Over 1200 species of bamboo grow worldwide. Of the total species, about 18 are regarded as commercial species due to their suitability for various uses. The rest are good for environmental conservation and ornamental applications. Out of the world cover of 14 million ha of bamboo, 85% is distributed mainly in the Asian tropical region. Africa has a total of only 1.4 million ha, much of which is distributed over Eastern Africa in which Kenya’s share is about 150,000 ha. In Kenya, over 20 exotic bamboo species have been introduced during the last two decades through the support of various research and development programs. Commercially important bamboo species usually mature in 3-5 years, after which multiple harvests are possible every second year for 40-120 years. Worldwide, over 2000 uses of bamboo have been recorded as opposed to Africa where its great potential is rarely exploited. Bamboo can be used in the production of pulp and paper, clothes, biomass fuel, handicrafts, construction, recycling and filtration of domestic and industrial waste water, soil erosion control, green energy production, act as a source of medicinal herbs, animal fodder and its shoots are good for fiber. The global market for bamboo products is approximately $7 billion which is expected to triple by the year 2020. The purpose of this talk is to create awareness on the potential of bamboo production in environmental conservation and sustainable rural livelihoods in the country, hence open new areas of scientific research and cooperation between Kenya, Germany and some Asian Countries.