

MITIGATING CLIMATE CHANGE IN AFRICA THROUGH SOCIAL/FARM FORESTRY

BY

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Climate change, the variation in weather patterns over a period of time, is partly caused by the disruption of the atmospheric composition by human activities such as deforestation, burning fossil fuels and industrialisation. These activities lead to an increase of greenhouse gases such as methane, carbon dioxide, chlorofluorocarbons (CFCs) in the atmosphere which trap heat leading to global warming. Changes in weather patterns (rainfall and sunshine patterns), floods, droughts, sea level rises are therefore likely to continue due to the change in climate. Although climate change presents a challenge worldwide, it is more of a threat to Africa because of poverty and unavailability of technologies to cope and adapt effectively. Africa is also socially and economically dependent on agriculture yet the above mentioned tragedies have led to a decrease in agricultural production and therefore food insecurity. Climate change is expected to worsen the situation by exacerbating hunger and malnutrition.

Climate change mitigation involves reducing the impact of climate change effects and global warming by reducing emissions of green house gases to the atmosphere and by increasing carbon sinks. Some of the mitigation strategies that can be effective and efficient in absorbing atmospheric carbon include afforestation, reforestation and sustainable management of forests. Forests are the fundamental bases in climate change mitigation because they can be relied upon for increased carbon sequestration.

In Africa, forests cover approximately 650 hectares, which is 17% of the world's forests. This implies that Africa can play an important role in mitigation of climate change globally. In one way or the other, we all depend directly or indirectly on trees not only for environmental benefits, but also for social, economic and cultural benefits. Planting a shade or fruit tree in one's compound or garden does not have as much impact as planting a hectare of trees, but it is still good enough. Everyone should therefore be encouraged to plant a tree if we are to effectively protect ourselves and the future generation from this tragedy. We also need to act very fast. However, much as forests act as carbon sinks, they are also a source of carbon. Deforestation and poor management of forests and swamps lead to the increase of greenhouse gas emissions into the atmosphere. Expanding populations, industrialisation, mining, clearing land for agricultural production are some of the major reasons for deforestation. There is therefore a need to plant more trees and sustainably manage forests in order to enhance the absorption of carbon from the atmosphere.

Local communities are an invaluable resource in mitigation of climate change through social forestry. Social forestry involves participation of local communities in planting, managing

and protecting forests on degraded land to boost economic, social and environmental development. Other than the known benefits of forests, social forestry comes along with other benefits such as being able to utilize land that would be unsuitable for agriculture. Rural communities greatly depend on forests for firewood, medicine, food, timber and an extra income. Given that populations and industrialization are growing very fast, pressure exerted on the existing trees will be reduced through social forestry as it provides an alternative source of firewood and other forest products.

However, to make it even more successful, public awareness, employing trained personnel and strengthening of personnel capabilities should be integrated into the climate change mitigation strategies in Africa through social forestry. Campaigns and education programmes about social forestry should come in as fast as possible. In addition, governments and other forest stakeholders should devise mobilization and motivational strategies that can attract local communities to involve themselves in social forestry. With all the dependency that they have on trees, local communities can be easily motivated to engage themselves in planting, managing and protecting them and thereby enhancing climate change mitigation. Mitigating climate change through social forestry will even be more effective and efficient if the local people are involved in policy formulation of forest laws, legislations and practices other than it being handled singly by government authorities. They should be guaranteed that they have a right to sustainable management and utilization of forests and their products for their well being. Illegal forest activities (for example logging trees from protected areas without permission, logging immature trees, or unsustainable logging of trees) remain a threat to forestry development and therefore authorities should work at eliminating such activities and strengthening regulations and laws. In addition, authorities should exercise transparency, and strictly adhere to the laws by avoiding corruption.

In conclusion, social forestry is a cheap, effective and efficient strategy that we can embrace in Africa to combat climate change. However, government authorities and stakeholders should work at increasing public awareness of social forestry and all the benefits that come along with it for its success in climate change mitigation.