**CASE STUDY:**

**DELAY OF MELAMCHI WATER SUPPLY PROJECT**

The Melamchi Water Supply Project (MWSP) is regarded as the most promising solution to address the chronic lack of drinkable water in Kathmandu Valley on a long-term basis, consequently improving the health and well-being of the city's residents, particularly the poor. The project was started in 1998. The Melamchi Water Supply Project is aimed to provide good quality potable drinking water in accordance with WHO guidelines and to feed into an enhanced distribution network. The project will redirect roughly 170 MLD of fresh water from the Yangri and Larke rivers, all of which are located upstream of Melamchi River in Sindhupalchowk district to the Kathmandu Valley.

The intake site is located in the upper part of the Melamchi river basin about 1 km North-West of Dorin village and about 0.5 km South-East of Ghawakang village at the elevation of about 1425 m. The project area stretches from the intake at Melamchi River to the outlet at Sundarijal, about 14 km North-East of Kathmandu city. The Project's executing agency is the Ministry of Physical Planning and Works (MPPW), while the implementing agency is the Melamchi Water Supply Development Board, which was formed specifically for the project's implementation. As an autonomous project implementing organization, the Board has gone a long way in raising the necessary funding.

The estimated cost of the MWSP in 2000 was $464 million. According to the original financial plan, ADB shouldered the largest financing share (US$120 million equivalent) followed by the World Bank (US$80 million), the Japan Bank for International Cooperation (JBIC), US$52 million equivalent), NORAD (US$28 million equivalent), Sida (US$ 25 million equivalent), the Japan International Cooperation Agency (JICA, $18 million equivalent), the Organization of Petroleum Exporting Countries Fund for International Development (OFID/OPEC), $14 million equivalent), and NDF ($9 million equivalent). The Government's original financing share in the MWSP was $ 118 million equivalent. After the government showed its commitment and took action, ADB decided to make up the budget gap and restructure the project as the Melamchi Valley Subproject (Subproject1) and Kathmandu Valley Subproject (Subproject2). Only the Subproject1 operations are currently governed by the MWSDB.

**ANALYSIS OF THE PROBLEM**

Numerous factors prevent the project from being finished in the allotted period, necessitating the awarding of an extension to the contractor. Construction project delays are fairly typical in developing nations like Nepal, even on projects that are considered national pride, like the Melamchi Water Supply Project. The major problems causing the delay of MWSP is stated below:

1. **Causes related to clients:**

* Failure to meet the Loan Covenants (ADB Loan No 1820 NEP-2001).
* Delay in Rebidding Process of Contractor after termination of Previous Contract.
* Delay in getting approval for land acquisition.
* Lack of proper pre-planning of client for implementation.
* Delay in getting approval for processing of site (Example: Night Blasting).
* Lack of Proper Coordination between Government Agencies.

1. **Contractor related causes:**

* Poor Performance of Contractor.
* Contractor making unreasonable and vague disputes in small matters.
* Frequent Change of Project Manager.
* Chain of supply of Materials was irregular so delay of work due to lack of materials.
* Frequent breakdown of equipment and poor maintenance of workshop.
* Delay in construction of road and other infrastructure for the project.

1. **Consultant Related Cause:**

* Incomplete Construction Design of Head works.

1. **Miscellaneous Causes:**

* Natural Disasters (Earthquake, Landslide, Heavy rainfall).
* Blockade, Fuel Crisis.
* Local Strike for their local demand.
* Political-Legal Environment.
* Unforeseeable Geological Condition.

**PROBLEM TREE**



*Figure 1: Problem Tree on delay of Melamchi Water supply Project (MWSP)*

**CONCLUSION**

The Melamchi Water Supply Project (MWSP) was almost completed. After a 23-year long wait, the Melamchi project was inaugurated on March 28. People were also glad to see water from the Melamchi running from their taps, but their happiness did not last long. Floods on June 14 and 15 had severely damaged the head works of the project. Making things worse, more debris has accumulated around the same area as the river now flows at least 10 meters above the normal river basin which has made it difficult to directly send water into the tunnel. Boulders, pebbles, mud and sand had accumulated around the 200-metre square area of the head works due to earlier flooding, covering the head works infrastructure under at least 10-meter thick slit. With roads and multiple bridges, which were also washed away by the flood, authorities are not sure when or how they can clear the debris. The government has estimated that the flood has caused a loss of 2 billion rupees to the project alone. However the project is still not in operation as the experts have predicted heavy rainfall in this monsoon season which will cause flooding and damage head works as well as tunnel. It is expected to continue the distribution of water after the end of monsoon season.

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Assignment III

**A REPORT ON**

**DELAY OF MELAMCHI WATER SUPPLY PROJECT**

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