

ANIMAL FEED SUPPLEMENT FROM AVOCADO RESIDUE AND OTHER LOCALLY AVAILABLE MATERIALS

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Kenya's population has been on the increase, and more than 15 million people are poor and live in rural Kenya. Of these, 70% are women, who are particularly vulnerable because they do not have equal access to social economic assets thus widening economic gap and rising poverty levels that erode self-esteem and growth in education, health, food security and employment. Most of the poor people are farmers who, apart from growing crops for subsistence, majority of them also keep livestock as a major source of farm income and manure. Proper feeding of the animals is a critical input in productivity as feeding alone accounts for about 40% of production cost or more depending on the sources of feeds and feed ingredients. The available feeds used by farmers including plant residual and napier grass do not meet all the needs of the cattle kept by most farmers which compromises the productivity of the animals leading to low income for the farmer. In order to improve and empower the small holder farmer, there is need to come up with technologies that can improve their lives. This project aimed at reducing poverty in Evurore division in Mbeere District, by training the locals to prepare animal feed supplement, using locally available avocados. Avocado is one of the most commonly grown farm products in area and is available throughout the year. The fruit is mainly used as a salad fruit and a source of oil for cosmetic products as well as fuel. The seed and the peels of the avocado fruit have not been fully exploited and are normally thrown away with the garbage. This project was designed to come up with an economical way of producing commercial feed supplement using avocado peels and seed as well as other locally available materials in order to curb the problem of low animal feed resources for livestock. The avocado peels and seeds were analyzed for the levels of essential minerals using atomic absorption spectrometry (AAS) and were found to have substantial amounts of the minerals. The produced animal feed supplement will be used as a source of essential macro and micro nutrients which improve health and productivity of the livestock and consequently that of the farmers. The efficacy of the feed developed will be tested by feeding rats and comparing the results with those of commercially available feed concentrates.

Key words: Avocado; animal feed; macro and micro-nutrients