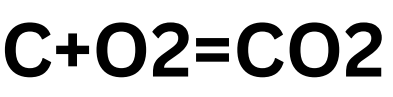


LOCAL PRODUCTION OF BIOFLAKS IN THE GAMBIA

INTRODUCTION:

Trees store carbon dioxide, but when forests are cleared or disturbed, they release greenhouse gases, contributing to 10-15% of global warming. The need for continuous energy demand, including charcoal in The Gambia, harms forests. To combat this, local bioflake production, an environmentally friendly and sustainable fuel made from organic materials, is proposed. This initiative aligns with SDG goals, especially Affordable and Clean Energy, addressing deforestation, global warming, and climate vulnerabilities while promoting green jobs and products.



Organic waste (Mainly carbon compounds) reaction with Enough Oxygen to give heat and little CO2

PROJECT GOALS:

The project goals are:

1. To contribute to the achievement of the SGD goal,Clean and Affordable Energy.
2. Creation of green jobs
3. Creation of green products for the use of fuel
4. Discouraging and addressing deforestation
5. Contributing to a more habitable environment, planet
6. Reduced global warming
7. Improvement of the biodiversity and ecosystem
8. Improved lividhoods and lives etc.

PROJECT DESCRIPTION

The project is a 12 months project initiated by a team of young chemist who are passionate about the environment and its preservation for a better and improved planet life experience.

This project was initiated since 2016 during our college education study period.

Our staff is designated into different components of our work and expectations base on each individual experience and commitment.

We have generally 5 teams of which there is a team lead for each group.

The first group includes the:

- Group 1:Researchers
- Group 2. Organic waste collectors
- Group 3. Producers
- Group 4. Packing team
- Group 5. Marketing team



MATERIALS USED

The materials needed for a sustainable and cheap production of bioflake is one of the reasons why we should prioritise it over other sources of fuels. The materials can be locally made, operated manually without much technical know-how with little or no environmental threat.

The materials include:

1. Manually constructed organic waste grinder
2. Waste collection tools eg tricycles
3. Mixer
4. Manually built moulder machine for making the flasks.
5. Dryer
6. Organic packaging



SUCCESS CRITERIA OUTCOMES

The need to protect our planet cannot be overemphasized however this cannot be achieved without the implementation of sustainable green products especially organic fuels. The SGD goal on Clean and Affordable Energy is important because it gives very many techniques and vision as to how we can achieve a more habitable planet this what has to be done, avoided, improved, changed and innovated to achieve a more friendly environment. Therefore , the introduction of bioflakes is a key contributor to the achievement of such important sustainable development goal.



SOME OF THE BENEFITS INCLUDE BUT NOT LIMITED TO:

1. Preservation and restoration of the forest cover thus more availability for trees to absorb and store all the excess carbon dioxide in the planet.
2. Reduction in global warming in the planet
3. Preservation and sustainability of our biodiversity
4. Optimal rain falls
5. Green jobs
6. A safer and more habitable planet

How we measure success: With the introduction of bioflakes as fuel in The Gambia there will be a significant decrease in the cutting down of treas for the production of Charcoal, thus discouraging and or addressing deforestation.

Forest cover in the county's forest regions will have a more habitable and friendly environment as there will be improved optimal rainfall, agricultural activities shall be increased and improved.

Waste management threats shall be limited if not avoided due to the huge organic waste recycling into bioflaks.

There will be a significant improved in air quality in major city markets

There will be availability of more jobs for youth as green jobs create more jobs

There will be a significant increase in lives and lividhoods

Finally,the amount of warm, humidity experience by people shall be minimal by how stress levels among people shall reduced

RESULTS/ FINDINGS:

About 10 to 15 percent of global warming is as a result of deforestation therefore any reduction in deforestation would yield a significant impact on the habitability of our planet.

EFFECTS OF DEFORESTATION:

1. Increase in greenhouse gas emissions
2. Reduced biodiversity
3. Distribution of the Water cycle
4. Impact on lividhoods
5. Increased in soil erosion.



