

TECHNOLOGICAL UNIVERSITY (MEIKTILA)
DEPARTMENT OF ELECTRONIC ENGINEERING

**PLANTING TREES AT THE BANK OF POLLUTED STREAM
NEAR MEIKTILA LAKE**

**BY
GROUP-B**

GROUP PROJECT

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DEPARTMENT OF ELECTRONIC ENGINEERING

Members of Group-B:

Ma Wai Zin Phyo	-VI-EC-1
Ma Aye Htet Aung	- VI-EC-5
Ma May Myat Mon	- VI-EC-6
Ma Myo Myat Thwin	- VI-EC-7
Maung Aung Ye Thway	- VI-EC-12
Maung Khant Si Thu	- VI-EC-15
Ma Nilar Htet Mon Oo	- VI-EC-18

ABSTRACT

This project is mainly focused on environmental conservation. As our country is built on agriculture, Aye Yar Wadi River is considered to be the life blood of our country. Such rivers depend on smaller ones such as stream. Aye yar wadi river is excluded. If something goes wrong with stream, our rivers will perish gradually. Plus, as being a agricultural country, we mainly depends on farmers. They can't do farming without water supply. Water supply is distributed by streams as we described in this project.

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CHAPTER 1

INTRODUCTION

1.1. Introduction to Planting Trees at The Bank of Polluted Stream Near Meiktila Lake

Plants and animals are interrelated each other. Plants consume CO₂¹ and produce O₂ in return. Whereas Human inhale O₂² and exhale CO₂ in return. Plants and environments also rely on each other. For instance, roots protect soil from being corroded. Soil provide enough nutrient for trees in return. Planting trees at the bank of the stream prevent soil corrosion from water current.

1.2. Aim and Objectives

The aim and objectives of this project are as follow:

- To plant trees at the bank of polluted stream
- To collect data of which the stream is polluted
- To think critically on the main cause of the pollution
- To analyze the cause of the pollution
- To provide a reasonable solution for the pollution

1.3. Implementation of Project

The project can be implemented in the following areas:

- Prevention of corrosion at the bank of river.
- Prevention of corrosion at the bank of stream.
- Prevention of corrosion at the bank of lake.

1. Carbon Dioxide
2. Oxygen

CHAPTER 2

CAUSES AND EFFECTS OF STREAM POLLUTION

2.1. Studying on the environment of the last three decades

The stream that we discuss is located at the Yan Myo Aung Quarter. It was a beautiful stream full of marine lives. The water is clean and stones can be seen at the bottom of the stream as the water is transparent. There were trees at the stream bank.

2.2. Studying on the environment of Today

The stream water is quite polluted as the population is increased. The stream water can no longer be transparent and fishes are quite rare as *Electric Shock Fishing*¹ Method develops. The water is no longer suitable for bathing. But in some places, people still do as they are poor.

2.3. Studying on the environment of Today

The stream is now totally polluted. Fishes are nowhere to be found. Water can no longer flow as the stream is blocked with garbage. There is no longer permanent water flow unless it is flooded at rainy season. The flow of water is blocked by garbage and thus the stream area got wider as the corroded soil deposited. *Water volume* that can be distributed by the stream dramatically degraded².

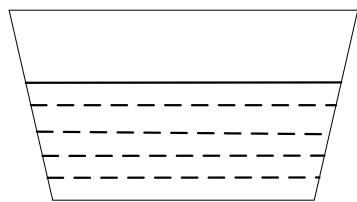
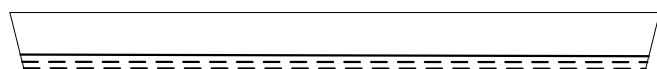


Fig.2.1. (a)Stream of last three decades
more rapidly.



(b)Stream of Today

1. A popular technique for fishing In rural area and has impact on laid egg

2.4. Education and Ethic

The increased population at the bank of stream create serious demand in food and garbage. Plus, the education level of the settled area is below average, which make them dispose all their garbage into the stream. And, since everyone can reach their hands to electrical equipment that are very difficult to dispose, such as battery, glass tubes, light bulbs and other pressure sensitive things, they just throw it away into the stream. Some of them may cause severe injury to those who expose them.

