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AFRICAN APPROACH TO ADDRESSING GLOBAL WARMING AND CLIMATE CHANGE: *Cocoa, the unsung mollifier*



Striking a Balance in the Climate Change Dilemma

- Rising global temperatures and climate change are caused by build-up of greenhouse gases (GHG) especially CO₂ and CH₄.
- Global ceiling of 1.5°C set nine years ago in Paris for the year 2050 is already exceeded.
- Heatwaves, floods, drought, thawing ice caps, submergence of seaports and coastal towns, etc. are daily reminders of climate change.
- Exacerbated by El Niño, La Niña, and other extremes of weather conditions.





Striking a Balance in the Climate Change Dilemma, cont'd

- Global action demands cutting down on anthropogenic activities, i.e., the burning of fossil fuels and deforestation, and adaptation of more efficient, effective, responsible and resilient production systems.
- Climate mitigation and adaptation, a global collective action, requires substantial investments that the developing countries lack, and the developed countries are passive to help.
- Both developed and developing countries are caught in a dilemma. Whilst developed countries have difficulty in forgoing the fossil fuels, their counterpart developing countries that are basically agrarian, cannot make progress without causing deforestation.
- Contrary to the long-held notion that cocoa is a major driver of deforestation, the experience in Ghana projects cocoa as a great measure in climate mitigation and environmental adaptation.

