PRICE AND MARKETING CONTROLS IN KENYA
Papers Presented at a Workshop Held at the Institute for Development Studies of the University of Nairobi, 26-29 March 1979

Occasional Paper No. 32

Edited by J.T. Mukui

INSTITUTE FOR DEVELOPMENT STUDIES
UNIVERSITY OF NAIROBI
P.O. Box 30197
NAIROBI, KENYA

The workshop was organised by J.T. Mukui and Guenter Schmidt. The financial support of the Friedrich-Ebert Foundation is gratefully acknowledged.

September 1979

IDS/OP 32

PRICE AND MARKETING CONTROLS IN KENYA

Papers Presented at a Workshop Held at the Institute for Development Studies of the University of Nairobi, 26-29 March 1979

ABSTRACT

The papers presented here were prepared for a Workshop on Price and Marketing Controls in Kenya, held at the Institute for Development Studies from 26 to 29 March 1979. The purpose of the workshop was to evaluate price and marketing controls in Kenya, and bring together parties influencing and/or affected by the price and marketing control policies.

The first part of the workshop was devoted to a search for a theoretical framework for analysing price and marketing controls, including illegal activities which frustrate the objectives of those policies. A paper by the Central Bureau of Statistics outlines consumer price data collection in rural and urban areas and how price controls affect the accuracy of the cost of living indices. Position papers from the Trade Union movement, the manufacturers' association, the Kenya Consumers' Organisation and the Chamber of Commerce show the conflict of interests and diversity of views on price and marketing control policy. Other papers cover domestic price effects of industrial protection, an evaluation of the role and performance of marketing boards, and price control on manufactures, milk, maize, meat, wages, and rents. The introduction to the workshop papers outlines the theme emerging from the papers and the policy implications, and draws heavily from the discussion in the workshop.

PRICE AND MARKETING CONTROLS IN KENYA

Table of Contents

EQUIVALENTS

Currency

20 Kenya Shillings (KSh.) .. .. - Kenya Pound (K£)
K£ 1 .. .. - U.S. Dollar 2.673
K£ 1 .. .. - £1.228 British Pounds Sterling
U.S. Dollar .. .. - KSh. 7.482
£ 1 (Sterling) .. .. - KSh. 16.288

Weights

1 metre ton .. .. - 1,000 kg.
- 2,205 lb.

Area

1 hectare .. .. - 2.4711 acres
1 square mile .. .. - 2.5900 square kilometres
1 acre .. .. - 0.4047 hectares

Distance

1 kilometre (km) .. .. - 0.6214 miles
1 mile .. .. - 1.6093 km.

Note: Please read K£ (Kenya pounds) for £ throughout, except in the case of quotations in which the original has been retained.

INTRODUCTION TO THE WORKSHOP PAPERS

By

J.T. Mukui
Institute for Development Studies
University of Nairobi

The main reason for holding a workshop on price and marketing controls is the current importance of this topic. The workshop organisers were also aware of the debate within government on the role of price controls and that the government had appointed a committee to appraise the performance of parastatals (Kenya, 1979b). The purpose of this introduction is to link the articles presented in the workshop, bring out points raised in the discussion, and summarise the emerging issues. The contributors hope that this anthology will make a modest contribution to the current debate on the topic and help in the search for solutions.

Price control is not, as most of the literature portrays, only a post-World War II phenomenon. The Roman empire, for example, exercised various forms of price restraint. In 301 A.D., emperor Diocletian promulgated an edict which set maximum prices for 900 commodities, 130 different grades of labour, and a considerable number of freight rates (Michell, 1947, p.1). However, Diocletian's extensive wage-price control program was conceived in passion but reared in ignorance.[1] Thirteen years later, the program, in shambles, was abandoned and Diocletian abdicated his throne and spent the rest of his life in a cabbage patch.

Since then, controls have been imposed in various parts of the world. In centrally planned East European countries, price controls have a wide coverage and are an integral part of development planning. The controls have helped to stabilise prices, (Portes, 1977) although a complete appraisal requires an assessment of both prices and incomes so as to ascertain real improvement in economic welfare.

---

1. 'The whole of Roman world was being slowly strangled with good intentions. The bureaucracy had grown so highly organised and efficient, so nicely ordered through its various grades of official life, that everybody walked in leading strings to the music of official proclamations. Paternalism regulated everything with its watchful and benignant eye. The triumph of the system may be seen in the famous Edict of Prices issued by Diocletian in A.D. 301. Here we find scheduled a maximum wage for every kind of service. Death is the penalt for any trader who asks, or any purchaser who pays, a higher price. No differer of locality or season is permitted....This delightful scheme...was evidently the product of a highly efficient Board of Trade which had sat late nights over the study of statistics and political economy. Benevolent officials of this type swarmed all over the Empire, spying and reporting on one another as well as on the general public.' (Stobart, 1951, pp. 347-8)

traders are forced to overcharge and occasionally resort to 'conditional sales' - forcing a customer to buy noncontrolled goods or controlled goods with higher profit margins as a condition for being sold the nonprofitable price controlled good. The effect of price control on traders' margins is particularly acute in the rural shops because the rural pattern of demand is predominantly for specifically controlled essential products but less acute in the urban shops where the turnover is higher and traders sell both controlled and noncontrolled products.

Mukui attempts an empirical analysis of the effects of price control on the cost of living, income distribution, and actual selling prices. When the price freeze was introduced in late 1971, it had temporary success in moderating price increases but later became irrelevant as the price controller passed on cost increases to consumers so as not to discourage supply. Again, the price controller is more liberal in awarding price increases for luxuries, which is likely to alter the pattern of production away from necessities in the longer run and in the short run has been responsible for occasional shortages of essentials. In other cases, such as meat and charcoal, prices have been depressed below the level they would have reached in the absence of any government intervention. Charcoal has been a particularly interesting case in which the relative power of the consumers and powerlessness of the producers and traders, most of whom operate in the legal twilight of the informal sector, has led to a number of dramatic arrests and prosectuions of charcoal traders. By contrast, there has not been a single prosecution of a formal sector manufacturing establishment despite the fact that price controls are widely ignored and violated by manufacturing firms. There have also been problems in collecting consumer prices for charcoal and other products because price quotations from dealers often give control levels for fear of prosecution. Olum of the Central Bureau of Statistics (CBS) confirms this and documents what the CBS is doing to ensure accuracy, given that the consumer price index is supposed to reflect actual rather than control prices. In the area of general price controls, the implementation of the legislation has been much more arbitrary and inconsistent.

Hopcraft argues that, inherent in the initial logic for widespread quantitative restrictions on imports, with their removal of international competitive pressure on Kenyan prices, was the notion that domestic prices

could readily be controlled by legislation. His contention is that the effect on domestic prices of government interventions in the area of industrialisation and trade is inadequately understood, and that the divergencies in prices introduced by these interventions tend to push economic activity in the opposite direction from government's stated policy goals. The quantitative and licencing interventions and restrictions have provided large rents to arbitrarily chosen firms, which has led to high levels of profitability, but have not improved growth, have worsened income distribution, and turned the terms of trade against agriculture. The initial policy measure he proposes is to replace these restrictions with price related interventions (tariffs, taxes, subsidies, etc.) and remove the very large anti-export, pro-import-substitution bias that has developed in the pricing and incentive structure facing firms as a result of the existing government regulations, and the consequent overvaluation of the Kenya Shilling. The problem is that vested interests have developed that inhibit policy change in this area. Again, price control may have instilled a sense of security among the policy makers which might make them more ready to give protection. However, whether the government can control such protected industries through price control is not the issue: protecting a firm and then controlling the prices of its products is like giving something with one hand and taking it away with the other. This supports Bonn's assertion that price control tries to restore equilibrium between money and goods, not by abolishing the causes of the disturbance, but by forbidding people to profit from their consequencies (1933, p. 357).

Oduor-Otieno of the Ministry of Labour gives a brief survey of the Kenyan experience with wage and incomes policies, with focus on wages. Since 1973 when the Wage Guidelines were introduced, wage restraint in the modern sector has been a significant element of the government's anti-inflationary, employment and equity policies. He concludes that, in the final analysis, the structure and degree of inequality is influenced not only by wage policies but more so by fiscal policies, the land tenure system, the general institutional setting, etc. Again, there is no guarantee that the increase in a firm's profitability arising out of wage moderation will be used to expand employment and not be repatriated overseas. Mukui and Gutto argue that, in a mixed economy, rent controls may, in theory, discourage housing construction and cause a housing shortage - although this might not have happened in the towns in Kenya, because the rent controls are ineffective and largely irrelevant. However, there is still a housing shortage in the towns but the cause of this shortage lies elsewhere.

Aldington proposes measures of appraising the performance of agricultural parastatals, which can also be applied to parastatals in other sectors as well. Although he does not address himself to the issue of whether these agricultural parastatals are necessary in the first place, his propositions are important because the government has a plan of reviewing the role of the sixty or so parastatals in Kenya.

The committee to review statutory boards in Kenya was set up in February 1979 and released its first report in May 1979 (Kenya, 1979b).[6] The committee was headed by the economic adviser to the president and most of the committee members were permanent secretaries in the ministries that coordinate parastatals, including the inspector of statutory boards. It was, therefore, not an independent inquiry. The committee members would also be reluctant to make critical recommendations on such an important issue because they are government employees and would not like to bite the hand that feeds them. The major weakness of the report is that it takes too much space on how to streamline recruitment and operations of parastatals but does not face the fundamental issue which is more economic than social or political although with political implications. In the case of the Maize and Produce Board, for example, the problem is high producer prices which benefit the large scale farmers who supply maize to the Board while the poor consumers bear the burden through high maize and maize meal prices; and movement controls which hinder regional price equalisation (disregarding transport costs) between surplus and deficit areas. In the case of the Kenya Cooperative Creameries (KCC), the government tends to allow producer prices to rise while at the same time sitting on the consumer price. This implies that some failures of statutory boards can not be attributed to the boards' management but basically result from confusing signals and policies of the central government. They are also supposed to achieve other objectives like employment creation. Therefore, it is difficult to set performance criteria for public enterprises because some functions are multiple and vague and cannot be accurately put in shillings and cents. A profitable public enterprise may be covering gross inefficiency with even grosser monopoly profits while the loss-maker has pared costs to the bone.[7]

Schmidt, in his well researched paper which is an abridged version of a more extensive report,[8] analyses the effectiveness of the maize marketing control system in attaining its stated objectives. The maize marketing control

---

6. The Review of Statutory Boards is reviewed by J.T. Mukui in the The Weekly Review, June 8, 1979.
7. 'The State in the Market', The Economist (London), December 30, 1978, p.38. For a thorough analysis of the performance of parastatals in an African setting, see chapter 9 of Tony Killick, 1978.
8. Schmidt, 1979 (forthcoming).

legislation creates a system which leads to low operational efficiency as reflected in increasing marketing costs, high excess profits, and works against the interests of smallholder maize producers (who do not get access to the Maize and Produce Board stores) and poor rural and urban consumers (who pay high prices for maize and maize meal). Relaxation of maize controls would lead to substantial savings in storage and transport costs and would allow consumers in deficit areas to take advantage of cheap grain from surplus areas. Under a decontrolled system, the Maize and Produce Board would have the function of maintaining the strategic national reserve as well as acting as a buyer of last resort.

The papers by Ruigu and McArthur and Smith are on government pricing and marketing interventions in the livestock industry. Ruigu evaluates the role of the Kenya Cooperative Creameries, a producer-controlled cooperative, with a virtual monopoly on milk marketing in the formal market. Ruigu argues for seasonally and spatially adjusted producer prices to reflect seasonal and spatial variations in production costs to avoid resource misallocation that results from the existing regulatory mechanism. McArthur and Smith present a frank discussion of the many statutes and other regulatory measures in the meat industry. The effect of controls on beef, for instance, has been to keep prices low, which has increased the demand for beef and lowered beef production.

Some of the papers in this report dwell on the policy implications of their research findings. We learn that a high price is not necessarily a bad price depending on its implications for income distribution e.g. in the charcoal trade where the charcoal-burners and charcoal-dealers are relatively poorer than the urban-based consumers, and in the meat industry where low beef prices have put meat production on a declining trend and probably works against the interests of the pastoralists in the marginal areas who supply cattle for slaughter.

However, whether the policy makers in Kenya implement recommendations given to them is a different matter. For example, in the maize industry, articles have been written from as far back as 1959 (Miracle, 1959) and various commissions of inquiry appointed but their recommendations are never implemented. The refusal to take action is itself an action and most likely is not out of ignorance but because of the politically powerful vested interests that would be hurt by polich changes. We can not, for example,

separate the adverse effects price control has on charcoal and meat producers from the fact that the policy favours the urban consumers who are more organised, are a political threat, and might claim higher wages from the modern sector as a result of the price increases. This is why political expediency tends to take precedence over careful economic analysis.

REFERENCES

1. Bonn, M.J. 1933. 'Price Regulation'. In E.R.A. Seligman and A. Johnson (eds). Encyclopaedia of the Social Sciences. New York, The McMillan Company, 12, pp. 355.62.

2. Galbraith, J.K. 1958. The Affluent Society. Harmondsworth, Penguin Books Ltd.

3. Galbraith, J.K. 1973. Economics and the Public Purpose. Harmondsworth, Penguin Books Ltd.

4. Kenya. 1974. Development Plan 1974-78. Nairobi, Government Printer.

5. Kenya. 1975. On Economic Prospects and Policies (Sessional Paper No. 4 of 1975). Nairobi, Government Printer.

6. Kenya. 1979a. Development Plan 1979-83. Nairobi, Government Printer.

7. Kenya. 1979b. Review of Statutory Boards (Chairman: Philip Ndegwa). Nairobi, Government Printer.

8. Killick, Tony. 1978. Development Economics in Action: A Study of Economic Policies in Ghana. London, Heinemann.

9. Leibenstein, Harvey. 1976. Beyond Economic Man. Cambridge, Mass., Harvard University.

10. Mitchell, H. 1947. 'The Edict of Diocletian: A Study of Price-Fixing in the Roman Empire'. Canadian Journal of Economics and Political Science. 13 (1), February, pp. 1-12.

11. Miracle, M.P. 1959. 'An Economic Appraisal of Kenya's Maize Control'. Eastern Africa Economic Review. 6 (2), December, pp. 117-25.

12. Portes, R. 1977. 'The Control of Inflation: Lessons from East European Experience'. Economica. 44 (174), May, pp. 109-29.

13. Salin, E. 1933. 'Just Price'. In E.R.A. Seligman and A. Johnson (eds). Encyclopaedia of the Social Sciences. New York, The MacMillan Company, pp. 504-7.

14. Schmidt, G. 1979. 'Maize and Beans Marketing in Kenya: The Interaction and Effectiveness of the Informal and Formal Systems'. Occasional Paper No. 31. Institute for Development Studies, University of Nairobi.

15. Spliet, J.A.M. 1978. 'The Role of Small Businesses in Domestic Food Distribution'. Preliminary Field Document, Marketing Development Project, Ministry of Commerce and Industry, Nairobi.

16. Stobart, J.C. 1951. The Grandeur That Was Rome. London, Sidgwick & Jackson, 3rd edition.

17. Todaro, M.P. 1969. 'A Model of Labour Migration and Urban Unemployment in Less Developed Countries'. American Economic Review. 59 (1), March, pp. 138-48.

RETAIL PRICE CONTROLS: SOME ELEMENTARY THEORY AND SOME AFRICAN EXPERIENCES[1]

By

Tony Killick
Department of Economics
University of Nairobi

1. INTRODUCTION

Concern with the social and economic consequences of inflation has induced many governments to introduce statutory controls on the retail prices of a wide range of consumer goods. The purpose of this paper is twofold: (a) to use elementary economic theory in order to explore what can and cannot be achieved by price controls; and (b) to briefly summarise experiences with such controls on the African continent.

2. WHAT CAN PRICE CONTROLS DO?

The case to be analysed is one of demand inflation, defined simply as an excess of aggregate demand over aggregate supply at existing prices. The proximate causes of this could include excessive monetary expansion, the sudden imposition of import controls (reducing supply relative to demand) and a crop failure (similarly reducing supply). The government is assumed to respond to this situation by imposing retail price controls in order to avoid (or mitigate) the effects on the distribution of real incomes that would result if prices rose enough to bring demand back into equilibrium with supply.

In the absence of price controls, there would be a tendency for profit margins to rise, with prices going up to an extent not matched by changes in costs. Producers and traders would gain at the expense of final consumers. In such situations, controls can be seen as an attempt to hold prices at, or near to, the levels that would obtain in the absence of excess demand.

Consider now the frame within which control prices must be set. The upper limit is obvious: it should be at least slightly below the new market-clearing price, otherwise the control is redundant and the resources devoted to its preparation and enforcement are wasted. The lower limit is a little less clear. If price controls are not to defeat their purpose of

---

1. This paper is largely based on a revision of Killick, 1973, which is a study of the operation of price controls in Ghana.

protecting consumers' real incomes, they must not be set so low that it becomes unprofitable to make or distribute the goods in question. Defining as 'normal' that level of profits necessary to induce suppliers and traders to produce and distribute, the lower limit of the control prices will be that level which permits normal profits to be earned. Their potential effectiveness in holding down prices thus depends on the magnitude of the excess profits that would otherwise accrue.

Two further points about the lower limit. If it is assumed that in a former period prices were at an equilibrium that has now been destroyed by import restrictions or a crop failure, it may well be thought that the lower limit of the price control is indicated by the previous level. However, with a reduced supply this is not necessarily correct, depending on the supply functions of the producers and distributors. They are likely to need somewhat higher prices, because their overheads now have to be spread over a smaller turnover, and in order to protect the absolute value of their own real incomes. In this situation the normal profit price is likely to lie somewhere above the pre-existing equilibrium (although this would not be true if there were formerly monopoly profits). Secondly, it has to be borne in mind as a practical consideration that the nearer the control price is to the lower limit, the greater is the incentive to evade the control. Controllers anxious that their actions should be of maximum effectiveness should opt for a judicious compromise between what is theoretically possible and what is enforceable.

It is clear, then, that there are real limitations within which retail price controls can operate effectively. Only when conditions make for large extra-normal profits are controls likely to hold prices down substantially. Moreover, their effect may largely be of a once-for-all nature: unless there is a tendency for extra-normal profit margins to widen over time, controls will be unable to prevent an inflationary upward trend of prices.

Since the coverage of controls is usually confined to a limited range of items, it is worth giving some thought to the impact of controls on the items left uncovered. Assuming the controls to be effective, there will remain an unsatisfied excess of demand for the controlled items. People would be willing to spend more on these items but are frustrated from doing so by physical shortages. What will they do with this excess of

purchasing power? It is theoretically possible that they will save it, but it seems more reasonable to expect them to spend most of it on other consumer goods and services. Other things being equal, this increase in demand for non-controlled goods will cause their prices to rise, and will probably increase the profitability of their production and distribution.

Probably the most common pattern (although one that only holds partially in Kenya) is for controls to be concentrated on imported goods and local manufactures, with the retail prices of most local foodstuffs left to be determined by market forces because of the impracticability of enforcing controls on such items. With a pattern of controls of this nature, an effectively enforced price list is liable to raise local food prices. This consideration makes it harder to be confident that controls will influence the distribution of income in the desired direction and, especially, that they will be egalitarian in effect, for it is the poorest members of society who spend the greatest proportion of their income on local foods.

This obscurity is increased further by the fact that the existence of controls eliminates ability to pay as the method of allocating the reduced supplies, without putting any alternative rationing device in its place. A logical extension of controls imposed because of supply shortages is the creation of a formal system of rationing to ensure that everyone gets a 'fair share', but that solution is not a practical one in the circumstances of most countries. Hence the final distribution is undetermined, but the tendency would surely be for the relatively well-to-do to get more than their 'fair share' because they bring more business to the retailers, are more influential, and more likely to be in a position to do a return favour.

A further case that should be mentioned is when controls are a necessary component of a policy designed to restrain the growth of money wages and other incomes. Controls can then be seen as part of a more broadly based anti-inflation policy, probably designed to prevent a re-distribution of real incomes in some undesired direction. The effectiveness of price controls could be greatly enhanced if, for example, their existence induced organised labour to reduce its wage demands. Whether the exertion of this kind of leverage would reduce income inequalities would depend upon the structure of income distribution in the country in question. A prices and incomes policy is liable to have effects on income distribution

too complex to permit a straight classification into 'egalitarian' or 'inegalitarian'.

We should also consider the likely effect of controls on the pattern of development. Since controls will be effectively limited to only a proportion of the multitude of goods and services available in an economy, with others uncontrolled (either de jure or de facto), relative prices will be altered. This will have an impact on the structure of demand and production but, especially, on investment incentives. If for example, the authorities are mainly concerned about the impact of inflation on the poor, they are liable to concentrate on regulating the prices of wage goods. If they are successful, this will have the effect of holding down profit margins on the production and distribution of 'essentials' and raising the profitability of uncontrolled 'luxury' items. Thus, a set of investment incentives will be created which will discourage the production of essentials and encourage the production of luxuries - precisely the opposite of what would be desirable in order to protect the real living standards of the poor. If, in order to avoid this consequence, the authorities put up the control prices in order to restore returns to investments in the production of essentials, then the controls will tend to become redundant, being little, if any, lower than market-clearing prices.

What if the authorities are able to effectively control the prices of most goods and services, leaving relative prices largely unaltered? That would avoid the distortions just mentioned but might still be adverse to economic development. The government would, in this case, be preventing a redistribution of national income away from the general consuming public in favour of profits. That may well be desirable from the equity point of view. But if we accept that firms have larger marginal propensities to save and invest than the average consumer, then the net effect will be to restrain saving, investment and, presumably, the rate of growth of the economy. A familiar trade-off is thus posed between the goals of social justice and economic growth.

To sum up, elementary economic theory suggests the following propositions:

- Controls can only be expected to reduce prices to the extent to which extra-normal profits would otherwise be earned.

- Their effect on prices is likely to be mainly once-and-for-all.
- When controls are enforced on only a proportion of goods and services, their income distribution effects are liable to be unpredictable. They will distort the pattern of investment incentives, in probably undesired ways.
- To the extent that controls restrain the aggregate sum of profits, they will prevent a redistribution of real income away from the consuming public. However, this will also exert a drag on the rates of investment and economic growth.

3. EXPERIENCES IN OTHER AFRICAN COUNTRIES

This paper is largely extracted from a study of the operation of price controls in Ghana. These were introduced in the early 1960s simultaneously with stringent import licensing, in order to protect consumers against the price-raising effects of the import controls. They were presented to the public in strongly egaliterian terms - the necessity to 'bring the prices of the commodities needed by the masses within the reach of everybody'. The reality worked out differently, however, and the main conclusions of my study were as follows:-

1. The Ghana Government was seeking, with a small staff and limited information, to administer a complex set of controls in order to reduce the rate of inflation and to provide special relief to the poor. However, the price list was not well designed to achieve the latter of these objectives.

2. The controls were mostly ignored. Only in shops located in the towns was there any significant observance; in the rural areas, and on the urban markets, they were almost completely disregarded.

3. The period studied (1963-72) does not appear to have been abnormal; the evidence suggests that the controls had been largely ineffectual from the outset. Attempts to improve enforcement led to corruption and were abandoned.

4. Overall, therefore, controls were unable to do more than slightly modify the outcome of market forces. A rather efficient degree of competition within the distributive system was, however, apparent and this provided some safeguard against the rapacious exploitation of the consumer so widely feared in Ghana.

5. Given the weak enforcement mechanism, the controllers were tying to keep distribution margins and final prices too low, and they might have had more effect had they been less ambitious. The controls, it seems, could digest small nibbles at monopoly profits, but usually tried to bite off more than they could chew.

6. To the extent that controls had any impact at all on the distribution of real incomes, they were probably retrogressive, worsening the position of the poor relative to the well-to-do.

One point of interest is that Ghana was widely believed at the time of Independence to have been more favourably endowed with human and infrastructural resources than practically any other tropical African country, and there is evidence to support this view (Killick, 1978, p. 3). The educationals system, the civil service, and the administration of justice were all reasonably well developed by the late 1950s. It is true that this was a purely relative matter and that by other standards the supply of skills and administrative capacity in Ghana was still woefully inadequate. But the relevant point here is that Ghana was better equipped to make price controls work than most other countries in Africa - the implication being that if controls were ineffective in Ghana, the prospects were poor for better results elsewhere on the continent. Unfortunately, there have been few studies of the operation of controls in other countries. The main source of information is in a series of volumes by the International Monetary Fund (IMF), Surveys of African Economies.[2] Seven volumes in this series are available, published between 1968 and 1977, covering a total of 34 African countries. Of these, 26 were reported as administering some form of retail price control, although the extent of coverage varied greatly between countries. It is possible that controls also existed in some in the other eight countries but were simply not mentioned. Lesotho is the only state described as deliberately allowing prices to be determined by unregulated market forces.

Price controls, then, are exceedingly common, but are they effective? Operating, perhaps, under the diplomatic constraints of an international agency,

---

2. In addition to the IMF volumes, see Lewis, 1972, and Oyemakinde, 1973, both on Nigeria; and Kimble, 1970, on Tanzania. Unfortunately, this latter work does not investigate the effectiveness of Tanzanian controls. See also Mukui, 1978, on Kenya, the results of which are in paper included in this report.

the IMF volumes are reticent on this subject, increasingly so as successive volumes have appeared in the series. Nevertheless, they do offer some comments, and it is interesting to compare these with the results for Ghana summarised above.

In only two countries, Mauritania and Zambia, did they believe price controls to have had much success. In the latter country, controls were limited to a small number of imported wage goods such as milk, soap, and margarine, and they were operated in conjunction with a wage freeze and a 'restrictive fiscal policy'. The comments of the IMF on the situation in Morocco were also relatively positive: 'The Government follows a flexible approach in administering the price control laws, attempting to moderate pressure on prices without causing dislocation through excessively detailed controls.' However, they did not say anything about the effects of this approach on actual price levels.

For most of the other countries on which the IMF offers any evaluative comments, the general comment is to the effect that controls are not effective - a point of some significance, given the wish of the Fund to avoid offending member governments. Their comment on the Ivory Coast is characteristic of several others:

> For the most part, price controls are not very effectively enforced. In Abidjan, competition at the retail level is sufficient to prevent excessive profiteering. In the interior, where distribution is less satisfactory and prices tend to be higher, enforcement of controls is almost impossible (1970, p. 258).

Of Mauritania, they stated that controls had been more effectively enforced in recent years, and that

> Price regulations are normally observed by wholesalers and shopkeepers in urban areas but are evaded in the small local markets. In rural areas the enforcement of price regulations presents administrative difficulties and is not effective (1970, pp. 350-1).

Of a number of countries, 'limited administrative machinery' and 'lack of qualified personnel' were blamed for the ineffectiveness of the controls.

The IMF, of course, has a bias against controls in general, which may have coloured the judgements reported above. However, two independent studies of price controls in Nigeria also reached negative conclusions.

One concluded that 'many traders find it rather easy to disregard price control regulations' (Lewis, 1972); the other was simply entitled 'The futility of price control in Nigeria' (Oyemakinde, 1973). It is also well known that even countries with well developed public services and good information flows, such as Britain and the United States, have found the enforcement of price controls exceedingly difficult.

In general, these comments on the operation of controls in other African states are similar to mine on Ghana, with controls most likely to be obeyed in urban stores, and almost entirely unenforceable in the villages. Whether the IMF is right to suggest that shortages of personnel are a major explanation of the failure is, however, open to doubt; the Ghanaian experience suggests that, because of corruption, the creation of a price inspectorate may create problems rather than solve them.

The overall conclusion, then, is that in the conditions of tropical Africa retail price controls are not likely to be a very useful instrument of economic policy. They stand a better chance of being effective if confined to a rather small number of imported wage goods, as in Zambia, and if the controllers are not too ambitious in the extent to which they seek to hold down profits and prices, as in Morocco. Overall, though, controls are unlikely to provide more than minor support to policies that operate directly on the levels of aggregate demand and supply, and on the distribution of incomes.

REFERENCES

International Monetary Fund. Surveys of African Economies. Washington, IMF in seven volumes as follows:
Vol. 1 (1968) on Cameroon, Central African Republic, Chad, Congo, and Gabon.

Vol. 2 (1969) on Kenya, Tanzania, Uganda, and Somalia.

Vol. 3 (1970) on Dahomey, Ivory Coast, Mauritania, Niger, Senegal, Togo, and Upper Volta.

Vol. 4 (1971) on Zaire, Malagasy, Malawi, Mauritius, and Zambia.

Vol. 5 (1973) on Botswana, Lesotho, Swaziland, Burundi, Equatorial Guinea, and Rwanda.

Vol. 6 (1975) on Gambia, Ghana, Libeira, Nigeria, and Sierra Leone.

Vol. 7 (1977) on Algeria, Mali, Morocco, and Tunisia.

Killick, Tony. 1973. 'Price Controls in Africa: The Ghanaian Experience'. Journal of Modern African Studies. II (3), Septebmer, pp. 405-26.

Killick, Tony. 1978. Development Economics in Action: A Study of Economic Policies in Ghana. London, Heinemann Educational Books.

Kimble, Helen. 1970. Price Control in Tanzania. Nairobi, East African Publishing House.

Lewis, A. Olu. 1972. Articles in West Africa (London). 14 and 21 January.

Mukui, J.T. 1978. Price Controls in Kenya. M.A. Research Paper, University of Nairobi. June.

Oyemakinde, Wale. 1973. 'The Futility of Price Control in Nigeria'. Pan-African Journal, 6 (3), Autumn, pp. 313-20.

ILLEGAL ACTIVITIES IN FRUSTRATION OF CONTROLS: THEORETICAL CONSIDERATIONS

By

T.C.I. Ryan
Department of Economics
University of Nairobi

1. INTRODUCTION

There is already a considerable body of literature on the theory of illegal activities together with a few empirical studies.[1] The few empirical studies, for the obvious reason of the difficulty of getting data, are usually well padded with disclaimers regarding accuracy but they tend, nevertheless, to bear out the conclusions of the theoretical studies.

This paper attempts to bring together the main streams of thought in this literature and to put it into a consistent framework in which it is hoped an analysis of frustration of price and marketing controls in Kenya can be undertaken. Unlike much of the analysis in the literature, the analysis here will be concluded in partial equilibrium and will therefore not concentrate on the welfare effects deduced from general equilibrium. This is considered a more valid approach given the widespread unemployment in the economy.

2. THE ECONOMICS OF CRIME

In the most capsule form, the economic analysis of criminal activities takes the following general form:

a) What is the expected direct net gain from the crime?
b) What is the probability of getting caught?
c) What is the probability of getting convicted?
d) What is the probable sentence received and suffered (likelihood of remission)?
e) What is foregone, directly and indirectly, during punishment?

---

1. Examples with useful references and bibliographies are Bhagwati, 1974, and Anderson, 1976. A more comprehensive bibliography is at the end of this paper.

It must be obvious from the preceeding summary that this is a purely microeconomic approach to crime seen through the criminal's eyes. It does not consider the damage to society and regards crime as what was called by a 'mugger', caught in Harlem, 'pecuniary redistribution'. Nor does it consider the theories of optimal prevention and policing (Stigler, 1970).

There is an alternative approach, not spelt out in the literature, which is to view crime as business. It does not merely cause income transfers but actually creates employment, has economies of scale and, in a violent way, competes for market shares or market power.[2] A common denominator of all these crimes is that the criminal is seen as profit maximising over some time horizon. He is not as risk averse as his more conventional counterpart in everyday business. In fact it is the very fact that he is prepared to tolerate some level of gamble that makes him prepared to operate outside the law for sufficiently lucrative rewards.

This introduces a most fundamental point: it is the law which determines what is illegal and what is not. This sounds trivial but it leads directly to the core of this paper: that price and marketing controls create a new group of crimes and we need to know the answers to questions (a) - (e) given at the beginning of this section. Professor Krueger suggests an intriguing point of departure:

> In many marked-oriented economies, government restrictions on economic activity are pervasive facts of life. These restrictions give rise to rents of a variety of forms, and people often compete for the rents. Sometimes, such competition is perfectly legal. In other instances, rent seeking takes other forms, such as bribery, corruption, smuggling, and black markets (1974, p.291).

We note that the existence of controls gives rise to a new market: the buying and selling of access to favoured positions e.g. trade licences and import quotas. A hitherto 'free good' - access to a market - becomes something over which property rights can be exercised for private benefit (Demsetz, 1964). The very fear that the market mechanism was favouring some segment of the community which led the government to intervene, was in fact being reinforced, and led to the efforts of that segment to maintain its position since the rewards grow larger <u>because</u> of the intervention (Krueger, 1974, p. 302).

---

2. Recent films on the Mafia and Cosa Nostra highlight this class of economic crimes. 'The Godfather' and 'The Valanchi Papers' might serve as examples.

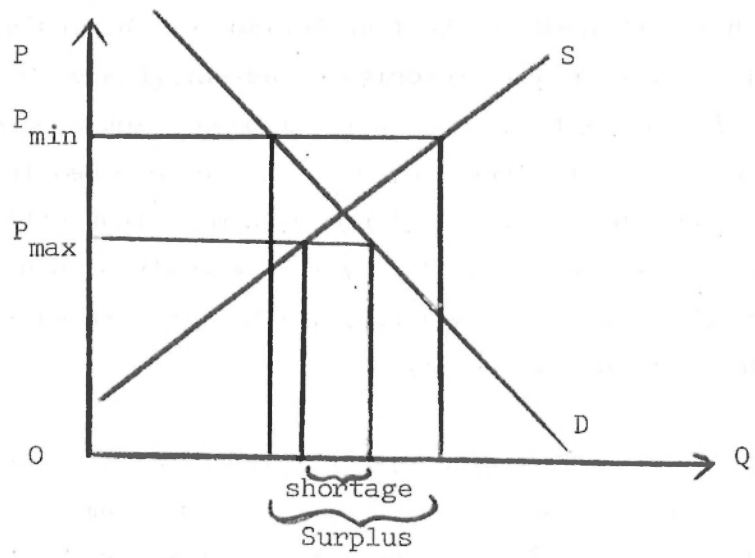
3. ANALYSIS OF PRICE AND MARKETING CONTROLS

This is a brief summary of the well-known theory of price controls and will provide a point of departure for later analysis.

In a freely operating market, purchases and sales plans are brought into agreement by a market clearing price. Purchase plans, conventionally depicted by demand curves, embody information regarding tastes and preferences, planned expenditure on all goods during the period under analysis, the vector of all prices (assumed known by the consumer) and the consumer's objective. Sales plans, conventionally depicted by supply curves, embody information regarding the production possibilities open to the firm (which depend on the firm's technology and the time period under consideration), the costs of productive factors (including intermediate inputs), and the firm's objective. The objectives range from profit maximisation and risk minimisation to maximising market share or 'not rocking the boat'. In all cases some time horizon is implicit in the firm's decision.

Where the government considers the market distribution of output and, in consequence, resources, to be undesirable, it is forced to provide some alternative to the so-called 'consumer sovereignty'.[3] The most usual interventions through the market relate to direct and indirect taxes (including subsidies) while those that work in contravention of the market are maximum, minimum or fixed prices, usually coupled with quotas and licensing in cases where minimum prices give rise to surpluses, and rationing where maximum prices cause shortages.

Figure 1: Minimum and Maximum Price Controls



3. See Galbraith, 1972, for a criticism of 'consumer sovereignty' as a valid concept.

The Government intervention in the market is often for mixed motives which are not always easy or possible to harmonise. Examples include efforts to induce firms to increase employment while controlling access to complimentary factors, or efforts to keep the urban cost of living down while redistributing income to the rural areas through high minimum prices for farm produce. The government also has its decision time horizon which may not coincide with that of either consumers or producers. We see that the government intervention, if it conflicts with the market, means that consumers' or producers' objectives are frustrated, and simple theory predicts that the frustrated party will seek ways of minimising his loss.

Intervention may give firms a potentially larger gain than before as in the case where the controls create a monopoly. In this case firms may bid for the privilege by seeking those willing to 'peddle influence' through a range of quasi-corrupt or corrupting practices (gifts, promises of jobs, etc.), and in this way the actual monopoly profit is dissipatated. The difficulty here is that we have a prisoner's dilemma - if one does not take part in the corruption he inevitably loses by being excluded from the market in the future (Bacharach, 1976).

4. CLASSES OF ILLEGAL ACTIVITY

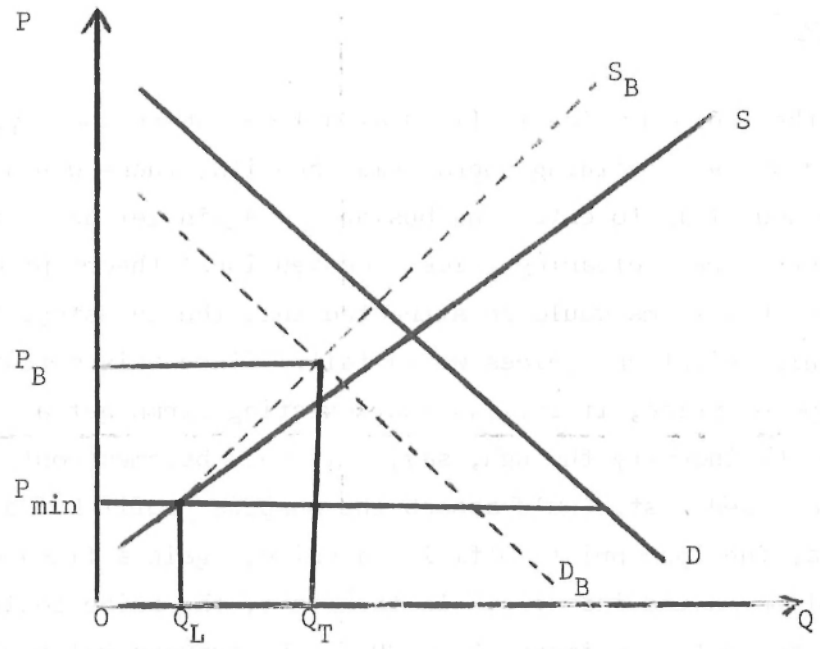
A consumer or producer will enter into an illegal transaction deliberately if it is worth while. I have not said 'thought to be worthwhile' since the outcomes of a multitude of transactions embody some element of uncertainty which is subsumed in the time horizon of the individual's objective function. The broad categories of advantage are relative prices and access to profitable activities. Lots of people would not, knowingly, perform illegal acts. Their civic and/or moral sense makes the idea of contravening the law repugnant, a feeling which more than offsets the potential financial gains. Others are dissuaded by the severity of punishments and the high likelihood of detection and conviction. In both cases, illegal activity is considered not worthwhile.

Where a potential, worthwhile gain is seen i.e. the person is prepared to contravene the law (and frustrate the government's objective), a range of strategy choices arise. The precise strategy used will have somewhat differing consequences.

(a) Blackmarket

Where there is a shortage caused by a minimum price, there will be some consumers who will be willing to pay more in order to get more.

Figure 2: The Blackmarket equilibrium



Suppliers may be prepared to increase their sales at more than the minimum price but they face greater risks and probably incur greater costs per unit of increased sales. These extra costs may be bribes or direct costs arising from working, say, night shifts and employing extra guards. The elasticity of the blackmarket supply curve (S_B) will be smaller the greater the expected punishment from capture.[4] The demand curve, too, might shift since several consumers may cancel their plans to buy above the minimum price (P_{min}). The result would be that quantity Q_L-Q_T would be sold illegally at price P_B. Note that the blackmarket price is not necessarily above the free market price.

(b) Hoarding

It is quite possible that P_{min} could be the market clearing price but there is still a potential gain since some suppliers might withhold part of what would have been their 'profit-maximising' output under perfect competition. Thus an artificial shortage is created and if the hoarders are

---

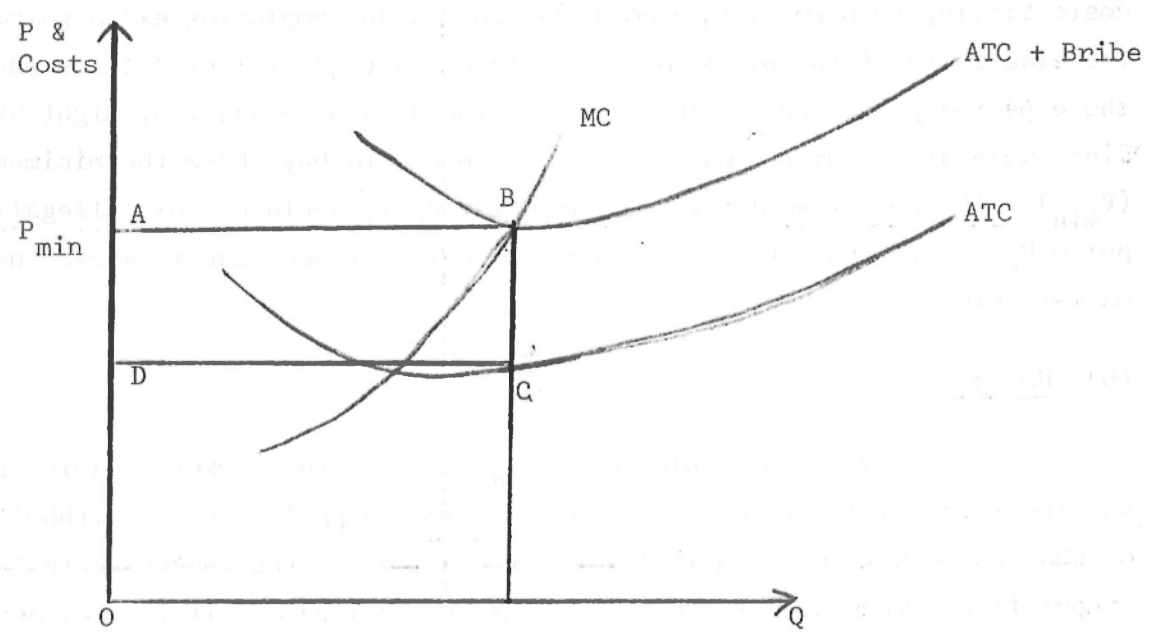
4. Zanzibar and Indonesia had laws permitting death penalty for smuggling.

sufficiently few so as not to compete against each other, they can act as perfectly discriminating monopolists, selling each unit at a different price according to the bargaining power of the customer. Clearly the greater the artificial shortage the more likely the hoarder will be detected.

(c) Corruption[5]

If the minimum price is fixed at a level where the representative firm in the industry is gaining supranormal profits, there would be an incentive for new firms to enter the business. Again let us assume that P_{min} is the short run market clearing price. Conventional theory predicts that in the long run new firms would be attracted into the industry, the supply curve would shift right and prices would fall. Since this situation is ruled out by the imposed price, it follows that existing firms get a virtual rent and access to the industry through, say, a licence becomes most attractive. The licence, a fixed cost, could absorb the surplus profit but an alternative would be to pay the appropriate official a bribe, again a fixed cost, so as to ensure a place in the industry. In the limit, the bribe could be so large as to remove the rent. In figure 3, ABCD is the supranormal profit which could be absorbed by a licence fee or bribe.

Figure 3. Bribery potential.



5. A useful discussion of corruption is to be found in Banfield, 1975, and the comments by Reder and Rottenberg in the same issue of that journal. From these, corruption can be defined as inducing an agent to betray his trust, i.e. sacrifice his principal's interest, by selling rights that he possess de facto but does not possess legally.

The analysis of corruption is also applicable to the earlier cases since corruption tends to lower the risks of capture and conviction. It works more on the fixed than variable costs.

Wherever there is an official limitation of access to profitable opportunities (opportunities which may have been created by government actions), there is potential for corruption since government officials have control over the disposal of lucrative 'property rights'.

(d) Poaching

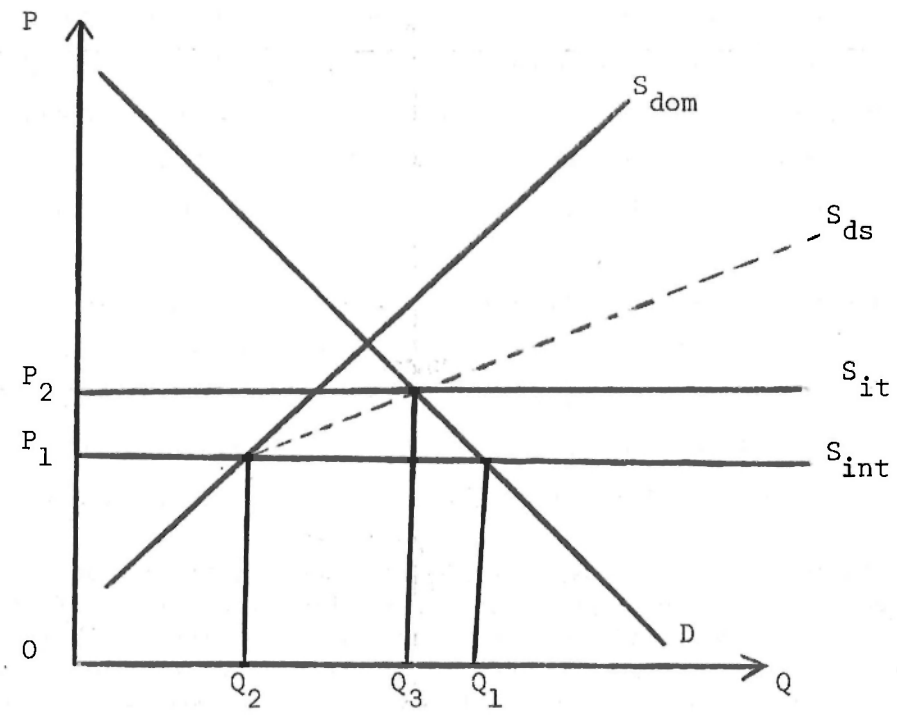
A ban is equivalent to an infinitely large fixed licence fee and the same temptation exists to circumvent it. If the market price of the illegal good is high relative to the average production costs, there are profitable opportunities to expand output, albeit illegally and (may be) at high costs. It should be noted here that the key is demand more than supply. Extra costs incurred in poaching are unlikely to be as large as the extra costs incurred in trying to control it.

(e) Smuggling

This whole problem arises from restrictions on the movements of goods across legal boundaries, either internal or external.

(i) Tariff Avoidance. With domestic supply S_{dom} and the international supply

Figure 4. Smuggling Potential.



S_{int}, Q_1 would be sold locally at price P_1, Q_2 of which would be locally produced. If a tariff is introduced for either revenue or protective purposes such that the price rises to P_2, then the domestic supply curve could become more elastic as resources are transferred into smuggling. In the limit the government gets no tariff revenue. S_{it} is the International supply curve after imposition of a tariff and S_{ds} is the domestic supply curve that would give rise to no tariff revenue.

(ii) Price Differentials. It is not unusual for neighbouring states to have slightly different prices for articles. The differentials tend to reflect transport costs where goods are free to move. But where the government wishes to pursue some policy such as national self sufficiency or cheap food to keep the cost of living down, there are usually controls to stop producers from selling in the most favourable market.

The price differential that results makes for the possibility of profitable clandestine traffic in goods, the movement of which is prohibited. Generally such trading raises marginal costs and often give rise to domestic shortages.[6]

(iii) Monopoly. Where government policy has created a protected monopoly or monopsony, it is often to the advantage of individuals to trade outside these organisations. Since monopolies sell at higher than competitive prices and monopsonists buy at lower than competitive prices, it is advantageous to try and trade directly with customers.

A monopoly is remunerative so long as the elasticity of demand is greater than one but less than infinity. Clearly the greater the amount of competitive goods smuggled in, the less the ability of the monopolist to exploit the situation expected from statutory protection. For example, Tanzania's General Tyres has undercut Kenya's Firestone on various occasions.

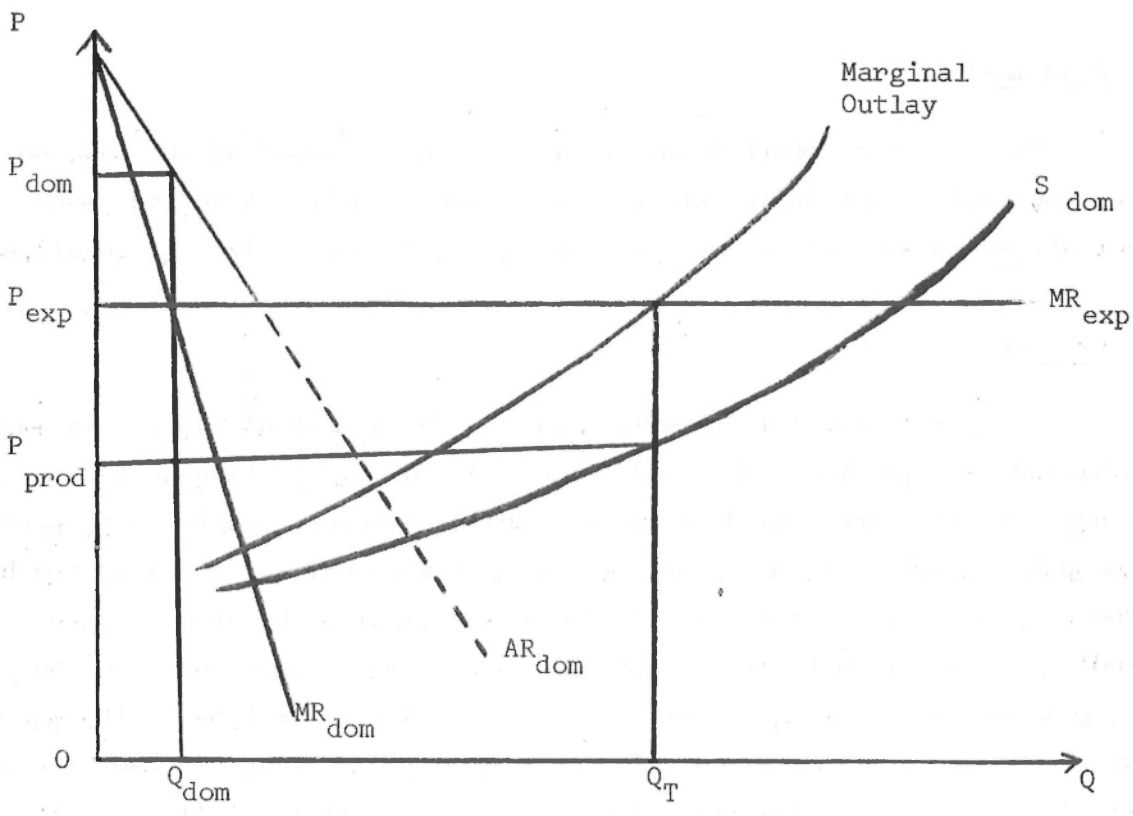
The monopsonist is often faced with two further disadvantages. He (or 'it' in the case of a Marketing Board) is used as an agent to collect taxes and cesses, and so is exposed to the common efforts to avoid these levies on (usually) smallholder revenues. Furthermore the legal monopsonist is usually charged with the job of disposing of surpluses abroad, often at low

---

6. Analysis of recent smuggling on the Kenya-Uganda border is complicated by distorted currency exchange rates in addition to price differentials. The likelihood of bribery is higher the more profitable the activity. At the time of the coffee boom, heresay evidence mentioned Uganda coffee was being bought for Ksh 8 and sold in Nairobi for Ksh 25 per kilo; small wonder bribes of Ksh 100 per truck were recorded.

prices and he tries to spread his overheads over the largest number of goods and to exploit the domestic market e.g. the Kenya Meat Commission, Kenya Cooperative Creameries and Uplands Bacon Factory. The less the controlled produce going through the controlled outlet, the smaller the lucrative domestic market available to the monopolist/monopsonist and the higher his unit costs and in consequence the greater the likelihood of traders trading illegally.

