

I. INTRODUCTION

In Egypt there are almost 2 million heads of coarse wool sheep, out of which one third is maintained in the western desert with special reference to the north western coastal area. In this area sheep are usually maintained on natural vegetation which depend to a great extent on the amount of rainfall that varies from 150-180 mm. plus some small amounts of concentrates.

Barki which is the dominant coarse woolled **fat-tailed** breed of the area is known to be well adapted to the harsh prevailing conditions including poor feeding, heat stress and diseases.

In Egypt lamb production represents the main source of income from such sheep. The wool clip, however represents a secondary source of income.

Food represents the main item of keeping sheep. Sheep are known to be the lowest among all other farm livestock in the biological efficiency of meat **production** (Owen, 1976).

In foreign breeds, estimates were obtained on the biological efficiency of meat production in terms

of units of feed needed to produce a unit of meat. Similar information on local breeds seem to be lacking and studies on the output of local sheep in relation to the input are very limited (Mokhtar, 1974 ; Azamel, 1978).

It is therefore, that this study was initiated to throw some light on the biological efficiency of meat production in Barki sheep in both experimental and commercial flocks.