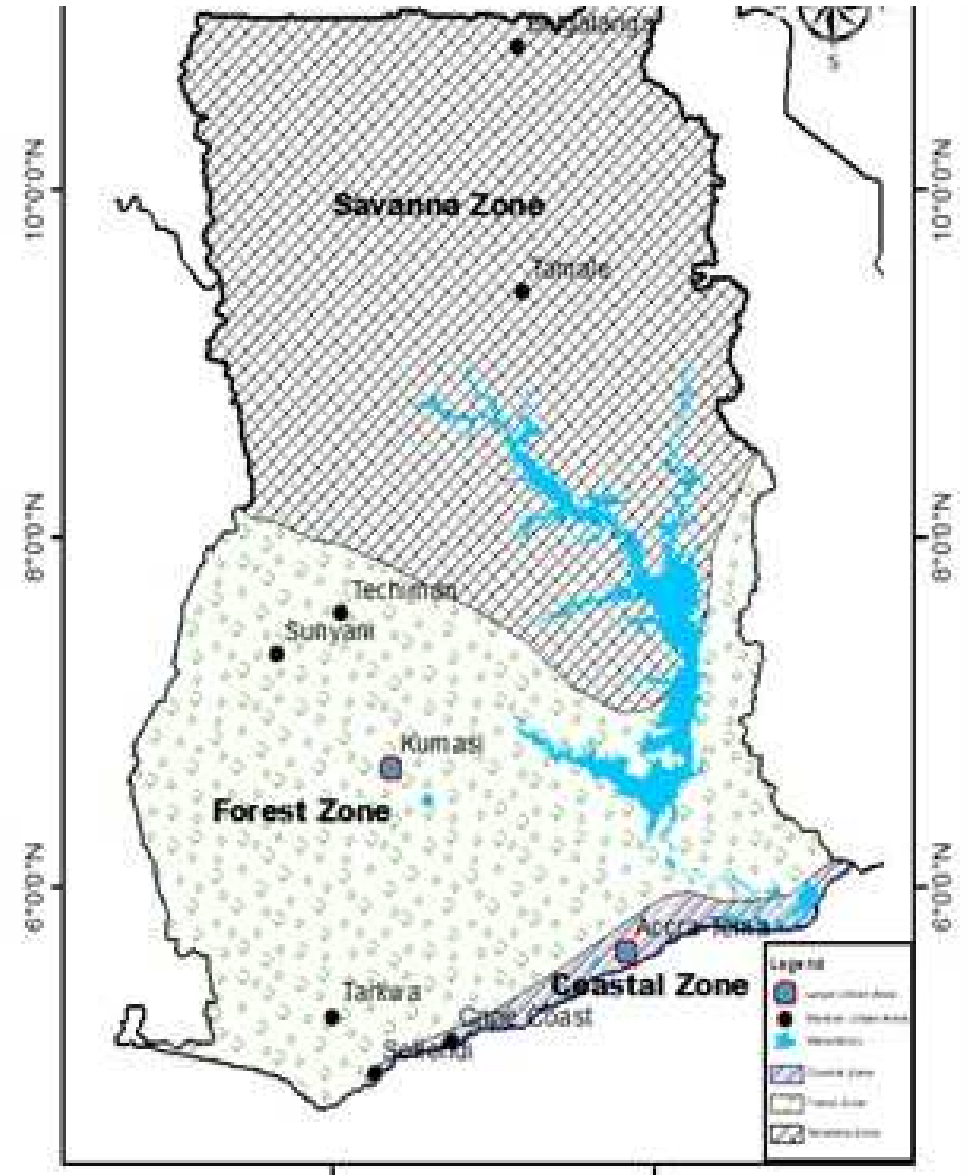
Importance of Cocoa to Ghana

- “Ghana is Cocoa and Cocoa is Ghana”
- Ghana’s cocoa is PREMIUM COCOA, the best and most sought for in the world
- Cocoa is the backbone and oxygen source of the Ghanaian economy
- Generates about \$2 billion annually as foreign earnings
- Supports the livelihoods of close to 800,000 farm families
- Engenders an unmatched broad-based revenue distribution system
- To control cocoa international trade in the name of deforestation as the EUDR seeks to do by 1st January 2025, is to regulate the oxygen supply to the Ghanaian economy



The Greening Effect of Cocoa Farming

- Total land area in Ghana 23.85 million ha, into three main ecological zones
 - Interior Savanna
 - Middle Forest Belt
 - Coastal Savanna
- The two savannas covering 15.69 million ha, once forest areas, have lost their forests
- Forest is 8.13 million ha; kept its forest outlook because of cocoa
- Cocoa covers 2 million ha of the forest area



Land Use in the Savanna Zone

- The Mole National Park is a forest remnant, exemplifying how the interior savanna once looked like
- Land tillage for food cropping alone is not environmentally friendly and resilient.



Cocoa Ecological Resilience in the Forest Zone



Ability of Cocoa to Improve Biodiversity and Environmental Resilience

- Cocoa is a gregarious plant
- Intercropping of variety of shade cover crops and trees
 - Temporary – food crops – i.e. plantains, cocoyams, pawpaw, cassava and vegetables
 - Permanent - economic trees – i.e. terminalia superba, terminalia ivorensis, cloropora excelsa, kyaya ivorensis
- Cocoa farm is an embodiment of agroforestry for carbon sequestration



5 months old cocoa farm



Typical Cocoa Agro-Forestry in Ghana (6 yrs old)



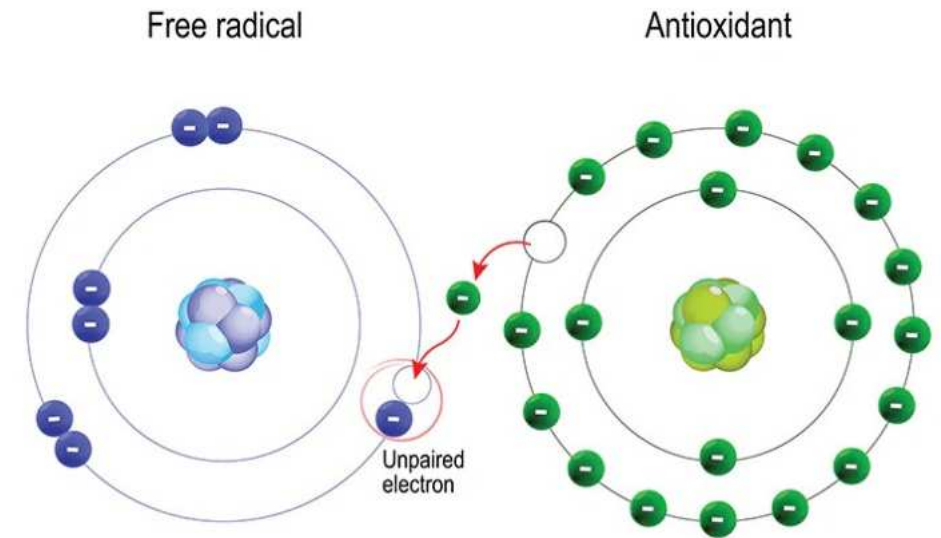
Nutritional and Health Benefits of Cocoa



THEOBROMA CACAO - “food of the gods”

