Title: Maintenance of Water through the Development of Activated Carbon Filter from Local Raw Materials.

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Abstract: The aim of work is to develop activated carbon filter from local raw materials such as bamboo and coconut shell to maintain quality water for human consumption by removing odours, colour, taste and chemical. The stated aim, and anaerobic furnace of 9Kg capacity was designed and developed for a maximum operating temperature of 1000°C. The raw materials used for activated carbon are bamboo and coconut shell. A quantity of 6Kg of bamboo was measured and fed into the furnace for four hours of heating of oxygen to temperature of 900°C. The experiment was repeated with some quantity of coconut shells as of bamboo. The activated carbon of the materials was ground separately in a mortar with a pestle, and sieved using British auto sieve shaker of different sizes, which was used to analyze muddy water. The result showed that the level of contaminants were significantly reduced, coconut activated carbon was found to be better than bamboo and activated with finer particles is more efficient in water filtration. It can then be concluded that activated carbon from local raw materials like coconut shells and bamboos, which are common in Africa, can be used to maintain quality water for human consumption.