Figure 5. Domestic Monopsony and Monopoly



(f) Extortion

One of the most important illegal activities arising from the introduction of controls (although by no means solely as a consequence of them) is extortion where a perfectly normal activity — request for licence or permit - is thwarted and replaced by a threat that the relevent document

won't be granted.[7] In view of the absolute need of, say, a licence in order to function at all, any surplus profit can be 'extorted' from a business. This comes about in much the same way as Ricardo's landlords obtained the economic rent from any land that was better than the worst that had to be cultivated to satisfy demand. A particularly important action in restraint of trade that is similar to extortion is to be found where a trader with a stock of scarce, price controlled goods ostensibly fulfils the law - the control price is adhered to - but conceals other rationing devices e.g. only those who buy all or some of their other requirements from that trader will get the scarce good. This action, 'full-line forcing', is illegal in most countries with Restrictive Practices Acts.

(g) Blackmail

Once one has embarked on a course of infringement of the law, no matter how mildly, one leaves oneself open to blackmail. A businessman cannot afford to have his reputation for honest dealing called in question.

(h) Protection

The famous protection rackets of the Chicago of Al Capone, in the Prohibition days of the 1920s and 1930s, don't have a spectacular a counter- part now, but it seems that 'influence peddling' serves much the same purpose: '"Someone" should be given a post, or put on the Board, for the long run health of the company..... or else .....!' Again the implied threat of closure or endless frustration (with no court of appeal) makes this cost one that is usually accepted. It has, of course, another side: protection by the powerful gives rise to another range of techniques for circumventing government regulations. It is clear that, while influence may have a price, it may well be worth it in money terms as a short cut round bureaucratic controls which are the necessary arm of government policy.

(i) Civil Disobedience

Government legislation often favours some segment of the community at the expense of some other. The underpriviledged sector often resorts to acts which frustrate government in areas other than those which are the primary cause of dissatisfaction.

---

7. 'The term extortion refers in a general way to the act of obtaining payments from some entity in return for not imposing upon that entity some harmful effect, where the generator of the external effect receives no direct net internal benefit from the act. It is very important to distinguish between what we have labelled extortion and other bargaining situations where the externality generating party does receive direct net benefits' (Daly and Giertz, 1975, p. 998).

In many of these sorts of illegal activity, the goal is not purely monetary and so the relative cost and benefit calculation mentioned at the beginning of this paper is made far more difficult. Furthermore the 'criminal' may make no effort to conceal what he is doing since his aim is to further his cause. A good example was Gandhi's march to the sea to take salt without paying tax. Wildcat strikes probably are also aimed at a different class of objectives. Those with deviant lifestyles e.g. hippies often aim at impeding the smooth running of the community by rejecting certain laws and conventions.

(j) False Documentation

Laws which are intended to protect a domestic industry are particularly susceptible to being broken by incorrectly invoiced imports. By putting a product in a different category, an importer causes customs officials to allow potential competitive goods in. One might be tempted to call this smuggling but actually the SITC heads are not so clear and some goods might validly appear in either of two categories. If documents give wrong prices or qualities, a number of foreign exchange control regulations can be undermined.

(k) Malfeasance

Malfeasance could be viewed as bribery but if we consider it more carefully, it is closer to theft: an official uses his public office to take money from a citizen and pockets the proceeds. This applies whether it is selling the 'right to speed on the highway' i.e. accepting a bribe rather than giving a speeding ticket, or selling the 'right to view elephants' i.e. admitting people to a park and pocketing the proceeds by not issuing a receipt. There is usually a serious discrepancy between park gate and park lodge tourist counts. This has government revenue effects and probably causes a number of adverse externalities - congestion, greater road risks, etc.

5. CONCLUSION

This paper has attempted little by way of formal analysis but has tried to show how a wide range of illegal activities can be understood in the simple context of microeconomics. A more sophisticated model involving shadow prices and activity characteristics (Lancaster, 1966) could give some light, particularly in so far as moral suasion affects people's perception of 'prices' and 'returns'.

The theme has been that price and marketing controls are usually for goals other than those of the markets' normal participants. This disruption must be backed with some penalties to stop the erstwhile equilibria from being restored. But coupled with these penalties, usually a new range of rewards (rents) come into being. The bulk of the suggested analysis is that illegal activities in frustration of controls are trades in rights created by the laws.

An economist's simple minded solution to crimes of this nature is to work upon the people's objective functions so that they become law-abiding for motives other than fear. The Justice Department, by increasing the probability of capture and conviction, would also play an active part in attaining the government objective.

Perhaps the conclusion reached by Reder can close this paper too:

> The point to be emphasized is not that private management is better than public, or the reverse, but that conflicting lines of authority and responsibility beget confusion both of purpose and obligation. One result is that corruption proliferates because it becomes difficult to identify, and the sense of moral outrage that inhibit it is correspondingly weakened (1975, p. 609).

BIBLIOGRAPHY

1. Ali, A.A.G. 1976. 'On Smuggling: Some Theoretical and Empirical Results'. Bulletin No. 42. Department of Economics, University of Khartoum.

2. Allingham, M.G. and A. Sandmo. 1972. 'Income Tax Evasion: A Theoretical Analysis'. Journal of Public Economics. pp. 323-34.

3. Anderson, R.W. 1976. The Economics of Crime. London, MacMillan.

4. Andreski, Stanislau. 1968. The African Predicament. New York, Atherton.

5. Bacharach, Michael. 1976. Economics and the Theory of Games. London, MacMillan.

6. Baldry, J. 1974. 'Positive Economic Analysis of Criminal Behaviour'. In A.J. Culyer (ed.). Economic Policies and Social Goals. London, Martin Robertson.

7. Banfield, Edward C. 1975. 'Corruption as a Feature of Government Organisation'. Journal of Law and Economics. 18 (3), pp. 587-605, together with 'Comments' by M.W. Reder and Simon Rottenberg.

8. Bayley, David H. 1966. 'The Effects of Corrumption in a Developing Nation'. Western Political Quarterly. 19, December. Reprinted in Heidenheimer (ed.), 1970.

9. Becker, G.S. 1968. 'Crime and Punishment: An Economic Approach'. Journal of Political Economy. 76 (2), pp. 169-217.

10. Becker, G.S. and G.J. Stigler. 1974. 'Law Enforcement, Malfeasance, and Compensation of Enforcers'. Journal of Legal Studies. 3 (1).

11. Bhagwati, Jagdish N. 1964. 'On the Underinvoicing of Imports'. Bulletin of the Oxford University Institute of Statistics. November. Reprinted in Bhagwati (ed.), 1974.

12. Bhagwati, Jagdish N. 1967. 'Fiscal Policies, the Faking of Foreign Trade Declarations, and the Balance of Payments'. Bulletin of the Oxford University Institute of Statistics. 29 (1). Reprinted in Bhagwati (ed.), 1974.

13. Bhagwati, Jagdish N. (ed.) 1974. Illegal Transactions in International Trade. Amsterdam, North-Holland.

14. Bhagwati, Jagdish N. and Bent Hansen. 1973. 'A Theoretical Analysis of Smuggling'. Quarterly Journal of Economics. 87 (2) pp. 172-87. Reprinted in Bhagwati (ed.), 1974.

15. Bhagwati, Jagdish N. and T.N. Srinivasan. 1973. 'Smuggling and Trade Policy'. Journal of Pulbic Economics. August. Reprinted in Bhagwati (ed.), 1974.

16. Bhagwati, Jagdish N. and T.N. Srinivansan. 1974. 'An Alternate Proof of the Bhagwati-Hansen Results on Smuggling and Welfare'. In Bhagwati (ed.), 1974.

17. Braibanti, Ralph. 1962. 'Reflections on Bureaucratic Corruption'. Public Administration. 40, Winter, pp. 357-72.

18. Cooper, R. N. 1974. 'Tariffs and Smuggling in Indonesia'. In Bhagwati (ed.), 1974.

19. Daly, George and J.F. Giertz. 1975. 'Externalities, Extortion and Efficiency'. American Economic Review. 65 (5), pp. 997-1001.

20. Demsetz, H. 1964. 'The Exchange and Enforcement of Property Rights'. Journal of Law and Economics. 7.

21. Dwivedi, O.P. 1967. 'Bureaucratic Corrumption in Developing Countries'. Asian Survey. 7, April.

22. Ehrlich, Isaac. 1973. 'Participation in Illegitimate Activities: A Theoretical and Empirical Investigation'. Journal of Political Economy. 81 (3), pp. 521-65.

23. Ehrlich, Issac. 1977. 'The Deterrent Effect of Capital Punishment: A Question of Life and Death'. American Economic Review. 65 (3), pp. 397-417.

24. Ehrlich, Isaac. 1977. 'Capital Punishment and Deterrence: Some Further Thoughts and Additional Evidence'. Journal of Political Economy. 85 (4), pp. 741-88.

25. Fallers, Lloyd. 1955. 'The Predicament of the Modern African Chief: An Instance from Uganda'. American Antrhopologist, 57.

26. Galbraith, J.K. 1972. The Affluent Society. London, Penguin Books.

27. Greenstone, J.D. 1966. 'Corrumption and Self Interest in Kampala and Nairobi'. Comparative Studies in Society and History. January, pp. 199-210. Reprinted in Heidenheimer (ed.), 1980.

28. Heidenheimer, Arnold J. (ed.) 1970. Political Corrumption. New York, Holt, Rinehart and Winston.

29. Holahan, J. 1973. 'The Economics of Control of the Illegal Supply of Heroin'. Public Finance Quarterly.

30. Huntington, Samuel. 1965. 'Political Development and Political Decay'. World Politics. 17, April.

31. Johnson, Harry G. 1972. 'Notes on the Economic Theory of Smuggling'. Malayan Economic Review. May. Reprinted in Ghagwati (ed.), 1974.

32. Kolm, S. Ch. 1973. 'A Note on Optimal Tax Evasion'. Journal of Public Economics.

33. Krueger, Anne O. 1974. 'The Political Economy of the Rent-Seeking Society'. American Economic Review. 64 (3), pp. 291-303.

34. Lancaster, K. J. 1966. 'A New Approach to Consumer Theory'. Journal of Political Economy.

35. Lees, D. and B. Chiplin. 1975. 'Does Crime Pay?'. Llyods Bank Review. (116), April, pp. 30-39.

36. Leff, Nathaniel. 1964. 'Economic Development through Bureaucratic Corruption'. American Behavioral Scientist. 8, November. Reprinted in Heidenheimer (ed.), 1970.

37. Leys, Colin. 1965. 'What is the Problem About Corruption?' Journal of Modern African Studies. 3 (2), pp. 215-30. Reprinted in Heidenheimer (ed.), 1970.

38. Mason, Edward S. 1978. 'Corrumption and Development'. Development Discussion Paper No. 50. Havard Institute for International Development, Havard University.

39. McKitrick, Eric. 1957. 'The Study of Corruption'. Political Science Quarterly. 72, December.

40. McMullan, M. 1961. 'A Theory of Corrumption'. Sociological Review (Keele), 9, July, pp. 132-52.

41. Nye, J.S. 1967. 'Corruption and Political Development: A Cost-Benefit Analysis'. American Political Science Review. 61 (2), pp. 417-27. Heidenheimer (ed.), 1970.

42. Reder, M.W. 1975. 'Comment'. Journal of Law and Economics. 18 (3) pp. 607-9.

43. Ricardo, David. 1911. The Principles of Political Economy and Taxation. New York, Dutton (First published 1817).

44. Richter, H.V. 1970. 'Problems of Assessing Unrecorded Trade'. Bulletin of Indonesian Economic Studies. March. Reprinted in Bhagwati (ed.), 1974.

45. Riggs, Fred. 1964. Administration in Developing Countries: The Theory of Prismatic Society. Boston, Houghton Mifflin.

46. Rogers, A.J. 1977. The Economics of Crime. New York, Dryden Press.

47. Rottenberg, S. 1968. 'The Clandestine Distribution of Heroin, Its Discovery and Suppression'. Journal of Political Economy. 76 (1), pp. 78-90.

48. Tottenberg, S. 1975. 'Comment'. Journal of Law and Economics. 18 (3), pp. 611-5.

49. Scott, James C. 1969. 'The Analysis of Corrumption in Developing Nation'. Comparative Studies in Society and History. 11, pp. 315-41.

50. Simkin, C.G.F. 1970. 'Indonesia's Unrecorded Trade'. Bulletin of Indonesian Economic Studies. March. Reprinted in Bhagwati (ed.), 1974.

51. Sjoquist, D.L. 1973. 'Property Crime and Economic Behaviour: Some Empirical Results. American Economic Review. 63 (3), pp. 439-46.

52. Smith, M.G. 1964. 'Historical and Cultural Conditions of Political Corruption among the Hausa'. Comparative Studies in Society and History. 6, January, pp. 164-94.

53. Stigler, G.J. 1970. 'Optimum Enforcement of Laws'. Journal of Political Economy. 78 (3), pp. 526-36.

54. Tullock, G. 1967. 'The Welfare Costs of Tariffs, Monopolies and Theft'. Western Economic Journal. 4, pp. 224-32.

55. Weiss, L. 1976. 'The Desirability of Cheating Incentives and Randomness in the Optimal Income Tax'. Journal of Political Economy. 84 (6), pp. 1343-52.

56. Werlin, Herbert. 1966. 'The Nairobi City Council: A Study in Comparative Local Government'. Comparative Studies in Society and History. 7, January.

57. Winston, G. C. 1970. 'Overinvoicing, Underutilisation and Distorted Industrial Grwoth'. Pakistan Development Review. 10 (4), pp. 405-21. Reprinted in Ghagwati (ed.), 1974.

58. Wraith, Ronald and Edgar Simpkins. 1963. Corruption in Developing Countries. London, Allen & Unwin.

THE EFFECT OF THE GENERAL PRICE CONTROL ORDERS ON MANUFACTURING

By

S. M. Ita
The Kenya Association of Manufacturers

From the manufacturers' point of view, the General Price Control Orders made under Section 5(1)(c) of the Price Control Act, have been an obstacle to industrial expansion and growth in Kenya since December 1971. Contrary to government intentions, the General Price Control Order of 1971 has not succeeded in lowering consumer prices and its administration interferes with incentives to investors and local manufacturers. The consumer continues to live with rising prices of goods and services except in the case of specifically controlled essential items. Indeed even in the case of essential items, one often hears of traders being taken to courts of law for overcharging.

The statement that administration of price controls has become a disincentive to investment and manufacturing might appear ridiculous in the light of the growth experienced by the manufacturing sector of the economy in the last seven years. At the inception of the General Price Control Order of 1971, industry was expected to absorb a large proportion of its production costs without passing them on to the consumer. Underlying this expectation was the official assumption that industry would experience increased productivity as a result of industrial protection and the growing domestic market.

Ironically, however, the system of appraising applications for price increases was slow and when at last decisions were made, the price increases allowed reflected an attitude of profit control rather than price control. Hence the inability of the manufacturing sector to take full advantage of the domestic market available to it. The uneconomic prices allowed for by the Price Controller force manufacturers to produce low quality products or even drop some product lines.

Realising that the price control system was slow, the Ministry of Finance and Economic Planning replaced L.N. 302 of 1971 with L.N. 314 of 1974 and L.N. 153 of 1976, both of which were General Price Orders but with

some provision for speeding up the system of processing applications for price increases. However, the new General Price Orders did not cope with the problem. The long delays in processing applications continued and applications for price increases continued to pile up at the Price Controller's office.

The problem of price control as a department can not be solved by simplified work procedures. There must be an adequate staff to cope with the workload in order to avoid long delays in processing applications. There must also be an adequate number of field staff to ensure that consumers get the benefit of price control. But to establish such a workforce requires a substancial government expenditure.

As mentioned above, price control has been a major constraint on profitability and output. When the General Price Contol Order of 1971 was introduced, the East African market and others within Kenya's neighbourhood were open to local industry. This of course has not remained the case all through the seven years of General Price Control Orders in Kenya. Our market is today confined within Kenya boundaries and industries that had established plan capacities in anticipation of an East African market are operating far below capacity. The cost of carrying excess capacity is surely a limiting factor to the growth of local industry.

Similarly, during the seven years of General Price Control Orders, the costs of industrial inputs have been rising steeply. In considering applications for price increases, the Price Controller must, under the 1976 General Price Order, take into consideration only the increases, in costs of raw materials and energy. Increases in transport and labour costs as well as overheads are not taken into account. This has had serious negative effects on profitability and output and is thus an obstacle to growth and expansion of local industry.

The assumption that manufacturers could maintain their levels of profitability through increased productivity despite price control does not hold true. It is a fact that domestic demand for local manufactures has increased during the seven year period. That this is so is supported by the fact that local industry maintained its production level despite the

collapse of the East African market. This does not, however, indicate increased production; it was merely a shift from export to local sales.

Similarly, the government expected local industry to increase productivity despite price control as a result of measures introduced to protect local industry from imports. Like the Price Control Orders, the implementation of the protective measures has not been very satisfactory. Licences for imports in competition with local manufactures continue to be issued, foreign exchange allocations to cover such imports approved, and illicit imports have found their way into Kenya from all directions. All these have taken away a share of the domestic market, thus reducing the chances of local industry benefiting from the protective measures.

It is common knowledge that price control, like inflation, distorts economic incentives, confuses the pattern of development and encourages speculation as opposed to productive activity. The Kenya Association of Manufacturers has been keeping the government informed of the negative effects of price control. The General Price Control Orders discriminates against manufacturers as its provisions mainly operate on the ex-factory selling price only and not on middlemen or importers of manufactured products. The Order does not consider increased costs of production except for raw materials and energy.

The Kenya Association of Manufacturers has often objected to broadening of price controls in Kenya. Hence its persistent representation to the government for a complete removal of the General Price Control Orders. The consumers are at the mercy of the retailer in all horticultural products and other consumer and consumer durables not covered by the General Price Control Orders.

We will comment on the role and effect of the Kenya National Trading Corporation (KNTC) and other parastatals which, like the KNTC, are established to promote production and distribute local products e.g. sugar, cement, maize, salt, cotton, sisal, etc. Some of these commodities are locally produced industrial raw materials and are an important component of production costs which form the basis for ex-factory prices of industrial products. It is no secret that these parastatals are crippled by inefficient systems of management which are a cost to the whole economy. Considering that many agricultural and industrial products categorised as basic essentials

are marketed and distributed by the KNTC and other similar parastatals, their influence on the final prices of these products is significant. When fixing the prices of these products, the Price Controller takes into account a commission and distribution costs of these parastatals. This has the effect of denying the consumer the benefit of low prices on basic essential products.

PRICE AND WAGE CONTROLS IN KENYA

By

Frederick E. Omido
Chairman General
Central Organisation of Trade Unions

I would like to start by explaining why the Central Organisation of Trade Unions (COTU) which represents the interests of workers in Kenya decided to withdraw its membership from the Price Control Advisory Committee.

When the Price Control Advisory Committee was set up in early 1972 to advise on prices, we hailed the move as a step in the right direction and accepted to serve in the Committee. This was because we were convinced that this Committee would advise on control of the prices of all commodities. COTU had not been made to understand that price increases of many essential foodstuffs would be made outside the Committee.

After accepting membership to the Committee, we came to realise that the impression created by the Government concerning the Committee was wrong. COTU communicated its feelings to the Government indicating that it was prepared to cooperate in search for a formula which would ensure that wages, prices, profits and rents were regulated in the interest of the nation. We suggested that since the Wage Guidelines were part of an incomes policy and required consultations with all the groups concerned in order to succeed, the Wage Guidelines should be replaced by a more comprehensive Wage and Incomes Policy.

COTU proposed specific amendments to the Wage Guidelines which, if accepted, would have made us continue our membership in the Price Control Advisory Committee. COTU could not however continue its membership of the Committee while price control on essential commodities did not fall within the powers of this Committee but were dealt with by the Costs and Prices Committee where COTU was not represented. This gave the public the impression that COTU was a party to all price increases made. COTU officials decided to seek the mandate of COTU members who unanimously demanded that we withdraw from the Committee immediately: we withdrew on 18th February, 1974. We have not taken part in any meeting of the Price Control Advisory Committee since that date. However, COTU is still very much willing to cooperate with the Government if the position is reviewed to allow for only one committee

to control prices of all essential commodities. COTU also feels that all essential commodities should be subject to price control.

Since August 1973 when the Wage Guidelines were introduced, workers' real wages have not increased. The unions have only been allowed to claim compensation for price increases and usually have not been fully compensated for those price increases. COTU also feels that the Cost of Living indices are manipulated in a manner that leaves workers on the losing side. Price fixing by manufacturers is in our view not subject to proper Government control and the standards of manufactured goods do not justify their high prices. Therefore, the wage controls and the free hand given to manufacturers to fix prices favours manufacturers and works against the interests of workers. The Wage Guidelines were intended to lead to expansion of employment opportunities, but we have no evidence that the profits realised by employers go towards attaining this goal. To the contrary, these profits end up as higher dividends to both local and foreign investors. The Wage Guidelines have led to a decline in the standard of living of the workers which will continue to decline as long as the Wage Guidelines are enforced. We feel strongly that unless the Wage Guidelines are accompanied by similar guidelines on profits and other incomes, the ultimate outcome will be the strengthening of classes which is bound to result in a clash between the 'haves' and the 'have-nots'.

Failure by the Government to control rents is a very serious matter because it has left the workers at the mercy of landlords. There should be effective measures to control and even decrease the current exorbitant rents as workers spend about a third of their wages on rent. Also, Government failure to formulate a housing policy has to a great extent contributed to the inflation of house rents. For example, civil servants put up buildings in which they live but claim high rents from Government. In COTU's view, senior Government servants have therefore been part and parcel of the hiking of rents to the detriment of workers. The Government should define a housing policy, extend the powers of the Rent Tribunal, and employ inspectors as in the case of price control so as to ensure that actual rents are in conformity with the laid down rules.

THE ROLE OF THE KENYA CONSUMERS' ORGANISATION

By

Christine N. Ndirango (Mrs)
Chairperson
The Kenya Consumers' Organisation

In 1952, the price increases after the last remaining goods, chiefly foodstuffs, were taken off price control which had been operative during the war so outraged some of the staff wives of the Prince of Wales School (now Nairobi School) that they got together and organised an ad hoc committee to discuss what to do. Out of this the Housewives Consumers' Organisation was born. Recently, in an effort to widen its appeal, the organisation changed its name to the Kenya Consumers' Organisation.[1] The organisation was then patronised by European women and operated mostly within Nairobi. Its aims, which have remained unchanged, were:-

- to try to keep the cost of living down;
- to protect consumer interests;
- to ensure that the views of the Organisation are known to the government, producer boards, manufacturers' associations, and to any other persons directly or indirectly engaged in the supply of consumer goods and services;
- to keep members informed on matters of interest to consumers; and
- to cooperate with other organisations with similar aims.

The Kenya Consumers'Organisation (KCO) is a non-profit making and non-political voluntary body centred in Nairobi whose membership is open to all Kenyans regardless of age or sex. Its limited finances come mainly from membership fees whose total sum is not enough to allow the implementation of many programmes. It is affiliated to the International Organisation of Consumer Unions (IOCU) and locally is a member of the Kenya National Council of Social Services which is the umbrella body for all voluntary organisations in Kenya.

The major aim of the KCO has been to protect the consumer. In doing so, the Organisation receives complaints of various types concerning the quality, quantity and price of all kinds of consumer items. It takes up these problems and tries to obtain the best solutions possible.

---

1. The origin of this Organisation is reported in the July 1977 issue of Contact, the official journal of the Kenya Consumers' Organisation.

The KCO is represented in the Price Control Advisory Committee, a committee whose purpose is to advise the Minister for Finance on matters related to the prices of goods and services or to the control of the prices of goods and services. The KCO's views are normally sought with regard to the importance of a commodity, whether the commodity is of importance to consumers at large or a luxury which will only affect the elite who can afford a higher price without adversely affecting their budgets.

In trying to protect consumer interests, we take up consumer complaints and try to solve them with the person or firm concerned by way of open discussion. We feel that this is a more effective way of making ourselves heard, rather than being militant and noisy, and manufacturers tend to respond to our complaints better through discussion. Manufacturers and other producer interests usually respond to our complaints by either replacing the faulty good in question or by apologising for the poor service rendered. Other activities of the KCO include visits to various factories, butcheries, supermarkets and other stores so as to discuss with them topics of special concern to us. We also used to publish prices of various essential goods in our monthly periodical Contact, with the unfortunate result that the shops charging lower prices raised them to the published levels.

Unfortunately, members of the KCO do not have powers to arrest or prosecute defaulting traders and manufacturers, and we therefore work in close liasion with the relevant government ministries in solving problems involving legal offences, e.g. overcharging and hoarding is handed over to the Price Control Department of the Ministry of Finance; defaulters in weights and measures are reported to the Weights and Measures Department of the Ministry of Commerce and Industry; complaints regarding quality are sent to the Kenya Bureau of Standards; and those regarding adulteration of goods are referred to the Government Chemist of the Office of the President for analysis.

Most of the complaints we receive come from consumers in urban areas, which represent only a small fraction of the consumer population as a whole. Many of the rural consumers are not aware that they can and have a right to complain and do not usually know who to compalin to. The need to create consumer awareness through consumer education is therefore great. Unfortunately, the KCO, being a non-profit making organisation, has not been able to establish branches in the rural areas. However, we

attend seminars in the rural areas organised by other organisations and give lectures on consumer rights.

KCO's participation in international conferences keeps us in tough with other consumer groups in other parts of the world. Although we meet with groups from developed countries, we still feel that the problems facing consumers are basically similar in both developed and developing countries. Based on our contact with consumer organisations in other countries, we have made the following recommendations to the government for possible implementation in Kenya:-

1. Consumer Policy. A Consumer Protection Act should be enacted to cater for all consumer problems. This could either be included in the existing Price Control Act or be a separate Act. The Price Control Act as it stands tends to omit some very important consumer services e.g. social, health, and education services. That is why one does not, for example, know what to do with a rude bus conductor or driver when they violate his consumer rights. That is why children as consumers of education services have no say over the conduct of their teachers and are sometimes punished or expelled from school when they complain about the behaviour of a teacher.

2. Consumer Time. This is a consumer right which does not receive any attention at all. An example of this is the time wasted at East African Power and Lighting Company and the Nairobi City Council when consumers go to pay their electricity and water bills respectively. A Consumer Protection Act should be able to control this by compelling the relevant institutions to devise better methods of collecting their levies. This would reduce the number of hours people spend queueing to pay their light and water bills.

3. Unlawful Denial. At present in Kenya, we have a Rent Tribunal with a provision for unlawful eviction of tenants. A Consumer Protection Act should have a similar provision for unlawful disconnection of electricity, water or telephone. Any consumer unlawfully disconnected from the above services should be lawfully compensated for the inconvenience and embarrassment

4. Price Increases. A Price Control Advisory Committee was started in 1972 to deal with applications for price increases. We feel that any landlord who wishes to raise his rent should be forced to submit an application to the same committee, giving reasons for the intended rent increase. The same

should apply to companies offering rental services e.g. after renting, say, a television set for three years or so, the monthly rental should go down for the simple reason that the set is no longer new and it is unfair to charge the same fee the dealer charges for new sets.

5. Misleading Advertising. Consumers in this country are usually misled by false publicity on some consumer goods e.g. soaps, creams and tinned foods. Some of these goods have been proven dangerous to human health in other countries because they contain some ingredients like mercury but in Kenya sell like hot cakes. The KCO strongly condemns misleading and inadequate labelling of processed foods especially baby foods which we feel should bear enough information to avoid undernourishing babies. The government, together with a strong consumer representation and full use of the services of the Government Chemist, should make sure that all advertisements are genuine and action taken against all misleading publicity.

6. Consumer Education. Poor people always pay more. Low income consumers have a double disadvantage: they have less to spend and also tend to get less value for the little they have. This is because they cannot buy in bulk and therefore often buy smaller packs with high unit prices, and rent and hire services because they cannot afford their own houses, washing machines, cars, etc. Advise on how to conduct consumer education courses should be sought from more developed countries, either by inviting their consumer educators to our country or by sending our educators to international conferences on consumer education.

7. Advisory Committees. The present advisory committees only play a passive role and wait for problems to be brought to them. Some of these problems need never arise if the individual had a better understanding of his rights and obligations. The advisory committees should play a more active role like persuading people to seek advice before entering into contracts or taking insurance policies. This type of service would need a great number of specialist staff especially in the case of lectures and demonstrations, the results of which are not always easy to assess. The KCO will also need members with technical know how to represent consumers at some of the technical meetings held by, say, the Kenya Bureau of Standards.

To conclude this short paper, it is important to put on record that there is a great need for raising consumer awareness in Kenya. Since our country is developing at a rapid pace, the KCO has even greater challenges

to fulfil. With the expanding local industries and the higher consumer demand for various commodities, the need for consumer education becomes vital. It is through demand that manufacturers increase their output, but the consumer must be well informed on issues concerning quality, safety, choice, and price. Consumer protection is needed to ensure that the poorest consumers do not spend the little they have on unsafe or shoddy goods. Since commercial organisations cannot be expected to provide the answers to consumer problems, the government and the KCO should play an active role. Of course there will always be people who will not be reached by information whatever mass media is used. Legislation on minimum standards and control of advertising and marketing practices can therefore be particularly important in Kenya.

THE IMPACT OF PRICE CONTROLS ON INFLATION AND THE DISTRIBUTION OF REAL INCOME IN KENYA

By

J. T. Mukui
Institute for Development Studies
University of Nairobi

1. INTRODUCTION

Until a few years ago, very little research effort was being devoted to the study of price control as a tool of economic management. However, recent experimentation with price controls in many countries has caused economists to take the issue more seriously. This paper is based on my M.A. thesis (Mukui, 1978) which was a response to controls imposed in Kenya in late 1971 to control prices directly and curb profiteering.

The paper starts by giving some background information to price controls e.g. why the controls were introduced and their coverage. The rest of the paper is an attempt at empirical analysis of the effectiveness of price controls. Aspects analysed include its effect on the cost of living, growth and distrivution of income, and observance and evasion of controls by traders.

The conclusions are tentative because (a) the topic is one in which the theory does not provide unambiguous conclusions for all situations, (b) there are no handy measures by which to gauge the effectiveness of controls in practice, and (c) there are no other countries' studies to compare my results with. The paper explains the practical problems encountered in the implementation of a control policy and concludes that price control promises more than it gives and the faith the public has in it may even be detrimental because it might divert attention from more important considerations like property ownership.

2. BACKGROUND INFORMATION

The present price control system was introduced in December 1971 when the combination of a balance of payments deficit and increased inflation caused the Government to devalue the currency and to announce a price freeze. In his Press release of December 22, 1971, the Minister for Finance and Planning said:

> The decision to maintain party with U.S. Dollar and the recently announced measures to control foreign exchange allocation for imports and the already existing tariffs and other protective measures, will mean that the protection enjoyed by local producers, especially of manufactured goods, has been increased tremedously.[1]

For the fear that this greater degree of protection would lead to 'unnecessary and unscrupous' increases in prices by manufacturers and traders, he announced a price freeze for all goods and some services and the establishment of a Price Control Advisory Committee (PCAC), composed of representatives of manufacturers, trade unions, traders, farmers, consumer organisations and Treasury.[2] According to the Price Control Act (cap. 504), the legal instrument governing the control of prices, a PCAC is appointed by the Finance Minister 'to advise him on all matters affecting, tending to effect, arising out of or relating to the prices of goods and services or to control of the prices of goods or services .... ' The Act empowers the Finance Minister to fix maximum prices for goods and services, to freeze all or some prices ordinarily charged on a specific date, and to prescribe percentage fixed goods. The Minister cannot delegate to any person any of these powers.

The Government enforces two types of controls, specific and general. The Price Control (General Prices) (Temporary) Order, 1971, L.N. No. 302/1971, prohibited increases in prices above those ordinarily charged on 22nd Dec. 1971. The categories affected by the freeze were: the sale of any goods by retail, the sale of any goods by wholesale, the importing or exporting of goods, catering, motor vehicle repairing, building construction and repair, electrical repairs, and electronic servicing. In 1973, the 1971 General Price Order was nullified in a law court on the grounds that it was not laid in Parliament as required by Section 8 of the Price Control Act.[3] A replacement Order[4] issued in December 1974 served the additional purpose of bringing under control products and

---

1. Daily Nation, 23rd December, 1971.

2. See Kenya Gazette, 21st January, 1972, G.N. No. 135/1972, for names of members of the first Price Control Advisory Committee.

3. Makadara Court File No. 821/1973 (unreported).

4. L.N. No. 314/1974.

services that had come into production after 22nd December, 1971. The latest General Price Order is L.N. No. 153/1976.

The general control operates by prohibiting firms and traders from increasing the prices of goods sold or services rendered by them above the price levels prevailing on the date the latest General Price Order came into effect, except with the approval of the Finance Minister. A firm applying for a price increase is required to complete a questionnaire which should be accompanied by a copy of the Profit and Loss Accounts and Balance Sheets for the previous two financial years, and supporting documents like suppliers' invoices to show that his costs of production have gone up. The price increases allowed are communicated to the firm by letter, and the firm notifies the public and middlemen by marking prices on his products or by publishing the recommended selling prices. The prices are not published in the Kenya Gazette Supplement and it therefore becomes difficult for the public to know the legal maximum prices in the case of goods under general control.

Even before December 1971 when general controls were introduced, specific controls were there for maize, maize meal, sugar, sifted maize meal, bread, rice, and beer and stouts. To make administration of controls more effective, many products were brought under specific control in late 1973 and early 1974. From June 1974, the specifically controlled commodities have been baby foods, barbed wire, charcoal, beer and stouts, tea, cement, GCI sheets, nails, soaps and detergents, fats and edible oils, toilet paper, sugar,rice, maize, and maize meal, sifted maize meal, bread, meat, wines and spirits, soft drinks, wheat flour, salt, tooth pastes and tooth brushes, and matches.[5] The prices of specifically controlled commodities are published in the Kenya Gazette Supplement which is posted to all Price Inspectors, District Revenue Officers, District Officers and District Commissioners and reported in the Press especially in the case of essential commodities.

The proportion of consumers' expenditure under price control can be estimated from Consumer Price Indices Nairobi (Kenya, 1977). As can be

---

5. Beans, peas, grams, and njahi (lablab beans) were controlled in August 1973 and decontrolled in May 1974 due to seasonality of production which caused erratic price variations. Wines and spirits were decontrolled in March 1979 (L.N. No. 31/1979).

Table 1: Consumer expenditure under specific controls, by income classes (%) - Nairobi.

COMMODITY	LOWER INCOME	MIDDLE INCOME	UPPER INCOME
1. Rice	0.48790	0.70132	0.64750
2. Wheat flour	0.60270	0.80812	0.46250
3. Maize flour	5.95730	3.52440	0.30250
4. Maize grain	0.53710	0.27412	-
5. Bread	3.16930	2.26416	0.81500
6. Meat	6.28940	5.72804	2.87250
7. Oils and Fats	3.19800	3.04736	6.11250
8. Sugar	2.95200	2.44216	0.77000
9. Tea	0.77490	0.48416	0.18250
10. Salt	0.31980	0.21360	0.05750
11. Baby Foods	0.22140	0.36668	0.30000
12. Beer	1.90740	2.24840	0.74520
13. Soda	0.40832	0.34012	0.10051
14. Wines and Spirits	-	0.26708	0.53222
15. Charcoal	1.96308	1.13016	0.18502
16. Household soap	0.37759	0.56700	0.23885
17. Detergents	0.39406	0.62775	0.16065
18. Matches	0.12688	0.05994	0.07480
19. Toilet soaps	0.88160	0.53880	0.16588
20. Other toilet goods (include toilet rolls and tooth paste)	-	0.54120	0.29377
21. Milk	4.35420	3.83412	2.48250
TOTAL	34.92293	30.00869	17.50190

Source: Consumer Price Indices Nairobi (1977)

seen from Table 1, specific controls cover about 35% of total expenditure of lower income class, 30% for the middle income and 17.5% for the upper income.[6] Assuming that price control is effective in keeping the cost of living down, one important and desirable feature of its coverage is that it is progressive over the entire income range.

The coverage of general controls is more difficult to compute. The Price Control (General Prices) Order, 1976, L.N. 153/1976 covers: manufacture of goods, importing of finished goods, repairing of motor vehicles, catering, clearing or forwarding, and wholesale or retail sale of pharmaceuticals, motor vehicles, motor vehicle spare parts, agricultural machinery, and fertilisers and agricultural chemicals. With the help of a Price Control official, the author estimated that general controls cover about 8.5% of Lower Income class expenditure, 9.5% for Middle Income, and 18.4% of Upper Income class expenditure.[7] This includes biscuits, coffee, cigarettes, footwear, refrigerators, bulbs, shoe polish, medicine, motor cars, motor car spare parts, radios, newspapers and ball pens. Table 2 shows that specific and general controls together protect all income classes in Nairobi almost equally.

There are other areas of economic activity which do not come within the ambit of the Price Controller (and therefore not covered by Table 2) but where the Government exercises control on prices. These include:-

(a) Public utilities like telephone and postal services, water and electricity, where the Government controls prices by virtue of being the producer.

(b) Petrol and petroleum products which are under the direct control of the Finance Minister.

---

6. The effective coverage of specific controls may be even higher because the Consumer Price Index for Nairobi does not include cement, barbed wire, nails, and GCI sheets which are price controlled.

7. These estimates do not include items such as fertilisers and agricultural chemicals which are not included in the compilation of consumer price indices.

Table 2. Coverage of Controls by Income Classes (%) - Nairobi.

	Lower Income	Middle Income	Upper Income
Specific controls	34.9	30.0	17.5
General controls	8.5	9.5	18.4
Total	43.4	39.5	35.9

Source: Consumer Price Indices Nairobi (1977)

(c) Bus fares, which are controlled by the Ministry of Power and Communications. The Road Service Identity Certificate issued annually to big passenger vehicles stipulate the route, timetable, and charge per kilometre. There is no mechanism to enforce the regulations and the law is only there to provide a forum for settling of disputes that may arise.

(d) Rent. The first rent control Act on residential premises was introduced in 1918 to check possible profiteering resulting from postwar housing shortage (Noormhamed, 1975, p. 21). The Rent Act ceased to apply on 31st December, 1923. At the outbreak of the Second World War in 1940, rent control was introduced on both residential and business premises. The Rent Restriction Act (Cap. 296) applies to private dwelling with 'standard rent' not exceeding Ksh 800 for unfurnished dwellings and Ksh 1100 for furnished dwellings. There is a Rent Tribunal for the arbitration of disputes between landlords and tenants.

The expenditure and establishement for the Price Control Department has expanded with the expansion of coverage of controls. As Table 3 shows, the staff has doubled between 1971 and 1978. When the present price control system was imposed in 1971, price control had regional offices only in Nairobi, Nakuru, Mombasa, Kisumu and Nyeri[8] but has since then opened new offices in Kakamega and Embu.

When the General Price Order was introduced in 1971, only increases in costs of raw materials were considered in awarding price increases. However, the Price Control (General Prices) Order, 1976, stipulates that application

8. Daily Nation, 5th January, 1973.

Table 3: Establishment for the Price Control Department

	1971/72	1973/74	1974/75	1975/76	1976/77	1977/78	1978/79*
Price Controller	1	1	1	1	1	1	1
Deputy Price Controller	-	-	-	-	-	1	1
Assistant Price Controller	1	1	1	1	2	1	1
Assistant Secretaries	-	-	2	2	2	2	2
Senior Price Control Inspectors	5	7	7	7	7	7	7
Price Inspectors	8	12	20	20	20	20	27
Clerical Officers	-	2	2	2	2	2	2
Shorthand typists	-	1	1	1	2	2	2
Copy typists	6	7	7	7	7	7	9
Drivers	5	10	10	10	10	10	11
Surbordinate staff	-	2	2	2	2	2	9
	26	43	53	53	55	55	72
Expenditure (K£) (Approved estimates)	n.a.	35,634	60,008	65,220	80,850	88,878	133,900

Note: n.a. = not available
* = estimates

Source: Kenya, Estimates of Recurrent Expenditure, 1974/75 to 1978/79 issues.
Establishment for 1971/72 from Price Control files.

for price increases under the Order 'shall have regard only to increases in the direct costs of raw materials and fuels and the costs of importation of finished products', i.e. liberalising the Order by also allowing fuel costs but still excluding labour costs. The aim of this highly restrictive policy seem to have been to make companies absorb a part of increases in costs. It was also an implicit wage control because firms would be less generous in allowing wage increases which they cannot pass on to consumers.

3. INFLUENCE OF CONTROLS ON THE COST OF LIVING

In estimating the extent to which price controls have influenced the cost of living, the measure of inflation used is the Consumer Price Index (CPI). The CPI is a measure of changes in the retail prices of goods and services typically consumed by households and is calculated separately for each of the three income classes in Nairobi. We will use the CPI because it allows us to analyse the effects of controls on each income class. We will analyse periods 1971-73 and 1973-77 separately.

(a) December 1971 - December 1973 Period

The rate of increase in the Lower Income CPI rose from 1.6% in 1970 to 7.5% in 1971 but declined substancially to 3.1% in 1972.[9] Was the 1972 decline due to price control?

A reliable answer to this question requires a model that separates the influence of demand-pull and cost-push factors to the cost of living so that price control effect can be taken as a residual. However, in the absence of such a model, we will assume that other factors influenced the cost of living equally in 1970, 1971 and 1972.[10] This implies that price control had a moderating influence, through two main routes. First, the price freeze must have instilled psychological fear in manufacturers and traders due to risk of falling foul of the law. Since the General Price Order had been subtitled 'temporary', manufacturers and traders could have exercised restraint, i.e. forgo short term gains, expecting to make up for the loss when the freeze was removed. Secondly, when a firm applied for a price increase due to increased costs of production and the Price Controller, by looking at a firm's profit and loss accounts, was convinced that it was making more than average profits, such a firm was forced to absorb all or a part of the increased costs.

In 1973, the Lower Income CPI rose by 16.5%. What was the effect of controls in 1973?[11] A Price Control official says that, about one year after the freeze was imposed, some firms started raising prices without consulting

---

9. Kenya, Economic Survey, 1974, p. 161.

10. This is an assumption I cannot defend. See Section 7 of this paper for problems encountered in empirical analysis of effects of price control.

11. For the effect of sales tax introduced in 1973 and import price index on the cost of living, see Killick, 1975.

the Price Controller in the hope that they would not be found out.[12] This implies that a part of the increase in 1973 was a portion of the 1972 inflationary pressure postponed by firms that exercised restraint in 1972 thinking that the General Price Order was temporary.

For products that remained under control, the influence of controls on their prices must have declined over time because it is unlikely that the Price Controller forced them to absorb part or all increases in the cost of materials for a second year in succession. This is consistent with Killick's argument (1973, p. 407) that, even where there are initially large monopoly profits, the price effect of controls will be largely once-and-for-all because after the excess profits have been eliminated, the controllers will have to allow prices to rise with costs if they are not to discourage supply. Controls may only have a long term effect if there is a tendency for monopoly profits to widen over time. The only suppression of prices in 1973 could have come from increased labour costs because the Price Controller did not take them into consideration when awarding price increases.

(b) December 1973 - December 1977 Period

As mentioned earlier, many products were brought under specific control in 1973 and the various price amendments are therefore available in the Kenya Gazette Supplements.

To estimate the effect of specific controls, we shall take the control prices of typical quantities of the specifically controlled commodities and compute ratios of December 1977 to December 1973 prices. The results are shown in Table 4. We will concentrate on the lower and middle income groups because the coverage of general controls in these two income groups is low and can therefore be ignored without seriously distorting the results.

Table 5 shows that the weighed price increase of controlled products is slightly less than that of uncontrolled products and the overall price index in the case of the lower income group. Table 4 shows that prices of agricultural commodities rose faster than those of manufactured commodities. This is probably because the agricultural commodities have guaranteed producer prices which are set high enough to stimulate production. The high rise in

---

12. This also means that those firms that still went through the Price Controller when raising prices were victimised while the unfaithful ones got away with it. Blessed are the unfaithful ....!

Table 4: Price Comparisons (KShs) - Nairobi

Commodity	(1) Dec. 1977	(2) Dec. 1973	(1) ÷(2) x 100
1. Rice grade II - 1 kg.	3.00	1.65	181.82
2. Wheat flour Atta - 2 kg.	4.85	3.00	161.67
3. Maize flour sifted - 2 kg.	3.30	1.70	194.12
Maize flour Unsifted - 1 kg.	1.25	0.65	192.31
4. Maize grain - 1 kg.	1.15	0.60	191.67
5. White bread - ½ kg.	1.50	0.85	176.47
6. Beef with bone - 1 kg.	8.30	6.40	129.69
bone - 1 kg.	9.50	7.60	125.00
Meat Sirloin - 1 kg.	18.00	12.60	142.86
7. Sugar - 1 kg.	4.50	1.85	243.24
8. Tea Simba Chai - 100 g.	1.20	1.20	100.00
9. Salt refined - 1 kg.	2.00	1.40	142.86
10. Fat 250 g. packets	3.10	2.40	129.17
11. Detergents - Omo - 200 g.	2.60	1.85	140.54
12. Household soap blue - ½ kg.	2.25	1.85	121.62
13. Toothpast Colgate - 240 g.	10.80	6.70	161.19
14. Cement 50 kg.	27.10	15.00	180.67
15. Spirits Haig Dimple - 75 ml.	106.20	66.55	159.58
16. Toilet paper	3.45	1.80	191.67
17. Barbed wire - 12½ g x 20 kg. roll	115.65	82.80	139.67
18. Nails roofing - 6.5 cm x 9G x 50 kg.	308.90	259.70	118.94
19. Galvanised iron 8' x 3" 37G	2.55	1.45	175.86

Table 4 (Cont'd): Price Comparisons (KShs) - Nairobi

Commodity	(1) Dec. 1977 Price	(2) Dec. 1973 Price	(1) ÷ (2) x 100
20. Charcoal - 1 bag	18.00	11.00	163.64
21. Matches - steamship	0.20	0.20	100.00
22. Soft drinks Fanta - 290 ml.	1.00	0.80	125.00
23. Baby foods - Lactogen 4500 g.	13.30	9.45	140.74
24. Bear Tusker	3.45	2.20	156.82
25. Toilet soap Lifebuoy	1.30	1.05	123.81
26. Milk	1.30	0.65	200.00

Notes:

1. The base period for wheat flour and baby foods is February 1974 when they were put under specific control.

2. Sales tax was abolished on bread, margarine and Kimbo in the Budget speech 1975/76, Reported in Daily Nation, 13th June 1975.

3. Cement, barbed wire, nails and GCI sheets do not appear in the consumer price indices for Nairobi.

4. The December 1977 prices of maize, unsifted maize meal (posho) and sifted maize meal would have been higher had it not been for the price revision of November 1977 which lowered their prices by about 10%. See Kenya Gazette Supplement, No. 72, 2nd November, 1977.

Source: Kenya Gazette Supplement, relevant issues.

the prices of agricultural commodities cause the price index for controlled goods to rise fast. We will ignore products with producer prices guarantee and only concentrate on meat, tea, salt, fats and oils, detergents, household soap, toothpaste, wines and spirits, toilet paper, charcoal, matches, soft drinks, baby foods, beer and toilet soap.

Table 5: Price Increases - December 1977 as % of December 1975.

	All controlled Products	All uncontrolled Products	Total
Lower Income	167.81	176.90	173.72
Middle Income	165.63	163.34	164.03
Upper Income	152.68	159.47	158.28

Source: Kenya, Economic Survey 1978, and tables 1 and 4 of this paper.

Let W_1 be the proportion of expenditure spent on the above named items, W_2 that of agricultural commodities with producer price guarantee and price control on middlemen, and W_3 that of all uncontrolled products and services. Let P_1, P_2, and P_3 be their respective December 1977 prices as percentage of December 1973 prices.

Then $W_1 + W_2 + W_3 = 1$

and $W_1P_1 + W_2P_2 + W_3P_3 = \bar{P}$

where $\bar{P}$ is the weighted price index

Let us make the crucial assumption that P_1 would equal P_3 in the absence of controls. Let P* be the price index that would have prevailed in the absence of controls.

Then $P^* = (W_1 + W_3) P_3 + W_2P_2$

The depression in the price index due to controls

$$P^* - \bar{P} = (W_1 + W_3) P_3 + W_2P_2 - W_1P_1 - W_2P_2 - W_3P_3 = W_1(P_3 - P_1)$$

The results are shown in Table 6. The depression in the overall index is 1.76% per year, i.e. about a tenth of actual inflation.

The above calculations refer to specific controls only. We are comparing control prices of goods at two points in time and the same cannot be done for goods under the General Price Order since their prices

are not published. For goods under general control, some qualitative assessment will suffice. For pharmaceuticals, motor vehicles, motor vehicle spare parts, agricultural machinery, fertilisers and agricultural chemicals, there were 'factor formula' developed in 1972 for reaching retail prices. The formula required a dealer to add on the landed cost plus duty a profit margin defined as a certain percentage of landed cost. This means that if the landed cost of an item has increased five times since 1972, the absolute profit also increased five times.[13] This is why dealers in motor vehicles, motor vehicle spare parts and fertilisers sell below control levels; and price control is then officially said to be 'working' because there is no abuse of the factor formula.

