

Mitigating Climate Change through Bio Char

We will first introduce little about our country Nepal and after then Baglung District. (We can add following narration about our nation and Baglung District)

The Federal Democratic Republic of Nepal is a landlocked country in South Asia located mainly in the Himalayas. With an estimated population of 26.4 million, it is 48th largest country by population and 93rd largest country by area. It borders China in the north and India in the south, east, and west.

This Baglung district is about 275 km west from Kathmandu, the capital city of Nepal. The Baglung Municipality popularly known as Baglung Bazaar is the district headquarter of Baglung district. The town is situated on a plateau overlooking the Kali Gandaki valley gorge directly south of the Dhaulagiri Himalayan range. It has been a quaint trading town since ancient times frequented by traders from north and south. The city is located at the cross-section of Kaligandaki corridor highway and mid hilly highway that transverse Nepal in north-south and east-west directions respectively. The Baglung District lies in Western part of country in Gandaki Province and covers an area of 1,784 sq. km.

Climate Change... What does it mean for Nepal?

Climate change is real; it is already occurring and is caused by human activity. More than 99.9% of all climate scientists agree ...99.9%! This is even greater than the percentage of physicians, cardiovascular scientists, and public health experts who agree that cigarette smoking causes lung cancer.

There is solid evidence that climate change is already occurring. We are witnessing an increase in average temperatures, more extreme weather events, and heavier rains for longer durations that lead to flooding, and severe winter storms that cause power outages and roofs to collapse.

As climate change is the burning issue contemporary running all over the world, the effect of climate change and its result are visualized slowly in this district too. The proof for climate change can be taken in many aspects of the natural phenomenon like rainfall pattern, change in temperature, etc. The national report is published which shows that the average temperature is increased by 2 degree Celsius annually. It is a sudden but tremendous change in the rainfall pattern causing drought and heavy rainfall at once. The change in the agricultural process like a decrease in production due to major climatic change also supports the climatic change in this area too. The infestation of insect and pest is increasing which is supported by an increase in temperature. The land degradation and the land fragility is also supported by it. Similarly, there is vast degradation in the sector of biodiversity and ecosystem by the climatic hurdles in the local area of Baglung. The density of wildlife has been decreasing causing an imbalance in the ecosystem. Desertification is also the major effect seen due to the combined threats of climate change and unsustainable land use.

The global warming of the planet not only affects the weather, it also affects human health and our surrounding environment. There are detrimental economic impacts, too. Local farmers' crops suffer due to either drought or intense, prolonged rainfalls. Ocean temperatures are rising as a result of climate change.

So...you get the picture...climate change is real and we are already experiencing its effects. BUT, we do have a choice. One choice is to do nothing, continue with business as usual, and hope for the best. OR, we can take steps to reduce the causes of climate change by reducing emissions of carbon dioxide and other greenhouse gases.

We can do our part by helping mitigating and adapting to climate change we can do our part to slow the rate and extent of change that we will experience.

We can also begin to adapt. We have choices on how to move forward

The adaptation strategies will lessen some of the impacts both physically and economically of our changing climate.

So, we can all agree that doing nothing is NOT a good option...We can take steps together to decrease the amount of climate change to which we must adapt.

To avoid the worst consequences of climate change, we need to significantly reduce global warming emissions and if possible remove existing carbon dioxide from the atmosphere.

One proposal for achieving this objective is to heat biomass — plant and animal materials — in a low-oxygen environment to create charcoal, which is mostly just carbon and is called biochar when produced specifically to help reduce global warming.

This good thing we can learn and easily do in our localities. It helps powering agriculture, waste management and untimely contribute on reducing the effects of climate change.

Biochar, a solid porous material obtained from the carbonization of biomass under low or no oxygen conditions, has been proposed as a climate change mitigation tool because it is expected to sequester carbon (C) for centuries and to reduce greenhouse gas (GHG) emissions from soils. This review aimed to identify key biochar properties and production parameters that have an effect on these specific applications of the biochar.

Production of biochar (the carbon (C)-rich solid formed by pyrolysis of biomass) and its storage in soils have been suggested as a means of abating climate change by sequestering carbon, while simultaneously providing energy and increasing crop yields.

In addition to its potential benefits in addressing climate change, incorporating bio char into the soil is also thought to increase fertility, help crop growth, and improve other soil properties.

We will now show some interaction with local communities in Baglung explaining them the concept of Bio Char and its benefits and will demonstrate in front of them how Bio Char is prepared, use and applied and what potential results they can expect from their agricultural products after using Bio Char.

We will also measure the soil interaction with Bio Char and what results we get after we apply it in fields and then encourage local farmer and communities to use Bio Char and play significant role on addressing climate change by actively involving in mitigation and adaption of climate change

We will brief them how they can be part of climate action specially using Bio Char and take stand against Climate Change

We should all now have the confidence that by working together with our local communities, businesses and government, we CAN meet the challenge to reduce the amount of climate change and its impacts!

Every individual can make a difference...Let's do our part for our generation and future generations to come...

Think Globally, Act Locally and Act Smart.

An YFEED Foundation Presentation

Under

SDG Asia Project