**Project proposal ( Group No. 6,**

**BS Mathematics 2nd Semester)**

**Course Name**

**Citizenship Education and Community Engagement**

**Project Title**

**Tree Plantation**

**Submission date**

**29 May, 2020**

**Submitted by Group**

|  |  |  |
| --- | --- | --- |
| **Roll Numbers** | **Names** | **Status** |
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**Submission to**

**Ma'am Mehlah Jabeen**

**Session**

**2019-2023**

**University of Sargodha Sub-Campus Bhakkar**

**Introduction**

1. **Back ground of the problem**

According to the **U.N , FAQ** , **2.2%** or about **1,687,000 ha** of **Pakistan** is forested, according **FAQ**. Pakistan had 340,000 ha of planted forest.

Change in forest cover between 1990 and 2010 Pakistan lost an average of 42,000 ha or 1.6% per year. In total between 1990 and 2010, Pakistan lost 33.2% of it's forest cover, or around 840,000 ha.

## **Tree cover loss data for Pakistan**

"Tree cover threshold" is used for defining the tree cover area. For example, 75% includes only areas with more than 75% tree cover, whereas 10% includes all areas with more than 10% tree cover. 75% tree cover reflects a dense canopy.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Tree cover threshold (%) | Total area (ha) | Tree cover Extent in 2000 (ha) | % land area | Tree cover Extent in 2010 (ha) | % land area | Tree cover Extent in 2018 (ha) | % land area | Tree cover loss 2001-2018 (ha) | % tree cover loss since 2000 | Avg tree cover loss/year (ha) | Avg loss/year 2001-2010 (ha) | Avg loss/year 2011-2018 (ha) |
| 10 | 87477910 | 1631432 | 1.90% | 1002575 | 1.10% | 1001418 | 1.10% | 9849 | 0.60% | 547 | 869 | 145 |
| 15 | 87477910 | 1292488 | 1.50% | 851398 | 1.00% | 850276 | 1.00% | 9707 | 0.80% | 539 | 859 | 140 |
| 20 | 87477910 | 1224060 | 1.40% | 821920 | 0.90% | 820813 | 0.90% | 9625 | 0.80% | 535 | 852 | 138 |
| 25 | 87477910 | 1075483 | 1.20% | 673470 | 0.80% | 672377 | 0.80% | 9571 | 0.90% | 532 | 848 | 137 |
| 30 | 87477910 | 979466 | 1.10% | 648755 | 0.70% | 647689 | 0.70% | 9529 | 1.00% | 529 | 846 | 133 |
| 50 | 87477910 | 667442 | 0.80% | 370897 | 0.40% | 370007 | 0.40% | 8385 | 1.30% | 466 | 750 | 111 |
| 75 | 87477910 | 335091 | 0.40% | 164234 | 0.20% | 163710 | 0.20% | 4712 | 1.40% | 262 | 419 | 66 |

**References:**

Tasmia Shafqat, BMTF19BM014, 2020, (BS Mathematics 2nd), University of Sargodha Sub-Campus Bhakkar.

<https://rainforests.mongabay.com/deforestation/2000/Pakistan.htm>

https://rainforests.mongabay.com/deforestation/archive/Pakistan.htm

1. **Present Situation**

According to the **United Nations** climate change report of **2017**, the average number of trees must be above **25%** of the land in a particular country.

However according to current data on trees, only **3%** of the land of **Pakistan** is covered with trees, which is the lowest ratio in the world. It cannot sustain the current current heatwaves occurring in the different parts of the country.

With only **0.5** ha of forest per capita against a world average of **1.0** ha, Pakistan is comparatively forest-poor. The high population growth rate (**2.61%)** is pushing the figure further down and, at present, it is not possible to expand public forest area at a high enough rate to keep up with demand for forest products.

However, farmers are encouraged to establish plantation on farm-lands and waste-lands to help ameliorate the situation.

Pakistan has planted over a billion trees. Pakistan's **Federal Government** plans to plant **100 million trees** within five years.

