

FUTURE OF AFRICAN AGRICULTURE

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Agriculture in Africa, with a bright future to be food self-sufficient for the current and future population, must address the following challenges: soil degradation including depletion of soil organic matter, content, drought stress and extreme events caused by the global warming, rapid and ad-hoc urbanization, and a large yield gap. The continent has a large negative nutrient budget with the mean rate of fertilizer use at 17 kg/ha. Further, only 6% of cropland is equipped for irrigation. Widespread problem of soil degradation adversely impacts both human wellbeing and environment quality. Indeed, the health of soil, plants, animals, people, ecosystems and the planet is one and indivisible. In addition to socio-economic issues, strategies to achieve food and nutritional security must also address environmental and soil health issues. Soil health must be restored, protected and sustained through re-carbonization of the terrestrial biosphere (soil and vegetation) for enhancement of soil and ecosystem resilience by adoption of regenerative agricultural systems. With vast endowments of natural resources ,Africa has the capacity to be the bread basket of the world by:1) scaling up of proven site-specific best management practices,2) emphasizing soil restoration and achieving zero net land degradation, 3) re-carbonizing soil and vegetation,4) empowering farmers, especially women farmers, through payments for ecosystem services . and 5) translating science into policy actions and adoption of pro-farmer and pro-agricultural practices. These initiatives will make man-made famine and mass starvation politically intolerable, morally toxic, ethically unthinkable and humanely unacceptable.

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