THE MARKETING OF MAIZE, COTTON AND
PYRETHRUM THROUGH COOPERATIVE SOCIETIES
AND STATUTORY MARKETING BOARDS IN EAST AFRICA.

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# ABSTRACT OF THESIS


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Title The marketing of maize, cotton and pyrethrum through Cooperative Societies and Statutory Marketing Boards in East Africa.

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A critical enquiry into the functioning of the marketing system in East Africa where Cooperatives buy from growers and sell to Boards maize, cotton and pyrethrum in competition with private intermediaries such as produce traders, registered agents and licensed processors.

Existing data on controlled marketing is sparse, therefore a Survey Analysis on producer marketing was undertaken in twelve districts of Kenya to collect primary data; this was required to assess the various problems uncovered by the research and to investigate the complaints voiced by participants in this marketing system.

An overview of government intervention in agricultural marketing is related to the growth of the public sector; there is a detailed analysis of the marketing system in East Africa, with particular reference to Board monopsony, costs, prices and margins, Cooperative monopoly and the private sector, the role of agents and processing.

The Survey data, collected by personal interviewing with precoded questionnaires, is presented in tabular form, and there is a narrative commentary on these Tables.

There is an assessment of problems and complaints which draws heavily on the significant results of the Survey, and on secondary data. Findings are summarised, and after a concluding section is a detailed statement of recommendations for action to improve the marketing system as it relates to maize, cotton and pyrethrum.

Throughout the thesis are diagrams, statistical tables, references, detailed appendices and pro formas.

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# PART 1

## Section 1.

## SCOPE OF THE THESIS

1. Acknowledgements

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Professor N.C. Hunt, Department of Business Studies, University of Edinburgh.

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General Manager and the staff of the Maize & Produce Boards.

Deputy General Manager and the staff of the Cotton, Lint and Seed Marketing Boards.

Deputy Chief Executive and the staff of the Pyrethrum Board and the Pyrethrum Marketing Board.

Inspectors of Statutory Boards and their staff.

The Director and members of the Nordic Cooperative Project in East Africa.

I am also indebted to the Deans' Committee of the University of East Africa for generously providing funds.

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## 2. Thesis outline

### Part 1.

Section 1 - Scope of the Thesis.

The parameters of the thesis; the importance of agricultural marketing to the economy of East Africa; statement of marketing problems.

Section 2 - The Framework of Marketing.

Marketing theory and the applications of marketing in the African environment. Forms of Government and private participation in and control of marketing functions. Review of experience gained in operating Boards and Cooperatives in Africa, and how they work.

### Part 2.

Section 1 - The Products

Descriptions of the products to be studied, reasons for choosing them and their distribution in East Africa.

Section 2 - The Marketing System

Development of agricultural marketing in Kenya, Uganda and Tanzania, and the economic effects of statutory control. Distributive channels, and the relationships between Boards and Cooperatives. Functions of intermediaries, and Board and Cooperative involvement in processing industries.

Figures - These are listed and paged as they occur in the text of Parts 1 and 2.

Tables - These are listed and paged as they occur in the text of Parts 1 and 2.

Part 3.

Section 1 - Data Evaluation

Explanation of how survey data is presented, and detailed account of the numerical results of the Survey, with generalised responses set out in the order of ranking assigned by respondents. Analysis of Survey data related to the Problems and Complaints in the Part 1, Section 1 (6); presentation of Findings. Conclusion to the thesis is followed by Recommendations justified by these Findings. There is also a list of sources, and a Bibliography.

Section 2 - Pro Formas

Section 3 - Survey Analysis of Producer Marketing in Twelve Districts of Kenya.

Design and Location of the Survey, and an explanation of the personal interviewing used to collect the data. Detailed break-down of identity and size of populations and samples interviewed. Methods of questionnaire construction, and processing of Survey data.

Part 4.

Section 1 - Survey Tables

The order, lay-out and grouping of the Survey Tables which are set out from 1 to 114.

Section 2 - Appendices to the Survey

These contain the Questionnaires, detailed localities of the Survey, and notes for the guidance of Enumerators. Also listed are distributions of maize growers, Registered Agents, and cotton and Pyrethrum Cooperatives; Sampling frame used.

## 3. Introduction

Agricultural marketing is vital to the development of the economies of the three East African territories, since upon it depend the expansion of exports of produce, earning much needed foreign exchange, and the achievement of self sufficiency in food crops. It is also the means by which the standard of living of the majority of the African population who are small-scale producers can be raised speedily; that is, by bringing more of them to exploit and market more profitably and productively a wider variety of resources on the land.

The importance of agriculture is illustrated by the fact that in Kenya agriculture and livestock industries account for about 42% of the Gross Domestic Product and for about 81% of all exports, and in Uganda cotton is the source of more than 30% of foreign exchange earnings. The major feature in improving marketing is the very high proportion of agricultural products handled by Cooperative Societies and Statutory Marketing Boards. For example, in Tanzania Marketing Boards control or influence over 90% of total monetary output of the non-subsistence agricultural sector; in Uganda about 96% of national cotton production and in Tanzania about 80% of all pyrethrum production derive from Cooperatives.

There is also a fundamental social priority served by the agricultural marketing system: its contribution towards alleviating urban unemployment by providing more jobs on the land, and maintaining a standard of living in rural areas comparable if not better than that enjoyed by the majority of Africans in the towns. Hence President Kenyatta's call "Back to the Land."[1]

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1. When registration of the unemployed was begun in Kenya in 1969, a special appeal was made by the Government to those living in the countryside not to flock to registration centres in the towns to find new jobs, but to stay in their villages and work the land through their Cooperatives.

The concern of the East African Governments for the efficient and profitable functioning of both Boards and Cooperatives is shown in two recent official publications:

(i) "The Report of the Presidential Special Committee of Enquiry into the Cooperative Movement and Marketing Boards in Tanzania"; Government Printer, Dar es Salaam, 1966.

(ii) "The Report of the Committee of Inquiry into the Affairs of all Cooperative Unions in Uganda";
Government Printer, Entebbe, 1967.

In Kenya, a Presidential Working Party to investiage all Marketing Boards was set up on 14 February 1966 under the Chairmanship of Mr. M. Kibaki, then Assistant Minister of Economic Planning and Development, and instructed to report by 1 May of that year. This Committee, however, never completed its task owing to staff changes, and although some evidence was collected, no findings or recommendations were reached.[1]

There has thus been no authoritative report yet on Boards or Cooperatives in Kenya, although the need for research work to be undertaken into both was recognised by almost all officials contacted. Indeed, the Government has shown continuing concern about the satisfactory working of Boards and Cooperatives.[2]

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1. Personal interview with officials of the Ministry of Economic Planning and Development, Nairobi; December 1967.

2. For instance, in "Planning for Progress: Our second Development Plan" Government Printer, Nairobi 1969, it is stated on pages 39 and 40, "More attention will be given to improving the efficiency of the agricultural marketing system. Many agricultural products are marketed through statutory marketing boards. In some cases these boards have not been efficient. For this reason, the Government intends to pay much closer attention to the operations of these Boards and make changes wherever necessary. Cooperatives are also heavily involved in agricultural marketing. In many instances they have an important role to play in bridging the gap between the small-scale producer and other marketing institutions which can afford to handle only large quantities. The performance of many societies has been poor, and they have been paying their members too low a price for farm produce. The Government attaches great importance to the healthy development of cooperatives."

The current extent of definitive research publications on Boards and Cooperatives in East Africa reflects a similar situation. There have been two important research papers into Statutory Marketing Boards in Uganda and Tanzania.

(i) "Marketing Boards in Uganda" by Professor B. Walker, University of Exeter; in Proceedings of the International Economic Association: Problems in Economic Development, edited by E.A.G. Robinson; Macmillan, 1965.

(ii) "The Role of Marketing Boards in Tanzania" by W. Lamade; Economic Research Bureau, Paper 67; University College, Dar es Salaam, 1967.

Also published recently is a comprehensive study of Cooperative Societies in Uganda and Tanzania:

"The Cooperative Movement in Tanzania and Uganda - Possibilities and Objectives" by M. Paulus; Institut fur Wirtschaftsforschung, Munich, Afrika Studien 15; Springer Verlag, 1967.

