of floods that have been witnessed years before the construction of the dam started. The Yangtze River has been known for displacing people on the lower and middle regions of the river, there have been losses of both human lives and property. A major problem was witnessed in the year 1931 and 1998 when the floods caused massive damages that ranges from the death of more than three million people due to starvation and devastating effects of floods. The rate of drought on the upper parts has been reduced significantly in a way that people experience no serious droughts any more (Barber, 1993). During the drought season the levels of water is allowed to reach 185 m above sea level and during the rainy season it is significantly reduced to 135 m above sea level thus stopping the chances of flooding.

The amount of energy of up to 84. 7Wh/Yr produced from this project can significantly be used in different ways that may include the coal and crude oil combustion (Benson, 2006). Many a times when coal is burned there are instances when a lot of sulfur dioxide of up to two million tons, tons of nitrogen oxide and so many tons of carbon monoxide is released into the atmosphere. This is majorly common when tons of coal is combusted thus releasing these substances into the atmosphere hence leading to serious cases of environmental pollution, however, with the availability of clean energy from the electricity produced from this project there are changes that

have taken place since the inception of this project, and as a result there have been reduced cases of pollution. This project has been used as a tool for fostering unity by the government amongst her people thus helping the population to stay in peace since it is a symbol of national unity recognized by almost every citizen of China. The dam has enabled the economic growth of the Chongqing as a result of the trade in the Yangtze River as well as other neighboring cities such as Shanghai, Beijing and Tianjin (Barber, 1993).

References

Benson, S., Coleman, A. D., Qing, D., & Friis, J. (2006). The cost of power in China: the Three Gorges Dam and the Yangtze River Valley. Lake Orion, Mich., USA: Black Opal Press.

Barber, M., & Ryder, G. (1993). Damming the Three Gorges: what dam builders dont want you to know: a critique of the Three Gorges water control project feasibility study (2nd ed.). London: Earthscan.

Kite, L. P. (2011). Building the Three Gorges Dam. Chicago, Ill.: Raintree