## MANAGING THE BIODIVERSITY OF MULANJE MOUNTAIN THROUGH PROMOTION OF CLAY STOVES- A GERMAN FINANCED SADC REGIONAL BIOMASS ENERGY PROJECT.

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The Mulanje Forest Reserve (MMFR) is located in the southeast corner of Malawi and has been a national protected area since its proclamation as a forest reserve in 1927. Mulanje Mountain rises to a height of 3,002 metres above sea level and covers an area of about 650 km<sup>2</sup>. The mountain is the highest in southeast tropical Africa and has the highest terrestrial endemic biodiversity in Malawi inclusive of over 250 endemic plant species and a wide range of endemic animal species. Mulanje Cedar the National Tree of Malawi is the keystone endemic species of the plateau-level cloud forests. The region has population of 1.9 million and is one of the most densely populated areas in Malawi and SADC region as a whole. However, despite such huge population in the region, (93%) still depends on biomass as source of energy. The major consumers of firewood are rural households (58%), followed by tea and tobacco estates (20%), small-scale industries (15%), urban households in Mulanje and Phalombe district headquarters (5%), and urban industries (2%). The overall wood consumption exceeds sustainable supply by about 2.37 million cubic meters which is equivalent to woodland clearing of 50,000 hectares a year (NEP 2003).

A major energy project intervention that would recognize the cultural importance of biomass energy and socio-economic status of the rural households was therefore required in the region to arrest the problem of deforestation. Introduction of clay stoves under a German-GTZ financed SADC Regional Biomass Energy Project significantly solved the problem. Clay stoves which can be moulded by local communities (especially rural women) and sold by less than 2 USD, affordable price by most of people in the region, has firewood burning efficient of (67%). Thus the impact of that is that amount of firewood that would have been consumed in a day using three-stone stove is now consumed in three days giving time and opportunity for trees in Mulanje Mountain Forest Reserve to regenerate and grow.