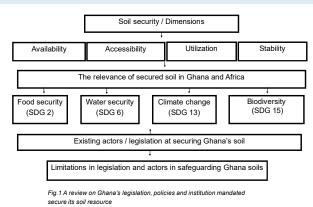
# Soil Governance a Constrain to Soil Security in Africa: A Case Study in Ghana

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# Introduction

- Soil governance refers to the policies, legislations and actors (institutions) that consolidate enforce and safeguard the use and management of soil resources for sustainable production and ecosystem services
- Good soil governance is a cross-cutting harmonizer of all the dimensions for securing natural resources and ecosystem services.
- A secured and sustainable food production system in Africa demands securing the soil; a basic underpinning resource of food and water security, climate, socioeconomic and human health.
- Despite soil's essentiality, the soils of Africa are threatened by acidification, contamination, erosion, nutrient mining, salinization and sodification [3].
- These threats have downscaled nearly half of the productive potential of African soils and consequently led to food insufficiency and socio-economic instability [1].
- The paper's object is to review the existing constraints in legislation and actors responsible for the governing ways of securing the soil of Ghana.

#### Literature frame work



#### Soil security dimension

- The dimensions for securing soil as proposed by McBretney et al. and Yawson et al [2,3] were Availability (capability), Accessibility (Condition), Utilization (Capital or wealth and Connection) and Stability (Codification).
- The stability or codification is the governing ways of ensure sustainable implementation of soil polices and laws, equipping the relevant institution to enforce and manager the sustainable and safe use of soil resource.
- The availability, functionality, capability, accessibility, the wealth and fulfillment of the soil depend chiefly on the governance of soil.

## The laws and governing instrument for securing Ghana soil

- The Lands Commission of Ghana was constitutional established in 1992 with constitutional mandate of Land Administration and Management for sustainable land use
- The Environmental Protection Agency Act, established 1994 (Act 490) is charged for regulating and managing environmental sustainability with soil conservation and land degradation inclusive

- Act 571 gives the Forestry Commission of Ghana the governing mandate to manage and sustain forestry resource including forest soils and wildlife
- Act 703 established in 2006 as a Minerals and Mining Act was required to regulates mining activities and protect mining environmental most expertly land reclamation, and soil conservation.

#### Discussion

- The Lands Commission and Environmental Protection Agency of Ghana are legislatively vested to undertake land (soil) entitlement registration and protection respectively.
- The governing mechanisms of laws, regulations, policies, and policy reforms are however inclined towards entitlement under the lands Commission with very little focus on sustainable use of the soils or land.
- The Environmental Protection Agency regulation that protect the environment does not have safeguard soil regulation and policy.
- The only existing law governing soil was established in 1953 (No. 32) and amended in 1957 (No 35). The law ensures effective and efficient utilization and sustainable management of soil and provides the power to enforce regulations and policies to safeguard soils.
- The law was established under the Ministry of Agriculture with no legislated protective mandate and the power of regulation.
- The operation of the constitutional mandated institution are highly influence politically hence sheltering the soil through governance is a constrain

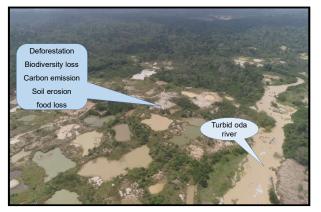


Fig.2. The lack of soil governance threat to other resources

#### Conclusion

- The laxity in legislation, policy and actors of soil governance in Ghana leads off to soil insecurity threats
- Insecure soil leads to insecure food, water, climate and threating ecosystem

### Reference

- Lal et al., (2021). Soils and sustainable development goals of the United Nations. *Geoderma*
- 2. McBratney et al., (2014). The dimensions of soil security. Geoderma
- Yawson, et al., (2016). Putting soil security on the policy agenda: Need for a familiar framework. *Challenges*





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