No comparable research has yet been done into either Boards or Cooperatives in Kenya by the University of East Africa, by the Kenya Government or by any other agency or institution. This thesis will therefore be concentrated on the marketing of maize, cotton, and pyrethrum through Boards and Cooperatives in Kenya, but continuing reference will be made to Boards and Cooperatives in Tanzania and Uganda because of the following factors:

1. The background to the marketing of these commodities includes developments throughout East Africa.
2. Inter-territorial trade is carried on by the respective Boards, notably cotton in Uganda, maize in Tanzania and pyrethrum in Kenya.
3. The operations of Boards and Cooperatives in Uganda and Tanzania can be compared with those of Kenya.
4. Significant aspects of the three Governments' marketing policies towards Boards and Cooperatives throughout East Africa, and the effects of these policies in the three territories.
5. The roles of Boards and Cooperatives figure prominently in the Development Plans of the three territories.

6. Differences in the structure and organisation of those Boards and Cooperatives in Uganda, Kenya and Tanzania dealing in maize, cotton and pyrethrum.

Approval for the necessary research to be carried out was obtained from the Kenya Government.[1]

Finally, this Introduction summarises the principal topics which will be examined in this thesis:

1. An analysis of the nature and functions of Boards and Cooperatives concerned with maize, cotton and pyrethrum marketing.
2. An overview of the roles of these Boards and Cooperatives in the total marketing system.
3. An enquiry into Board and Cooperative involvement in processing industries.
4. An analysis of significant differences in marketing policies of Boards and Cooperatives throughout East Africa.
5. A critical examination of the functions of intermediaries in the marketing system and their relationships with Boards and Cooperatives.
6. A study of monopoly and monopsony in Board and Cooperative marketing.
7. An assessment of the feasibility of the marketing objectives set Boards and Cooperatives by Government through legislation.
8. A restatement of the marketing requirements of small-scale growers, and a commentary on the extent to which these are being met by existing Board and Cooperative services.
9. An analysis of the volume of produce being delivered to Boards and its derivation from Cooperatives, growers and other agencies.

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1. Letter ADM/13/001/C.160(6) of 8 May 1968 from the Office of the President.

4. Definitions[1]

A Cooperative Society is an association of producers, usually of limited means, who have voluntarily joined together to form a democratically controlled business enterprise to market collectively their produce, making equal contributions to the capital required, and accepting a fair share of the works and benefits of the undertaking.

A Marketing Board is a statutory commodity body set up by Government with monopoly powers of buying and selling, to control or develop some or all of those activities of growers, Cooperative Societies and other enterprises in the processing and marketing of a commodity or category of produce, and in particular to guarantee prices to all producers.

5. Assumptions

The assumptions are, first, that controlled marketing through Boards and Cooperatives in East Africa is a necessary part of the three Governments' policies of developing small-holder African production of maize, cotton and pyrethrum. Second, that the price protection and production guarantees offered under controlled marketing can further the interests of the African producers themselves.

Acceptance of these two assumptions in no way limits a critical approach to the present system of controlled marketing. It must be made clear though, that whatever shortcomings are found in this system, the terms of reference of this thesis are primarily an examination of Board and Cooperative marketing. It would, however, be less than objective not to point out that the entire concept of controlled marketing has been the subject of informed and authoritative criticism.[2] And the East Africa Royal Commission Report, though somewhat dated, is still the single

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1. These are the author's.

2. "Why Organise Agriculture?"; by N.S. Carey Jones; East African Economics Review, Volume 7, No.2; December 1960.

most comprehensive survey of East Africa ever undertaken.[1] It contends, in its section on marketing and distribution, that in a developing economy public policy should aim at flexibility rather than control, that is, to encourage producers and other participants in the distributive system to undertake only those functions which are most profitable to them in a freely operating market.[2]

This Commission, however, gives no detailed indication of how the flexibility which it recommends can be applied to the marketing system in East Africa. Indeed, it recognises the value to small-scale growers of the Cooperative movement.[3]

Controlled marketing in the conditions of East Africa seeks particularly to stabilise grower prices in order to encourage higher levels of production of improved qualities of produce, for cash sale as opposed to subsistence production. This is one of the declared aims of the East African Governments in their Development Plans. Government participation in every type of commercial activity is envisaged in these Plans, and the marketing of produce is no exception. And it is at least arguable that controls effected through statutory bodies and agencies facilitate the collection of revenue.

Given the assumptions that controlled marketing is Government policy, and that this is being implemented in the interests of the grower, this thesis will examine the practical problems to be outlined in Section 6 and suggest solutions to them. In short, it will question the workings of Boards and Cooperatives, not their existence.

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1. East Africa Royal Commission Report, 1953-1955; Part III, Chapter 7; London, H.M.S.O. 1961; Cmd. 9475.
2. The Commission criticised, for example, in paragraph 32, the restrictive marketing facilities for cotton growers in Uganda, and argued that "... it is important that public policy should endeavour ... to create conditions which will be more favourable to the flexibility which the economy requires" (pages 75 and 76).
3. Paragraph 22 on page 71.

6. The Problems

The main problem can be summarised as how best to integrate the activities of Boards and Cooperatives, and other agencies, in the marketing by producers in East Africa of maize, cotton and pyrethrum.

Within this major problem, however, there are, first, a number of subsidiary problems, and second, complaints voiced by participants in the marketing system. The scope of these problems and complaints is considerable, and they are examined throughout the four Parts of this thesis.

A. The subsidiary problems uncovered in the course of this research can be categorised as follows:

1. There is the problem of real and apparent conflict between producers and traders in maize, cotton and pyrethrum marketing, particularly where the "middlemen" have become categorised as Asians. Such conflict must be viewed in the light of official concern for the interests of the African producers, sometimes at the expense of those of other participants, who provide them with valuable services such as stockholding and forward buying.

2. The producer protection policies of the Boards pose a problem, because the internal guaranteed price, particularly in maize, has been higher than the world market price and the difference has to be passed on in the subsequent year to the grower who pays a levy and thus receives much less money for his crop. And in subsequent seasons the grower tends to plant less and less maize with the result that a shortage of maize occurs in the country. Then maize has to be bought from overseas with a consequent loss of currency to Kenya's economy as a whole.

3. There is the problem of the multiplicity of small single crop Cooperatives, and the need to increase the size of the Primary Society so that it may deal in a number of crops as part of a District Union. This can reduce duplication of services and overhead costs at District level.

4. While the grower has to sell to a Marketing Board, he is not in all circumstances obliged to sell through a Cooperative; he is under Section 48 (1) of the Cooperative Societies Act of 1966 where members of a Cooperative market 60% of all production of any category of produce. There is therefore the problem of "selling" Cooperative membership to him, particularly when higher prices may be offered elsewhere. For in order to participate in Cooperative marketing, the grower must make an initial capital investment, however, small; if his Society is to expand, then some of the return he might expect from selling to the trader must be retained by the Cooperative, thus reducing the grower's income.

5. Many growers have been induced to join Cooperatives with the promise that in addition to the payment they receive when they deliver their produce to the Cooperative store, they will receive a second payment when all their produce is marketed by the Board. Instead they are told that every year their Society incurs a loss; and even when there is money available for second payments, it is used to pay off members whom the Cooperative already owes for other debts. Consequently, growers are continually owed money by their Cooperative for produce delivered months previously.

6. There is the problem of payments from Boards to Cooperatives for produce and from Cooperatives to Boards for marketing services. Cooperatives Unions are not paid by the Marketing Boards sufficiently promptly for crop finance to rotate quickly if they, the Unions, are to meet their Primary Societies' requirements at all levels of marketing. These delays in Board payments, however, are often the result of the Commercial Banks insisting that they can only finance the Marketing Boards to the extent of sales, particularly when producer prices are reckoned to be high in relation to world export prices. On the other hand, mismanagement of Cooperative finances contributes to the difficulties of the Primary Societies.