Table 6: Influence of specific controls on the cost of living (%) - Nairobi

	Lower Income	Middle Income
1. W_1	16.86	16.16
2. P_1	135.07	137.07
3. W_2	18.06	13.85
4. P_2	198.40	198.94
5. W_3	65.08	69.99
6. P_3	176.89	163.34
7. $P_3 - P_1$	41.82	26.27
8. $W_1(P_3 - P_1)$	7.05	4.24
9. $W_1(P_3 - P_1)/4$	1.76	1.06

(annual average)

Source: Tables 1, 4 and 5 of this paper.

4. INFLUENCE OF CONTROLS ON THE DISTRIBUTION OF INCOME BETWEEN PROFITS AND WAGES

The purpose of this section is to give a feel for the incidence of controls as they have operated in Kenya since December 1971. We will first consider how producers are affected because this determines what happens to other groups in society.

---

13. See 'What the Price for Protection 'Daily Nation, 16th Feb., 1977 and 'Spare Part Inflation', Daily Nation, 31st May, 1978.

In Kenya, information on profitability of companies is hard to trace. This is because the Companies Act (Cap. 486) Section 128 requires only a public company or a private company where at least one shareholder is a public company to deposit their balance sheets and profit and loss accounts with the Registrar of Companies. Unfortunately, only about a fifth of all public companies produce price controlled goods. The profitability of the 12 'controlled' companies in Table 7 might allow us reach some tentative conclusions about controls.

To measure profitability, we use after-tax profits as percentage of shareholders' funds plus reserves. This measure can be defended on two grounds. First, it is generally accepted that one of the main objectives of a firm's management is to maximise the profits of the owners, the equity shareholders, and the cost of capital to the shareholders is the net of tax return they could obtain from investing their capital to the best advantage elsewhere. Secondly, in times of inflation, absolute level of profits can rise without necessary reflecting increases in real profitability. Since reserves are normally retained profits, they will be affected by inflation to the same extent as the absolute level of profits, thus moderating the effect of inflation on our measure of profitability.

Table 7 shows that the profitability of B.A.T. Kenya Ltd., a manufacturer of cigarettes, has been on the increase despite the controls. The explanation for this phenomenon is that companies that produce goods that the Price Controller considers to be luxuries are allowed to make more profits because the Controller does not see why the Government should forgo corporation tax for the sake of wealthy consumers. For companies engaged in the production of necessities e.g. Kenya National Mills and Elliots Bakeries, the profitability has been on the decline because the Controller awards them low price increases in an effort to protect lower income consumers. This encourages investment in luxury goods and the artificially low prices of necessities boosts their demand while at the same time discouraging supply, leading to occasional shortages of these commodities.[14]

---

14. For a general discussion of the effect of selective controls on the pattern of production, see Killick (1973, p. 408) and Jervis (1949, p. 209).

Table 7. After-tax profits as % of Ordinary shareholders' Equity + Reserves

FIRM	1968	1969	1970	1971	1972	1973	1974	1975	1976
B.A.T. Kenya Ltd.	9.8	18.1	23.0	25.4	23.8	25.7	27.8	28.0	28.0
Bamburi Portland Cement Co.		22.7	21.6		21.1	15.3	16.3	21.6	25.6
East Africa Bag & Cordage Co.	15.6	14.4	-1.3	-3.4	6.0	8.7	2.4	7.5	19.5
East African Breweries Ltd.	18.9	19.2	18.9	21.8		24.9	19.3	12.9	13.5
East African Oxygen Ltd.		16.1	20.3		25.0	20.8	18.6	22.7	17.9
E.A. Packaging Industries	19.0		22.8	18.9	13.3	19.4	41.2	20.5	2.3
E.A. Portland Cement Co.	12.1	13.2	15.8	16.9	15.5	16.4	19.0	18.2	
Elliot's Bakeries Ltd.	13.5	18.2	20.0	22.2	22.2	20.5	14.7	3.7	2.8
K.C.C.				14.0	-7.8	-46.7	33.6	28.1	.1
Kenya National Mills Ltd.	9.4	7.0	11.0		12.0	11.8	5.6	4.1	4.2
Kenya Oil Co. Ltd.	16.8	13.1	17.2	20.3	21.5	23.0	9.6	9.4	18.1
Kenya Orchards Ltd.		-1.6	0.1		-6.4	9.8	1.1	-19.6	-5.2
No. of firms (excluding kK.C.C.	8	10	11	7	10	11	11	11	10
Average profitability	14.4	14.0	15.4	17.4	15.4	17.8	16.0	11.7	12.7
Average for all companies quoted in Nairobi Stock Exchange	8.9	12.2	12.5	13.3	13.5	13.8	16.9	12.9	14.3
No. of firms in sample	39	40	44	25	42	50	53	47	29
Profitability of Non-controlled firms	7.5	12.0	11.5	11.7	12.9	12.7	17.1	13.3	15.9
Profits of controlled as % of non-controlled	192	121	133	149	119	141	93	88	80

Source: Raphael Kaplinsky's files and my own compilation.

After scanning through the various companies' annual reports at the office of the Registrar of Companies, the author has the impression that manufacturers are more dissatisfied with the administration than they even are with the principle of price control. They complain of delays in obtaining price increases when costs of raw materials go up because the delays cause wide fluctuations in profitability and makes forward planning harzardous.

How have companies coped with the situation? Edgren (1977, pp. 420-1) says that it is unlikely that wage cost increases averaging 10% per year have been sustained by private industry without passing on at least part of the increase to the consumers. Table 7 shows that, although 'controlled' firms were more profitable than noncontrolled ones before controls were introduced, the ratio of profitability of 'controlled' to noncontrolled firms has been declining.

Table 8 shows the trend in labour costs and value added per employee for large scale establishments. We notice that controls cover high wage, high gross product per person industries. Also for the first three years, wages went up faster in controlled than in noncontrolled firms while productivity rose almost equally for both categories, which goes to explain why the ratios of profitability of controlled to noncontrolled firms has been declining.

We saw that price control on non-agricultural, specifically-controlled commodities reduce the cost of living by an estimated 1.7% per annum. However, there are a few Industrial Court disputes that support the assertion that the Court considers the effects of too strick price controls when awarding wage increases, thereby eroding the effect of controls on the workers' real earnings.[15]

Rural people have possibly benefited from price control on processed items because they are not a part of the urban-based employer-employee equation Killick (1973), in a study of the operation of price control in Ghana in the 1960s observed that non-observance was higher in rural areas than in cities. It is however possible that the overcharging occurs due to the failure of control authorities to fully cover transport and storage costs in reaching

---

15. See, for example, Gazette Notice Nos. 2549/1972, 1469/1974, 330/1975, 571/1976 and 922/1977.

Table 8: Indices of Trends in Unit Labour Costs in Large Scale Firms[a]

	1971	1972	1973	1974	1975
1. Controlled firms[b]					
Value added per employee	100	112	119	137	139
Earnings per employee	100	112	111	141	134
Labour costs as % of value-added	100	101	93	103	96
2. Non-controlled firms					
Value added per employee	100	106	123	142	169
Earnings per employee	100	99	101	114	140
Labour costs as % of value-added	100	93	82	80	82
3. All large scale firms					
Value-added per employee	100	106	119	135	156
Earnings per employee	100	102	103	120	138
Labour costs as % of value-added	100	96	87	89	88
4. Value added per employee in controlled as ratio of non-controlled	2.12	2.22	2.05	2.04	1.74
5. Average wage in controlled as ratio of non-controlled.	1.48	1.69	1.63	1.84	1.42

Notes: a) Data base is in current prices.

b) 'Controlled' firms include meat and dairy products; grain mill products; bakery products, sugar and sugar confectionery; spirits, beer, malt and tobacco; soft drinks; basic industrial chemicals and petroleum; paints, soap and vegetables oils; cement; and motor vehicle repairs.

Source: Kenya, Statistical Abstract 1977, p. 154.

the maximum retail prices, in which case the overcharging is a legitimate (but illegal) attempt to cover costs. If the above assumption holds i.e. traders cover the costs incurred in the course of handling goods whether there is price control or not, then the rural consumers benefit from the suppression of ex-factory price by the Price Control authority.

A rigid price control system can cause a decline in the growth of employment. Unfortunately, the extent to which controls restrict employment creation is difficult to ascertain. Two pieces of evidence, one indirect and one direct, might suffice. The indirect evidence is that since increases in a company's wage bill, arising from increases in wages of workers and new recruitment, will not be accepted by price control authorities as a justification for a price increase, a company is expected to be very cautious in employing new recruits. In the long run at least, refusal to allow wage increases as justification for price increases will act against labour intensity. The direct evidence is that at least one company has reported that it fired workers. In late 1977, East Africa Bag and Cordage Co. Ltd. reported that it had dismissed 300 trainee workers and it was working out a formula on how to phase out some of the 1950 workers who were on permanent terms due to what it described as 'unprofitable prices'.[16]

Price control can also cause shortages of price controlled goods although it would be wrong to argue that all shortages in Kenya are caused by price control. The Finance Minister outlined three ways in which shortages occur.[17] First, the foreign exchange position which in late 1971 forced the Government to adopt rather restrictive import policies and to impose a price freeze. Secondly, large quantities of goods both locally manufactured and imported being re-exported to neighbouring countries and especially Uganda through smuggling. Thirdly, there are 'artificial' or 'generated' shortages which refers to goods in stock but not available to the general public for purchase because traders anticipate price rises. There are usually widespread shortages of price controlled goods in the period immediately before Budget time in June as traders hoard goods to release them at higher retail prices. After the Budget, the commodities are released for sale whether their prices are raised or not, thus confirming they are held for speculative purposes.

---

16. Sunday Nation, October 9, 1977.

17. Daily Nation, 25th August 1973.

Some firms have occasionally been forced to 'strike' or stop production of price controlled goods if their costs rise and their applications for price increases are delayed by the Price Controller. This raises an important point. If the Price Controller delays a monopoly's application for a price increase or does not increase the price of its product to the extent demanded by the monopoly, it can hold the Government to ranson by stopping production. If the monopoly produces an essential commodity, the public would have the choice of paying more or not having the good at all.

5. OBSERVANCE AND EVASION OF CONTROLS

In this section, we will try to estimate the extent to which controls are observed. To measure the degree of evasion (or observance) of controls, we will compare actual retail prices as recorded by the Central Bureau of Statistics (CBS) enumerators with the official control levels established by the Price Controller.

Table 9 shows the actual prices as percentage of controls prices of specifically controlled commodities for Nairobi at three points in time. Cement, GCI sheets, barbed wire and nails are not included in the list because they are not used in the construction of consumer price indices for Nairobi and their prices are therefore not collected by CBS enumerators. We note that evasion is more serious with basic food items e.g. rice grade II, standard wheat flour, unsifted maize flour, and maize grain. Charcoal shows a low or no disparity between actual and control prices. The ratios given underestimates the degree of evasion on charcoal for three reasons:

(1) The Price Control (Charcoal) Order, 1977 specifies the price for 41 lg. bag of charcoal while the CBS records indicate that the weight of one bag of charcoal could be as low as 32 kg. This gives a charcoal dealer an automatic overcharging of up to 28%.

(2) Unlike products like maize flour, maize grain, standard wheat flour, rice grade II, beef, sugar, salt, and blue soap where the actual prices are the averages of test purchases, the charcoal prices are the results of price quotations. It is therefore possible that charcoal dealers only give the control prices so as not to raise alarm in Treasury.

(3) Some charcoal dealers refuse to sell in bags but instead sell in small lots using small tins. In this way, they are able to sell at even over double the control price.

Table 9. Actual Prices as Percentage of Control Prices - Nairobi

COMMODITY	JULY 1975	SEPT. 1976	DEC. 1977
Rice - 1 kg. grade 1	-	100.0	100.0
- 1 kg. grade II	120.0	103.0	100.0
Wheat flour - 1 kg. std.	126.0	126.0	124.0
- Atta 2 kg.	-	100.0	99.8
Maize flour - unsifted	116.2	114.3	116.0
- sifted	-	100.0	100.0
Maize grain - 1 kg.	102.0	100.0	106.1
White bread - ordinary	100.0	100.0	100.0
Beef - 1 kg. with bone	100.0	100.0	106.6
Milk - half litre green tetrapck	100.0	100.0	100.0
Fat - 250 g. Kimbo	97.0	100.0	100.0
Sugar - 1 kg. refined	100.0	100.0	100.0
Salt - 1 kg. refined	112.9	100.0	100.0
Tea - 100 g. Simba Chai	100.0	100.0	100.0
Detergents - 100 g. Omo	102.9	98.3	100.0
Beer - Tusker	100.0	100.0	100.0
Soft drinks - Fanta	100.0	100.0	100.0
Charcoal - 1 bag	99.1	113.7	99.0
Household soap - blue bar soap	106.7	99.4	143.3
Matches - steamship	100.0	100.0	100.0
Toilet soap - lifebuoy	100.0	100.0	100.0
Whisky - Haig	-	100.0	100.0
Baby foods - Lactogen	-	-	100.0
Toothpaste - Colgate	-	100.0	100.0
WEIGHTED MEANS			
Lower income	104.7	103.7	104.8
Middle income	104.5	102.2	102.1
Upper income	102.4	100.4	100.6

Note: A dash (-) means the actual price not available.

Source: Own compilation.

For manufactured, packed and branded commodities like wines and spirits, tooth pastes, beer and fats, there was no evasion. There are various plausible explanations for this phenomenon. First, in some products like tea, matches, and salt, the manufacturer stamps prices on the lebels. It therefore becomes difficult for a trader to convince a buyer to buy above the control price. Secondly, the law requires traders to mark the prices at which goods are offered for sale. The trader marks the control price or less because to mark a price in excess would be prima facie evidence that he is overcharging; and a buyer resists paying a price above the one marked on the label. Thirdly, these high income class goods are usually purchased from supermarkets. Supermarkets can sell even below control levels because their operations are based on high turnover-low profit margin, and because they buy their stocks straignt from manufacturers, thus pocketing both the wholesale and retail profit margin allowed for by the Price Controller.[18]

At the bottom of Table 9 are the weighted means of actual as percentage of control prices. In all cases, evasion is highest for the lower income and decreases as you rise up the income scale, though evasion is slight in all cases when compared with Killick's results of price controls in Ghana in 1960s.

Table 10 shows the actual maize prices and the figures in brackets are actual prices as percentage of control prices. Table 11 shows maize prices in municipal market stalls. From Table 10, we note that 'undercharging' in the open air markets is more of the rule than the exception. Out of the 68 cells in Table 10, 52 show actual prices below control levels, equal in four, and greater than control prices in 12. In Limuru and Timboroa, for example, the actual prices have, over the period, been below control levels.

There are many instances where price control regulations are flouted but the extent to which they are flouted can not be properly quantified. For example, Table 9 shows that the actual price of sugar corresponds with the control price. However, traders sell a kg. of sugar at the control price but require the customer to bring his own container or buy from him the paper bag used in packing the sugar. This is an evasion of the Price Control (Sugar) Order, 1976, which specifies that the gazetted retail price includes the cost of packing.

---

18. Mentioned in Contact, Journal of the Kenya Consumers' Organisation, July 1972, p. 1.

Table 10. Maize Prices in Shs/Kg. - June 1977 - March 1978.

	Kiambu	Nyeri	Karatina	Limuru	Timboroa	Butere	Kawangware	Burmar
27 June to	0.90	-	-	1.05	0.95	0.95	1.45	1.30
3rd July	(69.2)	-	-	(80.8)	(76.0)	(76.0)	(111.5)	(100.0)
25th July to	1.10	0.85		0.95	1.00	0.75	1.25	1.20
31st July	(84.6)	(65.4)	-	(73.1)	(80.0)	(60.0)	(96.2)	(92.3)
22nd August to	0.65	1.00	-	1.10	1.00	0.50	1.45	1.20
28th August	(50.0)	(76.9)	-	(84.6)	(80.0)	(40.0)	(111.5)	(92.3)
19th Sept. to	0.65	1.00	1.15	1.15	-	0.65	1.20	1.20
25th Sept.	(50.0)	(76.9)	(88.5)	(88.5)	-	(52.0)	(92.3)	(92.3)
24th Oct. to	0.75	0.90	0.80	0.90	-	-	1.30	1.20
30th Oct.	(57.7)	(69.2)	(61.5)	(69.2)	-	-	(100.0)	(92.3)
28th Nov. to	-	-	1.00	0.70	1.00	1.00	1.25	1.20
4th Dec.	-	-	(87.0)	(60.9)	(90.9)	(90.9)	(108.7)	(104.3)
26th Dec. to	0.90	1.20	1.25	0.95	.90	1.15	-	-
1st Jan.	(78.3)	(104.3)	(108.7)	(82.6)	(81.8)	(104.5)	-	-
23rd Jan. to	0.70	1.00	0.90	0.65	0.80	1.00	1.15	1.20
29th Jan.	(60.9)	(87.0)	(78.3)	(56.5)	(72.7)	(90.9)	(100.0)	(104.3)
20th Feb. to	1.20	1.00	1.00	0.90	0.70	1.00	1.35	1.20
26th Feb.	(104.3)	(87.0)	(87.0)	(78.3)	(63.6)	(90.9)	(117.4)	(104.3)
27th March to	0.60	1.00	-	0.90	0.60	1.00	1.15	1.20
2nd April	(52.2)	(87.0)	-	(78.3)	(54.5)	(90.9)	(100.0)	(104.3)
Control Price April-Oct.	1.30	1.30	1.30	1.30	1.25	1.25	1.30	1.30
Control Price Nov.	1.15	1.15	1.15	1.15	1.10	1.10	1.15	1.15

Table 10. Maize Prices in Shs/Kg. - June 1977 to March, 1978. (Cont').

Note: The figures in brackets are actual prices as percentage of control prices.

Source: Actual prices from Market Information Bulletins, June 1977 to March 1978 issues. Control prices from L.N. Nos. 88/1977 and 275/1977.

Table 11. Maize prices in Shs/Kg. in Municipal Markets

	JULY 1975	SEPT. 1976	JULY 1977
Nairobi	1.02 (102)	1.00 (100)	1.33 (102)
Kisii	1.19 (119)	1.23 (123)	1.10 (88)
Kakamega	1.19 (119)	1.23 (123)	0.80 (64)
Kitale	1.25 (125)	1.25 (125)	2.00 (160)
Mombasa	1.20 (120)	1.10 (110)	1.35 (100)
Nyeri	1.50 (150)	1.00 (100)	1.69 (130)
Embu	1.00 (100)	1.00 (100)	2.00 (154)
Nakuru	1.10 (110)	1.13 (113)	1.45 (116)
Kisumu	.97 (97)	0.75 (75)	1.29 (103)
Malindi	1.10 (110)	- -	1.39 (103)
Meru	.85 (85)	-	1.00 (77)

Note: The figures in brackets are actual prices as percentage of controlled prices.

Source: Actual prices from CBS and control prices from L.N. Nos. 33/1975 and 88/1977.

Price control also affects the prices of uncontrolled commodities through conditional sales. Conditional sales refer to 'a restriction of sales of the price controlled commodity to buyers who undertake to purchase another commodity or range of commodities, which otherwise they would not buy, or at least not at the price they are required to pay' (Bauer, 1965, p. 25). There has been numerous instances of this in Kenya. Some butchers refused to sell beef unless a customer purchased offals at the same time.[19] When there was shortage of rice in August 1975, retailers required a customer to make purchases of a certain value before he is sold a kilo of rice.[20] Although the extent to which conditional sales raise the general price level is difficult to estimate, it is important to note that such practices occur when there is a shortage of the price controlled commodity, and therefore demonstrates the ineffectiveness of price control in times of shortage when price control is needed most.

When the price freeze was put in force in December 1971, traders and manufacturers started looking for ways of going round it. In May 1972, six months after the freeze was announced, the Government noted that traders were disguising price increases by reducing discounts to which customers were entitled.[21] A Nairobi journalist wrote an article titled 'How to Beat the Government's Price Control Measures' in which he outlined the various ways in which traders were beating the price freeze.[22] These included:

(a) Reducing discount. He cited a case where the listed price of a car was KSh 25,000 but the going discount in that firm was normally 15%. By reducing the discount to 5%, the firm was selling KSh 2,500 above the control price.

(b) Offering products claiming that they were of higher quality or design, thus deceiving the customer into paying more for a price controlled item.

---

19. The Standard, 9th February 1975.

20. Daily Nation, 26th August 1975.

21. Daily Nation, 31st May 1972.

22. Peter Mwaura 'How to Beat the Government's Price Control Measures,' Sunday Post, 18th June 1972.

(c) Offering products disguised as new products and therefore not subject to price control.

(d) For service charges, traders overcharged by making false claims. If they charge, say, KSh 20 per hour for servicing your car, they still charge you at the same rate but make more money by claiming your job took two or more hours extra.

The General Price Order had many problems of enforcement. First, the Order required one not to raise the price 'ordinarily charged' on the freeze date. Thus, if a trader was selling an item at a price higher than in other shops, the trader would not be contravening the Order if he continued selling at the same high price. It became difficult for price control officials to know the price 'ordinarily charged' on the freeze date since traders would produce fake books of accounts.

Secondly, the Order did not apply if a commodity was not sold on the freeze date. If by mistake the Order was signed on a Sunday or public holiday when all shops had closed, it would have been void when it was signed.

Thirdly, the Order did not apply if the commodity was not in stock or was not in production. The Minister for Finance has been trying to bring new products under the Order by updating it. Some manufacturers change design and sell at their own prices. This is not confined to Kenya. When the French government tried to freeze the price of the humble croissant, the shopkeepers changed its shape, nicknamed it le Barre (the name of France's prime minsiter who had frozen the price) -- and raised its price.[23]

Fourthly, at times it become difficult for a trader or manufacturer to know whether he is contravening the Order or not due to the problem of interpretation. For example, in August 1977, the Price Control Department received a complaint that a well-known international hotel in Nairobi put up the charge for the use of toilet facilities by 900%, from ten cents to one shilling, making loos more lucrative than parking meters.[24] The hotel owners could not imagine that charges for toilet facilities came within the ambit

---

23. 'Europe's Incomes Policies', The Economist (London), February 11, 1978, p. 100.

24. The incident qualified for the 'Funny World' column of the East African Report on Trade and Industry, September 1977, p. 40.

of price control regulations. They were forced to return to the previous charges on the grounds that 'catering' comes under the General Price Order and toilet facilities are ordinarily offered in the normal course of catering!

6. CONCLUSION

On the price front, the price freeze contributed much to moderating price increases, at least in its first year of operation. After the first year, the success of price control in controlling the cost of living must have declined, for two main reasons. First, some small firms which had exercised restraint in 1972 started increasing prices without consulting the Price Controller, thus reducing the coverage of the General Price Order. Secondly, if a firm had lowered its profitability in the first year, the Price Controller most likely passed on further cost increases to the consumer.

Although controlled firms were more profitable than noncontrolled ones before the controls were introduced, the ratio of profitability of controlled to noncontrolled firms has been declining. The more efficient firms absorbed labour cost increases and in some cases profitability even went up. However, price control has adversely affected the profitability of the marginally profitable firms, although it is debatable whether such firms should be protected. Companies engaged in the production of necessities get low price increases for their products. This discourages supply and leads to occasional shortages of necessities.

Price control has other failures to record. It is not speedy enough in processing applications for price increases and at times, producers are forced to temporarily stop production or suspend some production lines awaiting action from the Price Controller. There are also instances where the control is redundant. In the case of motor car spare parts for example, there is 'factor formula' developed in 1972 for reaching retail prices, which makes absolute profits increase at the same rate as landed cost. Some dealers even sell below control levels and price control is then officially said to be 'working' because there is no abuse of the factor formula.

The enforcement of price control regulations is easy for branded commodities like fats, soft drinks, etc. However, in the case of charcoal and other non-standardised commodities, dealers can evade the controls by lowering quality or changing the measure. Despite occasional raids on

charcoal dealers by price control inspectors posing as buyers, official prices have been regularly and openly ignored and the legal maximum price has been the operating minimum. The control price is too low and there is not effective surveillance at the wholesale stage. A worrisome side effect of price control on charcoal is that it may have caused a downward bias in the consumer price index. The lower income spend an estimated 1.96% of their disposable income on charcoal. If we assume that the price of charcoal went up by 50% in 1977 over and above the increase revealed by CBS data, then the lower income consumer price index was depressed by about 1%, which could have important repercussions in as much as the consumer price index is used by the Industrial Court as a basis for wage awards.

7. METHODOLOGICAL ISSUES: AN EPILOGUE

There have only been few empirical studies of price control. This paper did not, therefore, take advantage of the mistakes of others and there are no other countries' studies to compare my results with. In addition, there is a 'missing figure', what the 'real' price or profit would have been in the absence of controls. A few examples will illustrate.

(1) The 'missing figure' problem makes the comparison of actual with control prices a hopelessly inadequate measure of effectiveness of controls. If commodites retail at below control levels, legally the policy is working because control prices are supposed to be legal maxima but in economic terms, it means the policy is redundant. If items retail at control levels, we can conclude that possibly the controllers correctly guessed the market clearing price, in which case there is no incentive to evade the controls. And if items retail above control levels, we can conclude that the law is ineffective.

(2) A reliable analysis of the influence of price controls on the cost of living requires an estimation of the influence of demand and supply so that the price control effect can be taken as a residual. In that light, we concluded that the price freeze led to a moderation of price increases in 1972 at the risk of committing the fallacy of post hoc ergo propter hoc (a latin phrase whose literal translation is 'after this, therefore necessarily because of this').

(3) Since value added is expressed in money terms, it is affected by prices.

(4) Quality changes are ignored in the analysis.

(5) It is not clear what the aims of controls are. If we take the cost of living to be the criteria, then zero price increase, whatever effect controls may have no production, would be the target.

(6) We assumed that the prices of controlled products would rise at the same rate as noncontrolled products if controls were abolished. However, the purchasing power that would have been absorbed by controlled products in the absence of controls spills over into demand for noncontrolled items and causes their prices to rise. This implies that the prices of noncontrolled products with controls are higher than they would otherwise have been in the absence of controls.

There are two basic conclusions to be derived from this paper. First, due to methodological problems listed above, empirical analysis, though necessary is not a substitute for good theory. Secondly, inspite of the faith people have on price control,[25] it does not make much economic sense to think that the solution to inflation is to legislate against it and expect it to be law-abiding. There is even a danger that price control might make income distribution worse by diverting attention from more important considerations like property ownership and industrial protection.[26]

---

25. See, for example, Daily Nation editorial, 'Time to Act on Vegetable Prices', 2nd August, 1978, where it is stated that 'the public is being let down in an area where it can be helped'.

26. In discussing the limitations of price control as an anti-monopoly measure, I stated: '... In practice, the very idea of price control to regulate monopolies may encourage concentration. First, a rigid price control in an industry may discourage other firms from investing in the industry, thus retaining the number of firms which was there when the price control system was introduced. Secondly, there is a danger that a government may encourage the growth of monopolies through industrial protection just because it feels that it can control them through price control. Whether the government can effectively control such monopolies is not the issue. Giving protection and then controlling prices is like giving something with one hand and taking it away with the other (Mukui, 1978, p. 13).

BIBLIOGRAPHY

1. Bauer, P.T. 1963. West African Trade. London, Routledge and Kegan Paul Ltd.

2. Bauer, P.T. 1965. 'Price Control in Underdeveloped Countries'. Journal of Development Studies. 2 (1), October, pp. 19-37.

3. Bienayme, Alain. 1978. 'Incomes Policy in France'. Llyods Bank Review. (128), April, pp. 33-48.

4. Blackaby, Frank, ed. 1972. An Incomes Policy for Britain. London, Heinemann.

5. Clarke, L.W. 1955. 'The Problems of Price Collection in African Markets and Their Relation to Retail Price and Cost of Living Indices'. Nairobi, East African Statistical Department, mimeo.

6. Cockfield, Arthur. 1978. 'The Price Commission and the Price Control'. The Three Banks Review. (117), March, pp. 3-25.

7. Edgren, Gus. 1977. 'The Politics and Economics of Wage Control'. Labour and Society. 2 (4), October, pp. 407-24.

8. 'Europe's Incomes Policies'. 1978. The Economist (London). February 11, pp. 100-1.

9. Friedman, Milton. 1971. 'Why the Freeze is a Mistake'. Newsweek. 78, August 30, p. 23.

10. Galbraith, J.K. 1952. A Theory of Price Control. Cambridge, Mass., Harvard University Press.

11. Ghai, D.P. 1968. 'Incomes Policy in Kenya: Need, Criteria and Machinery'. East African Economic Review. 4 (1) (New Series), June, pp. 19-34.

12. Ghai, Dharam and Charles Hollen. 1968. 'The Industrial Court in Kenya: An Economic Analysis'. Discussion Paper No. 73. Institute for Development Studies, University of Nairobi.

13. Gould, J.R. and S.G.B. Henry. 1967. 'The Effects of Price Control on a Related Market'. Economica. 34 (133), February, pp. 42-9.

14. Grayson, C. Jackson, Jr. 1974. 'Controls are not the Answer'. Challenge. 17 (5), November/December, pp. 9-12.

15. Haythorne, George V. 1973. 'Prices and Incomes Policy: The Canadian Experience, 1969-72'. International Labour Review. 108 (6), December, pp. 485-503.

16. Heyer, Judith. 1975. 'Who Benefits from the Price Increases?' The Weekly Review (Nairobi). February 8, pp. 26-8.

17. Hiribae, Wilson E. (Price Controller). 1974. 'On the Carpet'. Sunday Nation (Nairobi), 19th May.

18. Houthakker, Hendrik S. 1972. 'Are Controls the Answer?' Review of Economics and Statistics. 54 (3), August, pp. 231-4.

19. Jervis, F.R.J. 1949. Price Control: Government Intervention or the Free Market? London, Hutchinson's Scientific and Technical Publications.

20. Jones, Aubrey. 1968. 'Prices and Incomes Policy'. Economic Journal. 78 (312), December, pp. 799-806.

21. Kenya. Central Bureau of Statistics. Ministry of Finance and Planning. Economic Survey. Nairobi, Government Printer, various issues.

22. Kenya. Central Bureau of Statistics. Ministry of Finance and Planning. 1977. Statistical Abstract. Nairobi, Government Printer.

23. Kenya. Central Bureau of Statistics. Ministry of Finance and Planning. 1977. Consumer Price Indices Nairobi. Nairobi, Government Printer.

24. Kenya. Central Bureau of Statistics. Ministry of Finance and Planning. Market Information Bulletin. Nairobi, June 1977 to March 1978, monthly.

25. Kenya. Ministry of Labour. 1975. 'A Review of Two Years of Wages and Incomes Policy'. December (mimeo).

26. Killick, Tony. 1973. 'Price Controls in Africa: The Ghanaian Experience'. Journal of Modern African Studies. 11 (3), September, pp. 405-26.

27. Killick, Tony. 1975. 'Understanding Kenya's Inflation'. The Weekly Review (Nairobi). 3rd March, pp. 6-8.

28. Kimble, Helen. 1970. Price Control in Tanzania. Nairobi, East African Publishing House.

29. Leibenstein, Harvey. 1976. Beyond Economic Man. Cambridge, Mass., Harvard University Press.

30. Lekachman, Robert. 1974. 'The Inevitability of Controls'. Challenge. 17 (5), November/December, pp. 6-8.

31. Mukui, J.T. 1978. 'Price Controls in Kenya'. M.A. Research Paper, Department of Economics, University of Nairobi.

32. Mutunga, Willy. 1974. 'The Rent Acts and the Housing Problem in Kenya'. LL.M. dissertation, University of Dar es Salaam.

33. Mwaura, Peter. 1972. 'How to Beat the Government's Price Control Measures'. Sunday Post (Nairobi). 18th June.

34. Ngweno, Hilary. 1973. 'A Spirited Debate on the Need for a Whole Lot of Price Controls'. Daily Nation (Nairobi). 23rd January.

35. Noormohamed, S.O. 1975. 'Economic Consequencies of Rent Control in Kenya: A Case Study of Eastleigh, Nairobi'. M.A. thesis, University of Nairobi.

36. Oyemakinde, Wale. 1973. 'The Futility of Price Control in Nigeria'. Pan-African Journal. 6 (3), Autumn, pp. 313-20.

37. Rice, R.C. 1979. 'The Tanzanian Price Control System: Theory, Practice and Some Possible Improvements'. In Kwan S. Kim et al, eds. Papers on the Political Economy of Tanzania. Nairobi, Heinemann Educational Books.

38. Taussig, F.W. 1919. 'Price-Fixing as seen by a Price-Fixer'. Quarterly Journal of Economics. 33, February.

COLLECTION OF CONSUMER PRICE DATA IN URBAN AND RURAL AREAS OF KENYA

By

G. H. Olum
Central Bureau of Statistics
Ministry of Economic Planning and Community Affairs

INTRODUCTION

This paper gives an account of the methodology of consumer price data collection in Kenya with particular emphasis on the practical problems encountered and the solutions devised to solve these problems.

CONSUMER PRICE INDEX[1]

A consumer price index is defined as an index number which measures changes from one period to another in average prices paid by a specified group of consumers for a given quantity and quality of goods and services. The index thus measures changes in prices. Looked at in another way, the consumer price index states the percentage rise in income (compared with that in the base year) needed to buy the same 'market basket' of goods and services at current prices.

In Kenya income groups are defined as follows:-

(a) Lower Income Group:- This refers to households which in 1974 were earning less than Shs.700 per month.

(b) Middle Income Group:- This refers to households which in 1974 were earning between Shs.700 and Shs. 2,499.

(c) Upper Income Group:- This refers to households which in 1974 were earning Shs.2,500 and above.

Classification of the above three groups of consumers is based on information obtained from the Nairobi Household Budget Survey conducted in 1974.

---

1. This section deals with the Consumer Price Indices for Nairobi. For further details, see Kenya, Central Bureau of Statistics, Ministry of Finance and Planning, Consumer Price Indices Nairobi, Nairobi, Government Printer, March 1977.

Weighting System

Details on expenditures collected in the 1974 survey were classified in accordance with the recommendations contained in the U.N. System of National Accounts, and proportions of expenditure incurred on various items calculated by income groups described above. These proportions then formed the basis of the weighting system for the indices.

Selection of Commodities

Although a consumer price index is designed to reflect price changes for a wide range of goods and services, it is obviously impractical to collect prices for every item and brand sold in Nairobi, and also unnecessary. Instead of taking all goods and services, only representative goods and services are selected. The method of selection is first to divide all the commodities on which expenditures are incurred into groups of close substitutes, or at least groups having similar raw materials. The idea is that prices of close substitutes tend to move together and a few items within a group can therefore be taken to represent the group.

In making selection of items two general principles were considered:-

(i) all types of items for which there are characteristic price trends were represented in the index; and

(ii) items selected should remain unchanged if possible over a period of time.

The general principle in the selection of representative items is that the more important the group, and the less homogeneous the component items, the larger must be the items taken to represent it.

Selection of Outlets

The prices of any commodity vary according to the location of the outlet and the type of outlet from which the commodity is purchased - market stall, retail shop, supermarket, etc. Theoretically, the number of the different types of outlets should be in proportion to the expenditures incurred in them. Further, within the strata defined by type of shop and area, outlets should be randomly selected. Since the information on relative

expenditures incurred in different types of outlets in different areas of Nairobi was not obtained in the expenditure survey, it is not possible to follow these principles rigidly. Instead the outlets have been selected on the basis of local knowledge of types of outlets within the various localities in Nairobi.

Specification of Items

For a price index to reflect price change and nothing else, a homogeneous type of good or service must be priced each time to ensure similarity and constant quality. Specifications for most items and services included in the indices are maintained in the commodity registers compiled by the Bureau, which give detailed descriptions of the form and physical characteristics of the items. The list of commodities and services included in the indices appear in the appendix. Only limited specifications are given in the appendix for brevity.

PRICE DATA COLLECTION IN NAIROBI

Prices for items in the index for the Lower Income Group are collected at the beginning of every month and price collection lasts about four days. For the Middle and Upper Income Groups, prices are collected from 15th of every month and collection lasts approximately one week. Prices are collected by personal visits to the various retail outlets by members of staff who go through the normal system of bargaining. For certain items sample purchases are made and the items so purchased are disposed of at the Kenyatta National Hospital. These items are identified in the appendix.

Theoretically when prices are collected from different sources, weights should be assigned to each source according to volume of sales to estimate a weighted average price. In practice, however, this is extremely difficult particularly when one is dealing with small retailers with hardly any sales records. Hence, in Kenya we take the simple unweighted average of prices obtained from various outlets.

Since the accuracy of the consumer price index depends to a large extent on the accuracy of the prices themselves, the following general principles are followed when collecting prices:-

(i) The prices represent the group of persons to whom the index relates. In other words, price collectors make purchases or obtain quotations as actual purchasers in different income groups would; and

(ii) Prices correspond to the same quantity and quality of each item, to the same or equivalent sellers, to the same condition of sale and even to the same part of the week.

Practical problems of price collection

In areas and for items for which actual purchases are not made, prices are collected by quotation. Mere price quotations whether reported by retailers or obtained by price collectors are usually inaccurate and false entries are by no means uncommon. This is particularly common with stores dealing with motor-vehicle spare parts, household durables, furniture and clothing, where we normally hand over questionnaires to the sales attendants in such stores and collect the questionnaires after a day or two.

Quotation of controlled prices is another area which need mention. Ideally we are concerned with prices being paid by consumers and that is what the index should measure. However quotation of prices for meat and charcoal has in the past been posing some problems. In the Middle and Upper Income groups where we have graded meat, the problem was getting prices actually paid by consumers as opposed to controlled prices. When a butcher is given a questionnaire, he would fill in controlled prices but test purchases when made showed higher prices. In the case of charcoal, charcoal dealers refuse to give quotations or disappear from the scene, unit of sale is changed, and charcoal is sold at night to avoid harassment from price control inspectors. These practical problems have been sorted out as follows:-

(i) Callbacks are made when we find prices quoted are not consistent with the specifications given.

(ii) Budget for purchases of meat and meat products increased to allow actual purchases to be made.

(iii) Charcoal prices are collected by interviewing households within the area where price collection is taking place.

Other Problems

(a) Fruits and Vegetables

Problems arise because the prices of fruits and vegetables are subject to seasonal variation, and at certain times of the year some fruits and vegetables go off the market altogether. The method used for any fruit and vegetable is to calculate the ratio of a twelve month moving average ending with the current month to a similar moving average ending with the corresponding month in the base period. When, however, a particular vegetable or fruit becomes unobtainable at certain times of the year, the price is either left unaltered until it is again obtainable in the market, or left out of the calculation, its weight being spread over those of the other fruits and vegetables.

(b) Changes in Fashion or Quality

In some cases, changes in fashion or quality make it almost impossible to price the identical article over a long period of time. Secondly, new products are introduced which frequently bear little resemblance to products selected during the base period, and as such, direct price comparisons cannot be made. When there is a change in fashion, prices for the two items are collected for a period of time. During this period, a ratio is calculated of the price of the latter item to that of the former. The base period price is then adjusted by multiplying it by this ratio to obtain what would have been the base price of the new item.

PRICE COLLECTION IN OTHER MAIN TOWNS AND URBAN AREAS

The Central Bureau of Statistics is extending the coverate of price collection exercise to other towns and urban areas. Quarterly price collection in the three big towns i.e. Mombasa, Kisumu and Nakuru started in 1976 and the Bureau is currently compiling cost of living indices for these towns. Commodity and group weights are derived from the information collected in the Urban Food Purchasing Survey conducted in these towns in 1977. A composite index for only middle and lower income groups is calculated because the survey covered households earning less than KShs.2,500/-. These indices will be published after they have been formally cleared.

In other urban areas, prices are collected annually and are used for comparative purposes only. Consideration is being given to computing tentative indices based on weights derived from data collected in the Integrated Rural Surveys discussed below.

PRICE COLLECTION IN THE RURAL AREAS

Background. Price collection in the rural areas is a comparatively recent development in Kenya and has grown out of the Bureau's National Integrated Sample Survey Programme (NISSP). The most important survey administered under this programme is the Integrated Rural Survey, a multi-purpose household survey which collects data on smallholder agricultural production as well as household income, expenditure and consumption.[2] One of the most important objectives of the programme was to establish a permanent and efficient statistical infrastructure to collect data throughout the rural areas of Kenya. This infrastructure consisted of a well-trained cadre of field enumerators and supervisors permanently stationed in the field and qualified to undertake a variety of different statistical enquiries. The range of subjects covered by the NISSP surveys in the following year included for instance demographic studies, agricultural production, nutrition, literacy, fertility, marketing, etc.

Market Information Service. Although initially the work programme of the enumerators described above was almost exclusively centred on household interviews, their duties were expanded in 1977 to include weekly visits to specified markets for the purpose of collecting regular up-to-date market information. This market information service was initiated as a result of a joint FAO/Kenya Government Marketing Development Project; in which the Central Bureau of Statistics was to play a significant role as one of the main sources of data on marketing operations in rural areas.

Initially eighty markets[3] were selected. Within each province a list was made of the most important and strategic markets. A subset of these markets was then chosen for inclusion in the Market Information Service according to how accessable they were to the Bureau's enumerators. One enumerator was then assigned to cover each of the selected markets.

---

2. The consumption data from this survey will later provide the baseline weights for the rural 'basket of goods and service' needed to establish the rural cost of living index.

3. Minor changes have been made to the original list of markets, in the light of experience gained, but the total number by 1979 was still 80.

The main function of the enumerators is to collect weekly data on prices, volumes, and number of traders dealing in the most important crops in the market. These crops include maize, beans, cabbages, tomatoes sorghum, millet and potatoes. In collecting price data the enumerator is instructed to record information on a number of observed sales. His observations are deliberately spaced throughout the entire period of the day as well as across a variety of different sellers. An average price for the day is then later computed on the basis of these observed sales. Initially each enumerator was supplied with a weighing scale with which to check the weight of the produce sold. Later the enumerator was in addition supplied with a specially calibrated 'Standard Debe' a 'Standard Tin' since grains and pulses are traditionally sold by volume.

These data must be processed and published with minimum delay. Therefore considerable attention is devoted to getting the completed forms to Nairobi within a few days. Different types of transport are used including supervisors' motorbikes, and public taxis, depending on the location of the market. Initially a restricted computer print-out of the prices is produced on a weekly basis with a time-lag of ten days. This is subsequently re-published as a part of a regular Bureau publication, the Market Information Bulletin, on a monthly basis.

Recent Development. The Market Information Service was initially established for the dissemination of market news. It is however being considerably expanded into a much more extensive price collection exercise with a view to establishing a rural cost of living index. The first step in this expansion was taken in December 1978 when, for a smaller number of selected markets, prices were collected for a much more extensive list of items. This exercise included visits to local shops (dukas), butchers and non-market retail outlets. The initial pilot round proved successful. The exercise will be permanently established on a quarterly basis and will be merged together with the already existing Market Information Service. On the basis of this expanded price collection exercise, it is envisaged that by the end of 1979, it will be possible to compute a rural cost of living index and rural/urban domestic terms of trade indices.

Conclusion. Kenya is fortunate in that it has been able to build its rural price collection operations on an already established rural statistical infrastructure. The system is still young and in its

developmental stage. It should be stressed however that there are certain specialized price information needs for which the Bureau's system is not a appropriate. A case in point is the daily reporting of fruit and vegetable prices in the main assembly markets. This is a somewhat specialized price reporting exercise which lies outside the scope of the Bureau's activities and would be more appropriately undertaken by another agency or department. Also outside the scope of the Bureau's system is price reporting on live livestock sales. The Bureau at this time sees itself firmly committed to an integrated system of data collection. Consequently its efforts over the next five year period will be directed towards reinforcing and expanding its price collection system within the National Integrated Sample Survey Programme rather than branching out to more specialized areas.

APPENDIX

COMMODITY ITEMS IN THE LOWER INCOME GROUP

CATEGORY AND ITEMS	CATEGORY AND ITEMS
1. FOOD	FOOD CONTID.
1.1 Cereals and Cereal Products	1.6.2 Vegetables
1.1.1 Cereals	
*Rice - Grade II	*Cabbages
*Wheat Flour - White 1 Kg	*Sukuma-Wiki
*Maize Flour	*Tomatoes
*Maize Grain	*Carrots
	*Onions leeks
1.1.2 Wheat Products	1.6.3 Pulses
Bread - White Ordinary	*Beans
Biscuits - Sweet Favourite	*Green Grams
1.2 Meat	1.7 Roots and Nuts
*Beef - Without Bone	1.7.1 Roots
- With Bone	*English Potatoes
Offal	1.8 Sugar
Poultry	*Sugar - Refined
1.3 Fish	1.9. Beverages
*Fresh Fish - Tilapia	Tea
1.4 Dairy Products & Eggs	Coffee
Milk - Green Tetrapack	1.10 Miscellaneous Food
*Eggs - Fresh	*Salt
1.5 Oils and Fats	Curry Powder
Kimbo	Lactogen - Baby Milk
Salad Oil	Tangauzi - Ground Ginger
Ghee - Cowboy	1.11 Purchased Food
Margarine - Blue Band	Ugali na Nyama
1.6 Fruits, Vegetables and Pulses	Irio
1.6.1 Fruits	Githeri - Maize and Beans
*Bananas - Green Bananas	TOTAL FOOD
- Ripe Bananas	

*Denotes items where purchases are effected.

