Modeling the Efficiency Equation of a Solar Box Cooker

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***Abstract*-The mundane task undertaken by household in search for source of energy (i.e. wood) for cooking, coupled with the glaring implications of defrost rations associated with it, this study deals with the modeling of the efficiency of a solar cooker. The authors reviewed previous work on same subject in different locations around the world. An initial study begins with a basic equation representing heat change by a body. The methodology employed involved the calculation of energy output from a solar cooker which was based on the change in temperature, mass and specific heat capacity of the water used. The paper however outline how people consistently involved themselves in cutting down trees all in attempt to look for energy for cooking food with less or no concern to consequences of their action in an attempt to reduce or completely eradicate the above action, a mathematical modeling has been developed which can be used by engineers to adjust certain parameters before the real construction began. The equation is therefore found to be useful in calculating the efficiency of any solar cooker to be constructed under the same condition.**