Plant for Pakistan (Plant4Pakistan), also known as 10 Billion Tree Tsunami, is a 5 year project to plant 10 billion trees across Pakistan from 2018 to 2023. The Prime Minister Imran Khan kicked off the drive on 2 September 2018 with approximately 1.5 million trees planted on the day. The campaign is developed on the lines of successful Billion Tree Tsunami of the Pakistan Tehreek-e-Insaf government also led back then by Imran Khan in the province of Khyber Pakhtunkhwa in 2014.

In 2020, the program tripled its number of workers to 63.600 after being momentarily halted following the coronavirus pandemic, aiming to enlist those left unemployed by its economic consequences. Most of the work, which pays between 500-800 rupees ($3-5) a day take place in rural areas, with people setting up nurseries, planting saplings, and serving as forest protection guards. The plan got 7.5 billion rupees ($46m) in funding.

Saplings planted during the initiative include mulberry, acacia, moringa and other indigenous species.

**References:**

Urva Hanif, BMTF19BM012, 2020, BS Mathematics 2nd, University Of Sargodha Sub-Campus Bhakkar.

<https://www.weforum.org/agenda/2018/07/pakistan-s-billion-tree-tsunami-is-astonishing/>

https://en.m.wikipedia.org/wiki/Plant\_for\_Pakistan

**Justification of Project**

1. **Importance of project**

Due to lack of plants on Earth, we have to face many problems like as **pollution, perennial crops, including soil erosion, soil fertility decline, pollution, carbon sequestration and biodiversity, of three shelters.** It ruined there life cycles. Without trees, all species depending on it would become extinct. Without trees, climate would heat up faster as there will no natural “**air-conditioning**“.

For over coming this problem, we selected “**Tree Plantation”** as our project. Tree plantation drives combat many environmental issues like **deforestation, erosion of soil, desertification in semi-arid areas, global warming,** and hence **enhancing the beauty** and **balance of environment** as well as provide a home for variety of animals. It is also benefiting in **reducing climate change, purifying air, cooling down the street, natural air conditioning, saving water, preventing water pollution, providing shelters for the wild life, renewable energy sources and reinforcing soil.**

**References:**

Humaira Naheed, BMTF19BM018, 2020, (BS Mathematics 2nd), University of Sargodha Sub-Campus Bhakkar.

<https://www.bgky.org/tree/benefits>

<https://passthepistil.com/trees/>

1. **Practical Application (Who will get benefits of the activity?)**

By looking the given situation in **Pakistan** which is under developed country, Our activity will in the favor of both public and government. In our areas, load shedding is very common. And as people are not well conditioned and there income is not sufficient to meet their expensives. So they mostly used to sit under the shade of trees in such a hot whether of Summer in absence of electricity. Animals and other birds are also used trees as their shelters. And in the present era, all living things such as birds, animals and human needs fresh environment to live. So our project will also benefiting for oxygen and fresh environment to help them for taking breathe.

**References:**

Reemal Chohan, BMTF19BM053, 2020, (BS Mathematics 2nd), University of Sargodha Sub-Campus Bhakkar.

Self wrote.

**Objective of the Project**

The main objectives of our project is

* Provide a fresh air.
* Provide shelters for variety of animals.
* Give life to world’s wildlife.
* Provide food for variety of animals
* Enhancing growth diversity
* Create an environment that allows the growth of plants that otherwise would not be there.
* Motivate other people to plant trees.

**References:**

Mehreen Kousar, BMTF19035, 2020, (BS Mathematics 2nd), University of Sargodha Sub-Campus Bhakkar.

Self wrote.

**Plan of Action**

1. **How will we do this activity.**

We decided to plant these trees at our community area, road side, cemetery and in the houses where are no tree. Because in our area, there is lack of trees at road side. Our main purpose to plant these trees at road side is to provide a source of shelters for animals and birds. As summer season is running, so the important of trees has been increased, because in summer season every one needed shade to sit, because load shedding increased in summer season and many people, specially in village, can’t afford other means of electricity. We have already dig out that place where we have to planted these trees. So we started our work as following

**References:**

Humaira Naheed, BMTF19BM018, 2020, BS Mathematics 2nd, University of Sargodha Sub-Campus Bhakkar,

Self wrote.