7. There is the problem of the continuing high level of costs incurred by both Cooperatives and Boards, and the adverse effects of these costs on cash prices obtained by growers for their produce. Many of the Societies' governing committees have become lax in their financial stewardship, engaging in wasteful expenditure on their own account, managing their services inefficiently and making speculative investments with the members' proceeds; as a result, an unnecessarily large share of the crop revenues is siphoned off before reaching the growers.

8. There is the distribution of maize, cotton and pyrethrum to consider; the optimal routing for collection, transportation and delivery of produce from grower to Cooperative, from grower to Agent, from Cooperative to processor, from processor to Boards, and from Agent to Board.

9. Governments in East Africa have encouraged the rapid formation and development of Cooperatives for political reasons, such as the achievement of "economic independence" by the small-scale grower. This policy has created its own problems: Cooperatives have tended to be organised from "on top" without genuine local demand or even understanding; Cooperatives have been granted monopoly marketing rights without the resources to carry out all the necessary services.

10. The Governments' financial policies towards the Marketing Boards also pose a dilemma: without Treasury support the Boards cannot afford to undertake the research and extension programmes necessary to help African producers to increase the productivity of their land, and to raise their incomes by marketing more profitable produce. With such financial support there is little incentive for the Boards themselves to become self-financing, let alone profit-making, and thus to exercise the maximum economy in their marketing operations.

11. Finally, there is the policy problem of the East African Governments in determining how large a private sector to retain within the marketing structure, both to provide competition for the para-statal organisations

and the Cooperatives Unions, and to maintain sufficient capacity in the various marketing and processing services required by the growers. This is a political and not just a marketing question, but the two aspects of the problem must be considered jointly.

B. The complaints of participants are really their alleged problems, and even where they are more apparent than real, this can be because of failures in communication which frustrate the working of Board and Cooperative marketing policies. It is significant that many complaints originate from the growers in whose interests Boards and Cooperatives have been established.

1. Growers' complaints

(a) They express dissatisfaction with the system by which the Boards fix producer prices; it takes account of the various expenses of operating the Boards, but no notice at all is taken of the growers' expenses from the time of clearing the fields to the time of selling their produce.

(b) They complain of delays in the announcement of producer prices by the Marketing Boards, of variations between the gazetted prices and prices subsequently paid out, and of failure by the Boards to keep them informed of the prices fetched by their produce in outside markets.

(c) They are aware of the official policies of replacing much of the former expatriate, large-scale and agency institutions with monopoly marketing by both Boards and Cooperatives. Yet many of the marketing services and payments still available to small-scale growers from the private sector are more competitive and more attractive than those which are being increasingly thrust upon them by Boards and Cooperatives. They also criticise local authorities for failing to maintain roads and other services for which levies or cesses are deducted from the growers' price.

2. Cooperatives' complaints

(a) They allege reluctance by the Boards to establish monopoly distribution by Primary Cooperatives when it is, they claim, the declared policy of the Government to channel more produce from growers through Cooperatives and less through the private sector.

(b) They complain of inadequate representation on the executive committees of the Marketing Boards compared to that of large-scale growers, particularly when substantial representation on Boards is, they claim, the only way that the interests of their -growers can be looked after when the Boards formulate their marketing policies.

3. Boards' complaints

(a) They affirm that many Cooperatives market produce of low or even unacceptable quality, and thus can be paid only the lowest prices by those Boards which operate price and quality differentials. They also maintain that Cooperatives require higher margins to operate profitably than do produce traders.

(b) They allege interference by Government in the setting of producer prices.

(c) They point out that some of them, for example the Maize Board, are compelled by legislation to act through Registered Agents, and that this both increases the consumer prices of the Boards' products, and reduces the level of payments to growers. They argue that their marketing operations would be more economical if they were able to act on their own behalf.

4. Complaints of intermediaries

(a) Registered Agents

They complain of monopoly trading rights being granted to Cooperative Societies by Government, thus depriving them the appointed

Agents of producers' business when they have paid money to the Government for their trading licences.

(b) Produce traders

They complain about many Cooperative Societies being allowed to deliver small quantities of produce direct to the Marketing Boards' depots; this practice does traders out of their rightful commissions which they are entitled to earn when they handle numerous small delivery lots from producers to Boards.

(c) Licensed processors

They complain that Cooperative participation in processing industries such as cotton ginning is being brought about hastily by the three Governments, since Cooperatives lack the necessary capital and skills. They also point out that a flourishing private sector is essential to maintain sufficient processing capacity to cope with the higher levels of production envisaged in the territorial Development Plans.

It is precisely because these problems and complaints have proved to be both intractable and insufficiently documented that the Survey Analysis outlined in the following Sub Section (7) has been planned and undertaken. Indeed its justification is that it will throw light upon these problems and complaints, and in doing so distinguish between the real and the apparent problems, validate some complaints, and invalidate others.

7. Survey Analysis

The paucity and inadequacy of existing secondary data on which to base this research are explained in Section 3 of this Part, Introduction, and referred to it again in Part 2, Section 2, An Analytical Approach. The collection and interpretation of reliable and extensive primary date have been, therefore, essential to this thesis.

There is another and compelling reason for having undertaken the Survey Analysis: the need to make contact with and to sound the experiences of those actually involved in and served by the agricultural marketing system. In particular, small-scale growers who are intended to benefit from Boards and Cooperatives; and the Board and Cooperative personnel themselves who provide services to these growers. Many of these respondents to the Survey had never been consulted about the marketing system in which they play so important a part, and yet their documented opinions and experiences throw new light on the efficiency of the system of marketing through Boards and Cooperatives, as it is being set up in East Africa.

Details of the design and administration of the Survey Analysis are contained in Part 3, Section 3, and the results are tabulated in Part 4, Section 1.

The objectives of the Survey, and the Questionnaires to which they relate, are as follows:

**Questionniare No.1. Card 1.**

**Respondents - Small-scale growers of maize, cotton and pyrethrum.**

**Subject - Cooperative Societies**

(a) To determine the extent of growers' support for Cooperatives.

(b) To examine the basis of this support and to investigate areas of discontent.

(c) To compare the marketing services offered by Cooperatives with those of produce and other traders at District level.

(d) To assess what confidence growers have in the present management of Cooperatives.

Questionnaire No.1. Card 2.

Respondents - Small-scale growers of maize, cotton and pyrethrum.

Subject - Statutory Marketing Boards

(a) To find out what marketing services growers obtain from the Boards and whether they are satisfied with them.

(b) To compare these services with what growers can obtain from other agencies at District level.

(c) To assess how much growers know about the operations of the Boards, and what the Boards do to explain to them their activities.

(d) To examine the working of crop quotas, support prices and agency licensing operated by the Boards.

Questionnaire No.2

Respondents - Board Managers, Field Officers and Agents.

Subject - Cooperative Societies and Statutory Marketing Boards.

Questionnaire No. 3

Respondents - Cooperative Officers, Assistants and Secretaries.

Subject - Cooperative Societies and Statutory Marketing Boards.

(a) To ascertain how well Cooperative and Board respondents work together at District level, and how they see their contributions to the marketing system.

(b) To identify problem areas in the joint marketing of the three commodities by Boards and Cooperatives.

(c) To analyse the role of Government in granting monopolies and developing trading by Cooperatives and Boards.

(d) To explore the marketing relationships of Boards and Cooperatives with small-scale growers, and with produce traders, Registered Board Agents and licensed processors.

(e) To assess the desirability and feasibility of Cooperatives having more autonomy in the marketing of these commodities.

(f) To compare the services offered by Boards, Cooperatives and other agencies, and the relative costs incurred.

The English and Swahili versions of Questionnaires 1, 2 and 3 can be found in Part 4, Section 2, Appendices to the Survey.

The results of this Survey Analysis will form the basis of the Findings and Recommendations to be found in Part 3, Section 1, Sub Sections (4) and (6).

## Section 2

# THE FRAMEWORK OF MARKETING

### 1. A Conceptual Approach

Marketing is an integral part of the behaviour of society, because much of social behaviour depends upon the goods and services which marketing delivers. Indeed, at the individual level all of us are consumers in one form or another, and the pattern of our behaviour as consumers forms a significant part of our socio-economic identity in society. Similarly, those whose livelihoods depend upon marketing, form and develop their behaviour patterns whether they are producers, processors, distributors or other intermediaries. The open market is still to some extent a social institution: in Africa it is particularly so, as in the remoter parts of Africa where buyers and sellers, their families, friends and neighbours meet regularly to barter, and to buy and sell goods and services.