CATEGORY AND ITEMS

2. DRINKS AND TOBACCO

2.1 Drinks

Beer - Tusker
Muratina
Buzaa
Fanta - Soda

2.2 Tobacco

Cigarettes - Sportsman
- Ten Cents

TOTAL DRINKS AND TOBACCO

3. CLOTHING AND FOOTWEAR

3.1 Clothing

3.1.1 Men's Clothing

Men's Suits
*Men's Shirts
*Men's Trousers
*Men's Underwears
Other Men's Clothing - Ties
Socks
Pull-Overs

3.1.2 Women's Clothing

*Women's Dresses
*Women's Dress Materials
*Women's Underwears
Other Women's Clothing -
Kanga
Kitenge
*H/Square

3.1.3 Children's Clothing

*Children's School Uniform
*Children's Dresses
*Children's Shirts
Children's Shorts
Other Children's Clothing -
Underwear
*Vests

CATEGORY AND ITEMS

3.2 Footwear

*Mean's Shoes - Leather
- Rubber
*Women's Shoes - Leather
*Children's Shoes - Leather

TOTAL CLOTHING AND FOOTWEAR

4. HOUSING FUEL AND POWER

4.1 Housing

4.2 Fuel And Power

Paraffin
Charcoal
Electricity
Water

5. FURNITURE, FURNISHING, HOUSEHOLD EQUIPMENT AND HOUSEHOLD OPERATIONS

5.1 Furniture, Furnishings and Household Equipment

5.1.1 Furniture and Furnishings

*Bed Linen
*Mattresses
*Table Chairs
Beds
*Towels
*Blankets
*Table

5.1.2 Household Equipment

Stoves
Brooms - Cleaning Equipment
China - Cup and Saucer
*China - Glassware - Tumbler
Cutlery - Knife
*Sufurias
*Plates
*Bowls
*Basins
Buckets
Broom
Pots and Pans

CATEGORY AND ITEMS

5.2 Household Operations and Domestic Services

5.2.1 Household Operation

∴Household Soap - Blue Soap
- Panga Soap

Detergent - Omo
Shoe Polish - Kiwi
Matches - Steamship

TOTAL FURNITURE, FURNISHING, HOUSEHOLD EQUIPMENT AND HOUSEHOLD OPERATIONS

6. HEALTH AND PERSONAL CARE

6.1 Medical Care & Health

Medicine - Aspro
- Cafenol
- Algon

Hospital Fees - Kenyatta N. Hospital
- Pumwani Maternity Hospital

6.2 Personal Care

Toilet Soap - Sunlight
- Lifeboy

TOTAL HEALTH AND PERSONAL CARE

7. TRANSPORT AND COMMUNICATIONS

7.1 Personal Transport

Bicycle - Standard
Puncture Repair
∴Bicycle Tube
∴Bicycle Tyre

7.2 Purchased Transport

Country Bus Fares - Nairobi/ Mombasa
- Nairobi/ Kisumu
- Nairobi/ Nyeri

City Bus Fares - Short Route
- Long Route

TOTAL TRANSPORT AND COMMUNICATION

CATEGORY AND ITEMS

8. RECREATION, ENTERTAINMENT, EDUCATION AND CULTURAL SERVICES

8.1 Education

School Fees - Private
- Sharda H. School
- City H. School

School Fees - Government
- Pumwani S. School
- Nairobi Girls
- Starehe Boys

8.2 All Others

8.2.1 Equipment

Records - E.A. Records
Record Players - Phillips - G.A. 214
Radio Phillips - RL 238
- Sanyo - 7s 107 WF

8.2.2 Entertainment

Cinema Entrance - Back Entrance
Stadium Entrance

8.2.3 Books And Newspapers

Newspaper - Taif Leo/Baraza

TOTAL RECREATION, ENTERTAINMENT EDUCATION AND CULTURAL SERVICES

9. MISCELLANEOUS GOODS AND SERVICES

9.1 Personal Goods

Razor Blades
Ball Pens
Envelops
Writing Pads

TOTAL MESCELLANEOUS GOODS AND SERVICES

COMMODITY ITEMS IN THE MIDDLE INCOME

CATEGORY AND ITEMS

1. FOOD

1.1 Cereal and Cereal Products

Cereals

Rice - grade 1 Pishori
Wheat Flour - White Packed
Wheat Flour - Brown
Maize Flour - White Packed
*Maize Grain
Corn Flakes - Post Toasties

1.1.2 Wheat Products

Bread - White Ordinary
- Brown
Biscuits - Nice
Queen Cakes
Scones

1.2 Meat

*Beef - Beef with Bones
- Steak
Chicken - Alive
- Capon
Offal - Tripe

1.3 Fish

*Fish - Fresh Tilapia
*Fish - Dried Tilapia

1.4 Dairy Product and Eggs

Fresh Milk - Green Tetrapack
Eggs

1.5 Oil and Fats

Butter - Salted
Tinned Fat - Kimbo
*Salad Oil - Bottled -Elianto
- Tinned
Ghee Coloured - Cowboy
Margarine - Tinned

CATEGORY AND ITEMS

1.6 Fruits, Vegetables and Pulses

1.6.1 Fruits

Banana - Unripe Uganda Type
*Banana - Ripe Kampala
*Oranges
*Lemons
*Pineapples

1.6.2 Vegetables

*Onion - Pink
*Cabbages
*Carrots
*Tomatoes
*Kale

1.6.3 Pulses

*Peas
*Beans
*Greengram

1.7 Roots and Nuts

1.7.1 Roots

*Potatoes - English

1.8 Sugar

Sugar - Refined
Jam - Strawberry
- Plum
Honey and Glucose - Smith
- Capilano
Sweets - Tropical

1.9 Beverages

Coffee - Instant Kenna
- Brooke Bond
- Instant Nescafe
Tea Leaves - Brooke Bond
Green Label

Milo
Bournvita
Ovaltine

1.10 Miscellaneous Food

Table Salt - Fine Packed Packet

Curry Powder - Simba Mbili-
Virani

Ginger

CATEGORY AND ITEMS

Baby Milk - Nan
- Lactogen
Baby Food - Cerelac
- Farlene

1.11 Purchased Food

Fish and Chips
Biriani
Karanga

TOTAL FOOD

2. DRINKS AND TOBACCO

2.1 Drinks

Soda - Fanta
- Pepsicola
Orange Squash - Pep
Beer - White Cap
- City
- Tusker Export
Vat 69
Smirnoff Vodka
Johny Walker
Wine

2.2 Tobacco

Cigarettes - Sportsman
- Embassy
- Sweetnut

TOTAL DRINKS AND TOBACCO

3. CLOTHING AND FOOTWEAR

3.1 Clothing

3.1.1 Men's - Suits - Trevira/Wool
- Long Trousers - Trevira/Wool
- *Shirts - Polyster/Cotton
- *Underpants - Nylon
- Vests - Sunflag
- Pullovers - Acrylic
- Socks - Nylon
- Ties

CATEGORY AND ITEMS

3.1.2 Women's Clothing

*Women's - Dresses - Crimplene
*Dress Mateirals-
- Polyster/Cotton
- *Underwear - Pants
- Brassiers
- Petticoats
Women's Stockings - Nylon-Eve
Other Women's Clothing-
- Kanga
- Cardigan
- Headsquare
- Coats - Crimplene
- Trousers
- Blouse

3.1.3 Children's Clothing

Children's School Uniform -
- Girls
- Boys

*Girls' Dresses
*Boys' Shirts
Boys' Long Trousers - Crimplene
Children's Sweater-Acrylic
Children's Vests - Cotton
*Children's Underpants - Midco

3.2 Footwear

Men's Leather Shoes
Women's Leather Shoes
Children's Leather Shoes
*Sandals - Hawaai

4. HOUSING, FUEL AND POWER

4.1 Housing

4.2 Fuel And Power

Gas
Paraffin
Methylated Spirit
Charcoal

CATEGORY AND ITEMS
Water Electricity TOTAL HOUSING, FUEL AND POWER
5. FURNITURE, FURNISHINGS, HOUSEHOLD EQUIPMENT AND HOUSEHOLD OPERATIONS
5.1 Furniture, Furnishings and Household Equipment
5.1.1 Furniture And Furnishings
Sofa Set - Ngambo Dinning Set - 5 pieces Table With formica top Chair with padded cushion and seat Coil spring bed with all metal frame legs Dressing Table Wardrobe Blankets Bedsheets - 60" x 90" plain local Mattress - Foam Curtains - Synthetic fibre Bath Towel - stripped/solid colours
5.1.2 Household Equipment
Refrigerator Gas Cooker Pressure Stove Electric Cooker Electric Heater Electric Fan Electric Bulb Sewing Machine Dinner plates - Eartherware Cup and saucer Soup plate Table fork Table Knife Kitchen Knife Broom - Finlay
5.2 Household Operations and Domestic Services

CATEGORY AND ITEMS
5.2.1 Household Operations
Servants Wages Detergent - Omo - Surf Shoe polich - Kiwi Shoe Cream - Kiwi Suede Shoe Cleaner Laundry Soap - Panga - Blue Matches Laundry Dry Cleaning
TOTAL FURNITURE, FURNISHING, HOUSEHOLD EQUIPMENT AND HOLD OPERATIONS
6. HEALTH AND PERSONAL CARE
6.1 Medical Care and Health
Eye examination and prescription of eye glasses - Doctor's fee Child delivery - Hospital fee Medicine Ambulance charges Dental filling Tooth Extraction
6.2 Personal Care
Toilet Soap - Perfumed Skin lotion Skin cream Powder - Perfumed Tooth paste Toilet Rolls
TOTAL MEDICAL CARE AND HEALTH
7. TRANSPORT AND COMMUNICATIONS
7.1 Personal Transport
New Car New Motor Cycle
7.2 Operation of Personal Transport
Lubrication

CATEGORY AND ITEMS

Engine tune up
Head lamp assembly
Brake lining or brake pad
Storage Battery 12 volts
Tyre
Tube
Spark Plug
Petrol - Regular/Premium
Engine Motor Oil
Gear box oil
Road license

7.3 Purchased Transport

Car hire - self drive
Bus fare - within Nairobi
- Nairobi to Provincial Headquarters

7.4 Communications

Postage - land, air or sea
Telephone call in Nairobi - Minimum period
Trunk call - Nairobi to Provincial Headquarters

TOTAL TRANSPORT AND COMMUNICATIONS

8. RECREATION, ENTERTAINMENT, EDUCATION AND CULTURAL SERVICES

8.1 Education

School fees - Private School
- Government School

8.2 All Others

8.2.1 Equipment

Radio - 3 band-Electric/battery
Record Player - Automatic
Records 45 - r.p.m. E.A. language
- outside E.A.

CATEGORY AND ITEMS

8.2.2 Entertainment

Theatre/Cinema Entrance Fee - Back Stalls
Stadium Entrance - Non Sheltered Terrace
Radio Licence
T.V. Rental - Monthly

8.2.3 Books And Newspapers

Newspaper - English Daily
Magazine - Weekly Review
Books - Bible
- Dictionary

TOTAL RECREATION, ENTERTAINMENT, EDUCATION AND CULTURAL SERVICES

9. MISCELLANEOUS GOODS AND SERVICES

9.1 Personal Goods

Stationery - Envelopes
- Ball point
- Writing pad
- Wrist watch - Men's

Men's Umbrella
Shaver Manual - Clippers

9.2 Financial Services

Motor Insurance - Comprehensive
- Third party

TOTAL MISCELLANEOUS GOODS AND SERVICES

COMMODITY ITEMS IN THE UPPER INCOME GROUP

CATEGORY AND ITEMS

1. FOOD

1.1 Cereals and Cereal Products

1.1.1 Cereals

Rice - Grade 1 Pishori
Wheat Flour - White Packed
Maize Flour - White Packed

1.1.2 Wheat Products

Breakfast Cereals - P. & A.
- Country
- Style
- Natural Cereal
- Bran Flakes

Bread - Premium
- Brown

Biscuits - Assorted Cream
- Nice
- Digestive

1.2 Meat

Steak - Sirloin
- Rump
- Fillet
- Stewing
- Topside

Lamb - Loin
- Leg
- Shoulder
- Carcas

Pork - Loin, Leg, Shoulder
*Chicken - Capon
Beef - Sausage
Pork - Sausage
Bacon - Packed
Tinned Meat - 3 Bulls
Corned Beef - Fray Bentos

CATEGORY AND ITEMS

1.3 Fish

*Fish - Fresh Tilapia
Tinned Fish - Witco Tuna Fish
- Cherry Star
- Oyster

1.4 Dairy Products and Eggs

Fresh Milk - Green Tetrapack
Tinned Milk - Ideal
Cheese - Cheddar
Eggs

1.5 Oil and Fats

Butter - Salted
- Unsalted
Kimbo - Tinned Fat
Salad Oil - Mazola Corn Oil
Ghee Coloured - Cowboy
Margarine - Tinned

1.6 Fruits, Vegetables and Pulses

1.6.1 Fruits

*Bananas - Ripe Kampala
*Oranges
*Lemons
*Mangoes
*Coconut
*Pineapples
*Pawpaw
*Apples
Other Fresh fruits - Pears
Tinned Fruits - Pineapples

1.6.2 Vegetables

*Onion - Pink
*Cabbages
*Carrots
*Celery
*Cucumber
*Lettuce
*Tomatoes
*Spinach
*Cauliflower
*Kale

CATEGORY AND ITEMS	
1.6.3	Pulses
	*Peas
	*Beans
	*Green grams
1.7	Roots and Nuts
1.7.1	Roots
	*Potatoes - English
1.8	Sugar - refined
	Jam - Rasp berry
	Marmalade - Orange Sevile
	Honey and Glucose - Smith
	Capilano
	Creamed Honey
	Sweet - Toffee
1.9	Beverages
	Coffee - Instant Kenna
	- Non-Instant B.B.
	- Instant Nescafe
	Tea Leaves - Brooke Bond
	Green Label
	- Gold Label
	Milo
	Bournivita
	Ovaltine
1.10	Miscellaneous Food
	Table Salt - Kapa
	Curry Powder - Simba Mbili -
	Virani
	Baking Powder - Royal
	Yeast
	Garlic
	Baby Milk - Nan
	- Lactogen
	- Glucose
	Baby Food - Cerelac
	- Heinz
	- Farex
1.11	Purchased Food
	Breakfast
	Lunch
	TOTAL FOOD

CATEGORY AND ITEMS	
2.	DRINKS AND TOBACCO
2.1	Drinks
	Soda - Coco Cola
	- Ginger Ale
	Orange Squash - Pep
	- Treetop
	Whisky - Teachers
	- Haig
	Brandy - Beehive
	Wines
	Beer - Pilsner
	- Tusker Export
2.2	Tobacco
	Cigarettes - 555 State
	Express
	- Embassy
	Tobacco - Sweet Nut
	TOTAL DRINKS AND TOBACCO
3.	CLOTHING AND FOOTWEAR
3.1	Clothing
3.1.1	Men's Clothing
	Men's - Suits - Trevira/Wool
	- Trousers
	- Shirts -
	Arrow
	Markll
	- Underwear-
	Jockey
	Y-Front
	- Pullover
	- Socks
	- Ties
3.1.2	Women's Clothing
	Women's - Dresses
	- Dress Materials
	- Underwears
	Other women's clothing-
	- Kitenge
	- Headsquare
	- Stockings
	- Skirts
	- Cardigans
	- Brassiers
	Women's Half-Slip Petticoats

CATEGORY AND ITEMS	CATEGORY AND ITEMS
3.1.3 Children's Clothing Childrens Uniforms Girl's Dresses - Polyster/ Cotton Boys' Shirts - Polyster/ Cotton Boys' Trousers - Tetron/ Cotton Children's Pullover - Nylon Children's Underwear - Cotton 3.2 Footwear Men's Leather Shoes Women's Leather Shoes Children's Leather Shoes Sandals - Tropical Sports Shoes TOTAL CLOTHING AND FOOTWEAR	Door Mat - Coarse fibre Curtain - Sanforized synthetics fibre Bath towel 30" X 60" - cotton - plain Blanket - Cotton/Wool Mattress 54" X 84" 4-Foam with cover Bed Sheets 90" x 100" - Printed cotton 5.1.2 Household Equipment Refrigerator Electric Cooker Gas Cooker Electric Heater Electric Iron - control dial Electric Light Bulb Sewing Machine Dinner plate - Earthenware Soup Plate - Near bowl Broom - Finlay 5.2 Household Operations and Domestic Services 5.2.1 Household Operations Detergent - Omo Shoe Polish - Cream - Liquid suede Cleaner Floor and Furniture Polish Manson Laundry Soap - Jembe Matches - Steamship Dry Cleaning 5.2.2 Domestic Services TOTAL FURNITURE, FURNISHINGS, HOUSEHOLD EQUIPMENT AND HOUSEHOLD OPERATIONS
4. HOUSING, FUEL AND POWER 4.1 Housing Rent 4.2 Fuel and Power Gas Paraffin Methylated Spirits Charcoal Electricity Water TOTAL HOUSING, FUEL AND POWER	
5. FURNITURE, FURNISHING, HOUSEHOLD EQUIPMENT AND HOUSEHOLD OPERATIONS 5.1 Furniture, Furnishings and Household Equipment 5.1.1 Furniture and Furnishing Executive Sofa Set Dinner Set - 4 Chairs and table Bed with formica ends Wardrobe Chair-Padded Carpet	TOTAL FURNITURE, FURNISHINGS, HOUSEHOLD EQUIPMENT AND HOUSEHOLD OPERATIONS

CATEGORY AND ITEMS

6. HEALTH AND PERSONAL CARE

6.1 Medical Care and Health

Medicine
Examination and Prescription of eye glasses - Doctor's Fee
Ambulance charges - One way (to Hospital)
Child delivery - Hospital fee
Dental Filling
Tooth Extraction

6.2 Personal Care

Toilet Soap
Cosmetics
Other Toilet Goods
Other Personal Effects

TOTAL HEALTH AND PERSONAL CARE

7. TRANSPORT AND COMMUNICATION

7.1 Personal Transport

New Car
Motor Cycle

7.2 Operations of Personal Transport

Lubrication
Engine tune-up
Head-lamp Assembly
Brake-lining or Pad
Storage Battery - 12 Volt
Tyre
Tube
Spark Plug
Petrol - Regular/Premium
Engine Motor Oil
Gearbox Oil
Road Licence

7.3 Purchased Transport

Car Hire - self drive
Bus Fare - Nairobi/Provincial Headquarters
Taxi Fares per kilometer

CATEGORY AND ITEMS

7.4 Communications

Postage - Land, Air, Sea
Telephone - Standing Charges - Monthly
Telephone calls in Town - Minimum period
Trunk-Calls to Provincial Headquarters

TOTAL TRANSPORT AND COMMUNICATIONS

8. RECREATION, ENTERTAINMENT, EDUCATION AND CULTURAL SERVICES

8.1 Education

School fees - Private
- Government

8.2 All Others

8.2.1 Equipment

Radio 3 Band - Electric and Battery
Tape recorder 5 keys - Electric and Battery
Record Player Automatic Electric and Battery
Record - 45 RPM - E.A. Language
Record - 45 RPM - Outside E.A.

8.2.2 Entertainment

Theatre/Cinema Entrance Circle
Stadium Entrance - Weather shelter
Radio Licence
T.V. Rental - Monthly

8.2.3 Books and Newspapers

Newspaper - Daily
Magazine - Weekly local
Books - Bible
- Dictionary

TOTAL RECREATION, ENTERTAINMENT, EDUCATION AND CULTURAL SERVICES

THE DOMESTIC PRICE EFFECTS OF KENYA'S INDUSTRIAL PROTECTION AND EXCHANGE CONTROL REGIME

By

Peter Hopcraft
Institute for Development Studies
University of Nairobi

1. INTRODUCTION

Over the last years the Kenya Government has intervened massively in the economy to protect local industry from foreign competition and to control foreign exchange. The effects of these interventions on domestic price levels and price relationships has been little considered and little understood by those who are responsible for policy formation and implementation in this area. In view of the crucial role of prices in determining the behaviour of both producers and consumers, this apparent lack of understanding and concern in the formation of industrial policy is ironic. The relative growth of different industries and sectors, the technology and factor intensity of production, the rate of labour absorption and employment growth, the equity with which income is distributed in the economy, the balance of payments, and the sustainability of the industrialization process are all dependent on prices and relative prices in the economy. There is a general pattern in Kenya that explicit Government policy and rhetoric in these areas is directly countermanded by the economic consequences of the price divergencies engindered by Government interventions. Economic activity predictably responds to the prices and regulatory structures observed rather than to the rhetoric.

The exhilarating growth in the manufacture of import-intensive, import-substitutes in Kenya and the abysmal performance of manufactured exports are the direct result of major distortions in domestic prices. In particular, the substantially higher prices of manufactured goods on the domestic market has also led to a situation where potential exports are priced out of foreign markets by the inflated costs of locally manufactured intermediates. The result is that while Government policy statements emphasize local-resource-intensive and labour-intensive manufacturing and exports, and also emphasize more equitable income distribution, the behaviour of the industrial sector, responding to the price consequences of Government interventions, exhibits the exact opposite characteristics.

As a result of these interventions, substantially enhanced profits and incomes are being made by import-intensive, import-substituting firms. The

inevitable corollary of such a subsidy to selected firms (in the form of higher product prices and subsidized inputs) is a tax on other firms and individuals.[1] These Government-instigated transfers of income do not flow to the poor from the rich in Kenya's overpriced product market but to the rich from the poor, to the protected industries and firms, and from the anti-protected industries, firms and individuals.

The prime consequence of much of the Government's industrialization and trade policy intervention in Kenya is that a number of firms and individuals are reaping handsome financial rewards with little benefit to the economy. These high incomes are being made at the expense of the relatively powerless sectors, firms and individuals, and ultimately at the expense of exports and potential exports. Since manufactured exports tend to be local-resource-intensive and labour-intensive, and also offer the prospect for sustained growth in employment, this anti-export (pro-import-substitution) bias of the price and incentive system in Kenya is a serious aberration in development policy. Since Kenya's import-substituting industrialization involves the inefficient and wasteful use of foreign exchange and does not even earn the foreign exchange necessary for its own continued growth, the import substitution bias is a prescription for stagnation.

2. IMPORT RESTRICTIONS

The most basic source of price distortions in Kenya is the attempt on the part of Government to balance external payments and protect certain industries from foreign competition by the use of import restrictions.

The inevitable and overriding consequence of these restrictions is the overvaluation of the Kenya Shilling. The reason for this is simply that in the absence of the import restrictions, imports would rise to such as extent that Kenya could not possibly balance its international payments without devaluation. Currency overvaluation and its necessary accompaniment, exchange control legislation, implies that a subsidy is received by anyone who changes local for foreign currency at the official rate (e.g. importers), and a tax is being paid by anyone who sells foreign currency at the rate (e.g., exporters).

---

1. Recall that it is not possible to subsidise without taxing or to protect without anti-protecting.

The effect of the existing overvaluation of the shilling is that instead of imports costing, for example, Ksh 10 per dollar, they cost Ksh 7.50 per dollar. Imports are thus the recipients of Ksh 2.50 per dollar spent and exports are taxed at the rate of Ksh 2.50 per dollar in that exporters should be earning Ksh 10 (using these exchange rates) but are in fact earning Ksh 7.50 per dollar. There is a 10% export subsidy, erratically and inconsistently available for certain commodities which, in those cases that it is available, raises exporters' earnings from Ksh 7.50 to Ksh 8.25 per dollar. Quite apart from the difficulties in successfully claiming this subsidy, the problem is that it only represents Ksh 0.75 in the dollar. This in no way compensates for the implicit tax on exports.[2] Movement of funds out of Kenya at the official rate also receives a subsidy and the right to remit earnings overseas at the official rate thus represent considerable subsidies to individual firms.

The most striking feature of Kenya's import restriction, trade and foreign exchange control regime is, however, its highly variable and inconsistent character. The range includes outright bans, quotas expressed as foreign exchange allocations, quotas expressed as specified quantities, restrictive licences allocating import rights to specified individuals or firms, tariffs ranging from zero to 100% ad valorem, and specific tariffs on a per article basis. The bans on imports may apply to certain specified articles within a range (e.g. certain sizes of pipe fittings but not other sizes). They may apply to all articles within a certain price range. For example, shoes, blankets, or clothing articles below a certain price per pair or per unit may be banned whereas articles above that price may be permitted on payment of the duty.

From the point of view of the individual firm producing import-substitutes, the most advantageous ban is the one that operates at the discretion of that firm so that a licence to import is only given if that firm provides a 'No Objection Certificate' (NOC) to the import licensing authorities. The NOC status gives a firm, or sometimes an association of firms, the right to prevent all imports that it regards as a threat to its own market. NOC status can also be used by the firm to considerable advantage in those lines where it has no existing

---

2. Tariffs and subsidies do not necessarily lead to distortions in local prices. If tariffs are uniform between commodities and are matched by an equivalent subsidy to exporters, producers are not given incentives to produce in ways that are inefficient from the point of view of the econmy. A uniform tariff, making importscost Ksh 10 per dollar, accompanied by a uniform export subsidy so that exports earned Ksh 10 per dollar, would obviously be the economic equivalent of moving to a nominal exchange rate of Ksh 10 per dollar for all trade.

production facilities. It is recognised as a misuse of the NOC status to stamp and sign an import licence application for another firm for a pecuniary (or other) consideration. It is also considered a misuse of the status for a firm to deny the application, import the item itself, and sell it to the applicant at a premium. It is not regarded a misuse to deny the NOC and undertake to fill the applicant's order as a new line of production, even at a price to the applicant which is many times the price at which he could land it (duty paid) from an overseas supplier. In cases where an importer appeals to Government against a local manufacturer's refusal to grant an NOC, the appeal may be considered on grounds of technical specifications or on grounds of the local manufacturer's inability to meet a time deadline; it is not considered on the grounds of the price differential between the local and foreign supplier.[3]

It is far from clear how the list of firms with NOC privileges grew; in fact the list itself is neither in the possession of the Director of Industries nor of the Chairman or Secretary of the Industrial Protection Committee (IPC). According to IPC officials, there should not officially be more than ten companies with NOC status. In fact there are well over six times that many. While the only body authorized to confer the NOC status is the IPC, it appears that instructions to do so have been coming from a variety of different administrative and political sources, both inside and outside the Ministry of Commerce and Industry. In some cases they have come from individuals within Government who technically have nothing to do with the processes of the Ministry.[4]

---

3. In response to a question on the price differential, the Government official charged with responsibility for enforcing the regulations stated: If it is given protection the price depends on the manufacturer. We may find that the local price is five times the import price but there is nothing we can do about it. This was followed by a statement bemoaning the total ineffectiveness of price control legislation for the vast majority of products.

4. The problem of Government servants and policy makers being among the principal commercial beneficiaries of the policies and interventions of Government through their private business interests and holdings is one of extreme severity in Kenya. This issue is well understood by commercial firms, some of whom make a point of never entering business without the personal financial participation of a person capable of affecting Government policy toward the firm, or one of his family or associates. This element explains, as much as any other, the seemingly inconsistent and irrational stance of Government on the issues discussed in this paper. It also suggests that the task of effecting a major policy change is going to be more difficult than it otherwise might be, simply because those who would need to make the decisions might be financially hurt by them.

The deposit measures have effectively curtailed foreign exchange expenditures, and are therefore viewed with approval in official circles. They have done so, however, at the expense of raising the protection and the premiums of import-competing finished goods producers, and of even further removing the economic value of foreign exchange from its official rate. In doing so, they are completely consistent with the various other measures to protect foreign exchange in Kenya in that they subsidize import-intensive, import-substituting manufacturing, further raise the local prices of protected goods, further distort the exchange rate in the direction of protected overvaluation of the Kenya Shilling, and further bias local economic incentives against exports. They are also consistent with the other measures in that they were introduced as temporary and emergency expedients but are rapidly developing powerful lobbies with a vested interest in their preservation.

For each of the import restrictions and taxes that are in force, there is considerable discretion and variation in the way in which it operates. This discretion and variation may operate through the formal system with, for instance, the Industrial Protection Committee recommending that a specified firm receive the right to import a dutiable product free of duty, a decision which must be gazetted by the Minister for Finance. Alternatively, it may operate through a semiformal system whereby, for instance, a letter from a Cabinet Minister gives a particular firm the authority to import equipment without going through General Superintendence. The fact that the Cabinet Minister does not have the statutory power to confer such authority may complicate the proceedings but it may be politically impossible to reverse. Thirdly it may operate through the informal system where, for instance, a Ministry or Central Bank employee delivers the necessary forms with the necessary stamps and authorizations to a particular firm for a pecuniary or other consideration. An element of entrepreneurship frequently occurs in the area of licences, with a middleman who is not an importer acquiring the licence, and marketing it to prospective importers. The price at which such a transaction takes place varies with the premium at which the commodity in question can be sold, which depends, in turn, on the difficulty of acquiring the licence. This provides an obvious incentive to bureaucrats to make the formal system as restrictive as possible, while prserving its discretionary

character.[6]

3. THE PRICE EFFECTS OF PROTECTION, SOME CASES

A number of problems make the effort to quantify the price effects of Kenya's trade regime very difficult. The first is that where a particular line of imports has been banned for some years, it is not easy to get current price comparisons between the border and local prices. This task is not made easier where there have been restricted or illegal imports as these are generally sold at a substantial premium. What follows is therefore not intended as a formal statement or quantification of the price effects of import restrictions. An attempt has been made where possible to check the figures presented but there is no guarantee against inaccuracies. However, in the opinion of the writer, there are no obvious biases in the presentation. It reflects rather the general pattern of Government conferring monopoly power on particular firms by quantitative restrictions on imports, and the price effects of that monopoly power.

Lead pencils can be imported for a.c.i.f. price of Ksh 20 per gross, rubber-tipped, and Ksh 15 per gross, plain. By the time the 30% duty, 10% sales tax on the duty-paid-price, wharfage, clearing and forwarding are paid, these costs in Nairobi are Ksh 31 and Ksh 24 respectively. In the interests of protecting the National Pencil Co. Ltd., the firm was given a ban on all competing imports through the NOC and tariff protection. This firm now charges Ksh 61.50 and Ksh 45 ex-factory or 67.65 and 49.50 including sales tax for the two types of pencils. This represents a rise of 118% and 106% respectively above the duty and sales tax paid, delivered price, or an implicit nominal tariff of 208% and 200% respectively.

---

6. In a perfectly functioning bribery market with many bribers but only one bribable official, the size of the bribe could be expected to go up to the value of the premium on the goods. Since there are more than one way to skin a cat and since the licence market is full of imperfections, risk and misinformation, a great deal of the rental value of the licences probably stays with the firm for further contingencies. In the case of large new investments where capital can be overinvoiced and various other concessions can be granted on the firms' imports, where a firm can get most if not all of its risk capital from the overinvoicing and from Government and parastatal sources (or Government secured bank loans), and finally where the firm can be given types of protection that permit substantially higher prices for its products, there may be many millions of surplus shillings that can be used to grease the bureaucratic wheels.

Haco Industries also appears on the list of firms with NOC rights and produces ball point pens. Haco sells at a retail price Ksh 1.75 per pen. Importers state that a good quality Italian equivalent could readily be imported and sold for 50 cents. This implies a premium of 250%.

In the case of carbon paper, Crescent Investments makes it at Ksh 80 per box. The imported equivalent, now not available, would cost Ksh 10 a box, implying a 700% premium.

To complete the list of items that might be of interest to an academic (pencils, pens and paper), Table 1 presents paper prices from Panafrican Paper Mills and quotations from three different overseas suppliers in late 1977. It can be seen that the local company was selling at a premium that varied between 72% and 113% above imports at that time. While the company is overwhelmingly oriented towards the domestic market, it has done some exporting, principally to utilize plant capacity that exceeds local market demand. It will be seen that the company's export price list has to be more competitive with the rest of the world, and that its local prices go as high as 91% above the export price for the same item.

The inflated paper price in Kenya has had a pervasive effect on the costs of other firms and industries. The majority of these firms market locally, and merely pass on the additional costs to their buyers. Exporters, however, have been unable to do this and have been severely hurt.

Following considerable pressure on the company by local exporters, and in part to reduce the output that must be disposed of at the substantially lower world market prices, the company has developed a complex scheme of price discriminations, not only for their own exported products to different markets but also to paper converters who then export. Such exporters pay the local price of the paper initially but are later given a credit note on production of evidence that the company's paper was re-exported. The size of the credit note depends on the destination of the exports to Uganda, for instance. In this way, the company attempts to capture as much of the profit from the export as possible without making that export impossible to the re-exporter. The problem with the re-export rebate, quite apart from the complex bureaucratic procedure involved, is that it only applies to the products of those firms which make the initial purchase and only to exports that are 100% paper. Other firms that export, using paper packaging materials for instance, can get no rebate on their paper costs however large these costs loom in the price of the product. Horticultural

Table 1. Paper Prices, October/November 1977

(KShs/tonne)

Grade of Paper	Domestic	Panafrican Paper Mills Prices: Uganda	Rest of Africa	Other Countries	C.I.F. Prices of Imports: Panama	N. Zealand	Scandinavian	Local Premium or Tariff Equivalent
Unbleached								
Sack Kraft 70 GSM	5540	3900	3200	2900	2874	3243	3530	93%
MF Kraft 80 GSM	5580	4100	3300	3000	2956	3366	3859	89%
Bag Kraft 70 GSM	5580	4100	3300	3000	2956	3366	3859	88%
Kraft Liner 127 GSM	4900	3500	2900	2600	2299		2545	113%
Bleached								
Sack Kraft 70 GSM	6000	6000	5900	5500	3489		4023	72%
Bag Kraft 100 GSM	6000	6000	5900	5500	3407		4351	76%

Source: Pan African Paper Mills and Foreign Suppliers.

exporters, for instance, find that the inflated costs of the boxes cut into the profitability of their exporting activities, but they can do nothing about it. Even for those who successfully claim the rebate, it is frequently not enough, so that paper costs are still too expensive to allow them to compete successfully on major contracts.

On such items as screws from Nalin Nail Works, dealers also cite quality complaints from users. This is despite the fact that 4 gauge $\frac{1}{2}$-inch screws, for instance, wholesale for KSh 5.35 per packet whereas they could be imported for less than Ksh 2 for an equivalent, and allegedly higher quality, packet.

In the case of Emco Steel Works, there is evidence of typical monopolistic behaviour, not only in terms of very large price markups, but also in the company's disinterest in meeting elemental specifications and standards in the knowledge that buyers have nowhere else to go. The company is also a typical case of a supplier beginning with reasonably competitive prices, presumably to convince the authorities that an import ban was appropriate. After the ban was well established, artificial shortages were created and prices rose to the point where they are now markedly above the imported equivalents. The company appears to be a case where the import bans, far from creating an efficient integrated industry, merely raises costs and impairs performance all the way down the line of what might otherwise be a competitive metal-working industry.

An interesting case illustrating the typical proliferation of products stimulated by trade restrictions is Finlay Industries, a British brush manufacturer with worldwide connections. At the time of setting up, there were one or two lines of brushes which, for various reasons relating mostly to local material supplies, the firm could have exported successfully, competing with any of the world's producers. For the majority of lines, the Kenya firm could not possibly compete with these lower-cost producers, mostly because the crucial raw materials would have to be imported. The firm faced the choice of concentrating on the cost-efficient lines and on exports, or producing a complete range of lines at above world prices and seeking a ban on competing imports.

The firm's own preference for a protected domestic market orientation was, in effect, strongly encouraged by Government in its enthusiasm to establish the industry in Kenya. There was no help or stimulus in the exporting area; all the Government rewards and incentives were toward import substitution. A complete ban was imposed, eventually through the NOC mechanism,

on the importation of any brushes the firm regarded as competitive. The firm, not without considerable effort on its part, thus achieved a position of complete monopoly in the Kenya market. Local brush prices have risen as a result to about double the prices at which they could be landed from overseas. The focus of the firm's entrepreneurial and bureaucratic effort, consuming considerable cost and attention for the first part of its life, was not the push into foreign markets, or even cost-cutting and marketing to make more effective in roads into the Kenya market. Instead, the firm used every possible means at its disposal to persuade and cajole Government to enforce an import ban on all brushes, whether or not they were better, more suitable or cheaper.

Again, somewhat typically, a second producer then entered the market, attracted in by the inflated prices. With the limitations of the Kenya brush and broom market, however, this has merely meant that neither producer has the unit cost advantages of large turnover. Local brush prices have not moderated.

There is a strong policy pressure for government participation in foreign-owned manufacturing firms in Kenya. The conventional logic for government (or parastatal) participation in commercial firms is that for reasons of market power, or because of some benefit or cost not appearing as such to the individual firm (i.e. externality), a gap develops between the benefit cost calculus of the individual firm and that of society. Government can, under these circumstances, use its power or influence to make the firm behave in the social interest. This logic is completely inverted in the Kenya context. Far from Government making its client firms have in the social interest, those firms with the necessary power or influence to attract Government participation then use it to make Government behave in the firm's interest. The complete range of special concessions, licences, guarantees, and the whole edifice of protective measures, are far more accessible to the firm that has Government financial participation than to one that does not. In 1978, for example, Kenya's Firestone tire factory make a return of approximately 100% on its investment. This profit level cannot be separated from the fact that a set of local Firestone tires is priced at a very large premium above the imported equivalent, and that all imported tires are banned except those for which the import licence bears the Firestone stamp, stating that Firestone has no objection to the importation. All Firestone's equipment and materials, furthermore, enter the country free of duty so that rate of effective protection is very high. Even in these circumstances there was no pressure from Government, a major investor in Firestone, to bring prices more into line with the

imported equivalent and avoid the adverse economic effects of inflated tire prices. Technically, there is price control legislation in force providing a price ceiling for Firestone products. A 50% price increase was however, granted to the firm in 1975 by the Price Controller. The fact that the firm is 30% owned by Government (through two of its prastatals) undoubtedly influenced the earlier decision in favour of the firm, as well as the various other decisions affecting its financial welfare. The firm also enjoys the right to remit very substantial earnings overseas.

The problem with Government financial participation in individual firms is now clear. When Government stands to lose money because of financial problems within its client firms, the pressure is strong to shore up its investments by concessions to those firms on which its portfolio depends. The fact that these concessions merely involve transfers from the rest of the economy, frequently including substantial transfers from the public fisc itself in foregone taxes and duties and higher prices for goods (medicines, school books, etc.), is less visible and less of an embarrasment than the spectre of a government-funded company in financial difficulties. Private firms have developed considerable expertise in the use of this spectre in negotiating a wide range of concessions involving very substantial subsidies from the rest of the economy.

Of particular concern in Kenya's predominantly rural economy is the intersectoral terms of trade. While precise measurement in this area can be complicated and is not undertaken here, there can be little doubt that it has moved strongly against the rural and agricultural sector in the last years. The reason is that while agricultural commodities have tended to trade (albeit inconsistently) at world prices, manufactured goods have systematically risen above world prices. Under these circumstances, prescriptions in the area of raising farmers' selling prices clearly do not address the problem. The more so since agricultural commodities are the prime source of foreign exchange for the whole economy, and the country has little or no power to affect export prices.

Kenya's development plans have stated that the terms of trade should not go against agriculture and that the prices paid by farmers should not tax them unduly. In fact, virtually everything that farmers buy that is locally manufactured (except the products of the informal sector which are unprotected, and frequently discriminated against, by Government), implies a large transfer element, taxing the mass of farmers and subsidizing a few protected manufacturers.

The importation of sacks, for instance, required by farmers for a large number of their products, is banned in order to protect Acif Ltd. and East African Bag and Cordage Co. Ltd. These companies have the right to import jute free of duty; they also use polypropylene and sisal for different grades of sack. Besides serving farmers these companies supply large amounts to Government and parastatal agencies. Jute sacks can readily be landed in the country from Bangladesh at Ksh 3 per sack on an effectively unlimited basis. This price has, furthermore, prevailed for a number of years. It is not possible to buy the local equivalent for less than Ksh 10, or 3 1/3 times the imported price. Quite apart from the price of the jute sacks, the companies have also raised the prices of soil sacks (sisal is locally produced) behind the import prohibition.

In the case of basic hand implements used by farmers, especially low income farmers, across the country, Ideal Casements Ltd. make jembes (hoes), that sell, following a recent authorized price increase, for double the imported equivalent. Pangas (the indispensable Kenyan machetes), can be imported for Ksh 7/80 to and retailed for Ksh 10 to 11. The country now enjoys a local product made by East African Engineering Works Ltd. (a foreign firm using almost entirely foreign materials and foreign equipment, and expatriating substantial profits). This panga wholesales for Ksh 17 and retails for Ksh 24 or 25, about 2.5 times the price of the equivalent import. The same order of price increase applies to local spades. Furthermore, instead of the higher priced local implements being of better quality, farmers complain that they break far more easily and are generally lower in quality than the import.

Fortunately, Kenyan farmers have, thus far, been protected from Government protected fertilizer producers, despite several high-powered and highly corrupt attempts at establishing local plants. Since the country only uses about 150,000 tons a year, and even that figure is divided among some 15 separate compounds, local plants could only survive if they raised local prices quite considerably. The latest fertilizer plant is currently deteriorating on site at Mombasa after the bankruptcy of Ken-Ren Chemicals and Fertilizer Company, a subsidiary of the American firm, N-Ren. In the associated scandal, costing the Government many millions of shillings, the General Manager was deported (African Business, October/November 1978).

The case of vehicle assembly in Kenya is not going to be given detailed analysis in this paper for reasons of time and length. Suffice it to say that CKD (completely knocked down) vehicles cost at least as much, and often more,

and often more, to import as CBU (completely built up) vehicles. With no exceptions known to the assemblers, local components also cost more, sometimes three, four, five or six times more, than the imported components. There is, therefore, an understandable reluctance among assemblers to use them.

A number of local component manufacturers such as African Radiators Ltd. have been serving the replacement market very successfully and without protection for many years. This company explains its success by the labour-intensity of radiator core production. But even this company has been unable to sell to the assemblers, who raise endless technical specification problems and clearly have a strong preference for their own DE (original equipment) suppliers.

There are four vehicle assembly plants now operating in Kenya: Associated Vehicle Assemblers (Lonrho, Inchcape, and associated companies), Leyland, General Motors, and Fiat. Each one of them turns out a wide range of different commercial vehicles. (Passenger vehicles may be imported as CBUs, though importation is restricted by quotas, which result in their being sold at high premiums.) In most lines of component manufacture, the variety of lines means that runs are generally short and costs are high.

Much of the component manufacturing is itself highly import intensive, in many cases little more than breaking up lots, cutting or packaging. Where restrictions are imposed on the equivalent import, moreover, prices tend to rise dramatically and profits tend to be high. Flat glass importations, for instance, are banned, and assemblers must purchase from a local manufacturer, despite the fact that the item is not manufactured locally.

The overall result is that assemblers cannot possibly compete with the imported equivalent, even from their own parent companies. Not only are the CKDs as or more expensive to import as the CBUs (implying that local value added does not exist or is negative in economic terms), but the more local components they must use the higher their costs. Local components have, in almost all cases, gone up in cost and the more stringent the import restrictions, the greater the cost escalations. The irony is that the initial Government logic for vehicle assembly was that its presence would stimulate and increase the efficiency of local component manufacture.

Higher vehicle and transportation costs have a pervasive effect on the economy, certainly not least on the far flung agricultural sector. These costs are major inhibitions to the whole process of rural commercialization. A number

of factors external to the Kenya economy have served to raise these costs in recent years. Far from being mitigated by Government-stimulated developments in the domestic economy, this inflation has been enormously compounded by them. All this has happened, furthermore, with a serious curtailing rather than increasing, of Government revenue from equivalent tariffs.

The Government is deeply committed in the financing of these firms. IDB owns 51% of Associated Vehicle Assemblers (with part of this money coming indirectly from the Treasury). ICDC owns 51% of General Motors and the Treasury owns 35% of Leyland. Government is also deeply into the financing of components producers, virtually all of which rely on Government bans and restrictions rather than their own competitive or economic advantage. It is hard to see, therefore, how Government's influence on the sector can be anything but discriminatory against vehicle users (principally against commercial and 4-wheel-drive vehicle users).

In general, it can be said that intersectoral transfers and taxation of the agricultural sector may have some logic if an efficient, expanding, exporting and labour-absorbing industrialization is the result. It is hard to apply this logic, however, to the transfer of income and resources from a sector where judicious investments have substantial employment implications and where extremes of poverty exist, to a sector with a manifestly limited ability to absorb labour and where the transfers principally result in enhancing already inflated consumption levels.

CONCLUSION

Quantitative and licencing interventions and restrictions have provided large rents to arbitrarily chosen firms, which have led to high levels of profit but have neither improved growth nor income distribution. The initial policy measure proposed is to replace these with price related interventions (tariffs, taxes, subsidies). The next priority is to remove (or at least, reduce) the enormous variance that exists between the impact of these measures on the taxing or subsidization of different sectors, industries and firms. The third, and related, priority is the removal of the very large anti-export, pro-import-substitution bias that has developed in the pricing and incentive structure facing firms as a result of the existing Government regulations, and the consequent over-valuation of the Kenya shilling.

Manufactured exports, especially those to high income, capital rich countries, land to be intensive in the use of local resources and of labour. They also face elastic markets with considerable expansion possibilities, with payments made in foreign exchange. They therefore offer employment growth and self-sustaining industrialization not dependent on the country's traditional foreign exchange earnings and exports with their attendant inelasticities. The existing anti-export bias (which is a price phenomenon that can not be seriously counteracted by 'export promotion' rhetoric or activities, however correct and useful they are) is therefore a serious aberration in development policy.

WAGE AND INCOMES POLICY IN KENYA: A BRIEF SURVEY OF EXPERIENCE AND PROSPECTS

By

B.E. Oduor-Otieno
Employment Promotion Division
Ministry of Labour

1. INTRODUCTION

In Kenya, the imbalance between people's aspirations and the structure of incomes and opportunities available for the attainment of higher living standards is one of the basic and critical economic and political issues today. The inequalities in the income structure include the disparity between the average urban wage level and the average rural income level; between the wage level, job security and working conditions in the modern sector and in the unorganised sector; and the inadequacy of the minimum wage level in relation to basic needs.

In an attempt to reduce the severity of these problems, Kenya has developed a national wage and incomes policy with the aim of inducing wage moderation in the modern sector as a significant element of its anti-inflationary, employment and equity policies. This paper reviews the necessity and effectiveness of a national wage and incomes policy from the colonial period to the present. The paper concludes that, in the final analysis, the structure and degree of inequality is influenced not only by the wage policies but also by fiscal and monetary policies, the system of land tenure, health and educational policies, housing, as well as by the general institutional setting.

2. THE HISTORICAL SETTING

A wage and incomes policy for Kenya can be traced back to 1932 when the need for wage fixing was first given legal recognition by the Minimum Wage Ordinance of 1932, which empowered the Governor in Council to make orders fixing 'the minimum wage for any occupation in any municipality, township, district or other area in which he was satisfied that the wages for such occupations were unreasonably low'. However, no wage fixing orders were made under this Ordinance and it was eventually repealed by the Minimum Wage Ordinance of 1946. During the Second World War, the British government passed the Colonial Development and Welfare Act of 1940 whose official purpose was 'to promote the prosperity and happiness of the people in the colonial empire'. The Defence (Fixing of Wages)

Regulations, 1940, were enacted and a wage board set up for the purpose of fixing minimum and maximum wages to be paid in some specified trades and occupations. Such orders applied to Asian artisans only and automatically lapsed when, at the end of the hostilities, the Regulations were revoked.

Following the lapse of the Colonial Development Welfare Act in 1946, a dispatch was circulated from London charging the colonial government with the imperative duty of raising the living standards of Africans for humanitarian, political and economical reasons. As a first step in raising wage levels, Kenya passed the Minimum Wage Ordinance of 1946, which initially applied to Nairobi but later covered eight other industrial towns including Mombasa and Kisumu. The wage policy explicity sought to widen the urban-rural income gap in order to create a permanently committed labour force. The Nairobi Labour Department stated in 1946 that the long term policy was directed towards the maintenance of stability between agricultural and industrial areas. This meant the development of an independent wage worker without subsidy from the native unit. The first step towards stability was the general adoption of a 'living wage' standard for an African divorced from his native land unit.

However, in 1952, the Labour Department found out that only about 10% of the African wage earners in Nairobi received the barest minimum. This necessitated the introduction of wages councils and in June 1952, the first wages council was established for tailoring and garment making.

When Kenya gained political independence in 1963, there was still no comprehensive wage and incomes policy. The existing wage policy was essentially aimed at the creation and stabilisation of an effective African labour force to produce maximum output at minimum labour costs, as shown by the fact that the statutory minimum wage remained unchanged in real terms from the time it was introduced in 1947.

The government has, since independence, set up policies to cure such colonial ills. For example, in 1964, a Tripartite Agreement was signed between the government, employer and trade unions in which the unions agreed to a one year wage freeze while private employers agreed to expand employment by 10% and the government by 15%. In 1970, another Tripartite Agreement was concluded in which the government and private employers agreed to expand employment by 10% of their regular establishment and employees agreed to a 12 month wage stands-till, and there would be no strikes or lockouts during the agreement. The actual number of jobs created was about 34,000 and 45,000 in 1964 and 1970 respectively. The 1979 Tripartite Agreement has the objective of increasing wage employments allows wage increases of up to a half the increase in the increase in the cost of living.

The post-independence wage and incomes policy has the objective of redressing income distribution, stimulating productivity, promoting employment, and stabilising prices and the balance of payments (Edgren, 1976). Wage policies are formulated with due regard to other forms of income such as profits, dividends, rent, interest and agricultural incomes. Here is a clear class structure even more complicated than the traditional marxist analysis: low income employees are economically better off than peasant farmers and the urban unemployed and underemployed but are still far behind the upper class of foreign and local entrepreneurs and bureaucrats.

The wage policy aims at raising wage levels. However, in pursuing this objective, the government takes into account the fact that beyond a certain point, wage increases can only be justified by increased productivity and that the higher the wage increases, the greater the unemployment and the higher the prices of goods and services, unless the economy is expanding fast enough to contain the wage increases. For this reason, trade unions are under pressure from politicians and the upper class to restrain their wage demands in the interest of the unemployed, although there is no indication that this restraint has played or will play part in employment creation. As the ILO report (1972, Technical Paper No. 17) points out, in the absence of strict profit controls, wage restraint may even lead to an outflow of money overseas. The sceptism of trade union movements towards wage restraint is therefore understandable. In a resolution taken at Limuru in 1971, the Kenya trade union leaders accepted the government's call for a wage restraint in the 1970-74 Development Plan on condition that there would be inter alia price controls on all products which are not subject to free competition, improved rent controls on low income housing and expanded housing facilities for low income groups, and improved machinery for assessing and taxing profits, with restrictions on the expatriation of profits by foreign owned firms.

The present national wage and incomes policy was outlined in general terms in the Sessional Paper on Employment (Kenya 1973), which was an official response to the recommendations of the 1972 ILO report on Kenya. The government accepted the central theme of the ILO report, i.e. that Kenya's employment and unemployment problems are deeply embedded in the country's social and economic fabric and that these problems can be significantly alleviated only by fundamental changes in the pattern of development and in the structure of key institutions. However, the government did not accept some components of the package. For example, the government did not accept:-

a. The specific minimum incomes suggested in the report on the grounds that there was neither sufficient information nor sufficient means of implementing it

b. The proposal to introduce a tax on the employment of expatriates to act as a disincentive on the employment of expatriates, perhaps due to the economic and political implications involved.

c. The suggestion that school leavers be hired at less than standard rates because this proposal was inconsistent with the rest of the report and the fact that the government policy is to create an economy which is more labour absorbing, avoiding the discontinuties of ad hoc programmes of this nature.

d. The proposal that as a general rule there should be direct control over luxury imports and direct curtailment of consumption of exportables. The government preferred to use fiscal instruments such as tariffs, domestic consumption taxes and export subsidies to accomplish the objective of improving the balance of payments since these instruments alter the distribution of income and at same time curtail imports and increase exports.

3. THE INTRODUCTION OF THE WAGE GUIDELINES

The original Wage Guidelines were issued by the Minister for Finance to the Industrial Court on 29th August 1973 as a directive under Section 5 of the Trade Disputes (Amendment) Act, 1971. All collective agreements were henceforth to be registered with the Industrial Court to ensure their conformity with the Guidelines. The bulk of collective agreements are signed after voluntary negotiations between employers and trade unions.

The deliberations of the Court, when giving judgement in a particular trade dispute or when considering the registration of a particular collective agreement, was to be guided by the following Guidelines:-

i) So long as the economy continues to expand, all sections of the population have a right to expect some regular improvement in their standard of living. Over the years some employees have, however, tended to receive wage increases at a faster rate than the growth of the economy. This situation if allowed to continue unplanned would have the undesirable effect of employees as a

group having a relative advantage over other sections of the population, particularly small farmers.

ii) It is important that the decisions of the Court should not cause any check to the regular growth of wage employment opportunities in line with the Development Plan targets or cause redundancy in cases where labour becomes less profitable to use than machinery. This is important because the welfare of all sections of the population will only be improved if there is a significant and regular increase in the number of people in wage employment.

iii) In order to avoid widening inequities and frustrating employment creation, the Court should make sure that on the whole, increases in wages and salaries do not exceed the rate of income growth in the economy as a whole.

iv) The workers' wages should not normally be eroded by price increases. Compensation for price increases other than those caused by increased taxation may be granted, based on the rise of the Nairobi Wage Earners' Price Index from the time of the most recent revision of wages and salaries. Since tax increases must be borne by all members of society, it is not justified to ask that price increases caused by taxation be compensated in the same way as other price increases.

v) Workers are entitled to a basic minimum standard of living. It will be for the Court to decide what that minimum should be from time to time in each occupation. But in deciding that minimum, it is suggested that the Court should always have regard to the standard of living of people who are not in wage employment, particularly the standards of the average small farmer in the rural areas.

vi) As far as possible, priority in the allocation of awards should be given to lower paid workers provided this does not cause either a contraction in the opportunities for the employment of general unskilled labour or a decline in the incentives for workers to improve the levels of their work skills by training. Reasonable differentials should be established to reward skills and training, particularly as regards manual and technical skills.

vii) The Court should endeavour to prevent increases in wages in one industry leading to increases in wages in another industry less able to afford such an increase. The continual leapfrogging of wage increases from one industry to another will be harmful to the economy. Efforts to bring about equal pay standards for equal work should aim at lifting up those who are below the average rather than lifting the whole group to the position of the highest wage obtainable for that type of job.

viii) Ability to pay higher wages should not necessarily be regarded as adequate and conclusive reason for an increase, if it means that one group of workers will receive awards significantly out of step with those being given to other workers of similar skills.

ix) As far as possible, the Court should endeavour ro ensure that higher wages do not lead to higher prices, whether in export industries or industries producing primarily for local consumers. The Court should always bear in mind that rising consumer prices erode the real value of any wage award.

x) It is suggested that the level of remuneration of any one section of workers should not be reviewed more often than once every twenty-four months. This rule should apply to all awards granted or agreements entered into after these guidelines have been issued. It will not preclude reviews of wages and salaries for groups which are presently covered by collective agreements of a duration shorter than twenty-four months.

It was made clear that the contents of the Wage Guidelines would be subject to occasional modifications according to the experience gained in their implementation and to follow the requirements of changing economic conditions. The main objective of the Guidelines was to ensure that employees can acquire a fair share of the national product, while at the same time ensuring that better organised workers do not overcompensate themselves at the expense of the weaker and less organised sections of the community. Since some wages e.g. of managers, contract labour and in unorganised firms are not regulated by collective agreements, the employers in such firms were urged to respect the substance of these Guidelines.

