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Articles in the field of agricultural economics, suitable for publication in the journal, will be welcomed.

Articles should have a maximum length of 10 folio pages (including tables, graphs, etc.) typed in double spacing. Contributions, in the language preferred by the writer, should be submitted in triplicate to the Editor, c/o Department of Agricultural Economics and Marketing, Pretoria, and should reach him at least one month prior to date of publication.

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Changes in karakul pelt prices between 1952 and 1969

by

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I. INTRODUCTION

A regression equation was used to determine whether any significant changes in karakul pelt prices occurred during the period 1952 to 1969. The equation fitted was of the nature $Y = a + bX$

with Y = weighted average annual price of karakul pelts

X = year (1952 = 0, 1953 = 1, etc.)

a, b = constants.

The prices used were the weighted average annual prices of all karakul pelts marketed during the above period by three fur merchants in London, viz. Eastwood & Holt, Hudson's Bay Company and Anning, Chadwick & Kiver.¹⁾ Table 1 shows the quantities of pelts marketed and the average prices realised while the regression line of the average pelt prices during the period concerned is shown graphically in Figure 1.

II. RESULTS

The calculations resulted in the following regression equation:

$$Y = 3.55 + 0.1358 X$$

When tested according to Snedecor's²⁾ procedure, the calculated coefficient for b , i.e. 0.1358 was found to be significantly different from zero at a probability level of $p = 0.01$. It may thus be said that karakul pelt prices increased highly significantly over the period. Calculated values according to the regression equation show an increase in average karakul pelt prices from R3.55 in 1952 to R6.17 in 1969 - an increase of R2.62 or 73.8 per cent. When calculated according to the compound interest rate method, this means a rate of increase of 3.25 per cent per annum over a period of 18 years.

A considerable variation occurred in average annual pelt prices, irrespective of the general upward trend (see Figure 1). The average annual deviation ($S_{y.x} = 0.6605$) from the prices expected

according to the regression equation ($Y = a + bx$) equals R0.66.

TABLE 1 - The total amount of Karakul pelts marketed per public auction in London from 1952 to 1969 and weighted average annual prices

Year	Number of pelts	Average price (Rand)
1952	2 490 153	4.16
1953	3 342 877	3.55
1954	2 859 855	3.61
1955	3 405 174	4.21
1956	3 260 541	4.11
1957	3 431 008	4.25
1958	3 574 508	3.82
1959	3 217 244	4.22
1960	2 951 322	4.36
1961	2 823 181	4.64
1962	3 287 656	5.39
1963	3 241 066	7.08
1964	4 224 585	5.16
1965	3 515 937	6.26
1966	4 121 983	6.37
1967	4 170 334	5.00
1968	4 802 160	5.58
1969	5 538 864	5.94

III. DISCUSSION

During the period 1960 to September 1969 the index of consumer prices in South Africa rose from 102.6 to 128.4,³⁾ - an annual increase of 2.8 per cent, calculated according to the compound interest method. Karakul pelt prices have therefore increased 16 per cent faster than the rate at which the purchasing power of money declined.⁴⁾ It may therefore be stated that the purchasing power of karakul pelts increased at an annual rate of 0.44 per cent.⁵⁾

3) South African Reserve Bank, Quarterly Bulletin No. 93, December 1969.

4) In these calculations the difference in annual growth rates (0.45) was expressed as a percentage of the growth rate of the consumer price index.

5) This figure was obtained by expressing the increased average pelt price index as a percentage of the increased consumers price index.

1) Source: Market reports (1952 to 1969) of Eastwood and Holt, Hudson's Bay Company and Anning, Chadwick & Kiver, London.

2) Snedecor, G.W. Statistical Methods. Iowa State College Press, Ames, Iowa, 1956.