Health and Nutritional Benefits of Cocoa cont'd

- Rich in flavonoids and polyphenols, antioxidant, anti-inflammatory and anti-aging properties
- More than 300 chemical compounds making it a superfood for health
- Enhances vasodilation and endothelial functioning in the blood vessels and brain blood barrier, thus less predisposed to cardiovascular diseases and neurodegenerative disorders (dementia, Alzheimer's disease and Parkinson's disease)
- Helps against malaria, hypertension, stroke, diabetes mellitus, cancer, persistent coughs and hiccups
- Provides brain power, aphrodisia, improves bone mass, eye and hair pigmentation, boosts body immune system, gives energy and vitality, and elixir for body relaxation and sleep





Threat to Cocoa Resilience

- **Climate Change**

- *Illegal Mining - Threat to Cocoa Resilience*



- *Combined Price Volatility & Unjust Market Order is a Threat to Cocoa Resilience*

Issues

- A \$120 billion annually in the coca value chain
- Share of producers less than 6%. Annual take of Ghana that supplies 20% of global beans is \$2 billion
- Very volatile terminal market

Policy Initiative

- Cote d'Ivoire Ghana Cocoa Initiative (CIGCI)
- Living Income Differential (LID)

- *Cocoa Swollen Shoot Virus Disease (CSSVD) – Threat to Cocoa Resilience*



European Union Deforestation -free Regulation (EUDR)

Trade Control Policy

- Imposes additional cost on production

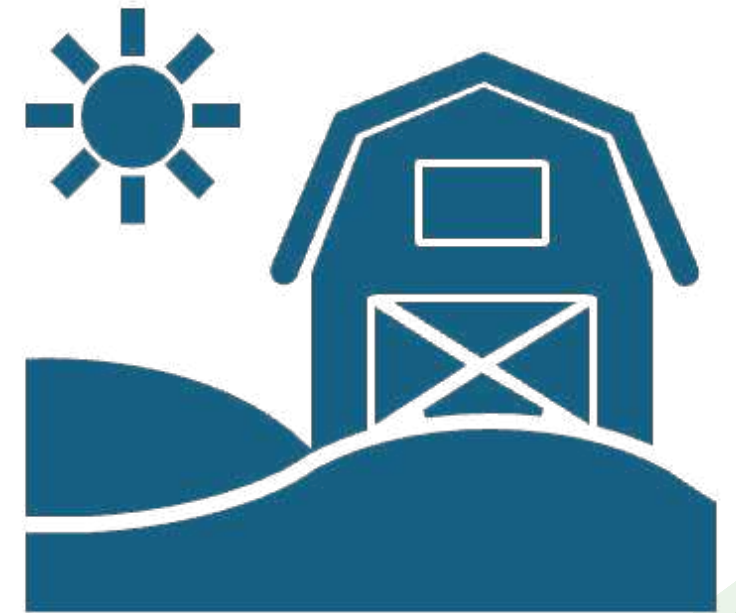
Measures

- Cocoa Management System allows cocoa to be traced to the last mile
- Ghana National Traceability System ready – unique farm ID makes it possible for any cocoa beans from Ghana to be traced to the farm plot

Policy & Programme Interventions

- Climate-smart & Regenerative Cocoa Farming
- Productivity Enhancement Programmes (PEPs) and Vertical Productivity
- Rehabilitation of CSSVD farms
- Social Safety Nets for farmers – input and price subsidies and critical infrastructure
- Private-led Cocoa Plantations with irrigation (at policy level)

❖ **All aimed at sustainable and resilient cocoa industry in Ghana**





Artificial Pollination of Cocoa

- Vertical Productivity that increases yield per hectare and removes appetite for more land as a measure against deforestation



Conclusion

- The view that that cocoa is a major driver of deforestation and antithesis to climate change needs to be relooked. Rather, cocoa being a gregarious forest plant facilitates restoration of deforested and degraded forestland and is a good measure for climate mitigation and environmental resilience.
- Cocoa has economic importance to developing countries such as Ghana. Any international regulation of cocoa trade is like regulating the supply of oxygen to the economies of those developing countries. This, nonetheless, enjoins that cocoa must be produced sustainably and responsibly.
- The secrets of cocoa as a superfood has not been told. It is said to have more antioxidants than any known food.
- In sum, cocoa is friendly to the environment, supportive of developing economies and good for human health.
- ❖ Sustainable production of cocoa is need in the world to serve as climate mitigation measure and adaptation.



THANK YOU