In March 1974, the Minister for Finance issued another letter to the Industrial Court aimed at clarifying the relevance of the Guidelines to the then prevailing economic situation which was characterised by rapid and persistent price increases. This letter did not interfere with agreements already negotiated and/or registered. The letter also increased the flexibility of the original Guidelines in the sense that the Court was asked not to object to arrangements whereby workers and employers voluntarily agree to review their agreements after one year, provided that the revision conformed with Guideline (iv).

In mid-1974, the economic situation started deteriorating, This made the Minister for Finance issue an amendment to the original Guidelines in January 1975 which was quite restrictive: Productivity would no longer be used as a justification for wage increases and compensation for cost of living increases would be allowed in full only for the lowest paid groups those earning KShs. 250 or less per month), with a uniformly declining rate of compensation up to KShs. 2,000 above which no compensation would be allowed. The entire policy measures to deal with the critical economic situation were described in the Sessional Paper on Economic Prospects and Policies (Kenya, 1975). These measures included the control of public expenditure, higher income tax for the well-to-do, increased indirect taxes on luxury items, introduction of capital gains tax, increased property taxes, import restrictions, and increased farm production.

During the first quarter of 1975, mounting trade union opposition to th strict Wage Guidelines and the low statutory minimum wages led to a threat of a general strike which ended in an agreement between the Central Organisation of Trade Unions (COTU) and the Minister for Labour to ease the restrictions and give more leeway for collective bargaining. In a statement issued on 18th April 1975, the Minister for Labour declared that while the Wage Guidelines would remain, increases over and above the ceilings laid down in January 1975 would be permitted. On 1st May 1975, against a background of political crisis, the President announced increases in the statutory minimum wages above the levels recommended by the General Wages Advisory Board.

Real per capita income rose only slightly in 1974, fell in 1975, and was expected to improve only slightly in 1976. Export incentives continued to be eroded by rising domestic costs of production, and higher import prices continued to aggravate the balance of payments deficit. In these circumstances, the government issued amendments on 3rd February 1976 for the interpretation of

the original Guidelines of August 1973. The new emphasis was that price increase which were due to increased costs of imports or local commodity shortages could not be used as bases for compensating better paid groups, since that would only lead to increased inflation. Due to improved economic performance from 1976 onwards, the Guidelines were relaxed in August 1977 to allow compensation based on realised productivity increases. The claim for productivity increase would be limited by the lower of the percentage increases of either the per capita income in the economy as a whole during 1977 and beyond or production per worker in the industry or firm covered by the particular claim during 1977 and beyond. Compensation for cost of living increases was to remain as before.

4. THE EFFECTIVENESS OF THE WAGE GUIDELINES

The average rates of increase in wages provided by collective agreements registered with the Industrial Court during the period September 1973 to December 1978 are shown in Table 1. These are not all the collective agreements in existence. Some of the agreements registered before and during 1974 were still valid in 1978 when this paper was written on had not been succeeded by new ones, and in some cases e.g. coffee, sugar and sisal plantations, there had been supplementary agreements. An analysis done within the Ministry of Labour shows that, the percentage changes in earnings for most sectors more or less reflect those provided for under the registered collective agreements during the periods indicated, although the total number of unionisable employees covered by the registered agreements is only about 400,000. This represents less than half the total wage earning labour force but include a majority of the paid-up union membership estimated at 350,000 in 1978.

Most of the agreements are of two year duration although many are revised annually, therefore making it difficult to calculate the annual increases in wages under the agreements. It appears that about a quarter of all agreements registered during 1973-75 remained in force for an average of 28 months while those registered in 1976 remained in force for an average of 24 months and 25 months for those registered in 1977. This shows an improvement in the frequency with which collective agreements are revised as compared to the days before the introduction of the Guidelines when agreements were revised after longer periods and with less favourable terms and conditions of employment. The averages are unweighted and therefore give undue weight to the large number of small firms covered by separate agreements. If the new agreements were to be regarded as compensation for price increases which take place during the lifetime of the agreement, then that rate of compensation

Table 1: Collective Agreements Registered By Industry, 1973-78

Classification of Industry	September 1973 - September 1975					
	(1)	(2)	(3)	(4)	(5)	(4)÷(5)x100
	Number of Agreements	Number of Unionisable Employees	Average Duration (Months)	Average Pay Increase (%)	Estimated Average Ceiling Applicable Under Guidelines	Utilization Ratio
1. Agriculture, forestry and hunting	19	60193	25	14.5	36.9	39
2. Mining and quarrying	12	2402	25	16.5	22.8	72
3. Manufacturing and repairs:-						
(i) Food and drinks	25	8173	26	15.3	28.7	53
(ii) Textile and garments	15	14888	27	19.3	33.7	57
(iii) Timber, sawmilling and wood	8	2669	28	21.4	31.7	67
(iv) Printing paper, etc.	17	2583	27	22.2	31.1	71
(v) Shoe, leather and rubber	5	1831	26	17.2	31.5	55
(vi) Chemicals, plastics and petroleum	45	7508	30	22.9	30.1	76
(vii) Mechanics and motor engineering	40	12052	26	21.3	29.7	72
(viii) Electrical engineering and electronics	3	1893	28	21.2	29.7	71
(ix) Glass, ceramic and other building materials	4	114	36	22.9	38.1	60
(x) Building and construction	7	533	26	16.2	27.6	59
(xi) Electricity and water	1	2244	36	12.4	39.8	31
4. Commerce including banks, insurance, petrol trades	45	9284	30	18.8	29.5	64
5. Transport and communication	62	23524	24	18.9	27.7	68
6. Services including Government	39	18863	28	18.9	31.2	61
ALL INDUSTRIES	347	338758	28	18.9	31.2	61

Table 1 Contd: Collective Agreements Registered By Industry, 1973-78

Classification of Industry	January 1974 - December 1974					
	(1)	(2)	(3)	(4)	(5)	(4)÷(5)x100
	Number of Agreements	Number of Unionisable Employees	Average Duration (Months)	Average Pay Increase (%)	Estimated Average Ceiling Applicable Under Guidelines	Utilization Ratio
1. Agriculture, forestry and mining	7	52783	25	13.3	33.5	39
2. Mining and quarrying	8	2225	24	15.9	23.0	69
3. Manufacturing and repairs:-						
(i) Food and drinks	17	4762	25	15.4	28.3	54
(ii) Textile and garments	9	4259	27	16.9	32.9	51
(iii) Timber, sawmilling and wood	1	171	17	11.3	35.6	32
(iv) Printing, paper etc.	9	1728	29	19.9	22.4	89
(v) Shoe, leather and rubber	2	434	30	18.0	27.7	65
(vi) Chemicals, plastics and petroleum	31	4707	31	22.1	29.7	74
(vii) Mechanics and motor engineering	22	11085	27	19.0	25.2	75
(viii) Electrical engineering and electronics	2	33	18	19.1	22.5	85
(ix) Glass, ceramic and other building materials	2	184	48	36.6	34.6	106
(x) Building and construction	2	188	30	25.5	27.5	93
(xi) Electricity and water	1	2244	26	12.4	39.8	31
4. Commerce including banks, insurance, petrol trades	22	3133	33	18.7	22.4	83
5. Transport and communication	35	12331	27	17.4	23.0	76
6. Services including Government	26	21299	30	20.8	27.7	75
ALL INDUSTRIES	196	130566	29	18.9	28.5	66

Table 1 Contd: Collective Agreements Registered By Industry, 1973-78

Classification of Industry	January 1975 - December 1975					
	(1)	(2)	(3)	(4)	(5)	(4)÷(5)x100
	Number of Agreements	Number of Unionisable Employees	Average Duration (Months)	Average Pay Increase (%)	Estimated Average Ceiling Applicable Under Guidelines	Utilization Ratio
1. Agriculture, forestry and hunting	11	138704	25	19.3	48.0	40
2. Mining and quarrying	4	325	24	21.4	19.6	109
3. Manufacturing and repairs:-						
(i) Food and drinks	15	7599	26	17.3	33.8	51
(ii) Textile and garments	8	11483	28	15.2	37.2	41
(iii) Timber, sawmilling and wood	0	1087	26	20.2	28.6	71
(iv) Printing, paper etc.	8	2360	27	21.5	37.9	57
(v) Shoe, leather and rubber	2	1364	24	15.9	38.0	42
(vi) Chemicals, plastic and petroleum	10	986	26	25.1	37.2	67
(vii) Mechanics and motor engineering	10	984	24	21.7	28.8	75
(viii) Electrical engineering & electronics	1	11	23	9.3	-	-
(ix) Glass, ceramic and other building materials	1	14	24	7.7	48.6	16
(x) Building and construction	6	349	24	14.5	27.5	53
(xi) Electricity and water	-	-	-	-	-	-
4. Commerce including banks, insurance, petrol trades	21	7737	27	21.5	39.8	54
5. Transport and communication	29	12487	23	16.1	29.3	55
6. Services including Government	14	12191	39	22.3	36.7	61
ALL INDUSTRIES	146	187681	26	17.9	35.0	51

Table 1 Contd: Collective Agreements Registered By Industry, 1973-78

	January 1976 - December 1976					
	(1)	(2)	(3)	(4)	(5)	(4)÷(5)x100
	Number of Agreements	Number of Unionisable Employees	Average Duration (Months)	Average Pay Increase (%)	Estimated Average Ceiling Applicable Under Guidelines	Utilization Ratio
1. Agriculture, forestry and hunting	6	45011	27	31.9	41.4	77
2. Mining and quarrying	5	385	24	42.2	47.9	88
3. Manufacturing and repairs:-						
(i) Food and drinks	13	4861	25	19.1	33.1	58
(ii) Textile and garments	7	3051	24	24.7	35.3	70
(iii) Timber, sawmilling and wood	1	33	24	28.9	-	-
(iv) Printing, paper etc.	5	263	24	27.1	36.2	75
(v) Shoe, leather and rubber	2	472	24	23.8	33.0	72
(vi) Chemicals, plastics and petroleum	26	1229	25	31.7	39.6	80
(vii) Mechanics and motor engineering	10	508	23	24.5	34.3	71
(viii) Electrical engineering and electronics	2	213	18	22.2	30.0	74
(ix) Glass, ceramic and other building materials	5	325	26	34.8	32.7	106
(x) Building and construction	2	15	24	40.4	28.1	144
(xi) Electricity and water	-	-	-	-	-	-
4. Commerce including banks, insurance, petrol trades	16	674	25	27.9	18.3	152
5. Transport and communication	40	3529	24	23.4	33.0	71
6. Services including Governments	16	1253	30.0	28.0	42.3	66
ALL INDUSTRIES	156	61559	24	28.7	34.7	83

Table 1 Contd: Collective Agreements Registered By Industry 1973-78

	January 1977 - December 1977					
	(1)	(2)	(3)	(4)	(5)	(4)÷(5)x100
	Number of Agreements	Number of Unionisable Employees	Average Duration (Months)	Average Pay Increase (%)	Estimated Average Ceiling Applicable Under Guidelines	Utilization Ratio
1. Agriculture, forestry and hunting	14	18270	23	20.1	25.8	78
2. Mining and quarrying	-	-	-	-	-	-
3. Manufacturing and repairs:-						
(i) Food and drinks	17	5882	23	24.5	22.2	110
(ii) Textile and garments	10	3983	27	20.2	22.9	79
(iii) Timber, sawmilling and wood	3	1179	24	24.0	22.9	105
(iv) Printing, paper etc.	14	1772	24	21.3	25.0	85
(v) Shoe, leather and rubber	11	1630	22	17.8	28.6	62
(vi) Chemicals, plastic and petroleum	28	3468	28	28.4	29.9	95
(vii) Mechanics and motor engineering	23	1318	24	23.1	27.9	83
(viii) Electrical engineering and electronics	9	504	24	21.8	18.6	117
(ix) Glass, ceramic and other building materials	4	645	27	20.7	31.4	66
(x) Building and construction	5	430	25	24.5	32.6	75
(xi) Electricity and water	1	2562	24	21.5	46.0	47
4. Commerce including banks, insurance, petrol trades	28	7741	26	24.2	26.9	90
5. Transport and communication	34	3600	24	19.7	25.2	78
6. Services including Government	19	1514	25	26.7	34.0	79
ALL INDUSTRIES	220	68798	25.	22.6	28.0	81

Table 1 Contd: Collective Agreements Registered By Industry 1973-78

	January 1978 - December 1978					
	(1)	(2)	(3)	(4)	(5)	(4)÷(5)x100
	Number of Agreements	Number of Unionisable Employees	Average Duration (Months)	Average Pay Increase (%)	Estimated Average Ceiling Applicable Under Guidelines	Utilization Ratio
1. Agriculture, forestry and hunting	6	116188	24	21.0	31.96	66
2. Mining and quarrying	8	813	25	18.3	34.3	53
3. Manufacturing and repairs:-						
(i) Food and drinks	18	6964	25	25.0	28.5	88
(ii) Textile and garments	6	4607	26	19.8	27.8	71
(iii) Timber, sawmilling and wood	18	772	23	17.1	32.1	53
(iv) Printing, paper etc.	10	386	25	22.0	27.5	80
(v) Shoe, leather and rubber	2	358	24	20.5	-	-
(vi) Chemicals, plastics and petroleum	20	1180	27	21.1	24.8	85
(vii) Mechanical and motor engineering	15	413	24	20.2	28.3	71
(viii) Electrical engineering and electronics	6	283	24	19.3	21.3	91
(ix) Glass, ceramics, cement, etc.	5	408	24	23.0	28.3	81
(x) Building and construction	5	517	24	22.7	24.1	94
(xi) Electricity and water	-	-	-	-	-	-
4. Commerce including banks, insurance, petrol trades	21	1115	27	24.2	32.0	76
5. Transport and communications	49	2653	24	21.3	27.5	77
6. Services including Government	16	854	27	21.2	30.3	70
ALL INDUSTRIES	195	137530	25	21.2	28.5	74

NOTES: a. The table excludes Registered Supplementary Agreements and casual and seasonal employees.
b. The averages are unweighted and the figures for 'all industries' are simple averages. The employees covered by these contracts in most cases belong to the lower and middle income groups as defined by the Central Bureau of Statistics.
c. Utilisation ratio is the average pay increase as a percentage of the estimated average ceiling applicable under the Wage Guidelines.

Source: Ministry of Labour, Employment Promotion Division, Collective Agreements Register

Table 2. Labour Costs As % Of Gross Domestic Product, 1973 - 77

	1973	1974	1975	1976	1977
Agriculture	36.4	25.4	25.8	18.2	11.7
Forestry	64.5	69.9	82.6	88.8	87.6
Fishing	25.9	27.6	24.8	27.5	28.0
Mining and Quarrying	41.8	52.6	55.4	43.1	43.1
Manufacturing and Repairing	46.00	46.8	45.5	42.3	43.5
Building and Construction	81.1	79.8	79.6	81.9	82.6
Electricity and Water	24.1	25.1	36.6	36.8	26.0
Transport, Storage and Communication	64.9	61.2	60.6	59.6	56.2
Wholesale and Retail Trade	43.0	45.2	45.6	45.3	44.6
Banking, Insurance, Real Estate	46.7	44.2	47.9	47.1	47.5
Other Services	67.7	67.8	71.1	69.0	71.5
TOTAL	43.6	43.4	43.5	39.1	34.1

Source: Kenya, Economic Survey and Statistical Abstract, relevant issues.

increased noticeably from 1974 to 1975 except in transport and communication and increased manufacturing sectors like textile and garments, leather, electronics, building and construction, and glass, ceramic and other building materials, which showed some decline.

Table 2 gives the percentage shares of labour costs to GDP. The table shows that the share of labour to GDP was stable over the period 1973-75. The share decline in the sectors where production declined e.g. large scale agriculture and building and construction. However, the overall labour share sharply declined from 43.5% in 1975 to 39.1% in 1976 and 34.1% in 1977. This can be explained partly by the effects of the Wage Guidelines in manufacturing and repair, mining and quarrying, commerce and other services, and partly by the boom in the value of gross marketed agricultural produce especially of coffee and tea.

Table 3: Analysis of Redundancies Approved by the Inudstrial Court, 1971 - 1978

Reason	No. of Cases	Number of Dismissals or Layoffs									
		1971	1972	1973	1974	1975	1976	1977	1978	Total 1971-78	% of Total
Economic Reasons	44	271	-	2	50	252	321	128	40	1064	48.5
Technological and similar reasons	4	-	-	-	-	33	6	-	73	112	5.1
Other Reasons (including political, transfer of business, administrative etc.)	34	-	33	-	98	134	148	507	97	1017	46.4
TOTAL	82	271	33	2	148	419	475	635	210	2193	100.0

Note: Between 1974 and 1976 redundancy was mainly caused by economic recession and the Kenyanization of business while in 1977 the main cause was the Government ban on hunting and related business activities. During 1978 the rate of redundancy showed a decline. The extent of redundancy in the labour market account for a very small proportion (0.6%) of unionisable labour force and would therefore not have any impact on the overall employment situation. In any case, most redundancy agreements have provided for alternative employment for the redundant employees or pledged to re-engage them as soon as relevant work becomes available.

Source: Ministry of Labour, Industrial Court, Trade Disputes Register.

The translation of the Guidelines into shillings and cents meets the following difficulties:

a. Whereas the upper limit for wage increases is described clearly in Guideline (III), the lower limit is defined in rather general terms.

b. The upper limit is a maximum, not a target. If there is a great risk of redundancy or layoffs in the industry or firm concerned or if wages are already relatively high or have been increased rapidly in recent years, the Guidelines advise the Industrial Court to be less generous in its wage awards. The difference between the maximum and the target level can be widened or narrowe narrowed depending on the views of the parties, one of the factors being redundancy or layoffs.

c. There is very little empirical evidence to follow the suggestion in Guideline (v) that the Industrial Court 'should always have regard to the standard of living of people who are not in wage employment, particularly the standards of the average small in the rural areas'.

d. The lack of a framework to deal with what the labour and management expects to be the economic performance of the firm and the economy as a whole.

e. The Guidelines recommend a change in the structure of wages in favour of the lowest paid groups. The lack of a definition of the lowest and high paid categories presents implementation problems. The high degree of sophistication of the Guidelines requires a considerable improvement in the collection, analysis and presentation of labour market data.

The present wage and incomes policy takes into account almost all forms of development policies affecting incomes, including such government programmes as direct provision of goods and services. The wage policies are therefore combined with measures affecting incomes other than wages. In the 1970-74 Development Plan, the government estimated that 'the achievement of the basic goal of an economy 60 per cent larger in 1974 than in 1967 will be obtained mainly through a greatly expanded spending programme covering the whole country which implied that the increased expenditure would largely be met

from revenues. The government planned to use taxation to achieve equitable distribution of income and beginning with the 1974/75 budget, the incomes policy has more or less been in line with the Sessional Paper on Employment (Kenya, 1973). The tax structure has been made more equitable by the abolition of the Graduated Personal Tax and the introduction of 10 - 25% sales tax on most items other than food. While the income tax system has been made more equitable by reducing the tax threshold from K£990 to K£720 for a family of four or more, taxation of company profits has increased from 40 to 45% and the rate of tax on dividends paid to non-residents increased from 12½% to 15%.

A 15% tax on insurance commissions has been introduced. Furthermore, all foreign insurance companies will now be incorporated locally to ensure stricter supervision of insurance business in order to protect local policy holders, and avoid unnecessary foreign exchange cost of insurance written overseas. All goods purchased by Kenya importers must be insured with companies licensed to transact insurance business in Kenya. It is envisaged that the surplus generated by insurance business in Kenya will in future be used in financing economic development. The tariff system has been reformed by introducing an import duty of 10% on a wide range of items that have higherto been duty free and further changes will be made. At the same time, a 10% local manufacturers' export compensation scheme has been introduced to offset the disadvantage to which exports are put because of import duty. This policy is expected to have the desirable effects of shifting Kenya's industrial and trade policies from inward-looking import substitution to outward-looking export promotion based on, and efficiently using, local resources rather than imported raw materials. Since this is a vital part of our development strategy, emphasis is being put to restrain the growth of imports. In addition, customs duties have been increased on various imported textiles, wines and spirits, and motor cars. In an effort to achieve greater income redistribution, capital gains tax was introduced covering not more than 35% of the difference between what was paid for a property and what has been received for selling the property.

In the 1978%79 Budget however, the Minister for Finance declared that the Capital Gains Tax would now be levied only on half the gain that an individual makes on the sale of the property. This is likely to inflate property prices. It has been argued that the Capital Gains Tax has the effect of inhibiting economic growth and that in its place, the existing stamp duty could be raised, and perhaps collect as much revenue with less collection costs

than the Capital Gains Tax. However, there is a general feeling that the Capital Gains Tax is necessary for the purpose of wealth and income redistribution and that what is needed is to close the loopholes. In addition, there is a progressive taxation of wealth in Kenya which is levied at varying rates between one per cent on estates between K£2,500 to K£5,000 and 50% on estates over K£1 million.

Agricultural incomes on the other hand have been increased through subsidies and increases in producer prices for selected commodities, removal of cesses on cash crops. and reduction in housing charge for agricultural employees from 15 to 10% to enhance the value of their emoluments. In general, however, Kenya has different goals to be achieved through the use of one instrument: taxation. For various reasons, possibly including corruption and inefficiency in the tax collection systems, it has been difficult to achieve the goals of equity in the distribution of income and wealth through the one instrument.

5. AN ALTERNATIVE EXPLANATION

It is obvious that the issue of wage and incomes policy is complex. The essential factors considered in the process of wage determination are the overall economic situation in the country, the principle of social justice, the bargaining power of the parties, and the necessity to promote, productivity and skill upgrading. The main problem with the Wage Guidelines is that they try to reconcile contradictory principles: to put a ceiling on wage increases and at the same time ensure a basic minimum standard of living.

There is a body of economic literature which holds that in Kenya and may other developing countries, prices outside agriculture are largely influenced by foreign organisations and multinational firms, and therefore undertaken outside the effective control of government. It is also possible that the wage policy is not very effective in promoting employment due to the fact that there are many factors besides labour costs that determine factor mix, and wage restraint alone will not therefore significantly affect employment unless it is combined with other more powerful measures of job creation.

Wage 'distortion' is usually included as a factor explaining this low growth of employment in less developed countries. That wage levels are 'too high' in this sense is indicated by the existence of substantial unemployment without a general tendency for wage rates in the modern sector

to decrease, while much lower pay rates for similar skills exist in the unorganised sector. The failure of wage rates in the modern sector to reflect market forces is partly explained by the presence of organised social forces in the industrial sector, notably trade unions. But government wage and social policies are probably of far greater significance. The government has played a major role in wage determination, both as an employer and in its wage regulations.

The general picture then, is of the modern sector paying high wages, with their levels even rising despite substantial unemployment and government wage policies. These high wage levels provide a part of the explanation for the relatively slow employment growth in the past 15 years. As Reynalds (1965) observes, there is no question about the plausibility of this kind of analysis. As a general proposition, a more rapidly rising wage level will lead to less growth in employment for reasons that are well known; furthermore empirical studies in a number of countries suggest wage elasticities of demand for labour which are negative and significant though generally lower than one.

Another significant dfactor in the explanation of slow employment growth is the distortion in the price of capital, which derives from certain economic policies and institutional arrangements in less developed countries which encourage capital intensity e.g. overvalued currencies, subsidised credit arrangements, and general fiscal policies.

It must be recognised however, that there are costs involved in a low wage policy. It is likely that the effectiveness and intensity of work effort is adversely affected, particularly among highly trained and educated workers. Low wages may cause deterioration in health and nutrition and result in slower rates of performance. There are, moreover, some unfavourable income distribution effects of low wage policies. Income distribution favours dividend receivers abroad, domestic capitalists, managers, and private sector employees, whose incomes are less amenable to effective control than salaries of public sector employees.

Similarly, the effectiveness of wage policy in narrowing the urban-rural income differential is difficult to assess in the absence of national data on income levels in small farms. However, there has been some success attributable to the pricing policy on major food items and to some free public services. In addition, the real wages in the modern sector significantly declined in the period 1973-75 at the same time as agricultural producer prices were rising. But as Edgren observed:

It is hardly likely that the urban-rural income gap narrowed in that period except in some geographical areas which had good rains and produced cash crops at favourable prices. Drought, distribution problems and rising prices of agricultural inputs as well as of non-food items seem to have eroded the real income of most small-holder families during the years of the new incomes policy.... Given the lack of control of productivity in the small-scale farming sector, attempts to narrow the gap tend to rely heavily on restraining wages in the modern sector. Since there is reason to believe that wages are more directly influenced by profitability and intra-firm relationships than by trade unions' bargaining activity, wage trends will not be effectively controlled by measures directed only at negotiated wages. And profits cannot be effectively controlled except by a government take-over of ownership (1976).

The costs of wage restraint are therefore real and for wage restraint to have a significant impact, a whole range of complementary policies are required e.g. control on the level and the use of profits. No wage policy, for example, will dampen the flow of migrants unless something is done to develop agriculture and improve rural amenities and land tenure arrangements. Similarly, no industrial sector expansion will bring about higher rates of labour absorption without basic changes in, say, fiscal policies and the structure of incentives so as to reduce or eliminate those features which encourage capital intensity. Without appropriate changes in general economic and social policies, even the most rational wage policy will hardly make a dent on the employment problem.

It is envisaged therefore, that future development policies will put more emphasis on formulating and implementing a more integrated rural development programme which together with improved government control on commodity prices and wages and measures to control productivity, would create more employment opportunities while at the same time improving the incomes of the rural workers, thus narrowing the urban-rural income differentials. However, care must be taken to avoid increased rural-urban migration in view of the on-going countrywide consolidation and registration of individual land ownership and the emergence of a permanent agricultural wage labourer class which will accelerate the process of rural differentiation and landlessness. As Godfrey suggests,

> Our framework would point to the need to influence the whole structure of urban rewards and the way in which it is changing.... Most rural development schemes have the effect of increasing differentiation,

whatever their intention and would thus be expected to accelerate rural-urban migration. Large-scale political and institutional change, including redistribution of land would be needed to counteract this process. Educational planning might also have a part to play although the rate at which people equip themselves for high-level jobs and thus their propensity to migrate, can hardly be controlled in the absence of measures to reduce the rewards for such jobs and rationalise their educational content (1975, pp. 11-2).

A desirable development would be the implementation of a coordinated and fully integrated wage and incomes policy operated by a single body (a National Board for Prices, Wages and Incomes), which would oversee in Mmatters affecting wages, prices and other incomes and monitor changes in productivity. The existing institutions e.g. the Price Control Advisory Committee, the Wages Advisory Board, the General Wages Advisory Board, the Agricultural Wages Advisory Board, Industrial Wages Councils, etc., could be amalgamated to provide the basis for setting up such a national organisation. Otherwise the existing framework lacks coordination and operates on ministerial basis.

REFERENCES

1. Berg, E. 1969. 'Wage Structures in Less Developed Countries'. In A.D. Smith (ed). Wage Policy Issues in Economic Development. New York.

2. Edgren, Gus. 1976. 'On the Politics and Mechanics of Wage Control in some Western and African Countries'. Seminar Paper No. 57. Institute of Development Studies, University of Sussex.

3. Frank, C.R. 1968. 'Urban Unemployment and Economic Development in Africa'. Oxford Economic Papers, 20 (2), July, pp. 250-74.

4. Godfrey, Martin. 1975. 'A Note on Rural-Urban Migration: An Alternative Framework of Analysis'. Manpower and Unemployment Research in Africa. 8 (2), November, pp. 9-12.

5. Harris, J. and M.P. Todaro. 1969. 'Wages, Industrial Employment and Labour Productivity: The Kenyan Experience'. Eastern Africa Economic Review. 1 (1), June (New Series), pp. 29-46.

6. Henley, John S. and W.J. House. 1976. 'Collective Bargaining, Wage Determination and Regulation of Employment Conditions in Kenya'. Paper Presented at the Fourth World Congress of the International Industrial Relations Association, Geneva, 6 - 10 September.

7. International Labour Office. 1972. Employment, Incomes and Equality: A Strategy for Increasing Productive Employment in Kenya. Geneva, ILO.

8. Kenya. 1954a. Report of the Committee on African Wages (Chairman: F.W. Carpenter). Nairobi, Government Printer.

9. Kenya. 1954b. Report of the Rural Wage Committee. Nairobi, Government Printer.

10. Kenya. 1965. African Socialism and Its Application to Planning in Kenya (Sessional Paper No. 10 of 1965). Nairobi, Government Printer.

11. Kenya 1970. Development Plan 1970-74. Nairobi, Government Printer.

12. Kenya. 1973. Sessional Paper on Employment. Nairobi, Government Printer.

13. Kenya. 1975. On Economic Prospects and Policies. (Sessional Paper No. 4 of 1975). Nairobi, Government Printer.

14. Mboya, T.J. 1965. 'The Development Progress in Kenya'. East African Journal. October.

15. Mukui, J.T. 1979. 'A Prelude to the Implementation of the 1979 Tripartite Agreement'. Paper Presented to a COTU/ICFTU Seminar on Employment, 15-18 February, Kisumu, Kenya.

16. Reynolds, L.G. 1965. 'Wages and Employment in a Labour-Surplus Economy'. American Economic Review. 55 (1), March, pp. 19-39.

RENT CONTROLS IN RESIDENTIAL PREMISES IN NAIROBI: SOME THEORETICAL REFLECTIONS

By

J.T. Mukui and S.B.O. Gutto
Institute for Development Studies
University of Nairobi

1. INTRODUCTION

In Kenya, the issue of rent controls is important, if the readers' letters and editorials in the local newspapers are anything to go by. This is because shelter is a basic need and rent (which is the price of that shelter) is a substancial proportion of expenditure of urban dwellers, 22.9% for the lower income, 16.1% for the middle income, and 27.2% for the upper income group in Nairobi (Kenya, 1977). Again, there is the suspicion, sometimes justified and sometimes not, that the market mechanism through the free interaction of supply and demand works against the interests of tenants. Hence the need to set 'fair' rents to reduce or prevent exploitation of tenants.

A number of academic papers (see, for instance, Mutunga, 1978) argue that rent controls are necessary because the market mechanism does not produce equitable results. However, one of the concerns in this paper is the likely effects of rent controls on the supply of housing. The conclusion is that the solution to the rent problem lies in getting more houses built. The paper also analyses the present system of rent control through the Rent Restriction Act (Cap. 296) and concludes that the legal institution embodied in the Rent Tribunal is inadequate both on paper and, even more so, in practice.

The paper is divided into three sections. The first is a review of the literature; the second deals with the structure of rent controls in Kenya; and the last summarises the emerging issues. The underlying major assumption throughout the paper is that the currently dominant capitalist economy, with heavy doses of state intervention, will prevail for quite some time, although this in no way reflects the authors' ideological stance.

2. 'A' THEORY OF RENT CONTROL

Myrdal (1969) says that social scientists should, if they can, simply announce their biases and assumptions so that the reader can take them into account when he examines the data presented and the arguments based upon them. In this paper, as stated above, we are assuming a mixed economy, with investment and the pattern of development solely determined by the profit motive, an assumption that holds true for Kenya.

The coverage of rent controls is important in as much as it affects the pattern of supply of housing. Mishan (1969) argues that, if the government, in a genuine attempt to protect the urban poor, controls rents in low cost housing, private investors will divert their investments to the uncontrolled middle and upper income housing, causing a severe shortage of low cost housing. This would leave the government to shoulder the whole burden of providing low cost housing. If rent controls cover all housing, a situation which is difficult to achieve in practice, private investors will direct their investments from housing to other sectors of the economy - assuming that the controls make the returns to housing construction less profitable compared to other investment opportunities. Thus, France had practically no residential construction from 1914 to 1948 because of rent controls (Samuelson, 1976, p. 396). Samuelson continues: 'If new construction had been subjected to such controls after World War II, the vigorous boom in French residential building since 1950 would never have taken place'. However, this does not mean that there would be no housing shortage in a decontrolled system, but the implication is that the scarcity of housing would have been greater, and the rents would have risen more had the stock of housing not expanded in response to the high prospective profits (Harris, 1969, p. 3).

Mishan (1969) argues that it is a fallacy to argue that 'rent controls are necessary during a time of shortage'. He argues that, during a housing shortage, rent controls will induce a less intensive use of housing stock, thus exacerbating the shortage. He advances two further arguments against rent control as a redistributive policy instrument. First, there are poor landlords and rich tenants and rent controls may therefore constitute a transfer of real income from the poor to the rich. Second, even if we supposed all landlords are better off than their tenants, rent controls discriminate against the owners of a particular class of property in an arbitrary manner. He recommends that the difference between the

estimated market rent and the government controlled rent be paid by the government on behalf of the poor tenant to the landlord, the funds necessary to finance this subsidy coming out of general revenues.

There are various objections to Mishan's approach to the issue. First, given the small size of the public vote in a country like Kenya, a subsidy to tenants would be too heavy a burden on the government. Second, the subsidy would be subject to misuse and would favour the urban dwellers who are likely to stay in rented premises. Mishan's argument that it is possible to have poor landlords and rich tenants does not seem to hold true for Kenya, at least at an aggregate level.

3. RENT CONTROL SYSTEM IN RESIDENTIAL PREMISES IN NAIROBI

Rent control on residential premises was introduced in 1918 at the end of World War I to prevent profiteering arising out of the post-war housing shortage but was removed on 31 December 1923. Rent controls on both residential and business premises were introduced in 1940 at the beginning of World War II and are still in force. We are concerned here with rent controls on residential premises although some arguments are relevant to business premises as well.

Rent control on residential premises cover those premises whose 'standard rent' does not exceed Ksh. 800 for unfurnished dwellings and KShs. 1,100 for furnished dwellings. If because of reconstruction and improvements of a hitherto controlled house the rent exceeds, by the agreement of the parties, the financial ceiling, the control ceases immediately; or if the Rent Tribunal assesses rent for a dwelling house over and above the financial ceiling, such a house is thereby decontrolled. Since rents, like prices of most consumer goods and services, have been increasing since 1966 when the rent ceilings were fixed,[1] the statutory coverage of rent controls has been declining over time, not to mention that the low ceilings puts the upper income and most of the middle income housing outside the ambit of the rent control machinery. The fact that the statutory coverage of rent control is low and is declining as rents increase means that the legal machinery has an built-in distortion which retards the supply of low income housing.

---

1. Act No. 37 of 1966, section 3.

The legislation does not apply to tenant-purchase houses which are becoming the dominant category of houses in Nairobi. The rationale for this is that tenant-purchase houses are occupied by the purchasers. This is a naive assumption as a good proportion of these houses are rented out and even the finance institutions which mortgage them out often recognise this fact but do nothing about it.

Also kept out of rent control, although here the tenant-employees are not charged high rents, are houses provided by the central and local government institutions and some parastatals.[2] It must be noted, however, that in such cases, the ultimate landlord may be reaping high rents from the government or parastatal which are normally too high for individual potential tenants. Under section 3 or the Act, service tenancies - defined as dwelling premises given by the employer to the employee in connexion with his employment - are excluded from controls. As with the category of dwellings given to government employees, the employer may not be the ultimate landlord or owner of the premises. Oftentimes, the employer merely leases the house and gives it to the employee at a subsidised rate. Individual potential tenants can hardly compete with corporate employers and other multinational institutions in securing such premises.

The gap between the legal and actual coverage of rent controlled premises is further magnified by the fact that not all assessable plots are assessed by the Rent Tribunal. Noormohamed's study of the economic consequencies of rent controls in Eastleigh, Nairobi, shows that only 7% of assessable plots were assessed by the Rent Tribunal and that rents are effectively controlled in only 50% of the assessable plots, thus making only 3.5% of plots with rents kept at the level of 'standard rent'. Noormohamed concludes that, even though the Rent Tribunal is significantly effective in assessed plots, its overall impact is negligible (1975, p. 45). Again, as Mutunga observes, '...in the urban areas, the figures of the personal enquiries show that the greater population of the towns who are tenants have not availed themselves of these institutions, or were not aware of them' (1978, p. 226). It must be pointed out that the Rent Tribunal

---

2. Sections 3 and 4 (1) of the Act and Gazette Notice No. 4662 of 1966.

has very wide powers including the appointment and employment of valuers, inspectors, and clerks.[3] Without identifying the reasons why the Tribunal has so far not chosen to exercise some of its wide statutory powers, it is hard to determine the influence its powers would have had on rents and stock of housing.

Another class of houses worth considering are the Nairobi City Council houses. The Council charges low rents to occupiers, giving an implicit subsidy to the occupiers equal to the difference between the market rent and the Council's rent. This subsidy can be up to 60% (Temple, 1973, p. 220) and the rentees sometimes convert the subsidy into cash by subletting at the prevailing market rates.

The issue of rents in Council houses has been recognised by various scholars, notably Temple (1973) and Harris (1969). Temple and Harris show that some of the Council houses are not low income houses and the occupiers do not therefore warrant a public subsidy. Second, the subsidy lowers the funds available to the Council for house construction and is therefore one of the factors contributing to the magnitude of Nairobi's housing problem. The current system protects a group of rich tenants and reduces the supply of houses. The resultant shortage of public houses makes it possible for private landlords to charge high rents. Thus, the beneficiaries are private landlords and tenants in the Council houses while the burden is borne by the Council, tenants in non-controlled private housing and, of course, the houseless and shanty dwellers. Furthermore, the availability of low rents in public housing and rent controlled private sector housing reduces labour mobility because occupiers know they will pay higher rents if they leave rent controlled premises.

The politics of the subsidy of City Council houses is well documented. Temple (1973, p. 221) shows that it is too tough a political act to remove the subsidy because of the relative political power of the beneficiaries and that the poor have no machinery to pressure the Council to allocate the houses in their favour. As Temple argues:

> Since housing allocation provide very tangible means of rewarding supporters, relatives, and friends, it is not surprising that the councillors endeavour to preserve as much personal control over allocation procedures as possible.

---

3. Section 5 (1) (A) of the Act.

> Council officers are also tied into Nairobi's networks of personal influence and obligation, and many of them also try to use their positions to influence allocations. Furthermore, many Council employees desire Council houses themselves, and given Nairobi's long tradition of employer-provided housing, they often feel that the Council has an obligation to provide it for them. When medium cost estates come up for allocation, Council employees often constitute a powerful internal lobby (1973, p. 231).

Political considerations aside, we would recommend a removal of the subsidy on high income Council houses because it inhibits supply of housing and is not in the interest of the poor in Nairobi. It is hoped that the market rents collected would be chanelled to new housing construction so as to spread the benefits to a wider population.

To summarise the argument so far, we started by inviting the reader to accept that in a market economy like Kenya, profit (greed?) is the prime mover and concluded that rent controls inhibit housing construction, create more shortages, which might be used as a justifidication for more rigorous controls. However, before we advocate a repeal of such laws, one must examine whether new houses would be built if such laws are repealed. Again, although rent controls are more of a myth than reality, the government should, under a decontrolled system, maintain a tribunal to deal with cases of breach of contract between landlords and tenants. According to Jorgensen, such a tribunal 'just as many countries have labour tribunals, would deal with and enforce its decisions on such matters as untimely evictions, change of rent during the period of lease, lack of maintenance and other kinds of negligence on the part of both tenant and landlord, devious contracts and interpretation of unclear or unusual contract terms' (1972, p. 20).

4. CONCLUSION

This paper has argued that rent controls imposed in a largely market economy interferes with supply of housing. If controls cover low income housing only, they discourage supply of housing to the low income earners unless substantial public housing for the low income is realised, and if imposed on all classes of residential housing discourages investment in residential housing sector as a whole. As Kenya's 1979-83 Development Plan states, 'it is not the policy of the government to allow the exploitation of tenants through unjustified evictions and extortionate charges by unscrupulous landlords..... It is, however, appreciated that in the final analysis the

answer to high rents lies in getting more houses built' (p. 173). While this paper accepts the general thesis of the Plan that it is futile to expect rent controls to achieve the desideratum of both low prices and abundant supply, the various institutional constraints on supply of housing e.g. the housing finance and the land tenure systems should be improved so as to allow expansion in housing stock as a result of the high rents; or encourage individual construction of own houses within reasonable distance of the towns.

The statutory and actual coverage of rent controls is low. Given that rent control is more of a myth than reality, they should be relaxed and the Rent Tribunal operate like an industrial court so see that contracts between tenants and landlords are adhered to and that market excesses are minimised. Indeed the existence of the Rent Restriction Act and the Rent Tribunal only helps to maintain and promote the myth of existence of rent controls. The City Council houses should also charge market rents because they are occupied by the well-to-do who do not deserve a public subsidy and prevents new housing construction, which could be used as a way of spreading the benefits to a wider population.

The comment by Jorgensen (1972, p. 20) might as well close this paper: 'The benefits of rent control, if it is not fully implemented, is doubtful because of the sense of injustice it leaves. The cost of rent control, if it is to be effective, will be enormous.'

REFERENCES

1. Harris, J.R. 1969. 'Some Thoughts on a Housing Policy for Nairobi'. Discussion Paper No. 78. Institute for Development Studies, University of Nairobi.

2. Hutton, John (ed.). Urban Challenge in East Africa. Nairobi, East African Publishing House.

3. Jorgensen, N.O. 1976. 'Housing Policy Guidelines for African Countries'. Housing Research and Development Unit, University of Nairobi.

4. Kenya. 1970. The Rent Restriction Act. Cap 296 of the Laws of Kenya. Nairobi, Government Printer.

5. Kenya. 1977. Consumer Price Indices Nairobi. Nairobi, Government Printer.

6. Kenya. 1979. Development Plan 1979-83. Nairobi, Government Printer.

7. Mishan, E.J. 1969. 21 Popular Economic Fallacies. Harmondsworth, Penguin Books Ltd.

8. Mutunga, Willy. 1978. 'The Impact of Housing Shortage on the Implementation of the Rent Acts in Kenya'. In G.W. Kanyeihamba and J.P.W.B. McAuslan (eds.). Urban Legal Problems in Eastern Africa. Uppsala, Scandinavian Institute of African Studies, pp. 218-56.

9. Myrdal, G. 1969. Objectivity in Social Science Research. New York, Pantheon Books.

10. Noormohamed, S.O. 1975. 'Economic Consequencies of Rent Control in Kenya: A Case Study of Eastleigh, Nairobi'. M.A. thesis, Department of Economics, University of Nairobi.

11. Samuelson, P.A. 1976. Economics. Tokyo, McGraw-Hill, tenth edition.

12. Temple, F.E. 197e. 'Politics, Planning, and Housing Policy in Nairobi'. Ph.D. Thesis, M.I.T.

THE MONITORING OF PERFORMANCE IN AGRICULTURE MARKETS AND ITS CONTROL

By

T.J. Aldington
Planning Division
Ministry of Agriculture

Government intervention in agricultural markets is found world-wide and Kenya is certainly no exception in this respect. Such intervention takes a variety of forms: direct through price control or price setting at various levels in the marketing chain, involving possibly consumer and/or producer subsidies; and less direct through the marketing operations of parastatals established by government which may involve the use of buffer stocks, price stabilization funds or other measures designed to affect prices. Governments may also confer market power onto non-parastatal organisations such as public companies through, for example, exclusive buying or selling rights or they may simply adopt a laissez faire attitude so that such organisations can acquire market power and hence exercise control over agricultural markets and their prices. This implies that agricultural marketing firms, whether parastatal or not, tend to conduct themselves and perform very much according to the monopoly or monopsony powers - or both - they wield. This is very much in line with the Bain/Caves thesis that one can predict how firms or business organisations will conduct themselves in a market and how they will perform in that market in response to that market's concentration. Several very enlightening examples can be taken from Kenya's agricultural markets which well demonstrate this point. This is all very interesting but what is more important in a practical sense is how to measure the performance of agricultural marketing parastals or quasi-parastatals, most of which perform marketing services and functions specific to a particular crop or product and undertake various processing activities. And having decided what to measure, against what set of criteria should these measurements be set to begin to attempt some sort of appraisal? And again, if the performance is found to be lacking, what is to be done about it. How can a government countervail against the marketing organisation it has either established or permitted to become established in order to preserve the interests of producers and/or consumers? It may surprise some that this last question is posed at all in the context of parastatals but certainly the problem of controlling marketing institutions established by Acts of Parliament and with functions defined in such legal documents (functions which can become modified in practice and over time) can be a major one.

Recapitulating so far, marketing parastatals or their quasi-parastatal relations, are often granted a good deal of market power when they are established, at least in the domestic market, and a good deal of autonomy with which to wield it. Over a period of time, these powers may change and increase. It can be noted also that developments over time can work in an opposite direction. Marketing institutions may lose market power and become enfeebled to such a degree that they can no longer perform the roles they were set up to undertake.

After this preamble, the first point to make is that if governments are to intervene effectively and continuously in agricultural markets (the supposition, not discussed here,being that such intervention is desirable), there is a need for them to monitor performance and possibly the conduct of the marketing agencies established in agricultural markets, to compare the results of this monitoring against some set of criteria, and do something about it if either performance or conduct appear to be lacking. That this need has been realised in Kenya is only slowly manifesting itself. So if we are to offer anything here, we have to address ourselves to the problem of the conduct and performance measures to be used, their criteria and consequent action. The second point to be made is that governments can and do, whether willingly or not, change policies either more or less explicitly, which can severely modify the market environment in which a marketing organisation is operating and hence affect its conduct and, more important, its performance. If these two points are not recognized, then the situation so often demonstrated in Kenya's agricultural markets can arise: of marketing institutions, parastatals and others, not conducting themselves in the market or not performing in the national interest. Deficits accumulate, producers' incomes are depressed or producers face other market difficulties, consumer prices are inflated and consumers have access to a more limited range of products than need be. These are some examples. This sort of situation cannot be blamed entirely on the marketing institutions themselves although in Kenya, a fair share of the blame can certainly be aimed at them. Government policy may be involved also and without doubt can be implicated in some cases.

Without pretending to offer many firm prescriptions, what can be said on the three main aspects of this problem: the measurement of conduct and performance of an agricultural marketing institution, the criteria against which such measurements can be appraised, and consequent action? It would seem more appropriate to consider the measurements along with their criteria; remedial action can be considered separately.

The following are some of the conduct/performance measurements and their criteria:-

(a) Performance of functions at minimum cost. That is, technical efficiency. Such measures e.g. storage costs per unit and transport costs per unit, are not difficult to calculate. The overhead costs of administration per unit of throughput can also show some interesting trends. Other things being equal, such overhead costs should decline with increasing throughput. However, comparing these costs between institutions can be misleading because it is rare for any two institutions to be performing similar functions, or be in the same sort of market environment. One institution may be undertaking more of a processing function, another a trading one. One may be dealing in a perishable product, another may not. Again, drawing from examples from similar institutions in other countries can be fraught with difficulties - exchange rates, quality differences, factor costs, government policies, to name a few - although major differences in costs can be shown.

(b) Undistorting market price signals to both producers and consumers. Clearly there is a link between (a) and (b) because the more technically efficient a marketing organisation is, the more capable it is of undistorting market price signals so as to maximize the resource allocative efficiency of that market, although its management may choose not to do so. The best measures here are the producers' share of a market price or the mark-up from the producer or farm-gate price to the consumer price. Again, and for the same reasons as for (a) above, it can be misleading to base too much on inter-institutional comparisons. More important are trends over time: if a producers' share is declining over time, what are the reasons? Or trends in relation to some other measurement, such as trading profits or the accumulation or size of reserves. Thus, an upward shift of the producers' share of the market proceeds in any year accompanied by a decline in trading profits or a run-down in reserves, clearly can only be a temporary situation. A declining share accompanied by an increase in trading profit and/increase in reserves may be the result of over-conservative pricing policies either by the institution itself or imposed on it by government and may be corrected in the following year. Then again it may not, and here some action would be justifies.

(c) Allocating sufficient capital to develop and/or improve marketing or processing services or functions. The accumulation of capital reserves normally appropriated from trading profits could be regarded as a healthy sign. They should also be seen in the context of trends in other measurements listed above. The question can be made: what is it supposed to do with such reserves?

If they constitute a windfall gain from advantageous trading conditions, then producer prices should subsequently be adjusted to absorb them over a period of time. If they are being accumulated to invest in new capital, can it be shown that this will confer benefits to producers? If not, can this be an example of conspicuous investment or is the institution concerned simply with accumulating a comfortable reserve on which it can enjoy a quiet life, a privilege many parastatals conferred with monopoly/monopsony powers seem to regard as behaviour deserving approval?

(d) Achieving trading profits or at least avoiding deficits. This would seem to be a very basic measurement of performance although in practice, given the quixotic policies adopted by governments in agricultural markets, it is less useful. A trading deficit may simply be an unfunded subsidy. In the industrial market context, excess profits - that is, excess over a 'normal' return to the risk capital invested - can be a sign of monopoly/monopsony power in a market such as to justify the exercise of countervailling power to overcome it. In agricultural markets dominated by parastatal marketing institutions, such a broad conclusion has less validity.

(e) Performing specific functions such as stabilising producer returns. It is rare, in fact, to have such functions carefully defined although they pertain to the establishment of price stabilisation funds administered by the marketing institution. It is equally rare to find criteria against which the operations of the fund can be measured although ex-post measurements can be useful, especially if they can be combined with other measurements such as the trend in the producers' share of the market price of a commodity. The marketing institution may be successful in stabilising the producer price, but at a level low relative to the actual trend in the market price. The surplus may be siphoned off to other ends, a complaint made by investigators of the performance of marketing boards in Ghana (cocoa) and Uganda (cotton), for example. Therefore, such quantifiable measurements - costs, shares of market proceeds, reserves, trading profits, price stabilisation - are useful in appraising the performance of a particular marketing institution but need to be qualified. What sorts of functions is the institution supposed to be performing and actually doing? Are these entirely of a marketing/processing/trading type or do they include those of a quasi-political nature such as creating employment which may not be conducive to good performance? What is happening to throughput or quantities handled for do not expect a marketing institution to perform well if government policies have reduced its share of the market. What are the trends in costs over time and in relation

to overall inflation? Is the institution performing better or worse than one might expect in these circumstances? These qualifications do underline the need to be fully acquainted with the particular institution, the market it is operating in and government policies which impinge on it, before definite conclusions may be drawn from these measurements, even if they are quantifiable and hence less subjective.