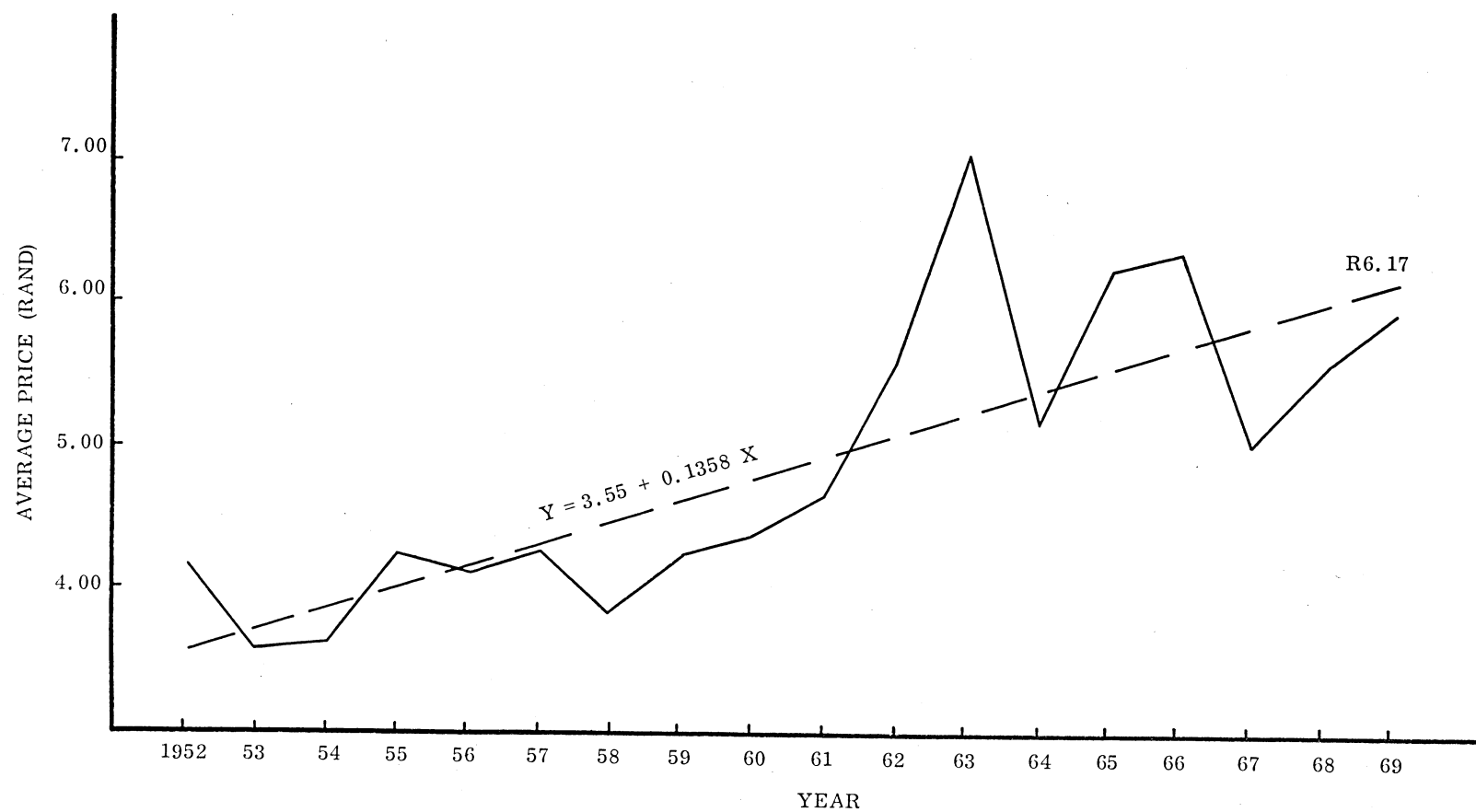


FIGURE 1. The relationship between years and average karakul pelt prices for the period 1952 to 1969

On the other hand, the producers' price index of agricultural products rose from 133.3 in 1951/52 to 173.8 in 1967/68) - an annual increase of 1.66 per cent, calculated according to the compound interest method.

Agricultural producers' prices as a group, in contrast with karakul pelt prices, therefore rose 40.7 per cent slower than consumer prices; this indicates an annual decline of 1.11 per cent in the purchasing power of agricultural products. The annual rate of increase in karakul pelt prices exceeded that of agricultural producers' prices as a group by 95.8 per cent.

Various factors probably contributed to this relatively favourable price position prevailing in the karakul pelt industry. Improved breeding practices and hence, higher quality production is probably the most important single contributing factor. More intensive promotional drives overseas, particularly during the past decade, as well as the general economic progress in the major consuming countries, were probably also important contributing factors.

It may also be added that clothing made from high quality karakul pelts are still regarded as luxuries and that karakul pelts may thus be expected to have a relatively high income elasticity of demand.

The deviation of R0.66 from average pelt prices is rather large and may be ascribed to the large short-run price fluctuations between 1962 and 1968. The reasons for these short-run fluctuations are not easy to determine. The increased prices, especially during 1963 and to

a lesser extent in 1965 and 1966, cannot be explained through a smaller supply or a spectacular improvement in the quality of pelts particularly in these years. The cause will rather lie in economic conditions prevailing in the most important consuming countries, particularly Western Germany and Italy.

The large decline in average pelt prices in 1964 may, on the other hand, possibly be ascribed to erroneous breeding practices. The high pelt prices of 1963, combined with low prices of mutton in the local controlled areas as well as a severe drought in 1962/63, gave rise to much cross-breeding. Even Dorper sheep were involved in this. The consequence was the marketing of a large number of pelts of a very low quality, which had a depressing effect on the general price level.

IV. SUMMARY

It may be stated in summary that prices of karakul pelts marketed in London since 1952 showed a highly significant annual increase. Calculated according to the compound interest method, this increase occurred at an annual rate of 3.25 per cent. This rise was about 16 per cent faster than the rate of decline of the purchasing power of money, and almost double the annual rate of increase in producers' prices of all agricultural products.

The deviation from the annual expected pelt prices was, however, also high - R0.66 per pelt.

The generally increasing trend in pelt prices may probably be contributed to improved breeding practices, more intensive promotion, the depreciation of money and the favourable economic conditions in the most important consuming countries.

6) Division of Agricultural Marketing Research, Supplementary Data to the Abstract of Agricultural Statistics of the Republic of South Africa. Government Printer, Pretoria, 1968.