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AN ANALYSIS OF COSTS AND RETURNS OF NATURAL RUBBER PRODUCTION IN NIGERIA

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With the use of financial tools of analyses, such as pay back period, net present value (NPV), internal rate of return (IRR) and benefit cost ratio (BCR), the costs and returns analysis of rubber production in large estates in Nigeria was undertaken. The annual output per hectare for 26 years coupled with costs and revenue were discounted at 25 per cent discount rate. A positive net value of N 5888.56 was obtained. The internal rate of return was 38.56 per cent while the pay back period was 12-13 years of plant life which is five to six years after maturity. The period for recapitalisation was between 26th and 27th year which is twelve years after the capital invested has been fully paid. On the other hand, the benefit cost ratio was 4.15.

Key words : Costs, Discount factor, Returns, Sensitivity.

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INTRODUCTION

Rubber production in Nigeria has great potentials since it is a dependable source of raw material for local industries and provides employment opportunities for farmers, tappers and manufacturers and other personnel in marketing (Anschel, 1963). Furthermore, by-products from the rubber plantations such as wood and seed have various industrial applications and have good market value. Rubber wood serves as timber, which compliment the wood requirements of the building, paper and construction industries, while rubber seed, the source of the rubber seed oil and cake forms a base for the manufacture of alkyd resin, putty, lacquor and ink. It is also used in animal feed as a protein substitute.

Between 1954 and 1964, the economy of Nigeria was sustained mainly by earnings from agricultural crops, such as oil palm, cocoa, rubber, cotton, cowpea, guinea corn and shea butter. By 1964, Nigeria was the biggest producer of natural rubber in Africa and sixth in the world. Her contributions were in the neighbourhood of 3.3 per cent of world production and accounted for abut six per cent of the national export earnings.

Natural rubber production in Nigeria has increased from about 50000 t in 1986 to about 100000 t in 1990. The yield falls short of what is envisaged due to various factors (Alika, 1980; Ndubizu and Ogowewo, 1982; Amobi *et al.*, 1983; Aigbekaen and Alika, 1984). Nigeria has 200000 ha planted with rubber, but this is only a small fraction,