Alderson discusses the concept of "organised behaviour systems" operating within heterogeneous markets where their participants can be viewed as interacting components;[1] such behaviour systems acquire the assortment of assets which these participants control through their actions and decisions, and contacts with the environment enable these systems to accept inputs and generate outputs. This raises important conceptual and sociological issues in the context of East Africa, as it is widely claimed[2] that African society is based on cooperation, and that therefore, cooperative marketing under statutory Board control is the most "natural" and relevant form in which such behaviour systems should function in Africa.

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1. W. Alderson, "Dynamic Marketing Behaviour," Chapter 1; Irwin, 1965.

2. As in the application of modern African Socialism to marketing, discussed in Part 2, Section 2 (2).

This claim cannot be uncritically accepted, particularly in the light of anthropological studies[1] which established, many years ago, three basic categories of tribal groupings in North America, Africa and the South Pacific. These are:

1. Individualistic
2. Competitive
3. Cooperative.

The cooperative were found to be closed societies, unlike the competitive or individualistic societies, and to have a high sense of security for individuals. In the competitive societies alone there was a highly developed concept of status, emphasis upon rising in status, and an interest in property for individual ends.

These different types of society came into contact with one another as their use for goods and services developed; first accidentally, for example, in their search for food and shelter, but increasingly on an organised basis in small markets where intentional contacts generated new wants, and wants increased the need for marketing facilities.

These cooperative, competitive and individualistic societies increasingly interacted within heterogeneous markets as organised behaviour systems, consisting for example of households and distributors and producers. Such participants both cooperate in moving goods and services from producers to consumers, and conflict in competing for the commercial gains accruing to those participants whose livelihood it is to make available those goods and services when, where and how desired by their customers.

Nevertheless, the notion of cooperation is implicit in the marketing system;[2] its internal structure is designed to facilitate cooperation to the extent that the participants "agree to compete" within the economic, political and social constraints of their system.

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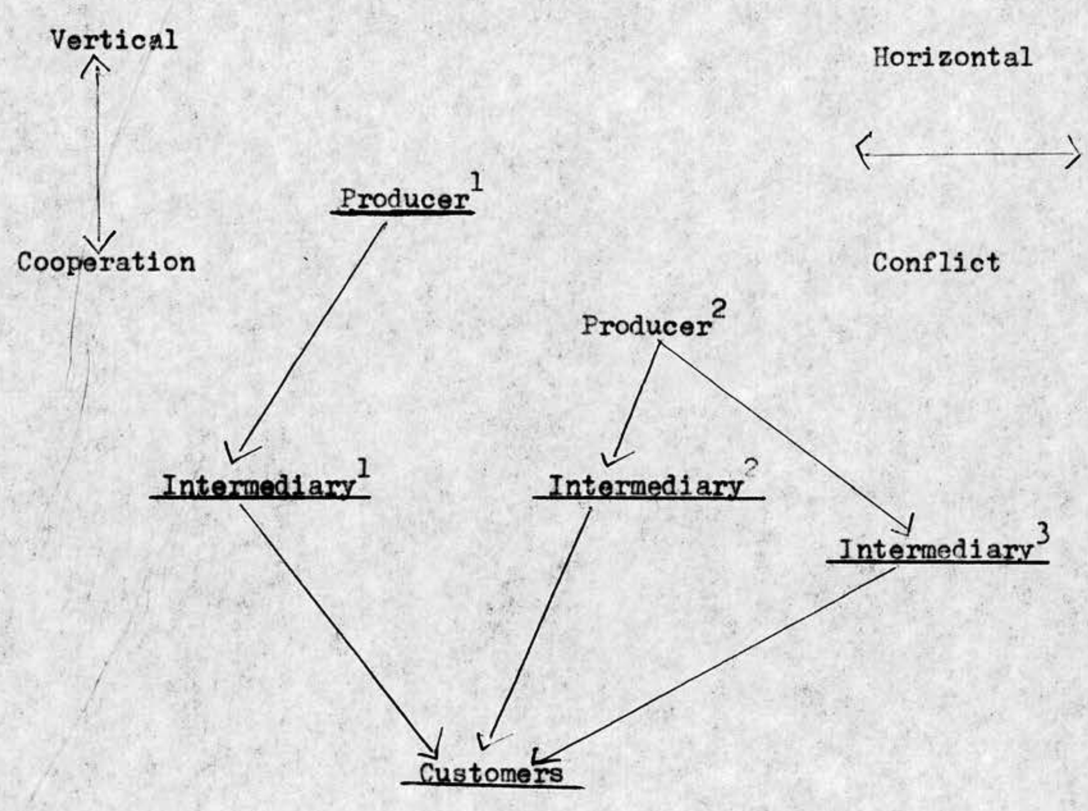
1. "Competition and Cooperation among Primitive Peoples" edited by M. Mead; McGraw Hill, 1937.

2. "Internal cooperation is required if a behaviour system is to act as a unit;" W. Alderson, "Dynamic Marketing Behaviour," page 239.

This concept can be illustrated as follows:

FIGURE 1



These contraints have been, in East Africa, increasingly clarified and imposed by governments through the instrumentation of Statutory Marketing Boards. Where they are accorded a dominant position in the system, their problem is to bring about constructive participation within that system by the producer cooperatives; indeed, these producer cooperatives are looked on as sociologically the successor to the early type of cooperative society, and thus an essential counterpart to the Boards.

Other intermediaries such as agents and processors also have to be induced to participate in the system, as they provide services to both growers and consumers which many Boards and Cooperatives alone cannot. But their participation will continue only if there is expectation of some surplus in excess of what these intermediaries can obtain by operating alone; and they will be concerned to preserve the system only so long as it supports these expectations.

As the marketing system develops in this way, it absorbs various elements of human experience or development; that is to say, a part of what is called culture. The many characteristics manifested by people as they participate in marketing are acquired or learned habits: they are acquired within the spectrum of cultural development. And like other aspects of culture marketing is universal, yet it is also unique to each society in terms of its economic, social and technological advancement. Thus, conceptualising becomes necessary when we wish to study a relationship between performance of what is already known and the search for improvement that can be made.[1] And, in Africa, it is within the context of organised behaviour systems in heterogenous markets that improvements to the marketing system can both be conceptualised, and the means made available to achieve them.

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1. M. Halbert, "The Meaning and Sources of Marketing Theory," Chapter 1; McGraw Hill, 1965.

## 2. An Analytical Approach

Marketing is defined in simple terms as the whole process by which goods and services from the producer reach the consumer; the marketing system has come into being only because individuals cannot themselves provide all the goods and services they require. It can be argued that there are important differences in the application of this definition to industrialised and to developing countries. For instance, industrialised countries depend upon the exports of manufactures to pay for the supplies of food and raw materials which cannot be produced in sufficient quantities to meet home demand. In developing countries, there is more or less a self-sufficiency in food supplies, and production of raw materials such as minerals in quantities which, because they vastly exceed domestic demand, are not purchased and cannot be used locally but can be exchanged for imports of manufactures and semi-manufactures which the economy lacks the capital and skills to provide. And controlled marketing in East Africa is intended to step up the output of foodstuffs for export to earn the revenue for the purchase of these imports.

Such differences of application have prompted one market analyst[1] to go so far as to state "tropical Africa is unlike any other part of the world, and the problem of understanding the commercial system of the area can be frustrating. Some physical, economic and sociological factors lead to marketing procedures that can be radically unusual." Unusual that is in the American context; the point is that "procedures" such as integrating the activities Boards and Cooperatives so that they dominate even if they do not control the marketing system, are in East Africa, far from being unusual, the basis for achieving all those social

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1. R.W. Baker, "Marketing in Nigeria"; Journal of Marketing Vol. XXIX, July, 1965.

and economic objectives (minimum means of subsistence for all, redistribution of incomes, industrialisation, higher levels of consumption) which tend to be taken for granted in Europe and North America.