More subjective but worthy of note are the less quantifiable measurements such as market conduct and the physical performance of marketing/ processing services or functions. An appraisal of market conduct involves investigating an instiution's pricing policies in terms of location and grades and the range of products it offers consumers. Typically, a firm with greater monopoly power will restrict the range of products (e.g. the Kenya Cooperative Creameries which has a virtual monopoly in milk in the major urban markets, only offers fresh whole milk as standardised, pasteurised milk packed in $\frac{1}{2}$ litre tetrapacks) either to lower their costs or to only produce that product with the greatest mark-up (e.g. in the bread market, not a monopoly but one with a high concentration ratio, a greater margin is earned on a 'premium' loaf than on a 'standard' loaf and it is therefore the former which is more commonly marketed). Here again, it is only possible to examine the market from the view point of ascertaining its conduct and attempt to draw conclusions on how closely it confirms with what may be termed as the national interest. The same goes in trying to appraise the physical performance of institutions in carrying out their functions or services, especially marketing functions such as storage, acceptance of produce, grading procedures, etc. If performance is poor in these areas, this can show up on the costs side although not invariably so. It is worthwhile to examine the whole marketing chain from the producer to the consumer, or that part of it under the control of the marketing institution in question, to ascertain what is supposed to be done by whom at the various links in this chain and how well it is done in practice. This can be a useful exercise although demanding in manpower and is therefore unlikely to be incorporated in regular monitoring procedures.

If one has to bet tentative in offering ideas on the measures to be used in appraising the performance of institutions operating in agricultural markets and on the criteria against which they can be compared, hedging them with qualifications and caveats, this is even more true when making recommendations on what actions are appropriate in the event of a particular institution failing its performance tests. It is pertinent to note that the

legislation on which such institutions normally, but not invariably, rest as a rule do comment at length on the institution's duties and functions, its constitution, financing and so on. Therefore the legislation normally gives some idea of what the institution is supposed to do but it is rare to note any ideas on what is to be done in the event of the institution not doing what it is supposed to do. It is normally regarded as sufficient if it produces audited accounts at least annually and on time, some do not. But guidelines on what performance can be expected and what remedial action can be taken is lacking. It can be remarked that parastatal annual reports and accounts in Kenya, when they are produced, are normally much more informative and give a better idea on the details of the accounts than annual reports from public companies, and certainly provide more details than would be required under the Companies' Act. There is a danger that such reports could become less informative as time goes by, which would mark an even further weakening of government control over them. Here again, the legislation could specify in more detail the minimum requirements with respect to the content as well as the timeliness of regular reports and presentation of accounts.

The normal procedure adopted if a parastatal is not performing well is to sack the management, which may or may not solve the problem. If the problem stems from a basic incompatability in government policies and these policies remain unchanged, then such an action cannot achieve its desired objective. Short of this and in those cases where government does not have legal control over the institution in question, some leverage can be used against erring institutions through pricing. Reducing trading margins through raising producer prices while maintaining consumer price levels, for example, can be a salutory lesson for a trading institution, whether it is a parastatal or not. However, in some cases, government does not have sufficient control over prices or may not wish to use what pricing powers it may have. On the other hand, simple 'jaw boning' - that is, simply discussing with the institution's management the conclusions of a performance appraisal and what may happen if appropriate action is not taken - can achieve the desired result.

Overall, it would be beneficial if firmer guidelines on expected performance on the part of a marketing (including processing) institutions can be set down as a quid pro quo for the conferring of certain powers on it. Such guidelines could be quite general such as the expected producers' share of market proceeds or the ex-store or factory mark-up over the farm-gate price; or the maximum size of reserves as a proportion of the producer payout. Guidelines such as these could give a frame of reference within which

Table 2:

Year	Coffee Board: Cofee sold '000 metric tons	Coffee Board: Coffee Board Non-marketing costs Shs/metric ton	Coffee Board: Marketing costs Shs/metric ton	Tea Board: Production costs Million kg. made tea	Tea Board: Board costs Shs/'000 kg.	KTDA: Green leaf '000 kg.	KTDA: Head Office costs cts/kg green leaf		KTDA: Total costs cts/kg. green leaf
1970/71	59.9	68.14	297.75	36.3	59.30	31.8	6.7		43.3
1971/72	62.7	77.73	308.21	53.3	44.30	51.0	5.0		33.6
1972/73	75.4	60.74	243.89	56.6	59.40	65.8	3.6		27.2
1973/74	72.8	74.30	161.68	53.4	55.40	65.9	4.2		28.6
1974/75	65.4	129.97	190.71	56.8	56.70	73.7	7.0		28.6
1975/76	73.8	113.14	250.76	62.0	58.00	88.8	7.9	35.5	35.5
1976/77	100.3	97.98	300 90	n.a.	n.a.	n.a.	n.a.		n.a.

Note: n.a. - not available at the time of writing.

Assuming a conversion rate of green leaf to made tea of 22.2%, Tea Board average costs were around 0.9 cts/kg to 1.4 cts/kg green leaf, to compare these with KTDA costs.

Source: Annual Reports.

Table 3: Kenya Meat Commission (KMC)

Year	Beef Processed '000 kg CDW	Costs - Kshs/kg CDW[a] Transport	Total Operations[b]	Administration
1971	27,427	0.10	1.33	0.15
1972	33,522	0.09	1.03	0.19
1973	23,043	0.13	1.36	0.27
1974	20,637	0.19	1.65	0.29
1975	17,063	0.32	2.72	0.36
1976	26,033	0.46	2.84	0.25

Note: a - Cold Dressed Weight

b - Includes transport costs, processing, etc.

Source: KMC Annual Reports.

Finance	Grand Total	Average Producer Receipts, shs/Kg.	Producer price as % sales value	Surplus (deficit) as % turnover
0.04	1.67	3.09	67.3	3.7
0.03	1.36	3.08	61.6	3.7
0.04	1.82	4.10	66.5	3.6
0.07	2.19	4.67	70.7	(3.7)
0.26	3.53	5.03	65.0	(8.3)
0.22	3.49	5.35	63.4	8.9

Table 4: Kenya Cooperative Creameries Ltd. (KCC)

Year	Intake milk Equivalent '000 litres	Costs cts/litre intake		
		Selling	Admin.	Processing
1970/71	195,247	7.56	2.52	21.80
1971/72	242,015	8.56	2.65	20.81
1972/73	280,508	10.16	2.66	21.59
1973/74	255,027	11.42	3.27	26.84
1974/75	224,257	13.44	4.67	38.06
1975/76	226,467	16.29	4.71	39.64

Source: KCC Annual Reports.

Total	Producer Payout cts/litre average	Payout as % sales	Trade Surplus (deficit) as % turnover
31.81	55.89	60.5	0.4
32.18	70.87	73.2	(16.9)
34.61	72.73	31.2	(17.0)
41.53	72.73	62.1	4.2
56.18	79.05	57.9	4.1
60.65	86.36	59.2	Breakeven

Table 5:

Year	Pyrethrum Board: Production Pyrethrins in metric tons	Pyrethrum Board: Administration Costs shs/kg pyrethrin	Pyrethrum Board: Total costs shs/kg/pyrethrin	CLSMB: Production '000 bales	CLSMB: Administration costs cts/kg seed cotton[a]	CLSMB: Totals costs cts/kg seed cotton[b]
1970/71	127.7	59.04	115.69	30.2	3.0	6.2
1971/72	193.1	47.50	121.62	29.0	7.9	10.2 (16.8)
1972/73	142.1	31.58	167.23	30.8	n.a.	(26.0)
1973/74	187.0	23.26	214.42	28.3	n.a.	(57.5)
1974/75	200.6	20.05	90.50	28.8	n.a.	(87.0)
1975/76	187.6	29.39	177.16	31.5	16.2	(56.6)

Notes: a - Assumes 185 kg/bale and 32% average ginning outturn. The figures in brackets are from unaudited accounts. Unfortunately it is impossible to sift out the administrative costs from these.

b - Excluding trading costs.

Source: Annual Reports.

EFFECTIVENESS OF MAIZE MARKETING CONTROLS IN KENYA

By

Guenter Schmidt
Institute for Development Studies
University of Nairobi

1. INTRODUCTION

Maize is the major staple food in Kenya and most of it is produced by smallholders of whom 90 per cent grow maize. The functioning of the maize marketing system is therefore of major concern as reflected in the various commissions of inquiry and research undertaken over the years (see the bibliography). Since colonical times, the maize marketing system in Kenya has been subject to strict controls, giving the parastatal marketing organization, the Maize and Produce Board (MPB), a monopoly with regard to production exceeding subsistence requirements.[1] The controls were introduced in order to benefit both producers and consumers as stated in the Maize Marketing Act, Cap. 338. However, it is questionable whether the aim has been achieved, especially because Kenya has reached self sufficiency in maize production and has even produced considerable surpluses for some time. The discussion will therefore focus on whether Kenya should decontrol maize marketing or not (see (Gsaenger and Schmidt, 1977; Hesselmark and Lorenzl, 1976; Kenya, 1978). The Select Committee on the Maize Industry (Kenya, 1973) and the 1970-74 and 1974-78 Development Plans recommended decontrol of the maize marketing system.[2] Except for a short period in 1977/78, no definite action has been taken, probably due to the uncertainty with regard to the costs and benefits of relaxing the controls. The research project on which this paper is based (Schmidt, 1979) was undertaken in collaboration with the Marketing Development Project of the Kenya government to evaluate whether or not the controls were fulfilling their stated objectives.

---

1. For a brief history of the maize marketing controls, see Hesselmarkm 1977.

2. The 1974-78 Plan for example states: 'The 1970-74 Plan anticipated that major changes would be made to the system of maize marketing in Kenya, in particular that the internal maize market would be freed of all restrictions. These changes have not yet been made but will be introduced early in the new plan period. Under the proposed marketing system, maize millers will be free to purchase their requirements direct from farmers without going through the Maize and Produce Board. The Board will purchase any maize offered to it at a guaranteed floor price and will sell maize to anyone requiring it at a fixed price. It will also be responsible for maintaining the strategic maize reserve and for all imports and exports' (p. 234)

An effective marketing system which benefits both producers and consumers should achieve operational efficiency; pricing efficiency; security of outlets and sources in order to guarantee a market to producers and sufficient supplies to consumers; prevent exploitation of both producers and consumers; and operate at lowest possible costs. This paper summarises the findings of the research project which examined the extent to which maize marketing controls in Kenya perform these functions.

2. THE LEGAL FRAMEWORK

The legal provisions for the maize marketing controls are laid down in the Agricultural Produce Marketing Act, including the Agricultural Produce Marketing (Maize and Produce Board) Order, and the Maize Marketing Act. The Agricultural Produce Marketing Act, which commenced in 1936, specifies, among other things, the powers and regulations of Marketing Boards and the power of the Minister for Agriculture to fix minimum,maximum or specified producer prices for regulated produce. The Maize Marketing Act lays down more specifically the marketing regulations, their execution, and the degree of control to be exercised.

The main functions of the MPB, as described in the Maize Marketing Act, are to regulate, control and improve all maize marketing activities, to import or export as required, and to advise the Minister for Agriculture. The Board is empowered to appoint agents to act on behalf of the Board, within limits set by the Board, which include the definition of the area in which the agent is allowed to operate. Agents may, with the consent of the Board, appoint sub-agents.

To protect the MPB from competition, movement controls are required as specified in the Maize Marketing (Movement of Maize and Maize Products) Order. According to this Order, all movements of maize, with some exceptions, require a movement permit which is valid for only 24 hours. The movement permit must be obtained from the MPB or any other authorized person prior to the movement. Movements at night are generally prohibited. Exempted from these regulations are: the movement of maize or maize products within the boundaries of the farm, the movement of not more than 2 bags (180 kg) across districts if accompanied by the owner, and the movement of not more than 10 bags within a district if accompanied by the owner and for consumption by such owner or his family. With regard to the latter, the Board may declare two or more adjacent districts be treated as one. If adjacent districts are not declared as one, a farmer wishing to take 3 bags to the market or agent located in the adjacent

district must first get a permit often from a place more distant than the market he wants to go to.

The Agricultural Produce Marketing Act and the maize Marketing Act regulate the fixing of producer prices by the Minister of Agriculture. In addition, the Price Controller of the Ministry of Finance fixes the MPB ex-depot, wholesale and retail prices for maize and maize flour. Thus, prices for maize are fixed at all levels of the marketing system except in the informal subsystem. A District Commissioner, in his capacity as a Deputy Price Controller, has the power to adjust prices if local conditions require it. He even has the power to ban all maize and other marketing activities in the open markets in his district as occurred in Kitui. This adds further controls to those imposed by the above legislation.

3. SUPPLY AND DEMAND PATTERNS

Smallholders play an important role in maize production. As mentioned above, 90 per cent of them grow maize and contribute about 70 per cent of total maize production. The remaining 30 per cent comes from large and medium scale producers with holdings above 20 ha. However, because the major portion of smallholder output is used for subsistence consumption, the large and medium scale producers' share in marketed production is much higher, an estimated 50 - 55 per cent in 1975-78. Thus, supply is more concentrated than production. This is even more if one looks at marketed production in value terms. In 1974/75, about 95 per cent of smallholder maize producers accounted for only 29 per cent of total sales (Kenya, 1978, p. 24).

Maize is grown in almost all agricultural zones and almost throughout the year. The major production areas are the western parts of the country, including Rift Valley, and the Coffee and High Altitude Grassland Zones.[3] All other zones contribute only marginally to national production and are not self sufficient except for short periods of the year. They therefore get supplies from other zones, and this makes the intertemporal pattern of production and supply important in the operation of the marketing system. Harvest times differ considerably between provinces and within provinces or districts so that inter- and intra-regional flows can contribute significantly to balancing supply and demand over time.

---

3. The classification of zones is based on the Integrated Rural Survey (IRS), (Kenya, 1977).

The demand patterns are more or less in line with the supply patterns. Since the majority of the Kenyan population work and live in rural area, the rural demand accounts for approximately 90 per cent of total demand including subsistence, or 80 per cent of total marketed production. The high share in total market demand is explained by the fact that non-marketed production covers only about 60-65 per cent of smallholder families' consumption (Kenya, 1977; Shah and Frohberg, forthcoming). The regional distribution of rural demand follows the distribution of production except for Eastern Province which includes major rural deficit areas. The Rift Valley and other western areas produce enough to meet their own requirements and usually have surpluses particularly if the temporal distribution of production is taken into consideration.

4. BASIC STRUCTURE OF THE MAIZE MARKETING SYSTEM

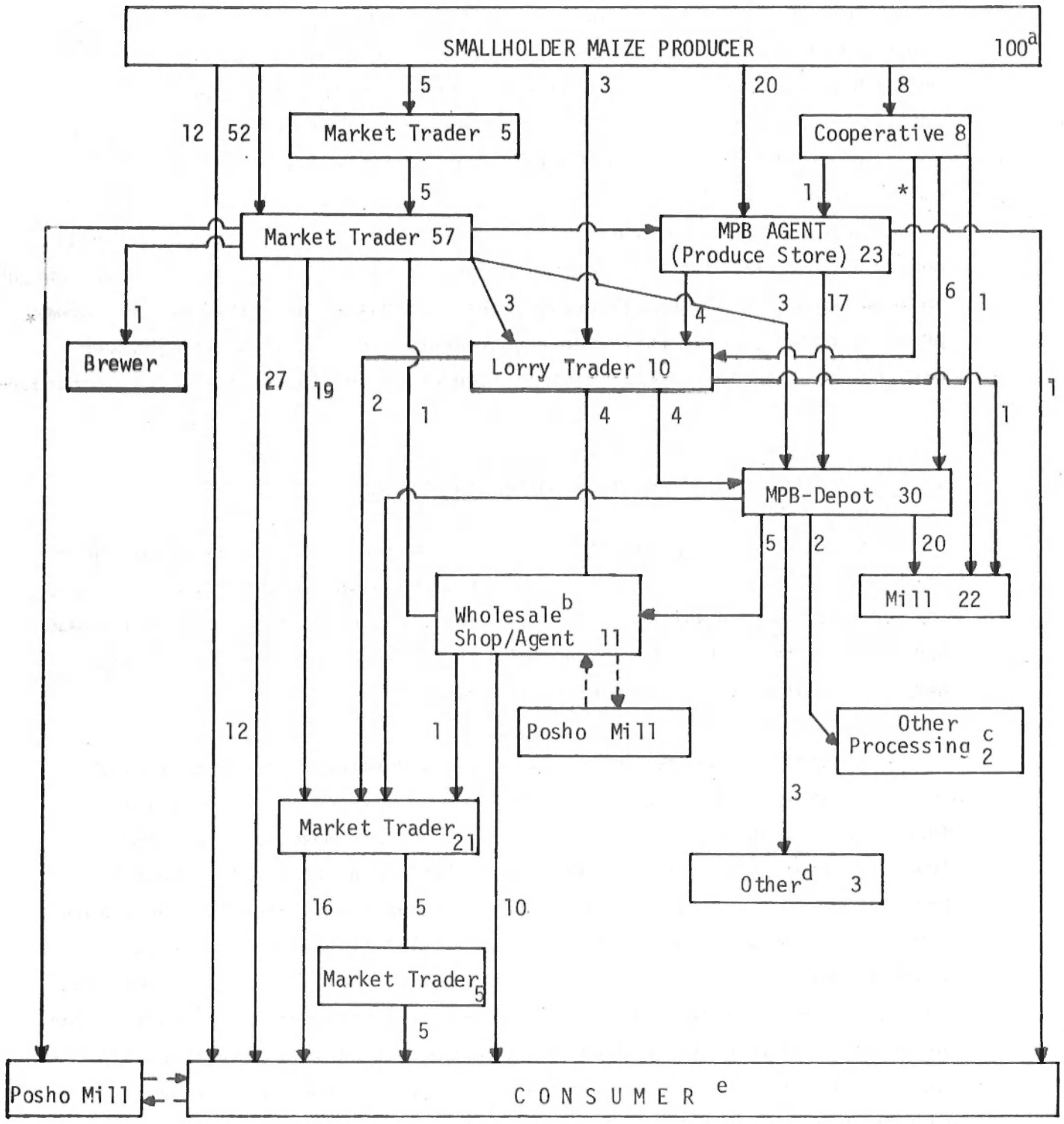
The controls separate the marketing system into two different though interrelated subsystems, the formal system which is subject to controls and the informal system which consists of relatively small traders,[4] mainly women, operating on a local level in the open air markets where prices fluctuate in response to the forces of supply and demand.

The small traders can be classified according to their degree of mobility. Most market traders are mobile and move between two or more markets. Only about a third of the traders do not move and are termed 'resident traders'. The rest are termed 'itinerant traders'. About 80 per cent of itinerant traders called 'intra-regional traders', move within a radius of 50 km and about 20 per cent, called 'inter-regional traders', usually operating on a larger scale, may travel distances of even more than 100 km, about 80 km on average. Both intra-and inter-regional traders play an important role by responding to the regional and seasonal patterns of supply and demand. This is even more so because private marketing functionaries are not allowed to participate in inter-regional marketing flows, except through the MPB.

---

4. About 75% of small traders have a working capital of less than KSh. 500 and handle less than 340 bags of maize annually.

Figure 1: Marketing Channels for Smallholder Marketed Maize 1976/77



* Marginal participation (below 1%)

a Smallholder marketed maize output accounted for about 30% of total smallholder output and roughly 45-50% of total marketed production including large scale marketed production.

b During off-season agents sold about 6% of their turnover to other retail shops, lorry trader with general wholesale business sold more than 75% to retail shops.

c Stockfeed, starch etc.

d Exports, Famine Relief, Cooperatives, Institutions (schools, hospitals, prisons etc.)

e Including Institutions, which accounted for about 1-2 per cent.

The MPB, with its network of 35 depots, is the dominant marketing functionary of the formal system which includes the appointed MPB agents at the assembly side and wholesalers and retail shops at the distribution side. MPB agents are usually individuals operating a produce store (with an average turnover of about 3,000 bags annually). Apart from these individual MPB agents, cooperatives and, in the Rift Valley, the Kenya Farmers Association (KFA) act as MPB agents. In typical smallholder areas, however, the individual agent is the predominant feature.

According to the regulations, there should be a division of activities between the two subsystems, with the informal system handling the marketing flows within a district and the MPB handling surpluses beyond district requirements. In practice, both subsystems interact and overlap to a considerable extent. MPB agents, for example, go to the markets of their home areas or of other districts and buy at prevailing market prices. Market traders frequently ship maize in small quantities across district and provincial boundaries. On a large scale, produce wholesalers, handling 100-400 bags a week, ship maize from surplus to deficit areas using their own or hired lorries. Wholesalers engaged in these transactions are often referred to as 'lorry traders' and all their activities are usually in violation of the Maize Marketing Act.

As can be seen from Figure 1, the informal system handles more than 70 per cent of smallholder marketed output. Only 20 per cent goes through MPB agents and 8 per cent is sold through cooperative mostly to the MPB. Large and medium scale farmers do not depend on the informal system but usually have direct access to the MPB depots. The formal, controlled system therefore mainly serves large rather than small farmers. Similarly, the formal system's links on the distribution side with the informal system are quite weak. Maize is mainly sold through informal outlets and the MPB mostly serves the milling industry.

Even in areas where the MPB is expected to play a major role, this is not usually the case. During the survey period, Kitui District was for example almost exclusively supplied by lorry traders, coming mainly from Meru (where about 70 per cent of the surplus supposed to go to the MPB was sold to Kitui) and from other places like Nyahururu and Uasin Gishu. The lorry traders' market share, particularly with regard to smallholder maize, is quite substantial, about 10 per cent on average. The lorry traders buy from farmers, market traders, and MPB agents, and sell through many outlets, including the MPB, particularly in Western Kenya. If controls were effective, the appointed agents would be undertaking

the sales now undertaken by lorry traders. However, in about 30 per cent of the sample markets, no active MPB agents were found and 52.8 per cent of smallholders interviewed in markets did not know of any MPB agent in the vicinity of the market. This suggests that in various smallholder areas, no real alternative to the informal system exists and in such cases therefore, the informal and formal subsystems are isolated from each other.

The impact of controls is also influenced by other features of the market structure: degree of competition between types of outlet (intertype competition), restricted market entry, and lack of market transparency. Although intertype competition is not guaranteed for all rural centres, there is usually a sufficient number of competitors none of whom is big enough to influence the market price. However, there are other factors which affect the market price e.g. point of sale or purchase, region, and time.

According to IRS data, about one third of smallholder maize production is not sold at a market or trading centre but at the holding or roadside (Casley and Marchant, 1978, p. 30). Farmers selling at the holding or roadside are usually faced with monopsony or quasi-monopsony power of the buyer at the time of transaction though the buyers at these places might be numerous. Unless the farmer has a good knowledge of the market conditions and outlets in a market or trading centre within his reach, alternatives are limited or non-existent, which reduces his bargaining position considerably. This is the case especially during the peak supply season when rural markets or assembly centres act as buyers markets, though the number of outlets and traders are usually numerous.

In general, markets handling maize in surplus areas during the peak season have an atomistic structure with virtually no barriers to entry and transactions are usually on a wholesale basis. When local supplies from farmers decline, markets turn mainly into sellers' markets with a considerably lower number of maize retailers and traders. The markets provide a competitive structure with regard to number and size of traders although in a number of markets no maize transactions take place and consumers have to rely on MPB agents, cooperatives, lorry traders and shops. This was the case in Kitui where maize trade in markets was banned, and is also prevalent in Western Kenya. In the centres with MPB agents, two or more of them were operating.

The market imperfections were not much observed with regard to market concentration (number and size of traders) and market entry, but more with regard to market transparency. Market transparency is severely restricted by the absence of uniform measurements of weights and standards in markets. Even the MPB standards are difficult to rely on because grades are broadly defined, grading is done subjectively by agents and depot managers and according to traders, maize is often sold without regarding and/or weighing. Market and lorry traders use differents sizes of tins, calabashes, baskets and bags so that price comparisons are very difficult. The lack of standardisation mainly affects farmers and consumers since traders use their own measurements which they can easily relate to other standard measures. Therefore farmers and consumers have problems in comparing prices within the markets and with government controlled prices.

Traders are particularly affected by lack of standardization if the exchange of market information in markets and areas not personally frequented is considered. This is particularly so with regard to quality, because this requires personal inspection. There are some measures which serve as common denominators, e.g. the 'standard debe'. However, information on market prices and market conditions of other areas is rather poor, and traders usually know only about their home areas. Consequently, the network of markets constituting the informal system is not very well integrated as far as market information is concerned, thus reducing marketing efficiency. The controls are largely responsible for this situation because they restrict private market transactions at the local level.

5. PERFORMANCE WITH SPECIAL REFERENCE TO CONTROLS

(i) Operational Efficiency

Operational efficiency is concerned with marketing costs. If a marketing system performs its functions at higher costs than necessary there is a scope for increasing the operational efficiency. Due to the maize marketing legislation, virtually all maize production beyond subsistence requirements must be marketed through the MPB. Mills, were in the past established mostly in the vicinity of MPB depots. Maize is therefore supplied to the neighbouring depot and then shipped from there to the mill, adding a marketing channel which is economically questionable. Maize wholesalers face a similar situation. Marketing costs could therefore be reduced significantly if direct sales to mills or distributors we allowed. Some people argue that the MPB's per unit costs might increase but this is not necessarily so because the existing capacity would be sufficient

and the MPB would extend its facilities to other crops which have so far been neglected because of maize.

Total savings which would result from bypassing the MPB are rather difficult to ascertain because information on the proportions of fixed and variable costs within the MPB-margin are not available. Currently, the MPB allots marketing costs of about KSh 12 per bag of maize excluding railage. Overhead on administration, storage and operation is calculated at KSh 6 per bag and financing costs at another KSh 6 per bag which includes costs of holding the national reserve. In the absence of a detailed study on the operation and cost structure of the MPB, one is not far off the target to assume a net saving of Ksh 2 per bag of maize or beans as a result of bypassing the MPB. Also, the expansion of storage and handling capacities could be done at a much lower pace than at present, thus reducing total costs of the MPB even further. Even assuming a net saving of KSh 2 per bag, the potential for reducing total marketing costs on the basis of 1976/77 figures would be in the order of KSh 3 million, assuming only 25% of current MPB sales were sold directly to mills and/or wholesalers without passing through the MPB. Reduction of private costs would be even higher since maize buyers would save about KSh 12 for each bag they purchase from sources other than the MPB.

Costs could be further reduced because agents and other private traders do not utilise storage capacity fully and agents are not supposed to perform any genuine storage function, as reflected in a uniform MPB buying price throughout the year. Moreover, no financial support is given to agents for storage. Therefore, it is not surprising that, except when the MPB is unable to accept any further intakes, agents deliver their maize as soon as possible and buy back from depot during the off-season to sell to consumers. The average storage capacity per agent was 404 bags which leads to a total capacity of 65,000 to 100,000 metric tons.[5] In 1976/77 this capacity was on average used to only 33 per cent for about 8 weeks.

A comparison of the storage costs of agents with those incurred by bringing maize to the depot and later buying it back at a higher price shows that storage efficiency would be much higher if agents stored their own stocks. On the basis of 1979 MPB prices, agents' storage costs for a

---

5. The estimate of total storage capacity depends on ones assumption of the number of MPB agents. Figures given range between 1,800 and 2,600.

period of 6 months range between KSh 13.33 and 21 per bag depending on the kind of store and the degree of capacity utilization. These are contrasted against opportunity costs of KSh 26 to 44 per bag (depending on the zone) if storage is performed by the MPB. At subsidized prices, opportunity costs for agents range roughly between KSh 24 and 36 per bag. Estimates of total potential savings are rather difficult because total storage costs also depend on, among other things, the efficiency of the inter-regional exchange which is important under production patterns prevailing in Kenya. Total storage and transport costs would have to be determined simultaneously under different assumptions which was beyond the scope of this study. But if one assumes that MPB agents would be allowed and financially supported to utilize their storage facilities, agents would, with the total storage capacity available and under assumptions suggested by the survey,[6] retain an additional 20,000 to 25,000 tons which corresponds to the amount they buy from the MPB during the off-season. This would reduce marketing costs in the order of KSh 2 - 3 million annually assuming a conservative estimate of opportunity costs of KSh 24 per bag.

Savings are likely to be higher, especially because a number of MPB agents keep stocks simply because the MPB stop buying due to insufficient storage. If allowed, they would directly dispose of these supplies to deficit areas, thereby avoiding storage losses. Furthermore, in selling maize, the MPB first tries to get rid of old stocks, i.e. it operates on a policy of 'first in first out'. With such a policy, the MPB has to concern itself with moisture content because the maize bought might be stored for a considerable period. High moisture content leads to higher storage losses or to additional drying costs in the case of artificially dried maize (driers are available in two depots). The MPB currently charges KSh 5 to 6 per bag for drying. Thus, considerable savings would be made if direct disposals to mills or other areas were allowed. The MPB could also reject consignments where no drying facilities exist, without additional costs which suppliers currently incur.

Forcing all supplies through the MPB leads to further costs. It is common knowledge that congestion at depots during the peak periods is a major problem, sometimes causing transporters to wait for several days. To

---

6. The survey assumes an extra 40 per cent utilization of storage capacity (65,000 tons) with storage costs of about KSh 13 to 16 per bag for a period of 6 months.

avoid waiting, bribing is quite common. The situation becomes even more critical when storage capacities at the depots get filled up as has been the case in Kenya since 1976/77. Agents and farmers bribe their way into the depot since no other legal outlet exists.

Bribing is necessary for virtually all steps involved in getting maize into the depots: obtaining movement permits, passing the gate, passing the moisture test, getting the lorry off-loaded, etc. For some depots in Western Kenya, bribes were reported to range between KSh 300 and 350 per lorry of KSh 3 to 3.50 per bag. For some depots in Central Kenya, bribes at peak season can be as high as KSh 500 per lorry. Thus, bribes are a major cost item for agents. If one compares the level of bribes with the commission agents get, about KSh 2.50 per bag, it is quite obvious that during the peak season, this commission does not even cover the bribing costs necessary for delivery to the depot. Only after the situation relaxes does the commission cover the bribes which then decline to about KSh 1 per bag.

In order to avoid these problems at the depot, agents often sell to lorry traders who have arrangements with the depots or ship the maize to other areas with the risk of being caught in a police road check, which in the past has meant bribing or confiscation of the maize and lorry. Apparently, the per unit bribing costs on the road were lower than at the depot. From figures given by lorry traders, they range between one and two shillings per bag taking into account the fact that lorry traders were caught in about 20-25 per cent of their transactions. Bribing costs reported by seven lorry traders totalled more than KShs 350,000 per year.

Bribing on the road is a problem, not only for lorry traders, but also for itinerant market traders particularly inter-regional itinerant traders, who pay KSh 5 to 10 per bag if caught. However, in total, these costs are negligible compared to transport opportunity costs created by movement controls.

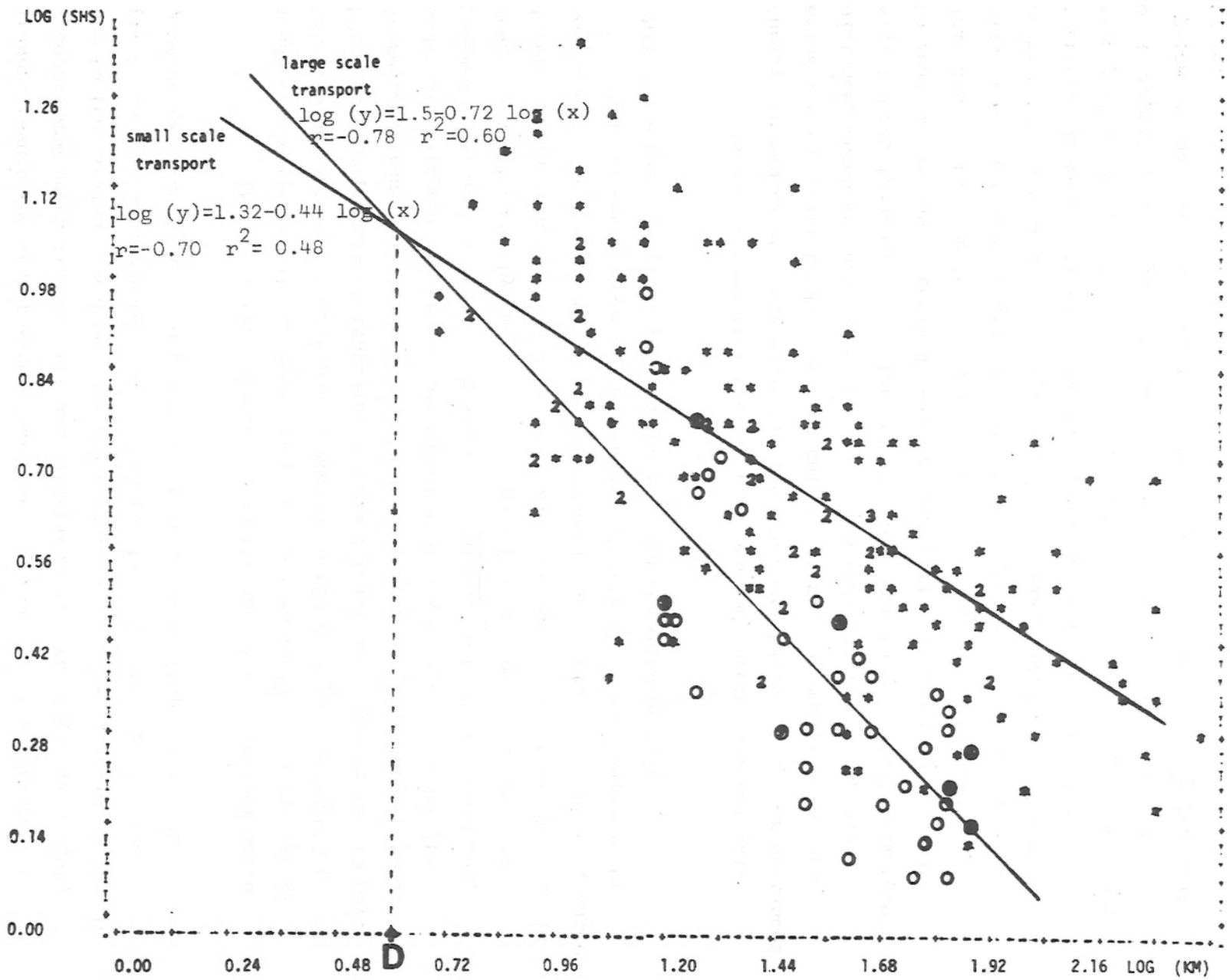
The movement controls have severe implications for the mode of transport used by market traders and consequently on transport costs. Due to the restrictions, market traders and farmers are forced to break down their shipments into small lots and use buses and matatus (taxi) or for short distances, animals, Lorries and pick-ups are mostly out of question, because their loading capacity cannot be economically utilized.

Transporting small volumes by bus and matatu means paying a fare and an extra fare for the produce which, for one bag especially in Western Kenya, sometimes exceeds the personal fare. Consequently, the transport costs are extremely high. This is worsened by the fact that traders reduce the transported volumes to below one bag because they(the traders) and the police are not well informed about the regulations and, due to the limited transport capacity of matatus and buses, it is easier to get a ride the less you have to transport. Finally, the fare for the produce is often less for a partly filled bag rather than a full one.

All these factors contributed to the fact that itinerant maize traders paid (before the increase in petrol prices in 1978) an average of KSh 6.46 per ton/km for transport compared to KSh 2.95 per ton/km which MPB agents or produce storeholders who use lorries and pick-ups had to pay. Therefore, transport costs could be reduced considerably if more economic modes of transport are encouraged rather than discouraged as under the present controls. A shift from buses and matatus to pick-ups would cut down transport costs by half, i.e. to about KSh 3.50 per bag. A shift to lorries would bring costs down further to almost one third though this would not be possible for all parts of the informal subsystem. Nevertheless, under a marketing system without any movement restrictions, even a significant shift to lorries is possible within a reasonable period of time.

As can be seen from Fig. 2, pick-ups and lorries are not only cheaper on medium and long hauls but even on short hauls. Only for distances below 4.4 km (point D) do buses and matatus seem to be more economical, distances which are usually covered by human headloads. On long hauls, e.g. 150 km, transport costs for lorries come down to 0.85 Shs/ton/km (0.08 Shs/bag/km) as can be derived from the transport cost function in Figure 2. This has further implications for possible savings. Under the present situation, only short distances are linked together. Free movements of maize would connect distant regions and thus bring down transport costs further. If we assume that, initially, for about 10 per cent of the transported volumes, traders would take advantage of less expensive modes of transport such as pick-ups, we would expect savings in the informal system of the order tof KSh. 3.5 to 4 million per year, i.e. 5-6 per cent of total transport costs.

Figure 2: TRANSPORT COSTS IN SHS/TON/KM FOR SMALL AND LARGE SCALE TRANSPORT BY TRANSPORT DISTANCE (KM) IN DOUBLE LOGARITHMIC SCALE



In addition, possible savings within the formal system are envisaged though on a much smaller scale. The question is whether the inter-regional flow pattern of maize handled by the MPB, i.e. shipments between depots and areas, minimises transport costs. This is questionable. Between the Meru and Kitui depots, for example, no direct link exists. These impediments to inter-regional flows and their impact on total transport costs require further research.[7]

To summarise, opportunity costs of controls on the maize marketing system are quite substantial. If our indicators of potential savings in various areas are added together, the total savings exceed KSh 10 million. In the long run, they must be even higher.

(ii) Pricing Efficiency

The analysis of pricing efficiency is concerned with excess profits earned in the marketing system and their effects on resource allocation. We will therefore attempt to assess the extent to which the pricing process is distorted and in what ways marketing controls contribute to this.

In microeconomic theory, pricing efficiency is achieved if price differences between two areas correspond to transfer costs (and therefore prices in the two areas are correlated with each other); seasonal price differences reflected storage costs; and price changes are passed on to other market channel levels. Under such conditions, the potential for excess profits is rather small. In Kenya, two different price structures exist, the control price within the formal system and the price in the informal system which depends on supply and demand conditions. The two price sets should be interrelated if controls are effective and the price structure in the formal system should reflect transfer costs through space and time.

At present, the formal price structure reflects the transfer costs of the MPB which are based on the railway infrastructure and assumes that all surplus maize throughout the year comes from western Kenya. This neglects the fact that rural deficit areas in Eastern Kenya, for example, get major supplies from adjacent areas in Central Province and surplus zones

---

7. H.K. Maritim is currently working on an inter-regional model of the Kenya maize market for his Ph.D. thesis (Maritim, 1978).

of Meru and Embu. During the survey period, the official price spread between the farmers' selling price in Meru at MPB agents' stores and Kitui ex-depot wholesale price was about KSh 46 per bag compared to transfer costs of not more than KSh 17 to 23 per bag. The actual price spread was even higher because prices in the markets in Meru fell to as low as KSh 30 per bag because the MPB failed to take all surplus in that area, making the actual price spread between ex-depot wholesale price at Kitui and actual farm prices at Meru as much as KSh 86 bag. This clearly shows that maize marketing controls does not prevent 'exploitation' but rather create the conditions which make exploitation possible. Similar price spreads can be observed in Western Kenya. At a time when market prices in Kisii fell down to KSh 30 to 50 per bag and MPB agents were paying around KSh 70 per bag, the ex-depot price at Kisumu was KSh 102/05 per bag, compared to private transfer costs using lorries of not more than KSh 15 per bag. Retail market prices at Kakamega, Siaya and Busia District markets ranged between KSh 90 and 180 per bag.

Market price differences of this magnitude can only be explained by impediments in inter-regional exchange which do not allow free flow of maize on a sufficient scale. Inter- and intra-regional exchange is mostly carried out on a small scale by itinerant traders so that the overall integration effect is likely to be insufficient. This was tested by correlation analysis.[8] Market integration and inter-regional pricing efficiency is assumed to be high if time series correlation coefficients of prices are 0.7 or above (Gsaenger, 1975; Jones, 1972; and Lele, 1968). Coefficients of this magnitude are expected between adjacent surplus and deficit areas e.g. markets within Central or within Western Kenya. With increasing distances between markets or areas, the integration and correlation decreases because of increasing transfer costs and influence of local conditions. Thus, if seasonal patterns are very different, even negative correlations are possible. But markets within one area should have a significant number of high correlations if there is free inter-regional exchange. However, results of the correlation analysis show that market integration, and thus inter-regional pricing efficiency, is rather low. In CBS sample markets in Central and Eastern provinces, only 0.5% and in Western Kenya (including Rift Valley) only about 6% of correlation coefficients were higher than or equal to 0.7; 21.7% and

---

8. Using market prices collected by the Central Bureau of Statistics (CBS), a correlation and time series analysis was carried out. See Schmidt, et al, 1979.

about 30% of the correlation coefficients respectively ranged between 0.3 and 0.69, indicating a medium degree of correlation, and 70% and 66% of the coefficients respectively showed weak or no relationship between markets.

Altogether 2041 meaningful coefficients were computed on weekly price series. Visual inspection of time series suggest that for a small number of markets, a time lag would improve correlations, although the general pattern would not change.[9] Thus for Central and Western Kenya, seasonal values calculated on a 13-week moving average provided only 13.4% and 16.9% correlations coefficients respectively higher than or equal to 0.7.

That traders' arbitrage transactions affect market prices is indicated by the degree of correlation between trend (computed as a linear regression line on the original data) and seasonally corrected prices (residuals). Significant correlation coefficients of residual ranging between 0.3% and 0.7 for markets within Western, Central and between Western and Central Kenya were 6.9%, 5.1% and 3.8% of the correlations respectively. But as the correlations of the original series suggest, arbitrage transactions generally seem insufficient for market integration. Even prices in adjacent markets e.g. Karatina and Kerugoya, less than 20 km away from each other, were negatively correlated, with $r = -0.35$ at 1% level of significance. Inter-regional pricing efficiency is insufficient and allows excess profits to be earned by traders. Arbitrage activities are severely affected by movement controls and private storage is discouraged, which affects intertemporal pricing efficiency. Evidence for the latter is found by comparing seasonal price differences with private storage costs. In order to classify seasonal patterns using the data available, seasonal indices[10] were calculated (Schmidt, et al, 1979). The seasonal index was above 10 in more than 60% of the CBS sample markets and above 20 in about 15%, which corresponds to seasonal price spreads of between KSh 25 to more than 100 per bag depending on the average price level. Actual price spreads of up to KSh 145 per bag were observed in 1977/78. Even for

---

9. Arbitrage activities usually take place within one week with traders moving between markets with different market days.

10. The seasonal index (SI) was defined as standard deviation of seasonally adjusted values (13-week moving average) as percentage of the mean for the original prices, i.e.

$$SI = \frac{1/n \ (Pst - \bar{P}s)^2 \times 100}{\bar{P}}$$

P_{st} = seasonally adjusted price,

P_s = mean seasonally adjusted price,

$\bar{P}$ = mean original price.

indices below 5, which covers 8.2% of the markets, seasonal price spreads of KSh 25 to 35 per bag were observed. When these figures are compared with average storage costs of MPB agents of KSh 13 to 21 per bag for a period of six months, it is quite clear that in most cases, inter-temporal pricing efficiency is far from achieved.

Altogether, pricing efficiency is low. Estimates of excess profits (defined as profits over and above opportunity costs of labour and capital[11]) showed that about 60% of all maize and beans market traders earned excess profits of about 50% of their gross profit, which on average ranged between KSh 11.50 and 17.25 per bag of maize. Lorry traders showed a similar pattern, assuming the opportunity cost of their labour is the consolidated salary of Grade I MPB depot manager, i.e. KSh 3,500 per month. Thus, potential savings from intensifying competition are substantial, if the present control system is revised.

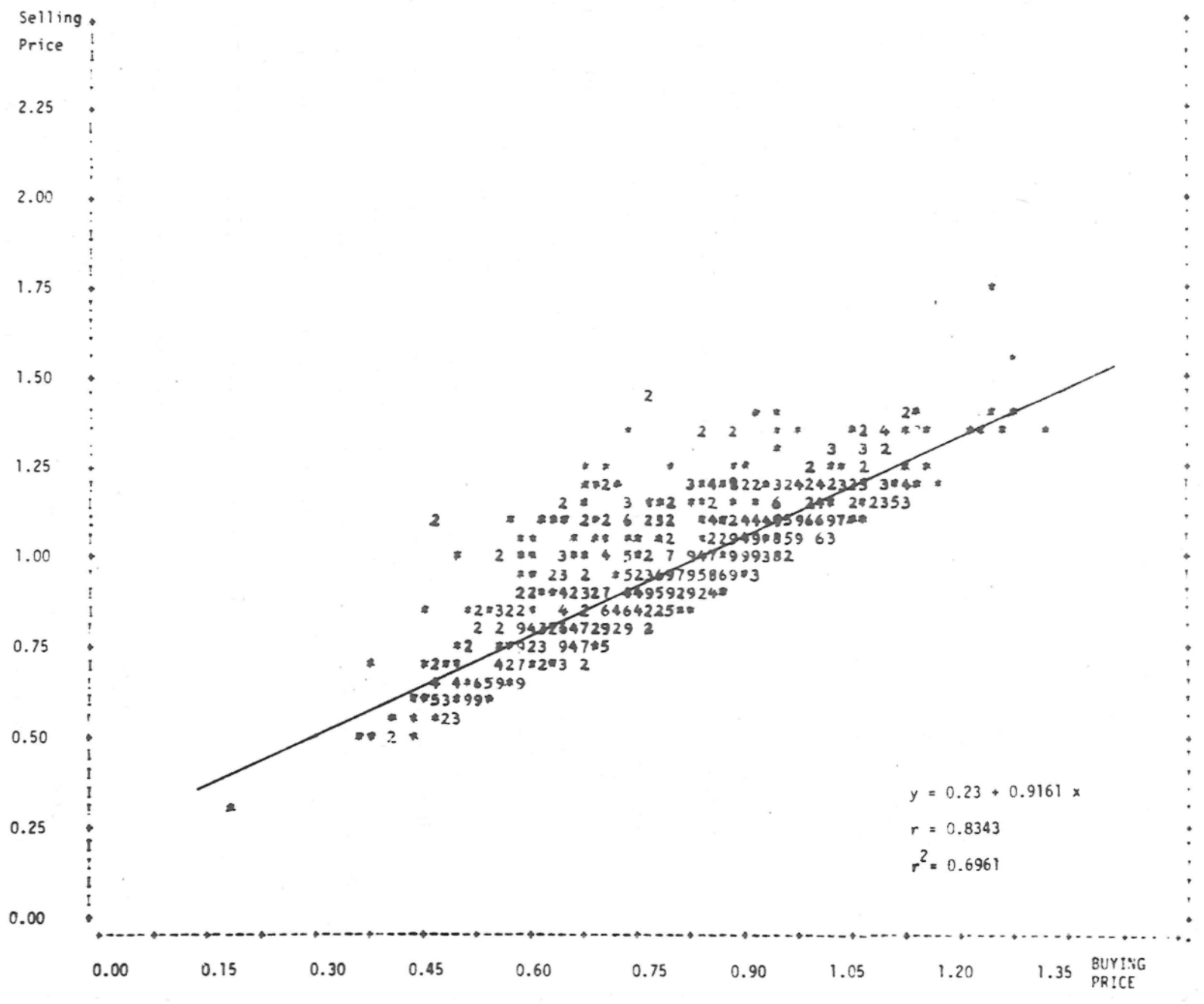
The low pricing efficiency is usually blamed on traders who are often described as exploitative and unscrupulous by newspaper editorials, letters to the editor, and Government officials.[12] However, these allegations ignore the fact that excess profits appear where the market structure is distorted by price and marketing controls for which traders are not to blame. That excess profits in the Kenyan maize marketing system are largely due to market distortions is supported by a relatively high pricing efficiency at channel interfaces. With an exploitative or monopolistic pricing behaviour, profits margins would not be expected to remain constant with changing prices, indicating that traders generally do not pass on price changes to other channel levels. This can be statistically tested by regression analysis of traders' selling and buying prices (Ruttan 1968, p. 84; Schubert, 1973, p. 48-49). If the slope coefficient of the respective regression equation is not significantly different from or is very close to 1, we can conclude that traders work with constant profit margins and thus pass on price changes.

---

11. The opportunity cost (shadow price) of labour is the minimum wage in the agricultural sector, i.e. KSh 175 per month for traders handling below 10 bags per week. In order not to artificially increase excess profits for traders with a weekly turnover of 10 or more bags, a double amount, KSh 350 per month was assumed, which corresponds to the Nairobi minimum wage. The shadow price for working capital was taken as 10 per cent per annum for all market functionaries.

12. See, for example 'Exploitation in Maize Trade', Daily Nation, 3rd August, 1978; 'Maize Prices Need Control', Daily Nation, 11th August, 1979 and 'Exploitation of Small Farmers', editorial, The Standard, 23rd October, 1978.

Figure 3 : RELATIONSHIP BETWEEN MARKET TRADER'S SELLING AND NET BUYING PRICE FOR MAIZE 1977 (KSHS/K



As can be seen from Figure 3, the slope coefficient (0.916) is very close to 1 and if in addition we consider that the corresponding correlation coefficient between the profit margin and the buying price is r = - 0.137, the hypothesis that traders are exploitative is rejected. This can also be done for lorry traders taking into account the fact that at a time when the MPB was selling maize at Kitui for KSh 116.80 per bag, lorry traders were selling for as low as KSh 75 a bag. Therefore, increased competition under a free and undistorted marketing system would ensure that producers and consumers are not exploited by 'unscruplous' traders.

(iii) Security of Outlets and Sources, and Price Stability

The monopoly position of the MPB and its resulting failure to cope with all available supplies make controls destabilizing. Since private storage is discouraged, there is usually congestion at depots and strain on storage is discouraged, there is usually congestion at depots and strain on storage capacities. Moreover, because of moisture content, depots start accepting deliveries late and when filled to capacity stop buying altogether. Finally, if supplies do not meet specified standard, especially with regard to moisture content, the consignment is rejected rather than bought at a lower price. Present drying capacities are limited. Under the present situation, lack of sufficient drain of supplies results in low prices in surplus areas without any benefit to consumers in deficit areas. Even MPB agents, because of bribe costs to get maize into the depot (which cannot be accounted for), are not in a position to pay the official prices to the farmers. They therefore pay lower prices and should not be blamed.

Altogether, the present control system has not increased the security of outlets for small farmers. Rather, it has done the opposite. The most secure outlet for them are cooperatives though even cooperatives face the same problems as individual farmers and agents. Also, the cooperatives have only a limited market share in smallholder maize marketing and most small farmers only transact with private traders and MPB agents.