**We will plant trees in such a way;**

* Locate all underground utilities prior to digging.
* Identify the trunk flare.

The trunk flare is where the trunk expands at the base of the tree. This point should be partially visible after the tree has been planted.

* Improve.

I improve the soil to help the plant survive in the long-term. In day soils, we add some gypsum to improve the soil structure and drainage, and well-rooted compost to provide organic matter and further structure.

* Dig a shallow, broad planting hole.

Holes should be 2-3 times wider than the root ball, but only as deep as the root ball.

* Decant.

I take the plant out of its pot in a way that keeps the root as intact as possible. Because root disturbance in healthy stock will shock the plant.

* Remove the containers or cut away the wire basket.

Inspect container tree root balls for circling roots. Straighten, cut or remove them.

* Place the tree at the proper height.

Take care to dig the hole to the proper depth-and no more. If the tree is planted too deep, new roots will have difficulty developing because of lack of oxygen.

* Straighten the tree in the hole.

Before backfilling, have someone view the tree from several directions to confirm it is straight.

* Fill the hole gently, but firmly.

Pack soil around the base of the root ball to stabilize it. Fill the remainder of the hole, firmly packing the soil to eliminate air pockets that may dry our roots. Further reduce air pockets by watering periodically while backfilling. Avoid fertilization at the time of planting.

* Stake the trees, if necessary.
* Mulch the base of tree.

Mulch is organic matter spread around the base of a tree to hold moisture, moderate soil temperature extremes, and reduce grass and weed competition.

* Water the plant.

We water the plant in, to ensures that the soil settles around the plant, and the roots get good contact with the soil. It also provides an important first drink.

* Provide follow up care.

Keep the soil moist, but not water-logged. Water is important for plants growth, we irrigate these daily. Water trees at least once a week, barring rain and more frequently during hot, windy weathe.

**References:**

Urva Hanif, BMTF19BM012, 2020, ( BS Mathematics 2nd), University of Sargodha Sub-Campus Bhakkar.

<https://www.treesaregood.org/treeowner/plantingatree>

**Needed recourses & the source of generation.**

We will get help from our family members, friends and neighbors. We collect our pocket money for this project. And also collect some money from our parents, friends and neighbors. And all of them equally sport us.

**References:**

Tasmia Shafqat, BMTF19BM014, 2020, ( BS Mathematics 2nd), University of Sargodha Sub-Campus Bhakkar.

Self wrote.

1. **Each person’s role in the project.**

The role of every person in this project is same. Every one participate equally and do her properly.

1. **Proposal duration of the project.**

The duration of this project will be 23 days. We will submit our report on 29 May 2020.

1. **How will you evaluated your project for possible outcomes.**

Through our this project, people will get very benefits. Our atmosphere will also became cleaned through this project. Our little effort will make other people to breathe in fresh air. And also by our this act, people will be motivated to plant trees, which will be helpful for Government. We will give our best for this project.

Our objective for this project will be fulfil if people have motivated for planting trees.

**References of the whole proposal.**

**Members participation**

Urva Hanif, BMTF19BM012, 2020, (BS Mathematics 2nd), University of Sargodha Sub-Campus Bhakkar.

Tasmia Shafqat, BMTF19BM014, 2020, (BS Mathematics 2nd), University of Sargodha Sub-Campus Bhakkar

Humaira Naheed, BMTF19BM018, 2020, ( BS Mathematics 2nd), University of Sargodha Sub-Campus Bhakkar.

Mehreen Kousar, BMTF19BM035, 2020, ( BS Mathematics 2nd), University of Sargodha Sub-Campus Bhakkar.

Reemal Chohan, BMTF19BM053, 2020, (BS Mathematics 2nd), University of Sargodha Sub-Campus Bhakkar.

**Links**

<https://rainforests.mongabay.com/deforestation/2000/Pakistan.htm>

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<https://www.weforum.org/agenda/2018/07/pakistan-s-billion-tree-tsunami-is-astonishing/>

<http://www.fao.org/3/ac778e/AC778E15.htm>

<https://www.bgky.org/tree/benefits>

<https://en.m.wikipedia.org/wiki/Forestry_in_Pakistan>

**The End.**