In spite of the essential contribution of marketing towards achieving such objectives, analytical studies of marketing in developing countries are few and far between. As late as 1965[1] it was pointed out that "the role of commodity distribution in the economic development of pre-industrialised areas has been almost completely ignored in the growing body of literature devoted to the nascent field of economic development in developing countries. Even casual mention of distribution is rare for instance in the U.N. publications dealing with development. Attention is devoted almost exclusively to the problems of increasing production in basic industries, correcting the balance of trade, relieving capital charges and reducing unemployment."

The result of this has been that increased consumption tends to be equated with increased production, and efforts to increase living standards concentrate on the factors of production. Marketing functions, and their contribution to the economy, are inherently difficult to quantify, and there is little data about them in Africa. The multiplicity of marketing agencies and their complicated inter-connections with other aspects of the economy makes measurement hazardous.

Nevertheless, marketing occupies a central role in the advancement of underdeveloped or growth areas. In the words of Drucker,[2] "Marketing is the most important multiplier of (such) development. It is in ... these areas the least developed and most backward factor of the economic

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1. R.T. Holton, "Marketing Structure and Economic Development;" Quarterly Journal of Economics, Volume LXVII, 1965.

2. P. Drucker, "Marketing and Economic Development;" Journal of Marketing, Volume XXII, January 1958.

system. Its development, above all others, makes possible economic integration and fuller utilisation of whatever assets and productive capacity an economy already has."

The marketing system in an African economy often acts as a sort of residuary for excess or abundant labour supply. Much under-employment can be found in this sector and any attempts by government at rationalisation would aggravate unemployment, with serious political consequences. Why do consumers bear the cost of this inefficiency? Simply because many consumers in Africa are themselves distributors. Most family units, by definition small-holders, are responsible for the marketing of their agricultural surplus. If the marketing functions were separated part of their livelihood would be lost.

Finally, there are two features which pose marketing problems peculiar to Africa, and these are dealt with in Section 3. An indication of their analytical nature is given here.

There is first, a tendency towards increasing government control of the marketing system, and political interference in decisions affecting such things as pricing policy and distributive channel structure; these erode competition. Sectors of the economy are subsidised by government as a result of political activity rather than economic merit; for example, the "quality stabilisation" measures of the Boards designed to fix prices and protect competitors rather than competition. Such political activity can comprise undue influence by special power-interest blocs such as Cooperatives seeking to mitigate the effects of competition on inefficient operators.

Second, there is in Africa, the continuing multiplicity of middlemen:[1] peddlers, registered agents, dealers, produce traders, merchants,

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1. H.C.G. Hawkins, "Wholesale and Retail Trade in Tanganyika: A Study of Distribution in East Africa;" Economist Intelligence Unit; Praeger, New York, 1965.

retailers, wholesalers, millers, ginners, graders and packers, stall-holders, bazaar traders and hagglers. This results in small quantities of goods being distributed by a very large number of people; on the one hand there is the grower who takes his surplus direct to the local market, and in doing so handles uneconomic quantities of goods; and on the other, there are innumerable small-scale shopkeepers, particularly in the market for cheap imported foreign goods.[1] In short, labour intensiveness should not be uncritically accepted.

The important consideration here is not so much the competitiveness of prices as the value added to the community by each additional handling. Because the East African economy is labour intensive such added value can accrue to an extent impossible in an industrialised economy where high labour costs would render many channel agencies redundant.

The African producer does not always recognise profit alternatives from different actions because custom still regulates much local trade; by-passing a dealer may cause social conflict and there is a lack of cost data or demand estimates. The producer, for example, will sometimes travel long distances to sell his produce for marginally higher prices; although this indicates some profit consciousness, it is not sound marketing strategy, as he is likely to incur more in cost and in effort than the marginally higher revenue. He could for instance use this time spent travelling to improve the quality of his produce for sale.

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1. "The basic problem of the African trader is that there are two many traders in relation to the consumer demand;" H. Fearn, reporting on the East African Royal Commission in the East African Economics Review, Volume 2, No.2, 1956.

## 3. Marketing in a Developing Economy

### 1. Growth of Government intervention in agricultural marketing.

Sharp fluctuations in world prices of agricultural commodities have always been a major problem for countries exporting primary produce. However, the impact of these variations on the developing countries has become more significant since independence, as they disrupt development plans. Government intervention in the marketing of agricultural export commodities commenced in a number of British possessions in the 1930's. The main stimulant, however, emerged from the disruption of international trade as a result of the second World War. New marketing organisations became necessary and marketing boards with monopoly trading powers were established. By the end of hostilities, those in the British West African territories, for example, had developed into large marketing institutions. Because of their size, their economic impact on the economies of the countries, as well as the services rendered in the past and their potential for the future, these institutions were continued. In other countries, increased competition and instability on world markets caused governments to introduce quality control measures and export trading regulations. In the latter half of the 1950's price stabilisation schemes were established in most French territories, but trade still remained in private hands.

Newly independent governments were anxious to exercise greater control over export earnings which they felt could be achieved by a direct participation in trade. The functions and powers of existing statutory agencies were often strengthened and in many cases they became even important tools for implementing economic and social development programmes. More recently, governments of many African countries are also attempting to improve the marketing of staple food crops by means of a direct participation in buying and selling. And private enterprise, in particular the export trade, has declined in importance since the end of the second World War in many countries. Pre-war export marketing of practically all agricultural commodities was carried out by private overseas trading companies. Organisations under some form of government control have taken over the marketing of exports and in some cases staple food crops in the majority of African countries. This has been achieved primarily by various types of marketing boards.

In certain countries, state marketing organisations have effectively taken over the various functions and responsibilities which in other countries are generally performed by marketing boards. However, if they do not have a certain degree of autonomy with regard to management and financing, granted normally to marketing boards, they may face all the difficulties inherent in an excessively rigid and bureaucratic system of marketing.

2. Semi-public marketing organisations

These have the advantage of attracting the funds and technical know-how of the private sector, and are useful in countries where governments cannot provide the funds and staff necessary for the establishment of appropriate marketing channels. However, the establishment of semi-public authorities may not in all instances give the government sufficient control to ensure their policy aims, even if they hold the majority of votes on the Board of Directors. There is also the problem that private capital can be difficult to attract as investment in such institutions - particularly where the Government exercises this degree of control.

If is for these reasons chiefly that this sort of partnership between the state and private enterprises has not been widely adopted in Africa. Another objection often raised is that this type of arrangement may compromise or slow down the policy of Africanisation. Criticism is directed mainly against those partnerships with large foreign interests as the key executive posts have been held by expatriates, although the training of local counterpart staff and their subsequent nomination to key positions is now one of the conditions laid down.

In some countries, such partnerships may also come into conflict with government policy aiming at the rapid development of marketing co-operatives. Indeed, substantial capital subscription is often a condition for licensing agents. In Niger, for example, the Groundnut Marketing Corporation (SONARA), in order to secure adequate capital subscription made the granting of licences to act as buying agents dependent upon the agents taking up a number of shares in proportion to their expected purchases.

Despite these problems, this form of marketing organisation offers the advantages of greater financial, administrative and management autonomy together with collaboration of the largest and most efficient traders. Joint government/private enterprise ventures, on the other hand, are becoming more acceptable in the provision and operation of processing industries, particularly those which require large investments and high levels of technical skill. Knowledge of foreign markets, use of well-established brand names and access to capital are other advantages of partnerships between government and private enterprise in processing ventures.

3. Private trade and statutory marketing schemes

In the past, export trade has been associated mainly with large expatriate organisations, while the marketing of staple food crops has been principally carried out by small-scale indigenous traders. Participation of private foreign or indigenous concerns in the marketing of export crops remains a dominant feature only in a few countries, although they may not act solely on their own account. Some of the functions, such as export sales, have become the prerogative of marketing boards, state trading or other statutory bodies, the status of traders now often being that of agents of these new institutions.