Maize price and marketing controls seem to be ineffective in distribution as well. The channel analysis showed that the integration of the formal and informal system at the distribution level is not strong. This might partly explain why in certain markets maize prices were above controlled levels, which was even the case in the formal system, i.e. in retain shops, as shown by Mukui (1978, p. 107). But on average, maize prices were usually below control

levels and above only for short periods, thus suggesting that supplies to markets are rather erratic and impeded inter-regional exchange affects the supplying markets. If one looks at the time series of maize prices in CBS sample markets, there are tremendous erratic price movements in most markets. Instability indices, calculated in the same manner as seasonal indices, were above 10 in 70 per cent of the markets and above 20 in 18.5 per cent of the markets. Thus, erratic movements were as strong or even stronger than the seasonal movements, leading to price fluctuations of up to more than KSh 1 per kg or KSh 90 per bag. The resulting uncertainty in farmers, consumers and traders must therefore be immense. The objective of stabilizing prices is certainly not achieved. On the contrary, the availabbe information suggests that controls largely contribute to instability and resulting uncertainty.

6. SUMMARY AND CONCLUSION

We have attempted to assess the effectiveness of maize marketing controls in Kenya based on research carried out during the 1978-79 period. The marketing controls were evaluated against their own objective, i.e. to benefit producers and consumers. This would have been achieved if the controls contributed to a higher efficiency, i.e. lower marketing costs, less exploitation, and greater security of outlets and sources for both producers and consumers.

The analysis suggests that the objective was not achieved and the present system of controls contributes to inefficiencies. The control legislation creates a system which leads to low operation efficiency as reflected in increasing marketing costs, high excess profits and instability which particularly affects smallholder maize producers and rural consumers who are both low income sections of the society.

With a relaxation of controls, major savings could be expected in assembling and distribution, storage, and transport costs, initially of over KSh 10 million per year. A similar potential for reducing marketing costs exists with regard to excess profits earned due to market distortions. All savings would particularly benefit small maize producers in surplus areas and consumers in rural deficit areas. Considerable savings in the milling industry can also be envisaged, which would in turn benefit low income urban consumers.

The present controls mainly benefit large scale farmers, who have direct access to MPB depots, and the milling industry which pass on higher costs to consumers. The most disadvantaged groups in society pay to benefit those who are already better off. This is contrary to the stated objective of the Government in the 1979-83 Development Plan which is to improve the living standards of the poorer groups of the population.

Some argue that relaxation of controls would increase MPB's per unit costs but this is most unlikely. The present problem is the inadequacy of the capacity of the MPB. The MPB has to expand considerably in order to be in a position to cope with future supplies and relaxation of controls would therefore save a substantial amount of public funds and the MPB would perform its functions with its existing capacities. After all, under a decontrolled system, the MPB would have an important stabilizing function.[14] What happens, if, for example, the MPB is not in the position to take surplus out of the market at guaranteed minimum prices? The consequences of this were observed during the 1977-78 temporary relaxation of controls. Farm and market prices were depressed and farmers were no better off. It was a result of the MPB situation: because the depots were filled up to capacity, domestic demand was satisfied, exports were not permitted, and the MPB was virtually unable to stabilize producer prices. Under a decontrolled system, unless the minimum producer price is fixed at unappropriately high levels, this situation is not likely to arise since the MPB would not be forced to take all supplies.

In conclusion, the time seems right to relax maize marketing controls (originally introduced to discriminate against African farmers) in order to improve marketing efficiency and income distribution. Farmers, traders and cooperatives should be free to sell either to the MPB or any other outlet they think fit. Private storage activities should be supported and movement controls removed completely without any new permit system even on short term basis. Maize prices should be decontrolled because controlled maize prices are a major source of distortions. Cooperatives should be encouraged and supported to handle distribution and provide the source and outlet for their members. Finally, market transparency should be improved in order to supplement the other policy actions mentioned above. The research findings show that this would have considerable positive effects on marketing efficiency, improve incomes of smallholder maize producers and low income consumers, and would be in concurrence with one of the major objectives of the present development strategy, namely, to alleviate rural and urban poverty.

---

14. See Gsaenger and Schmidt, 1977, for the role to be played by the MPB under a decontrolled maize market in Kenya.

Bibliography

1. Alvis, V.A. and Temu, P.E. 1968. Marketing Selected Stable Foodstuffs in Kenya. Morgantown, West Virginia University.

2. Casley, D.J. and Marchant, T.J. 1978. 'Smallholder Marketing in Kenya: Presentation of data from the Integrated Rural Surveys and Marketing Surveys: 1974-78'. FAO Marketing Development Project, Nairobi.

3. de Graaff, J. 1978. 'The marketing of maize and beans by cooperatives in Kenya'. Draft Field Document, Marketing Development Project, Nairobi.

4. Gsaenger, H.G. 1975. 'Ansaetze zur Leistungsbeurteilung von Agranvermarktungssystemem in Entwicklungslaendern'. Ph.D. thesis, Technisch Universitaet Berlin, Berlin.

5. Gsaenger, H.G. and Schmidt, G. 1977. 'Decontrolling the Maize Marketing System in Kenya'. Discussion Paper No. 254. Institute for Development Studies, University of Nairobi.

6. Hanrahan, M. 1974. 'Experimental Maize Marketing Scheme at Luanda Market, Kakamega District'. Draft Final Report, Maize and Produce Board, Nairobi.

7. Hesselmark, O. 1977. 'The Marketing of Maize and Beans in Kenya: A Proposal for Improved Effectiveness'. Working Paper No. 300. Institute for Development Studies, University of Nairobi.

8. Hesselmark, O. and Lorenzl, G. 1976. 'Structure and Performance of the Maize Marketing System in Kenya'. Zeitschrift fuer Auslaendische Landwirtschaft. 15 (2), pp. 171-179.

9. Ireri, E.K. 1977. 'Structure, Conduct and Performance of Kutus Maize Market'. M.Sc. thesis, University of Nairobi.

10. Jones, W.O. 1972. Marketing Staple Food Crops in Tropical Africa. Ithaca and London, Cornell University Press.

11. Kariungi, F.T. 1976. 'Structure, Conduct and Performance of Kitui Local Maize Market', M.Sc. thesis, University of Nairobi.

12. Kenya. 1966. 'The Maize Commission of Inquiry'. Nairobi, Government Printer.

13. Kenya. 1967. The Agricultural Produce Marketing Act, Cap. 320 of the Laws of Kenya Nairobi, Government Printer.

14. Kenya. 1969. Development Plan 1970-74. Nairobi, Government Printer.

15. Kenya. 1972a. The Maize Marketing Act, Cap. 338 of the Laws of Kenya. Nairobi, Government Printer.

16. Kenya. 1972b. The Price Control Act, Cap. 504 of the Laws of Kenya. Nairobi, Government Printer.

17. Kenya. 1972c. 'Final Report of the Working Party Studying the Maize and Produce Board in Relation to the Expected Crop Production in the 1970's and 1980's'. Nairobi.

18. Kenya. 1973. 'Report of the Select Committee on the Maize Industry'. Nairobi, Government Printer.

19. Kenya. 1974. Development Plan 1974-78. Nairobi, Government Printer.

20. Kenya. 1977. Integrated Rural Survey 1974-75, Basic Report. Nairobi, Government Printer.

21. Kenya. 1978. 'Summary of Major Technical Studies and Recommendations for Agricultural Marketing Development'. Marketing Development Project, Nairobi.

22. Kenya. 1979. Development Plan 1979-83. Nairobi, Government Printer.

23. Lele, Uma J. 1968. 'Working of Grain Markets in Selected States, India, 1955-56 to 1964-65'. Occasional Paper No. 12. Department of Agricultural Economics, Cornell University.

24. Maritim, H.K. 1978. 'Maize Marketing in Kenya: An Optimal Commodity Flow Pattern and Policy Strategies in the Marketing of the Country's Staple Crops: A Research Proposal'. Institut fuer Sozilaloekonomie der Agrarentwicklung, Technische Universitaet Berlin, Berlin.

25. Mukui, J.T. 1978. 'Price Controls in Kenya'. M.A. thesis, University of Nairobi.

26. Odingo, R.A. 1977. 'Decision Making in Food Marketing in Kenya With Special Reference to Maize and Sugar'. M.B.A. thesis, University of Nairobi.

27. Ruttan, V.W. 1968. 'Agricultural Product and Factor Markets in Southeast Asia'. In K.G. Anschel, R.H. Brannon and E.D. Smith (eds.), Agricultural Cooperatives and Markets in Developing Countries. New York, Praeger, pp. 79-106.

28. Schmidt, G. 1979. 'Maize and Beans Marketing in Kenya: The Interaction and Effectiveness of the Informal and Formal Systems'. Occasional Paper No. 31. Institute for Development Studies, University of Nairobi.

29. Schmidt, G. and Mbugua E.S. 1976. 'Aspects of Marketing Effectiveness for Selected Food Crops in Kenya: Proposals for Further Research'. Working Paper No. 287. Institute for Development Studies, University of Nairobi.

30. Schmidt, G., Zettelmeyer, W., Casley, D.J. and Marchant, T.J. 1979. 'Time Series Analysis of Basic Commodity Prices'. (2 vols) Marketing Development Project Working Document, Nairobi.

31. Schubert, B. 1973. 'Some Considerations on Methods for Evaluating Marketing Systems for Agricultural Products'. Eastern Africa Journal of Rural Development. 6 (1 & 2), pp. 39-54.

32. Shah, M.M. and Frohberg, H. 'The Nutritional Status in Kenya 1974-77' (forthcoming).

MARKETING AND PRICING POLICIES IN THE KENYA DAIRY INDUSTRY

By

George Ruigu
Institute for Development Studies
University of Nairobi

1. INTRODUCTION

This paper discusses marketing and pricing policies in the Kenya dairy industry with specific attention to statutory control and the need for greater flexibility in pricing by incorporating seasonal and spatial considerations in price determination.

The dairy industry plays a very important role in the Kenyan economy and is essential for the survival of a large section of the population. In the 1964-77 period, the dairy industry accounted for 22% to 30% of marketed agricultural production, 29% to 35% of livestock and livestock products, or 8% to 10% of the total contribution of agriculture. All livestock products, including dairy products, account for about 8% of total exports and dairy products account for 24% of total livestock exports. In 1972, formally marketed milk amounted to 272 million litres valued at K£10.4 million while exports of milk and milk products earned K£3.8 million.

Commercial milk production is dependent largely on grade and exotic cattle of which there were an estimated 485,000 in 1974 and with the number expected to reach 661,200 in 1980 (Ryanga, 1975). Ninety per cent of all adult female cattle in Kenya consists of the indigenous zebu that yields very little milk. The herds of the large scale and settlement farms are composed of 85% to 90% grade cattle while those of smallholders consist of some grade cattle, zebu crosses and the unimproved zebu cattle (Mbanja and de Graaf, 1978).

Results of the Integrated Rural Survey indicate that about 60% of the smallholders have one or more milk cows and on average derived 20% of their total value of output from the dairy activities in 1974/75 (Kenya, 1977). The marketed surplus (over and above the quantity of milk consumed at home or fed to stock) was about 38% of total production (Smith, 1978). On the settlement farms, about 68% of total milk production is sold, compared to 80% from large scale farms (Mbanja and de Graaf, 1978). It is estimated that small scale farms account for about 40% of all commercial milk while the large scale farms account for the other 60%.

The difficulties associated with trying to estimate total milk output and the production per animal are reviewed elsewhere (Hopcraft and Ruigu, 1976) and will not be repeated here. The wide variation in figures obtained by various government agencies indicate big margins of error and the data should therefore be used with caution. Table 1 shows milk output by province and type of farmer.

Table 1. Milk Production by Province and Type of Dairy Farmer, 1974-75 (Million litres)

Province	Smallholders	Settlement	Large-scale	Total
Central	280.8	29.6	20.3	330.7
Coast	18.1	-	2.7	20.8
Eastern	130.1	4.0	7.5	141.6
Nyanza	128.0	-	0.6	128.6
Rift Valley	153.3	48.6	152.2	354.1
Western	46.5	1.0	0.3	47.8
Total	756.8	83.2	183.6	1023.6

Source: Mbanja and de Graaf, 1978, table 2, p.6.

2. TRENDS IN MILK PRODUCTION

Table 2 indicates the output of commercial milk in Kenya for the 1968-75 period. Since milk is predominantly produced on grass, weather variation is a very strong determinant of milk output. Production declined in 1971, a dry year, but increased substantially in 1972 and 1973, years without drought. The cumulative effect of three dry years, 1974-76, has left dairy herds in very poor shape.

The increase in producer price by 45% in July 1971 and the abolition of the quota system also contributed to the substantial increase in milk output in the three subsequent years. Despite increasing costs of production and inflation in excess of 10% per year, there was no further producer price increase until an increase of 11% was granted in January 1975. This increase was not enough to stem the decline in output and the producer price had to be increased by another 12% in November 1975.

Table 2. Total Milk Intake in Milk Equivalents, 1962-1975 (Million Litres)

Year	Liquid Milk Intake	Butterfat Intake: Milk Equivalent[a]	Total KCC Market	National Recorded[b]
1968	129.6	79.8	209.4	226.5
1969	141.2	68.9	210.1	228.5
1970	172.1	51.0	223.1	236.0
1971	195.4	18.6	214.0	223.7
1972	248.4	16.0	264.4	274.6
1973	265.6	9.0	274.6	284.3
1974	240.0	6.4	246.4	253.4
1975	222.8	4.1	227.0	236.3

a. The drastic decline in butterfat deliveries is as a result of pricing policies with the abolition of the quota system.

b. Includes the KCC and Mariakani plant intakes and of other licencees of the KDB.

Source: The Kenya Cooperative Creameries (KCC) and the Kenya Dairy Board (KDB).

There has been a substantial increase in production costs especially since 1973. In 1974, the subsidy on feed maize was abolished[1] and the prices of wheat bran, pollard, maize bran and daily cubes were increased. The lack of credit for the purchase of feed, pasture improvement, and fodder production aggravated the situation. Dairying became increasingly costly and unattractive to the farmers and the decline in output continued in 1976. In September 1976, the government announced a 41% increase in producer price which, together with a very wet 1977 and 1978 should restore the profitability of milk production and put milk deliveries on an upward trend again. The price changes are shown in Table 3.

1. A subsidy of 25% was re-introduced in 1977 following a substantial maize surplus. While the Maize and Produce Board buys maize at KSh 80 (now Ksh 65) per 90 kg. bag, it sells the same bag to feed-manufacturers for Ksh 60.

Table 3. Milk Producer Prices, 1970-1976.

Date		Price (Ksh/litre) Kshs/litre	Kshs/gallon	Change from Previous Period (%)
	1970	0.53	2.41	-
July	1971	0.77	3.50	45
January	1975	0.83	3.75	7
November	1975	0.93	4.25	12
September	1976	1.32	6.00	41

Source: Own Compilation

Table 4 indicates the spatial distribution of milk output among the creameries. The table shows KCC's marketed supply only. Since the major proportion of milk is not marketed,the elasticity of marketed supply is perforce different from that of the total output. There were substantial increases in output in both large scale and smallholder areas. The Kitale and Nyahururu creameries receive the bulk of their milk from large-scale farms and settlement schemes. The Kisumu deliveries, though small in absolute terms,showed a substantial increase. Eldoret, Nakuru and Naivasha which are predominantly large scale farm areas (but with some settlement schemes) and Nairobi where small scale farms play an important part all showed small increases. The Mombasa suppliers registered a net decline and were unlikely to have enjoyed a significant boost in price because of the loss of substantial quota and geographical premium. The data in Table 4 do not claim to represent an accurate supply response because the time period involved is too short. Capital requirements, availability of in-calf heifers and cows, land and management all tend to militate against a short period adjustment.[2]

3. THE STRUCTURE OF THE KENYA DAIRY INDUSTRY

In discussing the structure of the Kenya dairy industry it is necessary to recognize the existence of a dual marketing system: the formal or commercial system comprising the Kenya Co-operative creameries Ltd (KCC), the Mariakani Milk Scheme on behalf of the Kenya Dairy Board (KDB), and others with KDB licences to sell liquid milk in some remote or

---

2. If a farmer, for instance, decides to increase his milk output, and assuming a lack of in-calf heifers, he waits for a period of about three to four years for the heifer calf to reach milk production stage.

Table 4. Milk Deliveries to KCC Plants 1970/71 to 1974/75 (Million Litres)

Creamery	1970/71	1971/72	1972/73	1973/74	1974/75	Average Annual Change (%)
Naivasha	18	22	25	22	24	7.5
Nyahururu	4	9	10	9	8	18.9
Eldoret	44	54	64	58	45	.6
Nakuru	41	50	50	51	47	3.5
Kitale	10	24	28	30	31	32.7
Nairobi	22	27	33	27	25	3.2
Kiganjo	17	25	35	31	24	9.0
Kisumu	0.30	0.93	0.76	0.54	0.39	6.8
Sotik	2	4	10	10	9	45.6
Mombasa (Mariakani)[a]	3	3	6	4	1	-24.0
Total	165	223	265	247	218	7.2

Note: a. Milk delivered to Mariakani by KCC members.

Source: KCC Files.

small markets; and the informal market system which exists largely in rural areas where prices are determined by the forces of supply and demand, with little or no constraints from the formal system. Most of the milk produced in Kenya does not enter the formal or recorded market. In 1975 for instance, only 25% of milk output reached the formal market while an estimated 75% was consumed on farms or sold to neighbours. Table 5 shows that KCC handles about 96% of all commercial milk while Mariakani Milk Scheme (MMS) and the other licencees of KDB handle the remaining 4%.

Table 5. Market Shares of Recorded Milk Sales by Type of Operator, 1968-74 (Million Litres)

	1968	1969	1970	1971	1972	1973
KCC	209.4	210.1	223.1	214.0	264.4	274.6
Percent of total	92.4	91.9	94.5	95.7	96.4	96.6
Mariakani	6.7	6.8	5.4	3.7	7.1	7.4
Percent of total	3.0	3.0	2.3	1.6	2.6	2.6
Other Licence of the KDB	10.4	11.6	7.5	5.8	3.1	2.3
Percent of total	4.6	5.1	3.2	2.6	1.1	0.8
Total Milk Marketed	226.5	228.5	236.0	223.7	274.6	284.3

Source: Ryanga, 1975.

Milk, probably the most perishable of all major agricultural products, presents some unique problems and must be sold from the farm on daily basis. The transporting of milk to the factories is the responsibility of the producer. The large scale farmers deliver their own milk to the processing plants or organize contracts with private transporters to ensure economic loads. On the other hand, the smallholder because of his low output, is forced to market his milk through co-operative societies which also arrange for the transport of milk to the processing plants.

The distance each co-operative has to ship its products and the mode and condition of transport constitute an important marketing cost, and may indeed determine the amount of milk delivered. Some cooperatives operate in more severe environments than others in terms of location, infrastructure and physical conditions. Indeed some co-operatives can only deliver morning

milk. Many co-operatives, however, deliver milk twice a day. Obviously, the delivery of milk twice a day raises transport costs but makes it possible to get higher quality milk even in the absence of efficient cooling systems. About 25% of all milk sold by small-scale farmers is marketed through primary co-operative societies. In the 1974/75 financial year, 230 co-operatives delivered 105 million literes of milk to the KCC. Approximately 34% of the annual KCC intake is supplied by cooperatives (Mbanja and de Graaf, 1978).

The KCC has a monopoly on distribution of milk and milk products in the urban areas. It operates through independent retailers to whom the products are delivered. Home deliveries that once used to be undertaken by independent dairies are undertaken by KCC's appointed agents. There appears to have been a decrease in quality and service by KCC agents in many areas. (Heyer, 1976, p. 333) Outside the main urban centres, substantial sales are undertaken by co-operatives and farmers who sell to individuals, restaurants and local institutions.[3]

4. THE KENYA CO-OPERATIVE CREAMERIES LTD. (KCC)

The KCC has a virtual monopoly on the formal market of dairy products. It is a countrywide producer controlled co-operative registered under both the Companies Act and the Co-operative Societies Act.[4] The control of the Company is vested in a Board of Directors elected by the producer members. The preference share capital carries no voting rights or representation unless the company failed to pay the annual dividend. In 1968, the KCC had 1,469 supplying members consisting of 1,254 individuals and 215 co-operatives. By 1975 this number stood at 3,062 consisting of 2,768 individual members and 294 co-operatives.

The KCC is also the sole exporter of dairy products. It owns and operates eight creameries at Naivasha, Nyahururu, Eldoret, Nakuru, Kitale, Nairobi, Kiganjo and Sotik and sales depots at Nairobi, Nakuru, Eldoret, Kisumu, Kericho, Nanyuki, Mombasa, Thika, Machakos and Kitale. The creameries are organized on a national basis and, theoretically, enables plants to specialize in the manufacture of particular products.

---

3. About 400 producers are licensed to sell their milk to consumers or retailers or to process it into products like cheese and yoghurt. In Nairobi, about 60 licencees of the KDB supply about 3% of the city's fluid milk requirements.

4. Under a special legal notice, the KCC affairs are exempt from the supervision of the Department of Co-operative Development.

Table 6 shows the milk and butterfat intake by KCC plants in the 1968-74 period. It shows that as liquid milk deliveries increased, the proportion of milk disposed in liquid form declined with concomitant increase of manufactured milk. Changes in liquid milk consumption have played a small part in absorbing the increased output of milk and there has been a decline in deliveries of butterfat as a consequence of the disappearance of on-farm separation as a result of changes in the pricing system. These facors have resulted in a tendency of milk supplies delivered to KCC to rise more than proportionately. This has serious financial implications for KCC which has to dispose off a growing proportion of its milk in the less lucrative manufactured products market.[5]

The butter and ghee (clarified butter), is derived from the butterfat intake of the KCC, from standardization of milk to 2.3% butterfat and from processing of skim milk powder and condensed skim milk. All the milk delivered to KCC must, among other things, contain a minimum 3.5% butterfat and 8.5% solids-not-fat (SNF). Producers are likely to suffer financial loss if milk delivered does not fall in the first grade. In 1975, for instance, the price was reduced by 10 cents per kg for second grade. Any milk that fell below 8.5 SNF or 3.5% butterfat was downgraded and paid 20 cents per kg compared to 80 cents per kg for first grade. The butterfat content of cream should be at least 35%. Most of the cream delivered falls in the range of 35-50% and falls into three grades. There is no price inducement to produce cream above 50% butterfat.

5. THE MARIAKANI MILK SCHEME

The Mariakani milk scheme (MMS) was started by the Veterinary Department in the 1930s to organize the collection of milk from zebu cattle owned by Africans at the Coast. By that time, however, it did not have any pasteurizing equipment. The MMS has one of the most modern dairy plants in the country and is the only significant processing plant not owned by the KCC. It is now operated by the Kwale-Kilifi Co-operative Union which consists of eight primary co-operatives at the Coast.[6]

---

5. The situation has slightly improved since 1974 because of drought. For the 1974/75, 1975/76 and 1976/77 years, liquid sales were 63, 67 and 61% of total intake respectively (Mbanja and de Graaf, 1978).

6. Following financial and other problems, the Ministry of Agriculture has instructed the KCC to take over the plant. The scheme also lost milk supplies from large-scale milk producers at the Coast who, being members of the KCC, now take their milk to Kilifi Plantations Ltd., which processes and packs the milk for the Mombasa market.

Table 6. KCC Milk Intake and Utilization 1968-1974 (Million Litres)

Year	Liquid Milk intake	Butterfat Intake: Milk Equivalent	Total Intake	Liquid Intake Sold as Liquid	Liquid Milk Intake Manufactured	Liquid Sales as % of Total Intake
1968	129.6	79.8	209.4	86.5	43.1	67
1969	141.2	68.9	210.1	90.4	50.8	64
1970	172.1	51.0	223.1	94.7	77.4	55
1971	195.4	18.6	214.0	99.1	96.3	51
1972	248.4	16.0	264.4	115.9	132.5	47
1973	256.6	9.0	274.6	133.7	131.9	52
1974	240.0	6.4	246.4	148.7	91.3	62
Average annual change 1971-74 (%)	7.1	-28.9	4.8	14.5	1.8	6.7

Source: The Kenya Dairy Board

Until recently the manufacture of dairy products did not depend on the availability of fluid milk surpluses over and above Mombasa demand but on the need to produce milk powder to pay for UNICEF equipment and an agreement with the KCC to supply a maximum of 12,750 litres of milk per day to the Mombasa market. Extra milk could be absorbed in the Mombasa market which took 19 million litres in 1973/74. MMS, with a total of 11.6 million litres, would still be short which means that the KCC would still have to haul milk from up-country, a distance of at least 530 km. If MMS could dispose of all its milk in liquid form it would be a sure step towards economic viability and would reduce its financial deficit which stood at Ksh 3 million in 1976. As things stand, the creamery manufactures dairy products which could be obtained from the KCC more economically.

6. THE ROLE OF GOVERNMENT

The Kenya government is heavily involved in the activities of the Kenya dairy industry such as pricing, research, credit, and provision of inputs. Various laws such as the Public Health Act govern the safety of milk and milk products. The Dairy Industry Act governs the dairy industry and the Cooperatives Act govern the co-operative movement. The government has the responsibility of protecting the consumer against products which may be dangerous to health or do not have the characteristics claimed by the seller. The Kenya Bureau of Standards is expected to set standards and consolidate those under the Health and the Dairy Industry Acts. In addition, the government has instituted a regulatory arm of the dairy industry, the Kenya Dairy Board (KDB)

The Kenya Dairy Board was established in 1958, a year of particularly low butter prices in international markets, by the Dairy Industry Ordinance of 1958. Its general functions are to (i) organize, regulate and develop efficient production, marketing, distribution and supply of dairy produce, having regard to various types of dairy produce required by different classes of consumers; (ii) improve the quality of dairy produce; (iii) secure reasonable and stable prices for producers of dairy produce; (iv) promote market research in relation to dairy produce; (v) permit the greatest possible degree of private enterprise in production, processing and sale of dairy produce consistent with the efficiency of producer and the interest of other producers and of consumers; and (vi) ensure either by itself or in association with any government department or local authority the adoption of measures and practices designed to promote greater efficiency in the dairy industry.

The KDB appointed the KCC as its agent and this privilege requires that the KCC accept all surpluses from producers. In addition, the KDB initiated a system of licensing of liquid milk sales in order to accommodate producer-retailers who were not members of the KCC. A licence, however, did not guarantee any market and the KDB adopted a liberal policy except for major urban markets; hence licences tended to (and still) dominate in the rural areas.

Certain activities of the KDB overlap and it has always been felt that the dairy industry would realise substantial savings and enjoy greater policy coordination if the two bodies were merged. Echoing this policy, the Kibaki Commission Report (Kenya, 1965) recommended the establishment of a dairy authority, the Kenya Dairy Commission, as a statutory corporation along similar lines to the milk marketing boards of Britain. This would have,,inter alia, involved the nationalization of the KCC and would have permitted the articulation of both producer and consumer interests. The Commission maintained that it was undesirable to allow the existence of a private producer-controlled monopoly which operated only in producer interests. When the bill incorporating most of the Kibaki Commission Report was presented in Parliament it was defeated. Despite this defeat, the Ndegwa Commission Report (Kenya, 1971) strongly endorsed the Kibaki Commission Report and reiterated the call for the amalgamation of KDB and the KCC into a statutory commission like the Kenya Meat Commission.[7]

In addition to the Kibaki Commission, an official Dairy Working Party was set up in 1970/71 to examine the pricing policy, the competitiveness, and the longrun development of the dairy industry. The members of the Dairy Working Party saw their duty as formulating a pricing and marketing policy for the dairy industry that would encourage the growth of the industry in the 1970s in the national interest (Kenya, 1970, p.2). However, while the working party was sitting, the KCC announced the abolition of the independent dairies based on Tentoni (1969) recommendations. The so-called 'rationalization of distribution resulted in the consolidation and entrenchment of the KCC's

---

7. The merger has never taken place. In 1971 the Minister for Agricultur referred the question of the 'dairy authority' to KDB and KCC with instructions that the two agencies attempt to reach an agreement and report directly to him. The Chairmen of KCC and KDB recommended the continuation of KDB with certain changes in its Board. At the end of 1971/72, the appointed members and top executives of the KDB were retired and the day-to-day management of the Board devolved to the Ministry of Agriculture (MOA) which attached several officers tc act in various capacities, eg. executive officer. The Head of Animal Productior Division of MOA became chairman of an advisory or management committee which replaced the Board members. This meant that services of advocates and public relations consultants were dispensed with. The Nutrition Team was permanently transferred to the KCC. This is the position today.

monopoly position in major urban centres.[8] The KCC eliminated all private dairies and middlemen in Nairobi, Mombasa, Nakuru, etc, and took over the sale and delivery of milk in bulk to institutions. The KCC thus took over a large portion of the milk business held by the dairies, contending that it would contribute to eliminating the incidence of milk adulteration, illegal sales by producers, etc (Kenya, 1970, p. 6). The KCC in fact wanted to increase its revenue substantially in order to start the manufacture of spray-dried milk powder. Although several attempts have been made to control the monopoly powers of the KCC, it has a powerful lobby which has resisted such efforts.

The KDB has made a number of efforts to rationalize the pricing system and to exert some control over the marketing system. Thus far these efforts have not been successful. The ADB came into being at the instigation of the KCC, principally for the purpose of controlling non-KCC producer/retailers and distributors of dairy produce. With the virtual abolition of non-KCC distributors in the scheduled markets, the role of the KDB has been reduced.[9] The political power of the producers, and the requirement that the KCC maintain financial viability in the face of a given producer price, have been responsible for poor pricing in the industry. Political expediency tends to take precedence over careful economic analysis. The net effect of the structural and pricing policies is that there are inefficiencies in the processing and marketing system which eventually raise the fluid milk price to the consumer. This reduces the consumption of fluid milk particularly among the poorer consumers and more milk is diverted into manufacturing where the net price realized per litre is substantially lower. The losses involved in the manufacturing of milk and in maintaing capacity are recouped from sales of fluid milk.

---

8. Some members of the Dairy Working Party opposed the KCC's moves contending that the elimiantion of middlemen was not synonymous with reducing marketing costs; the elimination of competition was not conducive to effeciency; and the elimination of bottled milk interfered with consumer preference and was likely to have adverse effects. The Working Party called for a careful study of the system, including costs, margins, profits, and services but the KCC did not heed their call.

9. The KDB concentrates on issuing producers' and retailers' licences, provides inspection services, and lends some assistance to Kenya Milk Records and Naivasha Dairy Training School. It also helps the KCC to maintain its monopoly in the scheduled markets (urban areas) where only pasteurised milk is permitted. The KDB operates an inspectorate that ensures that pirate milk sales do not occur.

7. THE EXPORT OF DAIRY PRODUCTS

Kenya is a net exporter of dairy products. Despite the rapid increase in local demand for milk at 8-9% per annum, supply has tended to outstrip demand. The lack of purchasing power by a substantial proportion of the population due to a very skewed distribution of income means the absorptive capacity for fluid milk and manufactured products in the Kenya market has been limited.

Dairy exports have been an important source of foreign exchange. In 1964, for instance, dairy exports were worth K£2 million and by 1972 this figure had reached K£3.8 million or about 4.8% of total agricultural exports. The majority of these products were sold to East African partner states of Uganda and Tanzania which, together with Kenya, have always been considered the Kenya dairy industry's primary market. The breakdown of dairy exports are shown in Table 7. In the period 1969/70 to 1973/74, 46% of all cheese exports,

Table 7. Dairy Products Exports, 1968-1974

Year	Milk (Million litres)	Cheese metric	Butter	Ghee	Milk Powder tons
1968	17	210	2,140	451	943
1969	14	209	1,624	257	1,221
1970	10	197	1,596	327	2,310
1971	9	96	891	180	1,641
1972	18	324	2,399	359	3,900
1973	30	557	2,463	265	4,410
1974	33	267	1,742	155	1,273

Source: The Kenya Dairy Board

54% of butter, 68% of milk powder and 31% of ghee exports were sold in the East African market. In the same period, 99% of all liquid milk exports were sold to Uganda and Tanzania with Uganda accounting for 85% of the total. The sales to Uganda showed spectacular growth, rising from 9.9 million litres in 1969/70 to 31.1 million litres in 1973/74 period, but payment problems and trade impediments have greatly restricted the scope

of exports to these markets.[10]

Exports of dairy products outside East Africa are made at a loss. The domestic fluid milk market has always been under pressure to make high profits to subsidize the export of butter, cheese, ghee and various powders. Kenya is not a successful competitor with major dairy product exporters such as New Zealand and Denmark. The fundamental reason for this is the low yields obtained from Kenya dairy herds and price cutting due to developed countries' ability to subsidize their dairy exports. For Kenyan dairy exports to compete in export markets without subsidy, yields would have to be increased substantially without a corresponding increase in costs. The potential for high yield is present but it may take a long time to achieve those increases.

As stated above, the 'realized price' per litre of milk is far higher for fluid milk sales than it is for processed milk products. The consumer pricing system has been one of using the considerable profits derived from the sale of whole milk to, in effect, subsidize the sales of processed milk products. The consumer price of liquid milk, which requires relatively minimal processing, is roughly double the producer price. Processed milk products, on the other hand, are sold at prices that do not even cover the costs of purchasing and processing the milk, both in the domestic and export markets. KCC estimates that a net loss is made with 10 of the 14 products, with fluid milk and butter as the only significant sources of profit.

The problem of these losses and those made during the export of dairy products is relevant for the overall pricing policy of dairy products. The recouping of such losses from domestic sales of liquid milk inflates the internal price and thus tends to reduce the domestic absorptive capacity of fluid milk.[11] The high prices of fluid milk in effect serve to discourage

---

10. The current insecurity in Uganda and Uganda's failure to pay Ksh 20 million it owes the KCC means that this market is virtually lost. The closure of the Kenya-Tanzania border by Tanzania in February 1977 following problems arising from the now defunct East African Community also meant loss of the Tanzania market. In 1976 sales to Uganda and Tanzania were reduced to almost zero. In addition, exports to Malawi and Zambia were curtailed.

11. The price elasticity of demand for fluid milk was estimated to be a low 0.65 (Ruigu, 1978, pp. 163-5) and the KCC can therefore increase its earnings by raising the price. Based on this estimate of elasticity, the 36% increase in consumer price announced in March 1977 would be expected to reduce demand by 23.4%.

consumption among the poorer members of the population.

8. PRICING POLICY IN THE KENYA DAIRY INDUSTRY

One of the characteristic features of the marketing system in Kenya is the high degree of centralized control dating back to the colonial period. The Kenya government fixes the price of dairy products at the producer and consumer level. Currently only the producer and consumer prices of fluid milk are being set. The prices of other dairy products are determined by manufacturers, subject to confirmation by the price controller.

Prior to July 1970, an elaborate system of quotas and contracts was used to stimulate supplies of milk in the dry season by paying the farmer a higher price for a given quantity of milk that had to be supplied, otherwise the quota was forfeited. Quotas were replaced in July 1970 by a pool pricing system involving a guaranteed minimum price plus a bonus based on the amount realized by the KCC from the sale of liquid and manufactured products.[12]

Since July 1971, the producer price for milk has been set by Presidential decrees. A factory gate price of 77 cents per litre was set in 1971. This 45% increase stimulated production in a wet year, led to a reduction in the amount of milk retained in rural areas, and reduced butterfat intake by 44%. In addition, the boost in price led to the milking of beef cows which had implications for beef output. The fact that the boost in milk price reduced beef output which was more competitive in export markets than dairy manufactures implies a misallocation of resources and reduces foreign exchange earnings. Stotz (1975) notes that because of the favourable price of milk, and the desire to increase land productivity, beef ranches are shifting towards a combined milk and beef production system. He contends that beef ranches only produce milk during the flush season when grass is available, thus further aggravating the seasonality of milk production.

The requirement that KCC purchase all supplies offered at 77 cents per litre brought about a major financial crisis (with a net loss of K£721,376 over the 1971/72 and 1972/73 years), because the 35% increase in the volume of fluid milk intake resulted in a greater volume being manufactured as low paying dairy products. A shortage of processing capacity forced the discarding of some skim milk after butterfat extraction. The KCC's financial

---

12. For the rationale of abolition of the quota system, see Ruigu, 1978, pp. 69-74.

squeeze was only eased in 1975 as a result of increased demand for fluid milk, a shortfall in production because of drought in two consecutive years, and because of a decline in the real price of marketed milk (relative to prices of other products) and the consequent increase in rural consumption. In addition, other administrative and pricing measures were taken to improve the financial position of the KCC.[13] The producer price was increased from Ksh 0.83 to Ksh. 0.93 per litre in November 1975 and to Ksh 1.32 per litre in September 1976. These recent increases have undoubtedly stimulated excess production during the wet season. Between September 1976 and March 1977, the KCC incurred a loss of Ksh 35 million and by August/September 1977 it was unable to pay the farmers in Sotik, Uasin Gishu and Kitale areas.[14]

(i) Seasonal Fluctuations of Milk Supply

The seasonal fluctuations in milk supplied to the KCC increased markedly with the introduction of a uniform price in 1970. Hopcraft and Ruigu (1976) showed how the abolition of the quota pricing system with concomitant failure to replace it with an alternative system of premium pricing for the dry season production has led to a marked increase in the seasonality of milk supplied to the KCC. The increase from the lowest to the highest monthly intake was 28.7% in 1969/70 when the quotas were in operation, compared to 1973/74 when the fluctuation was 102.4%.

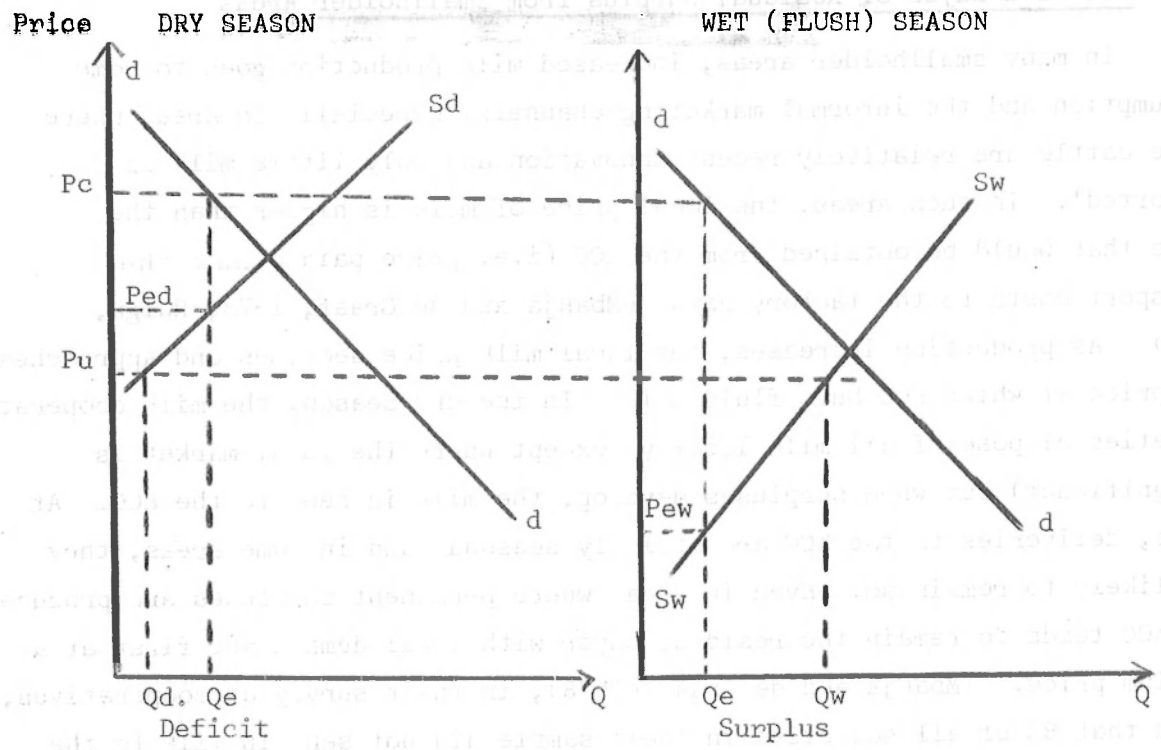
The absence of price differentials between dry and flush season seems clrarly unjustified. The existence of real cost differentials between seasons was demonstrated by the estimates of informal market prices obtained from Veterinary Department officials and reported by Hopcraft and Ruigu (1976, p. 16). Out of 16 areas where artificial insemination services were operational and for which dry and wet season estimates were available, 12 (or 75% of the areas) showed some seasonal price, variation the simple average dry-season price being 28% over and above the wet season price.

---

13. These included: (i) The consumer price which had been raised from 70 cents to 80 cents when the producer price went up to Ksh 3.50 per gallon on July 1, 1971 was further increased by 5 cents in May 1972 to 85 cents. (ii) The KCC was permitted to levy a one cent per litre cess to help finance payments for the expansion of Sotik, Kitale and Nyahururu plants. In addition, the KCC was permitted to retain 50% of the KDB cess of 2 cents per litre to help offset this deficit. (iii) The KCC liquid milk was standardized at 2.3% butterfat with no payment going to producers for the butterfat accrued by this method. (iv) The KDB Board of Directors including all sub-committees was suspended in May 1972 and the management drastically reduced in order to enable the Board to continue its operation within the one cent per litre cess. Effective management of the Board was devolved to the Ministry of Agriculture.

14. These losses arose from over-production and the loss of Tanzania, Uganda, Zambia and Malawi markets after the closure of Kenya/Tanzania border and insecurity within Uganda. Also the KCC had to pay Ksh 1.32 per litre without any corresponding consumer price increase between September and March 1977. A government guaranteed loan was advanced to the KCC to tide it through the difficulties and to enable it to pay farmers. In addition to rising costs, there are allegations of shortcomings in the KCC's management which are yet to be disproved.

Figure 1 illustrates the dry and wet season supply curves with the demand curve superimposed on them. Producing milk is a great deal cheaper in the wet than in the dry season because in the dry season, the producer undertakes fodder production and purchased feed at considerable expense to avoid sharp reduction in production. The supply curve for the dry season is further to the left of the flush season supply curve representing higher milk production costs. A uniform price, P_u, generates quantity Q_d in the dry season and Q_w in the wet season. If Q_e represents the market equilibrium, it can be seen that the uniform price generates a deficit in the dry season and a surplus in the wet season. In some years dry season supply is inadequate to meet the demand for fluid milk at the official price. To generate sufficient quantities the producer price would have to rise to P_{ed} in the dry season and fall to P_{ew} in the wet season.[15] In the dry season, not only could the fluid milk market absorb additional supplies but the entire stock of equipment for processing milk products is substantially idle.



Substantial fixed costs are incurred whether or not KCC capacity is utilized. The problem is that the capacity of processing facilities must be capable of handling the peak output of the wet season.

Substantial costs are imposed on the KCC by the extreme seasonality of production. The KCC is required to purchase all milk irrespective of whether it is financially appropriate or not. In general, large losses are made in the flush season when a large portion of milk purchased must be processed and sold at a loss. In the dry season, substantial financial

15. In order to determine the extent to which the price should be reduced, KCC's costs of handling fluid milk, and elasticities of both supply and demand would be required.

gains are made as virtually all milk is sold as fluid milk at the high official price. The KCC requires a high consumer price for fluid milk in order to recoup its losses during flush season. This high price substantially curtails consumption and forces the KCC to divert more milk into unprofitable processing channels.

Clearly what is needed is a seasonally differentiated price. This would require a reduction in the flush season producer price which would reduce flush season payout and surplus output while concomitantly reducing manufacturing costs. The price would be increased in the dry season to provide adequate incentives to farmers to maintain production in the dry season.

(ii) KCC as a Buyer of Residual Surplus from Smallholder Areas

In many smallholder areas, increased milk production goes to home consumption and the informal marketing channels, especially in areas where grade cattle are relatively recent innovation and only little milk is 'exported'. In such areas, the local price of milk is higher than the price that would be obtained from the KCC (i.e. price paid minus the transport costs to the factory gate) (Mbanja and de Graaf, 1978; Ruigu, 1976). As production increases, the local milk price declines and approaches the price at which KCC buys fluid milk. In the dry season, the milk cooperative societies dispose of all milk locally (except where the local market is insignificant) but when surpluses develop, the milk is sent to the KCC. At first, deliveries to the KCC are strictly seasonal and in some areas, they are likely to remain so. Even in areas where permanent surpluses are produced, the KCC tends to remain the residual buyer with local demand met first at a premium price. Mbanja and de Graaf (1978), in their survey of cooperatives, found that 8% of all societies in their sample did not send in milk to the KCC over the previous four years, 23% sold their milk to KCC only, while 69% sold milk both locally and to the KCC. Overall 19% of all the milk collected by cooperatives was sold locally over the 1973/74 to 1976/77 while 78% was delivered to the KCC.

(iii) Spatial Effects of a Uniform Milk Price

Unlike today, the prices paid to the producers prior to 1970 were not uniform throughout the country. They varied according to the distance from principal markets. In 1968, for instance, there was a premium of 35 cents per gallon in Nairobi area, 20 cents in Kisumu area and 65 cents in Mombasa (Ruigu, 1978, pp. 69-70).

The existing pricing structure pays a uniform price irrespective of the location of receiving plant (and regardless of the season of the year). The uniform price paid for all milk in different parts of the country has the effect of concealing transport costs involved in the delivery of milk to the consuming centres. Consequently, rather than encouraging the economically optimal location of milk production in the country, it promotes a misallocation of resources. The total cost of getting milk to the consuming centres differs widely depending on where it is produced. The KCC operates a transport pool for ferrying milk from the more distant areas at a very substantial cost which is not reflected in lower price to producers in those areas. Production in more remote areas therefore receive excessive stimulation while production in the areas where hidden transport costs are a great deal less receive inadequate stimulation. Areas near the main markets are thus subsidizing the areas that are more remote. There is thus an economic case to recommend the abandonment of the transport pool.

Table 8 shows the inter-plant raw milk movements effected by the KCC fleet of tankers. About 80% of all milk processed in the Nairobi plant is hauled from other areas. These movements have important cost implications for the industry. Most of the milk is transported relatively long distances and transport costs are high because of the weight and volume of liquid milk relative to value, high perishability and cost of refrigeration.

If whole milk is being transported to an urban area such as Nairobi, the value of milk at any given distance from Nairobi is the Nairobi price less the cost of transport.[16] In economic terms, surplus milk produced in consuming centres has a lower value and therefore processing facilities in those locations is justified as long as adequate supplies are forthcoming so as to benefit from economies of scale. Processing reduces the physical bulk of the product and enhances its value, making it suitable for long distance transportation.[17] Thus processed milk products - cream, butter, cheese and dried condensed milk - involves lower transport costs.

---

16. If the price at the market in P_m and the cost of transportation to the market is T, which a function of the distance, d, then the price at given location, P_l is given by the formula:

$$P_l = P_m - T\,(d).$$

17. Transporting raw milk costs about 10 times as much as transporting butterfat (Kenya, 1965).

Table 8. KCC Inter-Creamery Milk Shipments, 1975/76

From	To	Distance (Km)	Quantity (Litres)
Naivasha	Nairobi	83	8,000,000
Nyahururu	Kiganjo	109	368,000
Nyahururu	Nairobi	168	8,855,700
Nakuru	Nairobi	155	39,000,000
Kiganjo	Nairobi	162	5,000,000
Kitale	Eldoret	68	7,000,000
Eldoret	Nairobi	308	14,000,000
Sotik	Nakuru	166	162,000
Total Shipments			82,385,700

Source: KCC files

The KCC creameries are organized on a national basis in the interest of efficiency so that they can specialize in the manufacture of particular products, although no regional differences in producer or consumer prices exist. There is certainly an economic case for differentiated producer (and consumer) prices based on the existence of surplus and deficit areas and differential transport costs. In determing the price paid to the producer, a premium might be paid for milk supplied to creameries where there is a large demand and considerable quantities of milk are currently 'imported' (e.g. Nairobi and Mombasa) from other plants, often over large distances. The KCC does not appear to have exploited the advantages of a national marketing system fully.[18] For instance, there are sustential manufacturing activities such as cheese in the Nairobi plant that would result in substantial savings if relocated up-country.

SUMMARY AND CONCLUSION

The dairy industry has operated under a mantle of government administered prices, rules and regulations. Government administered prices have not been efficient. Efficiency in pricing cannot be achieved without flexibility which permits (a) seasonal variation of producer prices to account for variability in costs of production, (b) spatial variation in prices to promote

18. Although the industry is organized on a national basis, it is not always possible to balance out regional shortfalls against regional surpluses for processing because of the large distances involved.

efficient allocation of resources, and (c) frequent revision of the producer prices to ensure adequate incentives to farmers and revision of consumer prices to ensure reasonable consumption of milk to facilitate efficient operation. The setting of both producer and consumer prices without careful analysis of KCC operating costs and overheads creates financial problems for the KCC and does not allow it to perform efficiently. Using the cooperative processers as the dumping grounds at fixed prices for seasonal surpluses imposes a tax on the co-operative that is ultimately paid by its members (in the form of lower returns or delayed payment) and by the consumer (in the form of higher average prices).

There is an urgent need to reduce the extreme seasonality of milk production in order to reduce surpluses (and KCC losses) in the flush season. The elaborate system of quota pricing that existed prior to July 1970 ensured adequate supplies in the dry season but is not feasible today given the large number of smallholders who produce milk for sale. A higher producer price for milk in the dry season could be effected without quotas. Prices paid to farmers should be made on the basis of a clearly stipulated formula relating KCC milk intake to sales of fluid milk and manufactured products. In the dry season when milk is scarce, a high proportion of milk intake is sold in fluid form which is more lucrative and farmers could be paid more. By contrast, in the flush season a high proportion of milk intake is manufactured and sold in this less lucrative form.

The possibility of introducing a spatially differentiated producer price should be re-examined along the lines of the recommendations of Kibaki commission. There is ample precedent (by KCC) and economic justification for producer prices to vary over space.

Current pricing milk only requires a minimum content of 3.5 butterfat. There is no incentive to produce milk of higher butterfat content. A basic price could be paid for milk 3.5% butterfat content with an additional payment for higher percentage or a deduction for milk below 3.5% butterfat. In the longrun, pricing on the basis of protein or solids-not-fat (SNF) components should be considered since protein is the major deficiency in local diets.

The domestic demand for fluid milk is price inelastic. This rationalizes the practice of maintaining high fluid milk prices to subsidise manufactured dairy products. Milk pricing tends to favour producers at the expense of consumers. The degree of exploitation of fluid milk consumers by producers through the KCC remains a controversial issue given KCC's monopoly powers. However, it is obvious that the present policy limits the consumption

of milk by low income consumers. Granting monopoly rights to a nation wide farmer co-operative as has been done in the Kenya dairy industry may be excused on grounds of economies of scale but does not protect consumer interests. The Kenya Dairy Board should be strengthened in order to effectively carry out its supervisory role in the dairy industry.

