

Dr. Dionysious Dan Kiambi delivers a seminar at Wangari Maathai Institute on “Biodiversity: A Resource for Environmental Conservation and Sustainable Livelihoods



Dr. Dionysious Dan Kiambi, Executive Director of African Biodiversity Conservation and Innovations Centre (ABCIC) delivering a Seminar at Wangari Maathai Institute

Dr. D. D. Kiambi, the Executive Director of African Biodiversity Conservation and Innovations Centre (ABCIC), delivered a thrilling seminar on, “Biodiversity: A Resource for Environmental Conservation and Sustainable Livelihoods,” at the Wangari Maathai Institute for Peace and Environmental Studies on 23rd September 2015.

In a nutshell, Dr. Kiambi indicated that Biodiversity is the variety of all living things viz. the different plants, animals and micro organisms, the genetic information they contain and the ecosystems they form. Biodiversity provides humankind with the ecosystem services, biological resources as well as goods and services that sustain the livelihoods of the majority rural poor. Biodiversity especially the genetic resources and the variability within the germplasm of farmer varieties, landraces and crop wild relatives is the undisputable basis of crop productivity as it provides breeders with the necessary breeding stocks for the development of improved varieties to meet various abiotic and biotic challenges and increasing yields. Moreover, germplasm is also vital in broadening the genetic base and diversification of agricultural production systems for the resilience required to withstand the changing biotic and abiotic stresses including pests, diseases and drought as consequence of climate change. Reducing terrestrial carbon emissions and increasing sequestration is now central to the climate change agenda.

Biodiversity offers immense opportunities for mitigating the effects of climate change through the promotion and use of agroforestry practices as well as ecosystem restoration. However, biodiversity is threatened by a multiplicity of factors which include destruction of natural habitats, unsustainable agricultural practices, natural calamities such as droughts, floods, pests and diseases as well as invasive species, climate change, pollution and introduction of new crop varieties in agricultural production systems. All these factors create ecosystem instabilities and weaken organisms (reproductive) health, ultimately affecting the ecosystem services and leading to species extinction and genetic erosion. Concerted efforts are therefore needed to

conserve biodiversity using integrated *ex situ* and *in situ* conservation methods. It is also imperative that the government enforces the various biodiversity laws and policies and strengthens the governance structures as well as institutional capacities for the conservation and sustainable utilization of biodiversity to maximize economic gains as well as enhance people's livelihoods.



Mrs. Bernadette, Mr. Tirop and Mr. Gitonga after the seminar



Patricia, Faith, Alexander and Natalie after the seminar