Well established and experienced traders and firms acting as executive agents may fulfil important marketing functions and assist in improving board efficiency. However, some governments consider the present role of private trade as temporary until the cooperatives have reached a level at which they can take over these functions without impairing overall efficiency. Where private trade has to remain as part of a statutory marketing channel, in the long run, nationals will in most cases be primarily or exclusively involved. The exclusion of both foreign and indigenous traders is only advocated in countries orientated towards a centrally planned economy. In countries where a positive contribution from the private trade sector is expected in the implementation of marketing board or other statutory marketing schemes, the need for considerable control over private agents' activities is emphasised by governments. This can be achieved by licensing, the fixing of appropriate allowances, and strict supervision of operations, in particular at buying points.

4. Marketing Boards.

The functions of Statutory Boards are very diverse; some are not Marketing Boards in the strict sense, for example, those which are merely advisory or regulatory, and do not actively engage in trade at all, but regulate or control distributive channels.[1] These functions

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1. See "Agricultural Marketing Boards: their Establishment and Operation," by J.C. Abbott and H.C. Creupelandt; FAO Marketing Guide No.5; Rome, 1966.

depend upon the Boards' methods of participation in the market; and second, their position in the market. And these two factors differ from one Marketing Board to another in the following ways:

(i) A self-trading Board enjoys a two sided monopoly both for the domestic and export markets.

(ii) A non self-trading Board appoints an Agent or Agents upon whom a domestic or export market monopoly is conferred.

(iii) A Board which has nothing to do with the physical handling of the produce either directly or through Agents, but has the power to direct a specific commodity through a single distributive channel.

(iv) Finally, a Board undertaking no trading activities, but which can license producers, fix production quotas and guarantee minimum producer prices.

A diagrammatic example of the functions of a Marketing Board is given in Figure 2.

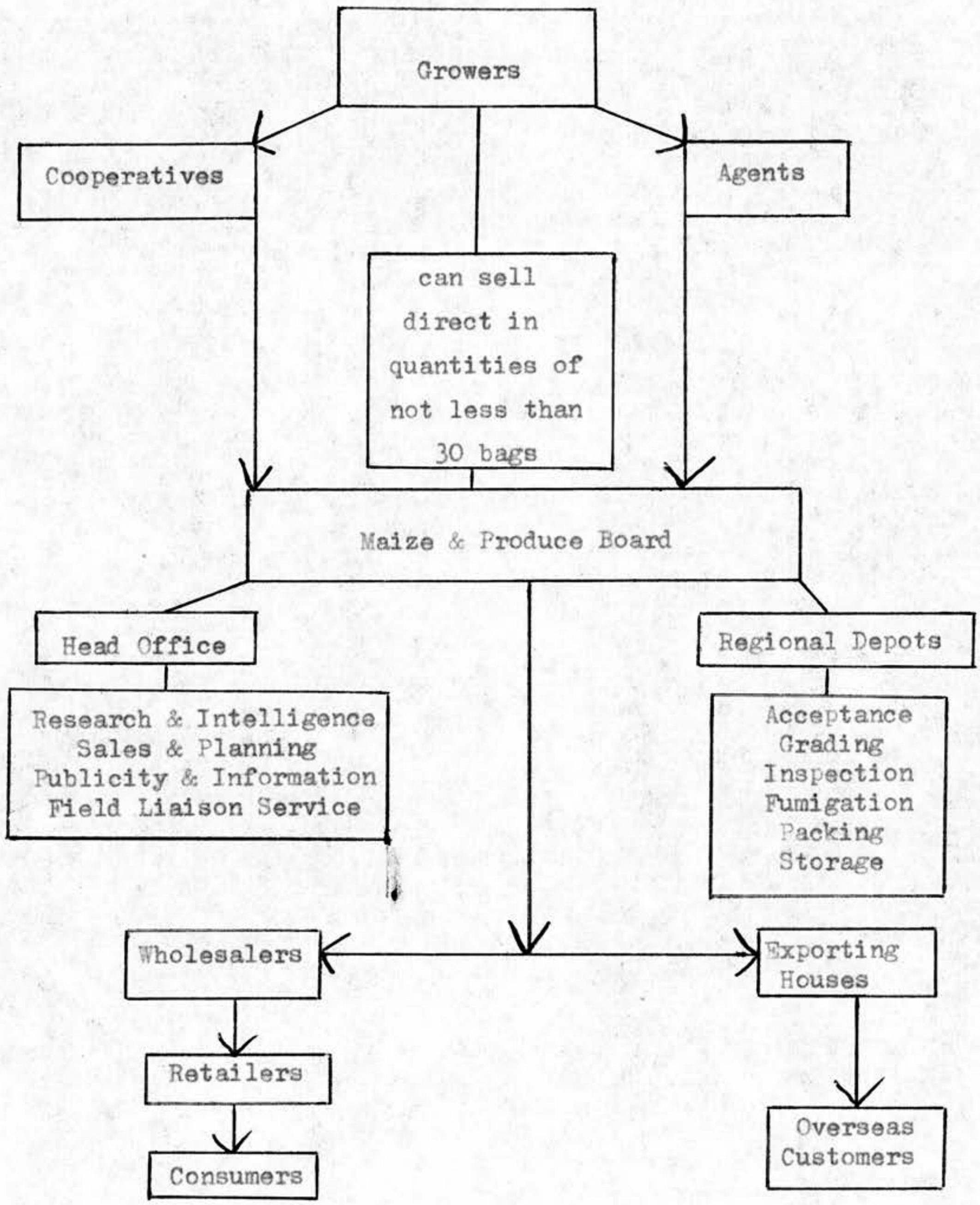
Marketing Boards in Africa are becoming more involved in the physical handling, storage, transport and processing, as well as in the financing of the commodities which they control or sell.

As far as export commodities are concerned, further use of large expatriate firms in any sector of the marketing system is not favoured by most governments. Their place is being taken by local traders, as in Nigeria; Cooperatives in Tanzania; or by the Boards themselves in Ghana.

Boards can implement administrative measures such as selective licensing of Agents and the provision of buying points at an economic cost when products pass through controllable channels, for example, export commodities. Even in this case, the supervision of buying operations often remains loose, as non-trading Boards are unable to exercise a sufficiently strong hold over produce traders or registered Agents. Control of buying operations by these Boards can be facilitated

FIGURE 2.

Kenya Maize and Produce Board



when the bulk of the crop is channelled through Cooperatives. This has not yet been achieved in many parts in Africa.

The licensing policy of some Boards discriminates against private agencies in order to eliminate them in favour of Cooperatives. However the use of inexperienced Cooperatives as agents can hamper a Board's programmes.

Under regulatory as well as price stabilisation Boards, existing marketing channels are more or less maintained. Selective licensing of private traders, coupled with the establishment of official buying points, and of market days and times, can facilitate control of transactions and prices paid to growers.

Under trading Board schemes, private buying agents and producers' Cooperatives can be used to collect produce at convenient centres for delivery to processing or export points. At this stage of distribution, it is necessary to ensure that guaranteed prices are paid to producers for delivery at the buying points, and that an adequate network of buying points exists to provide the necessary service to the bulk of the growers.

Boards established during the post-independence period in some of the French-speaking countries were opposed to the concept of having independent middlemen buying for them and stipulated that all traders purchasing controlled produce should be licensed. This eliminated unlicensed intermediaries and helped to restrict irregular practices. Nevertheless, Boards may be left with a substantial group of agents, which must complicate supervision and control. In Senegal for instance, 1,250 small-scale traders out of the 3,000 operating previously were integrated into a monopoly channel for groundnut exports, together with Cooperative societies.

Preference is sometimes given to indigenous traders and Cooperatives in selecting buying agents. When the Nigeria Oil Produce Marketing Board began operations, for example, only six out of a total of 34 licensed palm kernel buying agents were Nigerian. In the 1966 season, the Eastern Nigeria Marketing Board licensed 96 agents for palm kernels of whom 85 were Nigerian.[1]

This progressive change towards the use of nationals was made possible through some relaxation in the imposed minimum requirements for licensing but it entailed two important consequences for the Boards. Firstly, they had to contribute more towards the financing of local purchases and the physical handling of the produce. Secondly, there was a substantial increase in the number of agents and hence in administrative, accountancy and supervisory work.