Graphical representation showing a global warming with high deforestation compare to when green ideas in the harness for affordable and clean energy is introduced, promoted and enforced.

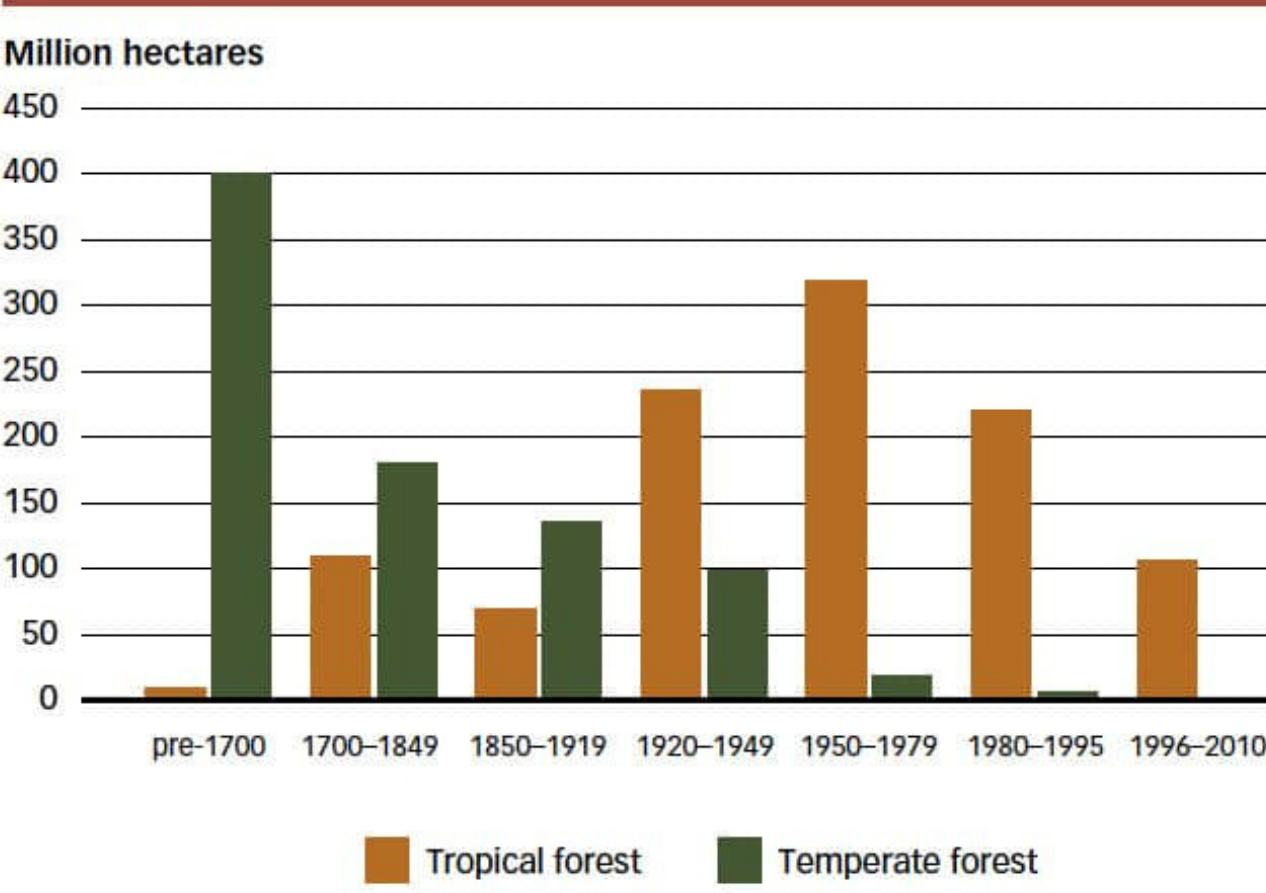
ACKNOWLEDGMENTS:

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Figure 2: Estimated deforestation, by type of forest and time period



Source: Estimates based on Williams, 2002; FAO, 2010b.