REFERENCES

1. de Jong, K. 'Projections for the Dairy Industry on Production, Marketing and Investments, 1973-78'. Kenya, Ministry of Agriculture (mimeo).

2. Heyer, J. 1976. 'The Marketing System'. In J. Heyer, J.K. Maitha and W.M. Senga (eds). Agricultural Development in Kenya: An Economic Assessment. Nairobi, Oxford University Press.

3. Heyer, S. 1963. 'An Economic Survey of the Dairy Industry of Kenya'. Economic and Statistics Division, Ministry of Economic Planning and Development (mimeo).

4. Hopcraft, P. and G. Ruigu. 1976. 'Dairy Marketing and Pricing in Kenya: Are Milk Shortages the Consequence of Drought or Pricing Policies'? Discussion Paper No. 237. Institute for Development Studies, University of Nairobi.

5. Kenya. 1956. Dairy Industry Inquiry (chairman: L.C. Troup). Nairobi, Government Printer)

6. Kenya. 1965. The Dairy Commission of Inquiry Report (Chairman: Mwai Kibaki). Nairobi, Government Printer.

7. Kenya. 1970. 'Final Report of the Dairy Working Party'. Ministry of Agriculture (mimeo).

8. Kenya. 1971. Report of the Commission of Inquiry (Public Service Structure and Remuneration Commission) (Chairman: D. Ndegwa). Nairobi, Government Printer.

9. Kenya. 1974. Development Plan 1974-78. Nairobi, Government Printer.

10. Kenya. 1977. Integrated Rural Survey 1974-75. Basic Report. Nairobi, Government Printer.

11. Manchester, A.C. 1974. 'Market Structure, Institutions, and Performance of the Fluid Milk Industry'. Agricultural Economics Report No. 248. USDA-ERS.

12. Mbanja, G.O. and J. de Graaf. 1978. 'Milk Marketing and Pricing in Kenya: The Role of Cooperatives'. Draft Field Document. Marketing Development Project, Ministry of Cooperative Development.

13. Peberdy, J.R. 1970. Animal Production 1970-1980 and Beyond. Animal Production Division, Ministry of Agriculture, Nairobi.

14. Ruigu, G.M. 1976. 'Smallholder Milk Production and Marketing: Opportunities and problems'. Working Paper No. 286. Institute for Development Studies, University of Nairobi.

15. Ruigu, G.M. 1978. 'An Economic Analysis of the Kenya Milk Subsystem'. Ph.D. Dissertation. Department of Agricultural Economics, Michigan State University.

16. Ryanga, R.B. 1975. 'Dairy Industry in Kenya'. Paper Prepared for the Seminar on Cooperation in Agricultural Development in East Africa, Nairobi, January 13-20.

17. Smith, I. D. 1978. Low Income Smallholder Marketing and Consumption Patterns: Analysis and Improvement Policies and Programmes. Marketing Development Project, Nairobi.

18. Staatz, D. 1975. 'Milk Production Systems in Kenya: Their Economic Features and Management Traits'. Working paper No. 2, Naivasha Livestock Recording Centre, Ministry of Agriculture, Nairobi.

19. Tentoni, R. 1969. 'The Development of Dairy Industry in Kenya'. FAO Rome (mimeo).

PRICE AND MARKETING POLICIES ON MEAT AND EGGS

By

I.D. McArthur & C. Smith
Planning Division
Ministry of Agriculture

1. INTRODUCTION

Government intervention in pricing and marketing at the producer or consumer level might be deemed to benefit the economy if it led to any of the following:-

i. A reduction in price, volume and income instability;
ii. An improvement in resource allocation;
iii. Increased economic self-sufficiency in meat production;
iv. The provision of low-priced meat to low income consumers, provided that this did not inhibit supplies or lead to resource misallocation.

From the producer's point of view, an absolute increase in producer prices leading to increased incomes would find favour, while consumers would favour policies which lead to a reduction in consumer prices. Other government interventions such as deficiency payments, buffer stocks, quotas, stabilisation funds, subsidised consumption, export rebates, income stabilisation funds, subsidies on inputs, tariffs, health and other restrictive regulations may be used to fulfil the same objective. Although some of these policy instruments are used in Kenya, price control is the main government intervention in the meat industry because, unlike many of the other possible measures, it does not use government funds to execute (except when there is a need to finance losses incurred by the Kenya Meat Commission which might arise as a result of price control).

There is no formal statement of the objectives of price control on meat in Kenya. However, one can assume that it is supposed to ensure regular and sufficient supplies of meat to the consumer at prices which even the low income family can afford, while at the same time ensuring a 'fair' return to the producer so as not to discourage supply. Such a desideratum is of course difficult to achieve: does price controlled beef get from the producer to the consumer more efficiently than unregulated poultry meat? The constant upward

pressure on beef prices and the widespread evasion of price controls suggest that a review of the beef price fixing system may be in order. Hedging beef prices to the cost of living index or to the cost of production index may be a 'fair' way of setting prices, at least in the short term although distortions may appear in the longer term. Alternatively, linking beef prices to an index of world prices may ensure competitiveness in Kenya's relatively open economy. But since Kenya is not at present an importer of meat products, competition from imports is a most unlikely result of such a policy.

Presumably, the importance of beef in the diet of urban consumers and the relative ease with which its marketing can be scrutinised in comparison to, say, eggs sold by numerous stones and in numerous villages, explains why beef is price controlled and eggs are not. In considering whether the objectives of price control on beef have been attained, we note that:-

i. Price controls have stabilised beef prices;

ii. It is doubtful whether price controls have led to improved resource allocation Output has not increased and investment has lagged. The low beef prices have had a strong bearing on the closure of ten of the thirteen feedlots established under the Livestock Development Project (LDP). Also, many group, company and commercial ranches established under the LDP are in financial difficulties caused partly by prices lower than would have been in a freely operating market. An estimated 400,000 bull calves are slaughtered annually because it is not economical to feed and fatten them under prevailing prices.

iii. Projections indicate that there will be a considerable deficit in beef supplies relative to demand by 1990 (Chemonics International, 1977).

iv. Low income consumers can be divided into two groups - urban consumers who are about 10% of the total population and rural consumers who make 40% of the total population. The first group is certainly interested in low beef prices although much consumption is in the form of offals. Members of the second group are also low income meat producers and as net sellers of livestock may be more interested in 'high' meat prices.

2. THE LEGAL FRAMEWORK

The legal basis for price and marketing controls on meat and eggs[1] is given by numerous Acts of Parliament which include the following:-

a. The Agriculture Act, Cap. 318, which provides the basis for marketing of scheduled agricultural and livestock produce (including cattle and sheep for slaughter) and the basis for guaranteed prices. Section 8 of the Agriculture Act states that the Minister may, before January 1st each year, fix prices for scheduled animal products for the coming year, as well as prices for the two subsequent years. In practice, a Kenya Meat Commission (KMC) buying schedule for producer prices is set annually.

b. The Agricultural Produce (Export) Act, Cap. 319, which includes the regulation of animals for slaughter and sets the requirements for registration of premises. All produce must be inspected prior to export, and the Minister may set standards and grades specifically for exportable produce.

c. The Agricultural Produce Marketing Act, Cap. 320, which provides the basis for the creation of marketing boards.

d. The Crop Production and Livestock Act, Cap. 321, which includes rules for poultry inspection.

e. The Branding of Stock Act, Cap. 351, the Cattle Cleansing Act, Cap. 358, and the Animal Diseases Act, Cap. 364. By the establishment of quarantine areas and other regulatory procedures, these Acts have an important influence on the marketing of cattle, sheep and goats. Also, under Section 8 of the Animal Diseases Act, the Director of Veterinary Services may prohibit or regulate the importation of meat or animals.

f. The Pig Industry Act, Cap. 361, and the Uplands Bacon Factory Act, Cap. 362. The former established the Pig Industry Board as the regulatory authority for the industry and sets the requirements for the licensing of slaughter houses.

g. The Kenya Meat Commission Act, Cap. 363, sets the framework in which KMC must operate, including the specification of a grading system for beef. Under Section (1) (b) of this Act, no person or company may export meat unless in possession of a licence issued by KMC.

---

1. There are almost no legislative rules on egg marketing, however.

h. The Meat Control (Local Slaughterhouses) Act, Cap. 356, which provides for the regulation and licensing of slaughterhouses selling to the domestic market only.

i. The Customs Tariff Act, Cap. 472, and the Cistoms and Excise Act (No. 10 of 1978). Under this Act, a 25% duty on important meat and edible offals and a 50% duty on imported sausages and canned beef are currently levied.

j. The Sales Tax Act, Cap. 476, applies a sales tax on local sales of canned beef (among many other products) and the Local Manufacturers (Export Compensation) Act, Cap. 482, provides a 10% subsidy on the f.o.b. price of canned beef for export.

k. Under the Price Control Act, Cap. 504, the Minister for Finance and Planning sets maximum prices for beef, sheep and goat meat at the wholesale and retail levels.

Thus, there is a large number of legislative means by which the marketing and pricing of meat is regulated in Kenya, with the Agriculture Act, Cap. 318, and the Price Control Act, Cap. 504, as the main instruments for regulating prices. Greatest emphasis has been on price control on beef at the producer, wholesale and retail levels, with lesser emphasis on sheep and goat meat. Poultry meat, pork, and eggs are not subject to price control.

3. THE SUPPLY AND DEMAND SITUATION, AND GOVERNMENT INVOLVEMENT

Figures for livestock population and offtake are extremely difficult to obtain and the numerous estimates from different sources vary widely. Table 1 shows, that beef is by far the most important meat product and is the preferred choice for both urban and rural consumers in many parts of the country. However, on-farm slaughter of small-stock rather than beef is preferred, because of the more manageable quantity of meat obtained and the lower amount of income foregone. Sheep and goats are preferred by Muslims and some other religious and social groups. A survey of lower income households (Kenya, 1977) showed the average household expenditure per month in the four largest Kenya towns at KSh. 62 for meat and KSh. 7 for eggs, out of a total household expenditure of KSh. 394. Another survey of four main towns showed average purchases across the spectrum of income at KSh. 18 per month for poultry meat and KSh. 10 for eggs (Smith, 1979).

Table 1. Livestock Population and Meat Production in Kenya in 1978

Species	Population (millions)	Meat Product	Production CDW[1] '000s tonnes	Kg/Head
Cattle	9.96	Beef	137.0	9.2
Sheep and goats	12.81	Mutton and goat meat	64.0	4.3
Pig	.06	Pork	3.3	0.2
Poultry	15.71	Poultry meat	30.9	2.1
		Eggs	23.1	1.6

Note: 1. Includes offals.

Source: Kenya, 1978 and Smith, 1979.

Nearly all projections (e.g. Shah, 1978, p. 7) show a static or only a slowly increasing supply of meat in Kenya over the next 10 years. With a human population increase of 3.5% per year, average real income growth of 2.5% per year and a high income elasticity of demand (in the region of 0.9), demand will far outstrip supply. In the absence of dramatic production increases, the most likely outcome is continued upward pressure on this price of meat and eggs and it is in this connection that price control assumes such importance. Given that beef is the least likely of all meat products to increase dramatically in the short term, a concerted effort to boost sheep and goat and poultry meat production is justified.

Government support to the various meat and dairy industries totalled K£16.391 million in the 1978-79 Development Budget, with the largest single allocation going to livestock improvement (K£6.954 million), followed by disease and pest control (K£3.789 million). Specific assistance to the beef, sheep and goat, pig and poultry industries has been identified in table 2. It can be seen from this table that the beef industry is considerably regulated in both production and marketing and that there is a much lower level of intervention with sheep and goats, poultry and pigs. However, none of the industries has a system of market intelligence and market organisation, and product grading (except for beef) and price monitoring is not well developed. Almost no attention is paid to the camel industry which has a potential for supplying greater quantities of meat in the northern areas of Kenya. Because some of the meat industries are subject to price control (albeit with varying levels of effectiveness) and others are not, it is necessary to look at the marketing chains for beef, sheep and goat meat, pork and poultry meat separately in an effort to compare the relative efficiencies of the various systems.

Table 2. Government Agencies Involved in the Meat Industry

Industry	Sector	Form of assistance or regulation	Government agencies involved
Beef	Production	Husbandry extension	APB
		Dipping	DVS, IADP
		Research	SRD
		Disease control	DVS
		Ranch and grazing block establishment	RMB, AFC
		Guaranteed prices	MOA
	Marketing	Movement regulations	DVS
		Marketing organisation and purchase	LMB
		Guaranteed purchase	KMC
		Grading	KMC
		Slaughtering and Market inspection	DVS
		Regulated prices	MF
		Compilation of statistics	CBS
Sheep and Goats	Production	Husbandry extension	APB
		Disease control	DVS
		Supply of improved stock - sheep and goat project	APB
	Marketing	Slaughtering and market inspection	DVS
		Regulated prices	MF
Poultry	Production	Husbandry extension (NPDP)	APB
		Poultry development project (NPDP)	APB/SRD
		Disease control	DVS
	Marketing	Research (NPDP)	DPD/APB
Pig	Production	Husbandry extension	APB
		Pig development project	APB
		Disease control	DVS
	Marketing	Slaughtering and market inspection	DVS

Note: APB = Animal Production Branch; DVS = Department of Veterinary Services; IADP = Integrated Agricultural Development Program; RMB = Range Management Branch; LMB = Livestock Marketing Branch; AFC = Agricultural Finance Corporation; MOA = Ministry of Agriculture; MF = Ministry of Finance; CBS = Central Bureau of Statistics; KMC = Kenya Meat Commission; DPD = Development Planning Division; NPDP = National Poultry Development Programme.

Source: Own compilation.

4. PRICING OF BEEF

As indicated above, beef is the most important meat product and the one subject to most strict price and marketing controls. Kenya Meat Commission (KMC) is a government statutory board and the government's main modus operandi in the beef industry. KMC has been in financial difficulties in recent times, and its problems are well documented (Chemonics International, 1977; Matthes, 1979). It has experienced a considerable drop in throughput at the three factories from 228,000 head of cattle in 1976 to about 60,000 in 1978. Producer sales of drought-affected stock in 1976 explain part of this difference, but there has also been a large drop in the number of high quality cattle slaughtered.

Since 1973 when KMC's control over the domestic beef market was relaxed,[2] KMC has faced increasing competition from at least 14 private slaughterhouses which also supply the Nairobi market, KMC's biggest outlet. Throughput of these slaughterhouses has been estimated at 73,000 in 1978 (White and Meadows, 1978). None of these slaughterhouses operate a grading system and several do not meet the government's regulated standards for hygiene and humane killing. They are therefore able to operate on smaller margins than KMC and are able and required to sell meat at the wholesale level at a price below KMC.

Minimum producer prices are set on a CDW (cold dressed weight) basis for carcasses graded from FAO (fair average quality) to manufacturing quality. There is a deduction if beef measles cysts are identified. In practice, traders buy live animals and the controlled prices only apply to purchases by KMC. However, in order to be competitive and attract throughput, KMC purchases live animals at prices above the minimum CDW equivalent.

Table 3. Beef Producer Prices in March 1979, KShs/Kg CDW

Prime and choice carcasses	open
FAQ carcasses	8.25
Standard carcasses	6.95
Commercial carcasses	5.45
Manufacturing carcasses	2.95

Source: Ministry of Agriculture.

---

2. This was done with KMC's consent as it had a large share of the domestic market at the time and, because of the buoyant world beef prices, wished to concentrate on the export market.

Maximum wholesale prices are set for both forequarters (FG) and hindquarters (HQ), and graded from prime to commercial quality. There are separate schedules for KMC and for all other abattoirs and the KMC schedule is up to 28% higher for prime forequarter. KMC is at a disadvantage relative to the lower cost wholesalers who are able and required to sell meat at considerably lower prices.

Table 4. Beef Wholesale Prices in March 1979, KShs/kg

	KMC		All other abattoirs	
	Forequarter	Hindquarter	Forequarter	Hindquarter
Prime	11.50	13.05	9.00	11.00
Choice	8.50	12.20	8.00	10.00
FAQ	8.15	11.15	7.25	9.50
Standard	8.60	9.00	7.70	8.10
Commercial	7.10	7.60	6.20	6.70

Source: Legal Notice No. 36/1978

There are some anomalies in these schedules. For example, the price of FAQ forequarters for both KMC and other abattoirs is less than the corresponding price for standard beef. In addition, the price differential between forequarters and hindquarters is KSh 3.70 for KMC choice, but only KSh 1.55 for KMC prime. The most important wholesale prices (because they influence the retail price of meat bone-in) are the FAQ and standard forequarter prices. KMC commercial hindquarters are used for canning; all other KMC hindquarters are used by butchers for speciality cuts, as even standard hinderquarter (at KSh 9.00 per Kg) is too expensive to be resold at the retail level as meat bone-in (at KSh 10.30 per Kg).

The majority of meat consumers do not differentiate between standards or grades, and abattoirs other than KMC do not grade meat. A butcher could therefore make considerable profit if able to buy standard hindquarters from other abattoirs at KSh 8.10 per Kg and sell a large part of the meat as speciality cuts like fillet and sirloin which sell for up to KSh 19 per Kg. KMC's average processing costs for an annual throughput of 150,000 head is stated to be KSh 1.85 per Kg, and KSh 2.20 per Kg CDW for the present rate of throughput of approximately 60,000 per year. KMC therefore makes losses on higher grades e.g. FAQ.

Table 5. KMC's Average Processing Costs, KSh per Kg CDW

Purchase price KSh 4.50 liveweight (48% dressing)	9.38
Add processing cost	2.20
Less sale of byproducts	0.50
Total	12.08
Less unweighted average wholesale price (FQ and HQ)	9.71
Loss	2.37

Source: Own compilation.

Maximum retail prices are set for different areas of the country for a range of graded cuts and for meat bone-in and bone-out.[3] The prices for graded cuts are largely ignored by the trade, and in many cases the market prices are considerably higher than the regulated prices e.g. fillet sometimes sells for up to KSh 30 per Kg or even higher. According to the KMC Act, KMC cannot operate at the retail level (but does have one outlet in Mombasa and sells special 20 Kg packs in Nairobi).

Table 6. Beef Retail Prices, Nairobi, KShs/Kg

Graded Beef		Ungraded Beef	
Fillet	19.00	Beef with bone	10.30
Sirloin	19.00	Beef without bone	12.00
Sirloin on bone	18.00	Liver, heart, tongue, kidney	10.00
Rump steak	18.00	Tripes	6.00
Silverside	14.30		
Topside	15.50		
T. bone steak	19.00		
Stewing steak	14.00		
Brisket	9.30		
Mince	11.00		

Source: Legal Notice No. 36/1978.

---

3. Geographical differentiation of prices has some anomalies. For example, the controlled price for beef bone-in is KSh 9.30 per kg in Meru district and KSh 7.00 per kg in Isiolo district. It is over 300 km from the south of Meru district to the north of Isiolo and such a price differential may therefore be justified. However, the main towns (and beef markets) in the two districts are about 30 km apart, with an insignificant difference in transport costs.

Price control on ungraded beef also has some anomalies. Beef with bone is not a uniform product; bone as a percentage of CDW varies from 16% in choice carcasses to 23% or more in commercial carcasses. There are even wider variations between cuts from the same carcass. One kg of meat bone-in purchased by consumers can therefore vary considerably in bone content. Beef without bone is almost unobtainable and when obtained is usually from very low quality carcasses. This is because one kg of beef without bone sells for KSh 12, plus a small amount for the bones (20 cents) whereas if this kg was sold as meat bone-in, it would have weighted kg 1.30 and sold for KSh 10.30 per kg, i.e. it would have fetched KSh 13.40. There is therefore no benefit to be made from boning out such meat.

The Livestock Marketing Branch (LMB) has been surveying 16 markets in Kenya since late 1978. Prices in some of these markets are shown in Table 7. In all cases, the estimated retail prices as set by the saleyard price plus processing costs and profit and minus the value of the fifth quarter were above the maximum regulated retails prices.

Table 7. Comparison of Estimated and Regulated Retail Price For Beef, KSh/Kg

	Average Producer Price (live weight)	Equivalent CDW Price (42% Dressing)[1]	Estimated Retail Price[2]	Regulated retail maximum price	Difference between estimated and regulated retail prices (%)
S. Nyanza	3.40	8.10	8.90	8.80	1
Kisii	3.70	8.80	9.70	8.80	10
Narok	4.10	9.80	10.70	8.80	22
Kericho	3.40	8.10	8.90	8.80	1
Machakos	5.50	13.10	14.40	9.30	55
Samburu	3.40	8.10	8.90	7.00	27
Kajiado	4.40	10.50	11.50	8.80	31
Laikipia	4.60	11.00	12.00	9.30	29
Ongata Rongai	5.40	12.90	14.10	9.80	44
Kiambu	4.40	10.50	11.50	9.80	17

Notes: 1. Assume equal numbers of standard and commercial carcasses. Dressing out percentage could be higher in Laikipia and Kiambu (up to 48%) because the cattle are of higher quality. This would reduce the difference between regulated and estimated prices.

2. This is the estimated CDW price plus 20% profit margin less 10% fifth quarter. This assumes that all meat is sold bone-in and none goes to cuts.

Source: Livestock Marketing Branch, Ministry of Agriculture.

Consider the market at Kibiko, Ngong, which supplies meat to Nairobi and which was surveyed by the LMB on ten different occasions in December 1978. 172 animals were involved, 94 indigenous and the rest crossbreed or exotic. 153 were males. The liveweight ranged between 105 and 350 kg and the price range was KSh 2.86 to 6.39 per kg liveweight, with an average of KSh 5.00. Assuming a 42% dressing percentage, this would imply KSh 11.90 per kg CDW. With allowances for costs and profit and the value of the fifth quarter, this would mean a retail price (assuming no additional wholesale margins) of KSh 13.10 per kg, compared to the regulated retail price for meat bone-in of KSh 10.30 per kg in Nairobi. That this price structure does prevail is confirmed by interviews at Dagoretti market in November 1978 when hindquarters were selling at KSh 12 per kg wholesale. Clearly, only the lowest quality animals in these markets could be sold profitably as meat bone-in in Nairobi. The other animals would be slaughtered at least partly for speciality cuts or resold to KMC as FAQ or higher quality, thus attracting a higher price per kg.

If a butcher bought a 250 kg steer for KSh 1250 at Kibiko, he would have to sell the meat for KSh 1375 in order to cover costs and make a profit. Assuming favourable 48% dressing, he would have 120 kg CDW. If half was sold as meat bone-in, this would make KSh 618. The rest of the meat would therefore have to make KSh 757 from speciality cuts at KSh 12.62 per kg. This could easily be done, as graded bone-in cuts are sold above this price and graded bone-out cuts e.g. fillet, sell for much higher and price control is generally not enforced. Fillet has a red meat percentage of 77% and KSh 12.62 bone-in therefore translates to KSh 16.40 bone-out, compared to the regulated price of KSh 19 per kg. Thus some aspects of price control are evaded by butchers who even profitably sell animals they buy at prices well above the published minimum producer prices.

Finally, consider an average butcher who purchases a 170 kg. CDW steer in Naivasha and sells it in Nairobi. With lower slaughtering costs in particular, this private butcher can profitably handle meat whereas KMC operates at a loss. As a buyer of last resort and with the canning operation which takes the otherwise unmarketable animals especially during drought, KMC has a social function which makes a certain level of government subsidy appropriate. However, this argument does not apply to its normal commercial operations.

Table 8. Private Butchers' Costs and Margins for 170 Kg Steer Sold in Nairobi

	Total (KSh.)	KSh per kg CDW
Purchase price	1500.00	8.82
Transport costs	51.25	0.30
Slaughter costs	30.00	0.18
Total costs to wholesale	1581.25	9.30
Carcass wholesale value	1450.00	8.53
Hide and offals wholesale value	170.00	1.00
Total wholesale value	1620.00	9.53
Wholesale margin[1]	38.75	0.23
Meat retail price	1751.00	10.30
Retail margin[1]	131.00	0.77
Overall margin (including by products)	339.75	2.00

Note: 1. The margin covers profit and overhead costs including wages.

Source: Own compilation

5. PRICING OF SHEEP AND GOAT MEAT

Sheep and goat meat is to a large extent consumed on farms and in rural areas than in urban centres. KMC does handle sheep and goats but marketing is mainly by very small-scale local butchers. There is no price control on sheep and goat meat at the producer level. The wholesale prices are KSh 15 for KMC and KSh 13 for all other abattoirs. However, even KMC ignores this price schedule and even sells mutton A and B at KSh 20 per kg wholesale. There are different regulated retail prices for different districts as in the case of beef. In Nairobi ungraded sheep and goat meat sells for KSh 12 while the graded meat sells for KSh 19. The anomaly in this price schedule is that the retail price for ungraded meat is below the wholesale maximum price for other abattoirs.

Consider an 11 kg CDW sheep bought by a Nairobi butcher for KSh 80 in one of the important producing areas and tracked or railed to Nairobi at a cost of KSh 29.40 (actual quotation from Lodwar to Nairobi was KSh 5000 for 170 animals). The computation is shown in Table 9. As there are indications that the prices of live sheep have fallen but sheep meat prices have not, the overall margins may be even higher than the table shown.

Table 9. Private Butcher's Costs and Margins for 11 Kg Sheep Sold in Nairobi

	KSh Total	KShs per Kg CDW
Purchase price	80.00	7.27
Transport costs	29.40	2.67
Slaughter costs	6.00	0.55
Total costs to wholesale	115.40	10.49
Carcass wholesale value	115.50	10.50
Intestines, skin, liver, head	17.00	1.55
Total wholesale value	132.50	12.05
Wholesale margin[1]	17.10	1.56
Meat retail price	132.00	12.00
Retail meat margin[1]	16.50	1.50
Overall margin (including byproducts)	33.60	3.06

Note: 1. The margin covers profit and overhead costs including wages.

Source: Own compilation.

6. PRICING OF PIG MEAT

Pig meat is mainly consumed by high income urban consumers, either in the form of pork and bacon or as processed meat or sausages. It is not therefore easy to work out an 'average' retail price for pig meat. Of the recorded slaughterings of 51,000 in 1978, over 40,000 were handled by Uplands Bacon Factory, a private company which sets its own producer prices. The producer and retail prices of pork are not regulated, but processed pig meat prices are subject to confirmation by the price controller. Due to high feeding costs and the limited demand from high income consumers, pig products

are more expensive than meat from other animals. While processed products are certainly expensive, pork prices compare favourably with prices of beef and mutton. The following is a calculation of costs and margin for a small butcher buying a 60 kg CDW pig in Nyeri and selling the meat in Nairobi.

Table 10. Private Butcher's Costs and Margin for 60 Kg Pig Sold in Nairobi

	KSh Total	KSh per Kg CDW
Nyeri purchase price	480	8.00
Transport	30	0.50
Slaughter[1]	6	0.10
Total costs to wholesale	516	8.60
Byproducts	24	0.40
Meat retail price	600	10.00
Total retail value	624	10.40
Overall margin (including byproducts)	108	1.80

Note: 1. Uplands Bacon Factory slaugher costs are close to KSh 250 per animal (including all overheads) but the value of the products (including processed meats) is very much higher than for a small butcher.

Source: Own compilation.

7. PRICING OF POULTRY MEAT AND EGGS

Poultry production in Kenya can be divided into four main groups: hatcheries, commercial laying stock, broiler stock and local stock (Matthes, 1979). Egg production is almost equally divided between commercial and local birds, but only about 10% of eggs from local birds is sold through commercial channels. In contrast, about 80% of poultry meat is produced from local birds and only 20% from hatcheries, commercial laying stock and broilers. Forty per cent of meat from local stock is marketed. Whereas the marketing of eggs and local birds meat is highly diversified, about 60% of broiler production is marketed by BAT Kenya Development Limited. There is no price control on eggs or poultry meat, although the price of poultry meat is obviously influenced by the cross elasticity of demand for alternative meats. The prices of feed, a major determinant of production costs for commercial layers and broilers, are subject to confirmation by the price controller.

A series of surveys of the main urban markets is being conducted. Since the data for Nairobi is not yet available, results for Mombasa and Kisumu are presented in Table 11. The calculations assume a 75% dressing and as there is no broiler industry in Kisumu, the calculations use Mombasa prices.

Table 11. Costs and Margins for Poultry Meat

	Exotic Birds (Mombasa)		Local Birds (Kisumu)	
	Total KSh	KSh per kg CDW	Total KSh	KSh per kg CDW
Producer price	13.50	10.00	8.22	6.09
Transport	0.90	0.67	0.63	0.47
Processing and feeding in transit	6.30	4.67	0.32	0.23
Total costs to wholesale level	20.70	15.34	9.17	6.79
Wholesale price	22.50	16.67	12.33	9.13
Wholesale margin	1.80	1.33	3.16	2.34
Retail price	25.20	18.67	12.33	9.13
Retail margin	2.70	2.00	0.00	0.00

Note: In transit feeding costs are a significant proportion of marketing costs for poultry.

Source: Smith, 1979.

Table 12. Costs and Margins for Eggs, KShs/Egg

	Exotic Birds (Kisumu)	Local Birds (Kisumu)
Producer price	0.48	.35
Transport	0.02	.02
Packing	0.01	2.50
Total costs to wholesale level	0.51	39.05
Wholesale price	0.51	.43
Wholesale margin	0.00	.03
Retail price	0.60	.56
Retail margin (including parking)	.09	.13

Note: In Nairobi, eggs retail at about 67 cents and at about 65 cents in Mombasa.

Source: Smith, 1979.

The main constraints on the marketing of poutry produce are:

i. The small amount of poultry produced per farmer and the irregularity of that production.

ii. The unfavourable location of farms relative to markets and sources of supply of inputs.

iii. Lack of transportation.

iv. Lack of market information.

v. Poor storage and slaughter facilities. (Smith, 1979)

Marketing costs could be reduced if small farmers banded together to organise the collection, transport and sale of eggs and poultry meat on a cooperative basis.

8. A COMPARISON OF PRICING OF BEEF, SHEEP AND GOAT MEAT, PORK, POULTRY MEAT AND EGGS

The calculations in the four previous sections can be summarised to give a comparison of producer and retail prices for these products as in Table 13.

Table 13. A Comparison of the Prices of Various Meats and Eggs

	Beef	Sheep & goat meat	Pork	Poultry		Eggs	
				Exotic	Local	Exotic	Local
Producer price[1]	8.82	7.27	8.00	10.00	6.09	48	35
Retail price[1]	10.30	12.00	10.00	18.67	9.13	60	56
Marketing margin (%)[2]	16.8	65.1	25.0	86.7	49.9	25	60

Note: 1. In KSh per kg CDW for beef, sheep and goat meat, pork and poultry while egg prices are in cents per egg.

Source: Own compilation.

It is not easy to compare the marketing margins of these different products for a variety of reasons. The beef prices assume the animal is bought in Naivasha and the meat is sold at the regulated price, although the widespread flouting of price control regulations and the existence of quality premiums mean that the marketing margin is in practice often higher. Sheep and goats are supplied from northern Kenya, which means high transport costs

and the tendency for the few enterprising traders to dominate the market. Pig meat is consumed by a relatively small percentage of the population. The marketing margin for eggs produced from local birds is considerably in excess of that from exotic stock; the reverse is true for poultry meat.

Nevertheless, some interesting points emerge. The product most subject to price control — beef bone-in — has the lowest marketing margin (although quality cuts have a higher mark-up). Retail price control on beef may be holding down the retail price of pork and local poultry meat to some degree (although the producer prices are lower than for beef) but this does not seem to be the case for sheep and goat meat. These marketing margins can be compared with those of some other agricultural products which ranged from 257% for wattleback to 3% for coffee (Aldington, 1979).

Price control on beef has obviously been used as a method of keeping down producer prices. Beef prices have not risen as rapidly as the consumer prices of other products. It has not therefore led to marketing inefficiency in the sense of excessive traders' margins, although the anticipation of regularly increased wholesale prices may have contributed to the lack of cost-consciousness on the part of KMC. However, price control on beef has had a longer term effect on the beef industry: prices held below free market levels have led to a lack of investment which manifests itself in reduced market supplies and an upward pressure on prices.

9. CONCLUSION

Price control has achieved its aim of holding down the consumer price of beef to the detriment of increased investment in, and output from, the industry. It also has had some effect in holding down the price of beef substitutes e.g. pork and local poultry meat. However, broiler meat from exotic stock and mutton are sold at higher market prices because they are luxuries rather than stable meats. This situation has led to increased investment in sheep and goat production which might help to alleviate the anticipated deficit in meat supply. The production of broiler meat is increasing through the assistance of the National Poultry Development Project (NPDP). The establishment of more slaughter facilities (to reduce marketing margins) and the improvement of production methods are necessary to hold down costs within the industry. An increase in the supply of poultry meat from local birds could be stimulated by improved transport and slaughtering facilities, which would lead to reduced marketing costs.

KMC has been in financial difficulties, partly as a result of price control whereby it has had to contend with increasing producer prices in the face of static wholesale prices and partly because of competition from low-cost slaughterhouses, which ignore also in many instances price control regulations. A new look at meat pricing in Kenya seems warranted, with the aim of redefining KMC's role, encouraging production, lessening some of the more restrictive aspects of price control, and developing market intelligence and coordination within and between the meat industries. Price policies which do not encourage an increase in supplies will lead (in combination with a rapid human population increase) to a reduction in per capita meat availability.

REFERENCES

1. Aldington, T.J. 1979. 'Pricing and Competition in Agricultural Markets in Kenya'. Ministry of Agriculture, Nairobi.

2. Chemonics International. 1977. 'Livestock and Meat Industry Development Study'. Prepared for the Ministry of Agriculture, Nairobi.

3. Kenya. 1977. Urban Food Purchasing Survey. Central Bureau of Statistics. Nairobi.

4. Kenya. 1978. The Plan for Agriculture 1979-83 and associated papers. Ministry of Agriculture, Nairobi.

5. Matthes, M.C. 1978. 'Analysis of Beef Prices'. UNDP-FAO Marketing Development Project, Ministry of Agriculture, Nairobi.

6. Matthes, M.C. 1979. 'The Kenya Meat Commission'. UNDP-FAO Marketing Development Project, Ministry of Agriculture, Nairobi.

7. Shah, M.M. 1978. 'Food Demand Projections Incorporating Urbanisation and Income Distribution, Kenya 1975-2000'. UNDP-FAO Marketing Development Project, Ministry of Agriculture, Nairobi.

8. Smith, C. 1979. 'A Brief Analysis of the Poultry Industry in Kenya'. National Poultry Development Programme, Ministry of Agriculture, Nairobi.

9. White, Judy and S.J. Meadows. 1978. 'Meat Supplies'. Livestock Marketing Division, Ministry of Agriculture, Nairobi.

PRICE ORDERS MADE UNDER THE PRICE CONTROL ACT, JANUARY 1964 TO JUNE 1979[a]

	Price Order	Legal Notice No.
1.	Maize and Maizemeal (Amendment) (No.2)	6/1964
2.	Maximum Retail Prices	51/1964
3.	Nairobi Area	63/1964
4.	Mombasa District	81/1964
5.	Sugar (Amendment)	91/1964
6.	Thika District (Amendment)	97/1964
7.	Mombasa District (Amendment)	98/1964
8.	Nairobi Area (Amendment)	99/1964
9.	Nakuru District	121/1964
10.	Sugar (Amendment) (No.2)	154/1964
11.	Revocation of order	169/1964
12.	Maize and Maizemeal (Amendment)	170/1964
13.	Meru District	171/1964
14.	Maize (Marsabit District)	172/1964
15.	Uasin Gishu District	178/1964
16.	Central Nyanza District	234/1964
17.	Trans Nzoia District	246/1964
18.	Central Nyanza District (Amendment)	259/1964
19.	Central Nyanza District (Amendment) (No. 2)	302/1964
20.	Nyeri District	344/1964
21.	Kericho District	5/1965
22.	Maize and Maizemeal (Amendment)	18/1965
23.	Sifted Maizemeal*	81/1965
24.	Maize and Maizemeal (Marsabit District)	82/1965
25.	Maize and Maizemeal (Baringo District)	83/1965
26.	Maize and Maizemeal (Elgeyo-Marakwet District)	84/1965
27.	Maize and Maizemeal (Amendment) (No. 2)	85/1965
28.	Maize and Maizemeal (Kitui District) (Amendment)	86/1965
29.	Maximum Retail Prices (Revocation of Order)	113/1965
30.	Sifted Maizemeal (Amendment)	132/1965
31.	Brazilian Sugar (Temporary Provision)	140/1965
32.	Sifted Maizemeal (Amendment) (No. 2)	324/1965
33.	Maize and Maizemeal (Amendment) (No. 3)	325/1965
34.	Maize and Maizemeal (Amendment) (No. 4)	337/1965

a. Culled from Kenya Gazette Seupplement, relevant issues, by J.T. Mukui. The price of milk is made under the Dairy Industry Act and is determined by the Kenya Dairy Board. Orders marked with an asterisk (*) show when the particular commodity or group of commodities was first put under price control.

	Price Order	Legal Notice No.
35.	Bread*	50/1966
36.	Sugar (Amendment)	120/1966
37.	Maize and Maizemeal (Marsabit District) (Amendment)	248/1966
38.	Sugar (Amendment) (No. 2)	280/1966
39.	Sugar (Amendment)	164/1967
40.	Rice*	266/1967
41.	Meat*	267/1967
42.	Marking Price of Goods	68/1968
43.	Woodfuel (Amendment)	199/1968
44.	Sugar	270/1968
45.	Maize and Maizemeal (Amendment)	1/1969
46.	Sifted Maizemeal (Amendment)	2/1969
47.	Rice	31/1969
48.	Sugar (Amendment)	113/1969
49.	Rice	156/1969
50.	Maize and Maizemeal	294/1969
51.	Sifted Maizemeal	295/1969
52.	Rice	68/1970
53.	Bread	102/1970
54.	Sifted Maizemeal	22/1971
55.	Sugar	136/1971
56.	Beer and Stouts*	150/1971
57.	Meat	200/1971
58.	Rice	255/1971
59.	Sifted Maizemeal (Amendment)	300/1971
60.	Maize and Maizemeal (Amendment)	301/1971
61.	General Prices (Temporary)*	302/1971
62.	Sugar	54/1972
63.	Beer and Stouts	165/1972
64.	Beer and Stouts	241/1972
65.	Rice	246/1972
66.	Rice (Amendment)	7/1973
67.	Soft drinks*	13/1973
68.	Wines and Spirits*	73/1973
69.	Meat	129/1973
70.	Matches*	165/1973
71.	Charcoal*	166/1973
72.	Tea*	167/1973
73.	Galvanised Iron*	168/1973

Price Order		Legal Notice No.
74.	Nails*	169/1973
75.	Tooth Pastes and Tooth Brushes*	170/1973
76.	Barbed Wire*	171/1973
77.	Salt*	172/1973
78.	Soaps and Detergents*	173/1973
79.	Beans, Peas, Grams and Njahi*	174/1973
80.	Fats and Edible Oils*	175/1973
81.	Toilet Paper*	176/1973
82.	Cement*	177/1973
83.	Wines and Spirits	178/1973
84.	Cement (Amendment)	184/1973
85.	Tooth Pastes and Tooth Brushes (Amendment)	218/1973
86.	Soaps and Detergents	219/1973
87.	Fats and Edible Oils (Amendment)	220/1973
88.	Wheat Flour*	21/1974
89.	Bread	22/1974
90.	Baby Foods*	23/1974
91.	Sifted Maizemeal (Amendment)	24/1974
92.	Maize and Maizemeal (Amendment)	25/1974
93.	Wines and Spirits	26/1974
94.	Sugar (Amendment)	33/1974
95.	Cement	66/1974
96.	Beans, Peas, Grams and Njahi (Revocation of Order)	91/1974
97.	Salt	112/1974
98.	Beer and Stouts	116/1974
99.	Fats and Edible Oils (Amendment)	117/1974
100.	Soaps and Detergents (Amendment)	196/1974
101.	Salt	197/1974
102.	Soft Drinks	198/1974
103.	Wines and Spirits	201/1974
104.	Matches	202/1974
105.	Galvanised Iron (Amendment)	203/1974
106.	Nails (Amendment)	204/1974
107.	Barbed Wire (Amendment)	205/1974
108.	Wheat Flour (Amendment)	217/1974
109.	Rice (Amendment)	218/1974
110.	Bread (Amendment)	219/1974
111.	Sifted Maizemeal (Amendment)	220/1974
112.	Maize and Maizemeal (Amendment)	221/1974

Price Order		Legal Notice No.
113.	Cement (Amendment)	244/1974
114.	Tooth Pastes and Tooth Brushes (Amendment)	286/1974
115.	Baby Foods (Amendment)	287/1974
116.	Matches (Amendment)	288/1974
117.	Toilet Paper (Amendment)	289/1974
118.	Beer and Stouts (Amendment)	290/1974
119.	General Prices	314/1974
120.	Maize and Maizemeal (Amendment)	33/1975
121.	Sifted Maizemeal (Amendment)	34/1975
122.	Wheat Flour (Amendment)	35/1975
123.	Bread (Amendment)	36/1975
124.	Meat	37/1975
125.	Rice (Amendment)	38/1975
126.	Sugar	39/1975
127.	Wines and Spirits	40/1975
128.	Cement	74/1975
129.	Tooth Pastes and Tooth Brushes (Amendment)	75/1975
130.	Soaps and Detergents (Amendment)	76/1975
131.	Toilet Paper (Amendment)	77/1975
132.	Bread (Amendment) (No. 2)	100/1975
133.	Beer and Stouts (Amendment)	101/1975
134.	Charcoal (Amendment)	102/1975
135.	Wines and Spirits (Amendment)	103/1975
136.	Soft Drinks	104/1975
137.	Cement (Amendment)	185/1975
138.	Baby Foods (Amendment)	186/1975
139.	Tooth Pastes and Tooth Brushes (Amendment) (No. 2)	187/1975
140.	Fats and Edible Oils (Amendment)	188/1975
141.	Wines and Spirits (Amendment)	17/1976
142.	Sugar	53/1976
143.	Rice	54/1976
144.	Fats and Edible Oils (Amendment)	118/1976
145.	Meat (Amendment)	119/1976
146.	Toilet Paper (Amendment)	120/1976
147.	General Prices	153/1976
148.	Beer and Stouts (Amendment)	188/1976
149.	Wines and Spirits (Amendment)	189/1976
150.	Charcoal (Amendment)	14/1977
151.	Galvanised Iron (Amendment)	15/1977
152.	Cement (Amendment)	25/1977

Price Order		Legal Notice No.
153.	Maize and Maizemeal (Amendment)	88/1977
154.	Sifted Maizemeal (Amendment)	89/1977
155.	Bread (Amendment)	90/1977
156.	Meat	91/1977
157.	Wines and Spirits (Amendment)	103/1977
158.	Wheat Flour (Amendment)	113/1977
159.	Soft Drinks	114/1977
160.	Salt	115/1977
161.	Sugar (Amendment)	117/1977
162.	Fats and Edible Oils (Amendment)	201/1977
163.	Beer and Stouts (Amendment)	202/1977
164.	Charcoal	203/1977
165.	Soft Drinks (Amendment)	204/1977
166.	Salt (Amendment)	205/1977
167.	Wines and Spirits (Amendment)	213/1977
168.	Fats and Edible Oils (Amendment) (No. 2)	238/1977
169.	Maize and Maizemeal (Amendment) (No. 2)	275/1977
170.	Sifted Maizemeal (Amendment) (No. 2)	276/1977
171.	Soft Drinks (Amendment)	297/1977
172.	Sifted Maizemeal (Amendment)	26/1978
173.	Cement (Amendment)	27/1978
174.	Nails (Amendment)	28/1978
175.	Wines and Spirits (Amendment)	29/1978
176.	Meat	36/1978
177.	Rice (Amendment)	58/1978
178.	Rice (Amendment) (No. 2)	97/1978
179.	Beer and Stouts	120/1978
180.	Wines and Spirits (Amendment) (No. 2)	126/1978
181.	Soft Drinks	144/1978
182.	Maize and Maizemeal	241/1978
183.	Wines and Spirits (Revocation)	31/1979
184.	Nails	51/1979
185.	Cement	80/1979
186.	Charcoal	81/1979
187.	Baby Foods (Amendment)	82/1979
188.	Baby Foods (Amendment)	133/1979
189.	Galvanized Iron (Amendment)	134/1979
190.	Nails (Amendment)	135/1979
191.	Beers and Stouts (Amendment)	136/1979
192.	Cement	137/1979
193.	Soaps and Detergents (Amendment)	139/1979
194.	Soft Drinks (Amendment)	140/1979

PRICE AND MARKETING CONTROLS IN KENYA

List of Participants

1. Dr. T.J. Aldington
Planning Division
Ministry of Agriculture
P.O. Box 30028
NAIROBI

2. Dr. P.O. Alila
Institute for Development Studies
University of Nairobi
P.O. Box 30197
NAIROBI

3. Mr. H. Bendt
Friedrich-Ebert Stiftung
P.O. Box 48143
NAIROBI

4. Dr. D.J. Campbell
Institute for Development Studies
University of Nairobi
P.O. Box 30197
NAIROBI

5. Mr. D. Casley
Central Bureau of Statistics
P.O. Box 30266
NAIROBI

6. Mr. R. Dowe
Friedrich-Ebert Stiftung
P.O. Box 48143
NAIROBI

7. Mr. G. Farago
Employment Promotion Division
Ministry of Labour
P.O. Box 40326
NAIROBI

8. Dr. David Feldman
Scientific Research Division
Ministry of Agriculture
P.O. Box 30028
NAIROBI

9. Miss Elsie B. Garfield
Institute for Development Studies
University of Nairobi
P.O. Box 30197
NAIROBI

10. Mr. S.B.O. Gutto
Institute for Development Studies
University of Nairobi
P.O. Box 30197
NAIROBI

11. Dr. P. N. Hopcraft
Institute for Development Studies
University of Nairobi
P.O. Box 30197
NAIROBI

12. Mr. G.K. Ikiara
Department of Economics
University of Nairobi
P.O. Box 30197
NAIROBI

13. Mr. S.M. Ita
Kenya Association of Manufacturers
P.O. Box 30225
NAIROBI

14. Mr. D. Kabagambe
Department of Urban and Regional Planning
University of Nairobi
P.O. Box 30197
NAIROBI

15. Mr. George Kamau
Kenya National Chamber of Commerce and Industry
P.O. Box 47024
NAIROBI

16. Dr. L. Kersten
Marketing Development Project
Ministry of Commerce and Industry
P.O. Box 30430
NAIROBI

17. Prof. Tony Killick
Department of Economics
University of Nairobi
P.O. Box 30197
NAIROBI

18. Mr. H.K. Maritim
Department of Agricultural Economics
University of Nairobi
P.O. Box 30197
NAIROBI

19. Mr. M.C. Matthes
Marketing Development Project
Ministry of Commerce and Industry
P.O. Box 30430
NAIROBI

20. Dr. O.L.E. Mbatia
Department of Agricultural Economics
University of Nairobi
P.O. Box 30197
NAIROBI

21. Mr. E.S. Mbugua
Institute for Development Studies
University of Nairobi
P.O. Box 30197
NAIROBI

22. Mr. I.D. McArthur
Planning Division
Ministry of Agriculture
P.O. Box 30028
NAIROBI

23. Dr. S.E. Migot-Adholla
Institute for Development Studies
University of Nairobi
P.O. Box 30197
NAIROBI

24. Mr. Ngugi Mirie
Institute for Development Studies
University of Nairobi
P.O. Box 30197
NAIROBI

25. Mr. Ali I. Mohamed
Central Organisation of Trade Unions
P.O. Box 13000
NAIROBI

26. Mr. J.T. Mukui
Institute for Development Studies
University of Nairobi
P.O. Box 30197
NAIROBI

27. Prof. O.K. Mutungi
Faculty of Law
University of Nairobi
P.O. Box 30197
NAIROBI

28. Dr. W.M. Mwangi
Department of Agricultural Economics
University of Nairobi
P.O. Box 30197
NAIROBI

29. Mrs. Christine Ndirangu
Kenya Consumers' Organisation
P.O. Box 30255
NAIROBI

30. Mr. N. Njoroge
Kenya Dairy Board
P.O. Box 30406
NAIROBI

31. Mr. J.A. Nkinyangi
Institute for Development Studies
University of Nairobi
P.O. Box 30197
NAIROBI

32. Dr. Ole Norgaard
Institute for Development Studies
University of Nairobi
P.O. Box 30197
NAIROBI

33. Mr. B.E. Oduor-Otieno
Employment Promotion Division
Ministry of Labour
P.O. Box 40326
NAIROBI

34. Mr. S.O. Ogundo
Central Bank of Kenya
P.O. Box 60000
NAIROBI

35. Dr. C.O. Okidi
Institute for Development Studies
University of Nairobi
P.O. Box 30197
NAIROBI

36. Mr. G.H. Olum
Central Bureau of Statistics
P.O. Box 30266
NAIROBI

37. Mr. Fred Omido
Central Organisation of Trade Unions
P.O. Box 13000
NAIROBI

38. Mr. Vitalis Ong'oa
Marketing Development Project
Ministry of Agriculture
P.O. Box 30028
NAIROBI

39. Mr. J. Ouko
Institute for Development Studies
University of Nairobi
P.O. Box 30197
NAIROBI

40. Dr. G.M. Ruigu
Institute for Development Studies
University of Nairobi
P.O. Box 30197
NAIROBI

41. Dr. T.C.I. Ryan
Department of Economics
University of Nairobi
P.O. Box 30197
NAIROBI

42. Dr. Guenter Schmidt
Institute for Development Studies
University of Nairobi
P.O. Box 30197
NAIROBI

43. Dr. K.L. Sharma
Department of Agricultural
Economics
University of Nairobi
P.O. Box 30197
NAIROBI

44. Dr. Jennifer Sharpley
Planning Division
Ministry of Agriculture
P.O. Box 30028
NAIROBI

45. Dr. C. Smith
Planning Division
Ministry of Agriculture
P.O. Box 30028
NAIROBI

46. Miss M.W. Waruingi
Institute for Development Studies
University of Nairobi
P.O. Box 30197
NAIROBI

47. Mr. John White
East Africa Development Divison
British High Commission
P.O. Box 30465
NAIROBI

48. Mr. James Winpenny
Ministry of Overseas Development
London