5. <u>Cooperative Societies</u>

Cooperatives are intended to provide services not available from private marketing agencies, or otherwise too costly for the individual grower to avail himself of; for example, cultivators in a local area might start production of certain produce for which no local marketing facilities exist. Being more interested in the general level of returns to growers in a small community than are private agencies who are concerned mostly with obtaining the largest possible share of the available volume, producer Cooperatives are designed to inaugurate and maintain marketing services appropriate to the needs of these growers.

Cooperatives can be successful provided that there is sufficient volume of business, and their success can be measured in three ways:

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1. Report of the F.A.O. Seminar on the operation and management of Marketing Boards in Africa; Ibadan, Nigeria, 1966.

the number of prospective members, the volume of production per patron, and the proportion of the total volume of produce obtained by the Cooperative in view of likely competition from private agencies. Also there must be sufficient capital for profitable operation.

Cooperative functions should, therefore, be viewed as comprising two sets of factors:

(i) Inputs as personal contributions by individual growers to the Cooperative in the form of membership subscriptions, and produce delivered to the Cooperative depot for sale.

(ii) Outputs or benefits to the members from their Cooperative in the form of guaranteed sales of their produce, and collecting, grading, storing and processing services; and second, the collective produce which the Cooperative is thus able to put on the market, in competition with other enterprises.

The marketing utility of a Cooperative is the extent of its success in competing with enterprises such as Agents and produce traders for growers' produce. Cooperatives can also be conferred with a monopoly of sales to a Board by Government. And Cooperatives can enjoy a monopsony in the purchase of produce from all growers in a District, whether they are Cooperative members or not.

A diagrammatic example of the functions of a Cooperative Union is given in Figure 3.

The contributions of Cooperatives to the marketing system can be enhanced if their activities are complementary to and supported by the Boards, sometimes by appointing Cooperatives as their buying agents. For example, in Senegal before the inception of the Agricultural Marketing Board (OCA) in 1960/61, Cooperatives handled only 5% of groundnuts for export, or 32,000 tons. During 1965/66, 1,400 Cooperatives handled 675,000 tons or about 67% of the marketed crop for the Board.[1]

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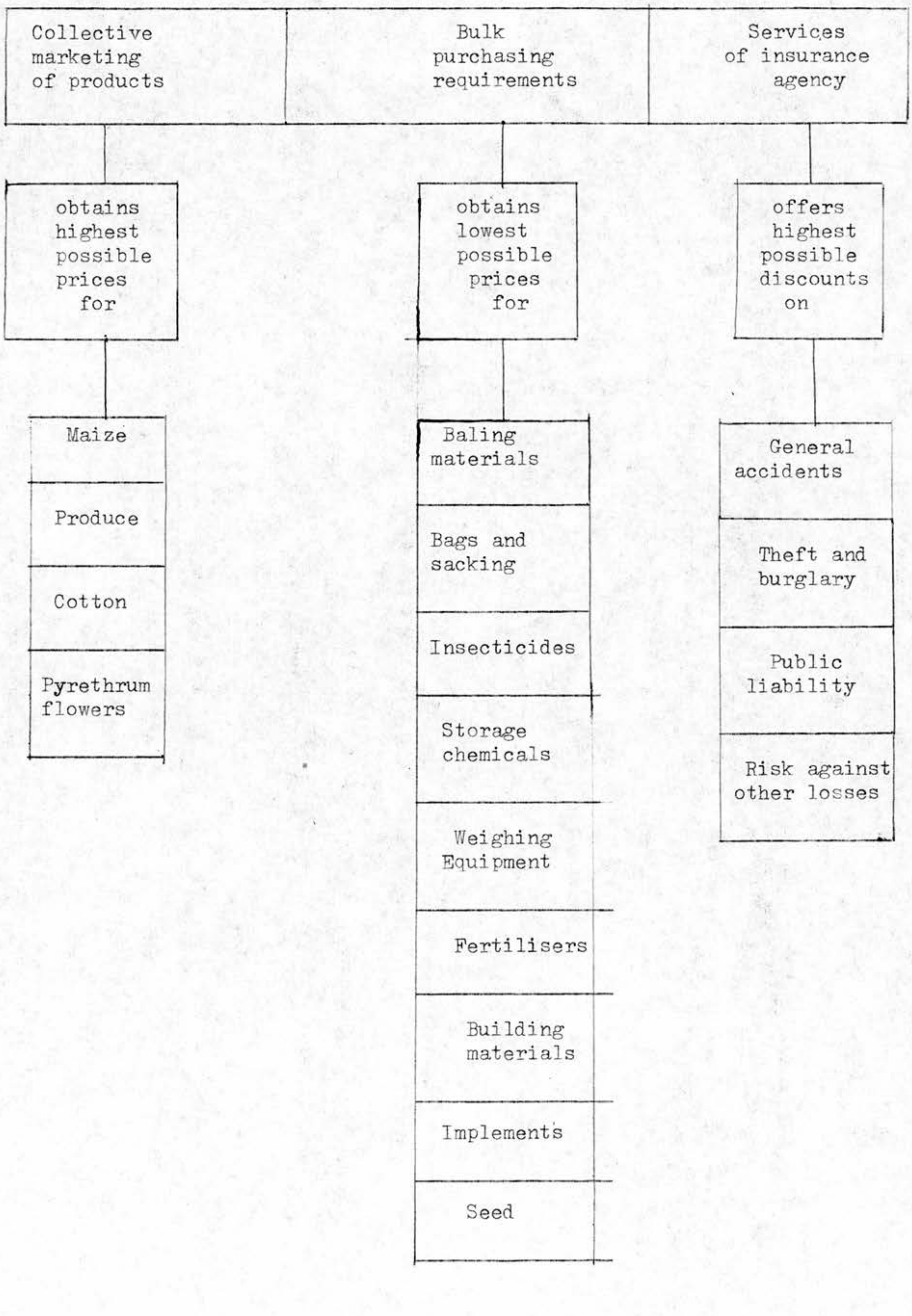
1. Report of the F.A.O. Seminar on the operation and management of Marketing Boards in Africa; Ibadan, Nigeria, 1966.

The development of marketing Cooperatives for staple food crops often requires the protection of statutory marketing schemes. Compulsory delivery of maize under war-time arrangements showed in Tanzania, for example, that 80 per cent of the marketed supply could be channelled through Cooperatives. However, they lost control over the market when these arrangements came to an end and private trade took over 95 per cent of the crop. Since the creation of the National Agricultural Products Board in 1965, the bulk of the crop has again passed through Cooperative Unions which were appointed as the Board's agents.

Newly created village level or Primary Cooperatives can act as sub-agents of a Board and deliver the produce of their members to local Registered Agents. At a second stage, their functions may cover secondary assembling, packing and perhaps processing at a regional level, with the Cooperative Unions acting as the Board's principal Agents.

FIGURE 3.

Tanzania National Federation of Cooperative Unions



# PART 2.

## Section 1.

## THE PRODUCTS

### 1. Reasons for the choice of products

Early in the research into crop categories, it became clear that it would be as inappropriate to limit the thesis to one product as it would be impossible to cover all products; this applied as much to Uganda and Tanzania as to Kenya. It was concluded that three products provide a sufficient basis for the comparative approach essential to this thesis, and this number is manageable as far as data collection is concerned.

Certain criteria had therefore to be applied to the variety of possible products in Kenya which include tea, coffee, sisal, dairy products, cotton, maize, nuts, vegetables, fish, citrus fruits, pyrethrum, timber, horticultural products, meat products, and other minor cash crops, nearly 60 varieties of which are handled by the Maize and Produce Board alone.

The three to be chosen had to satisfy as many of the criteria decided upon as possible:

1. Potential for being processed or finished locally.
2. Being a major East African food or export crop.
3. Having considerable growth and development prospects.
4. Comparability with the other crops chosen in terms of Boards and Cooperatives.
5. Not possessing a unique feature in its organization e.g. Settlement Scheme or Development Authority.