<i>Type</i>	<i>Time to decompose</i>
<i>Glass Bottle</i>	1,000,000 years
<i>Plastic bottles</i>	450 – 1000 years
<i>Plastic packages</i>	200 – 1000 years
<i>Aluminum Can</i>	200 – 500 years
<i>Leaf</i>	6 – 12 months

Table2.1. time to decompose for some garbage disposed by the local people

2.4.1. Education of the population

The education level is quite below average. They can barely read or write let alone conserving environment, as a result, they dispose garbage into the stream.

2.4.2. Ethic as a result of pollution

People know very few about the environmental conservation. But in some cases, people dispose garbage knowingly. They dispose glass tubes and feces knowing that it is used for bathing and washing clothes, which is harmful for local people let alone environment.

2.5. Pollution Versus Use of Lands

As the stream is polluted by the people living at the bank, it creates unwanted impacts on different society. The most affected society is themself, making them to

forcibly let go all the land that should be growing crops. Plus, people chop down all the trees to make a new land and to build new houses. *No trees mean no root and no root means no protection against corrosion.* In rainy season, their land is not safe since it can be corroded anytime.

2.6. Clean Water and Sanitation system

The stream passes at least three public owned wells along the way it passes. It serves as fundamental water source for a portion of Yan Myo Aung Quarter and Ye Twin Chaung². Those wells are just above the stream and when the water flood in the rainy season, the water become dirty and becomes unsuitable for drinking.

2.7. Relation to Public Healthcare

If people consume unclean water after flooding, they may suffer from diarrhea or E. coli. As they share the same wells, the bacteria spread more rapidly.

CHAPTER 3

SOUTION TO STREAM POLLUTION

3.1. Solution to stream pollution by thinking out of the box

The two possible approach of the solution are:

1. Human-based approach and
2. Political approach

3.1.1. Human-based approach

Planting trees at the bank of the stream provide certain level of solution. Planting trees is a long-term solution for stream pollution. Since planting trees grow roots which in turn prevent soil from being corroded. As a result, even if the stream is already polluted with garbage, the roots prevent from being corroded.

3.1.2. Political approach

The water will not clean itself just by planting trees. So, it comes as a matter of political affairs. If MCDC decide to renovate the stream as the mayor ordered, the stream will be clean again. Renovating means digging the original path of the stream and strengthen the bank. Thus, political decision-making has affected on renovating the stream.

3.2. Excluded or marginalized groups

Farmers, the fundamental suppliers of the country, requires water supply. If the water supply run out, the plants will no longer be able to grow. If the stream is renovated by the MCDC, it will have positive impact on farmers. Plus, the local people at the bank of stream will have access on water supply again. But a certain level of environmental education is needed for local people.

3.3. Wellbeing of local people

People will be healthier when planting trees than living among garbage. As discussed, plants produce O₂ that we need. It will start animating the ecosystem again. There could even be better weather if we plant trees for a long time. As a result, people will live in a healthier environment, breathing fresh air and drinking clean water.

3.4. Involvement of the Local People

To make the project actually work, local people needs to be educated for their interest and involvement. The more they involve, the faster changes they create. We need both *cure and prevention* for the betterment of the environment. First of all, stop doing what we are doing, such as throwing away all the garbage into the stream knowingly and unknowingly. Secondly, start planting trees at the bank of the stream to strengthen the bank. The plan will work with the increased involvement of the local people.

CHAPTER 4

DOCUMENTARY RECORDS

4.1. Documentary Pictures of the Polluted Stream



Fig.4.1. Public owned well at the bank of polluted stream



Fig.4.2. The corroded bank of the stream because of the lack of root protection



Fig.4.3. Irresponsible throw away of garbage into the stream



Fig.4.4. Polluted and unused stream as off Today



Fig.4.5. Before and After photo of Colorado River Delta

CHAPTER 5

CONCLUSION

Our project to plant trees at the bank of the polluted streams is most promising idea to make it happen in reality. As discussed earlier, polluted stream has impact on public owned wells and thus impacting the water supply. Therefore, it has affected on healthcare of local people. As a solution, we proposed two solution, human based and political decision. Planting tree is human based solution. Plants grow roots and provide additional protection to the bank, which in turn help the marginalized group, for instance, farmers can grow crop again when the stream is restored. If pollution is reduced or terminated, lands can be used again. Plus, it also affects the wellbeing of local people.