6. Not confined to one group of growers e.g. large-scale or Kenya Farmers Association.
7. Grown and marketed by large numbers of small-scale growers, both within and outside Cooperative Societies.
8. The crop distribution not being so fully integrated as to exclude the private sector.
9. Being subject to controls by a Marketing Board.

Many of the possible commodities are unacceptable in the light of the above criteria. Examples: there is a Cooperative Union but no Marketing Board for horticultural products; there are no Cooperative Societies dealing in sisal. Dairy products are handled from production to sale by the Kenya Dairy Board and the Kenya Cooperative Creameries on a fully integrated basis which would frustrate comparisons with the marketing of any other products; there are no Cooperatives of small-scale producers of livestock products which are marketed by the Kenya Meat Commission. There is also a Pig Industry Board and a Canning Crops Board but no producer Cooperatives of either commodity. Minor cash crops are marketed partly by the Maize and Produce Board, and partly on the open market, and there are very few Cooperatives handling fruit and vegetables. Tea is complicated by the existence of the Kenya Tea Development Authority set up to promote small-holder tea planting, as there is no comparable body developing other products. Coffee is marketed entirely through the Kenya Planters' Union which is similar to the Kenya Farmers' Association in that they act as the sole Agents for all large-scale growers and resell to the Coffee and Maize Boards. There are a number of successful Coffee Cooperatives, but most of these are Settlement Schemes; these were initiated by Government to help small-scale African coffee growers with loans to occupy and farm areas in the highlands of Kenya formerly settled by large-scale European producers, and they do not apply to other commodities.

Maize, cotton and pyrethrum have therefore been selected as the three commodities most appropriate, since they meet more of the above criteria than any of the others; and Boards and Cooperatives have an important part in their marketing. They also make significant contributions to the economy of the territory; this is made clear in the Development Plan.[1]

Under "Food Crops produced primarily for Domestic consumption" on pages 168-170, the Plan dwells upon the urgency of achieving self-sufficiency in maize as the main food crop;[2] the maize Board and maize Cooperatives have a vital part in achieving this. And under Food and other Crops primarily for Export, on pages 176-185, the Plan also emphasises the potential of cotton as a cash crop.[3]

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1. Republic of Kenya, "Development Plan 1966-1970;" Government Printer, Nairobi, 1966.

2. Paragraph 102 "......the Government is now determined to take the necessary steps to ensure a steady supply of basic foodstuffs at modest, stable prices in both urban and rural areas. Attaining this objective is clearly essential to the economic growth target of the Plan." Paragraph 103 "Maize is the principal stable food in Kenya. In normal years a large majority of Kenya's families produce enough maize for their own consumption. The Board....... handles surplus of domestic production over consumption................"

   Paragraph 106 ".....the Plan target is to return to self-sufficiency in maize......and the Government is confident that this will be achieved. In order to ensure a satisfactory safety margin against future shortages, the country must plan on producing surplus in most years."

3. Paragraph 141 ".....Before World War II cotton was one of the leading cash crops in small-holder agriculture" (It is still to-day particularly suited to production by small-scale growers on a Cooperative basis) "Cotton....... is thought to have the greatest potential of all Kenya's export crops for relative expansion by 1970."

   "......there are large acreages of unused land where net returns to small producers from growing cotton and selling it at present prices would be higher than those obtainable from any alternative crop........."

Pyrethrum is discussed in the same section as cotton, on pages 181-182, and the Plan stresses its importance to Kenya's external trade.[1]

2. Technical descriptions and by-products

(i) Maize

The maize plant is a cereal crop and its seeds are used for human consumption; the maize stalks which are left over have a number of uses in the domestic economy of Africans: dried out and bound together as matting for floors; when buried in sand or soil, maize stalks rot and provide manure for other crops; and if mixed with rough salt and stored, the stalks can be used as fodder for cattle.

The nutrients in the maize plant are available in the cob only, and thus are found in a very compact form. Maize can be consumed in two ways: green maize can be boiled and eaten straight "off the cob;" fully ripened maize can be ground or pounded into a flour which, when mixed with water and cooked, is turned into a mush called "posho" in Swahili. This is the staple food of the majority of the African population.

Maize can therefore be harvested over a long period, being consumed as a vegetable at the beginning of the season (green maize), and later as hard grain. The heaviest harvesting and deliveries occur between April and July. In calories maize ranks below wheat and sorghum (with equal yield of calories per 100 grams of dry weight) but is considerably above rice and plantain; it is high in carbohydrates but low in proteins.

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1. Paragraph 137 "Pyrethrum is the one major commodity produced in Kenya of which Kenya is the world's largest producer....For many years pyrethrum has been Kenya's fourth most important export commodity" (after coffee, tea and sisal). Paragraph 138 "The European farms..... were formerly Kenya's main producers of pyrethrum, which has thus become the first (and thus far only) significant crop once grown predominantly by Europeans where Africans on small holdings now produce more than half of total output."

The main advantage of maize is the rapidity with which it matures, thus enabling it to be grown in the very wide range of temperatures and altitudes which are to be found in East Africa. A minimum of moisture must be available, about 20 inches of rain, and temperatures must be above freezing during the growing season. This may vary roughly from 45 to 96 days according to variety: but maize is a warm weather crop, requiring warmth during the time from planting until flowering.

In addition to the maize stalk products already mentioned, the most important by-products of the maize cob are glucose, and starch which has a variety of commercial and domestic uses. Until recently most of the starch used in East Africa had to be imported, but a starch processing factory is now being built near Nairobi, and it will be supplied with the raw material on a contract basis by the Maize Board.

(ii) Cotton

Cotton is a sub-tropical annual plant with a growing season of five to six months. The plant bears numerous bolls containing seeds attached to a soft lint. Cotton must be planted early, with manure, before the beginning of the rains in October or April in order to give maximum yields. It is grown primarily for the lint, which is of good quality throughout East Africa, although it cannot match the quality of the cotton from Egypt and the Sudan.

The mainly cultivated types are S. 47 (with an average staple length of 36/32 inches), BP 52 (37/32 inches) and U.K. 51 (also 37/32 inches). These qualities are suitable for the spinning of yarn up to 40 English counts, which is a very fine yarn and suitable for the production of poplin cloth.

Temperatures should average at least 65°F. throughout the growing season, and most Districts below 4,500 feet satisfy this requirement.

But the crop does best where temperatures exceed 75°F. with unbroken sunshine, and at least 20 inches of rain is needed between planting and picking.

Cotton can be grown in many areas where the climatic conditions are unsuitable for the production of any more profitable cash crops; it is normally planted so that it is completely surrounded by food crops such as maize; this helps to keep the pests away and results in a cleaner, healthier cotton.

The seeds extracted from the cotton lint by ginning provide a number of useful by-products such as cotton linters, cotton seed oil, cotton seed cake and soap. These are processed by local industries.

(iii) Pyrethrum

Pyrethrum is botanically quite different from other cash crops grown in East Africa. It is a perennial herbaceous plant with flowers similar to daisies from which a powerful insecticide is obtained. The plant remains in the fields for a recommended period of three to four years. The flowers alone are picked for the pyrethrins they contain (pyrethrin I, pyrethrin II, cinerin I and cinerin II) which are toxic to most insects but not to men or animals. The active ingredients of pyrethrum tend to break down in strong sunlight, and this means that after the harmful insects have been exterminated, traces of the pyrethrum disappear rapidly from fruit and vegetable plants.

When the pyrethrum flower is fully open it is picked free from the stem, and carefully dried to reduce the moisture content from about 75% to about 10%.

Pyrethrum is successfully cultivated on high land near the Equator, and thus the highlands of East Africa are ideal for growing it. With warm days and cool nights there is a long flowering period, often lasting from eight to ten months; harvesting can continue all through the year, but almost all the picking is done between September and December. The crop needs temperatures falling below 60°F. to stimulate flowering and it survives frost; pyrethrum therefore is nowhere successful below 5,000 feet, and it does best above 7,000 feet.

Quality is entirely according to pyrethrin content per flower. Modern and efficient extraction techniques utilise volatile solvents such as petroleum ether, and produce pyrethrum concentrates of 20% to 25% pyrethrins.

There is no other insecticide which can equal the performance of pyrethrum, particularly in its quick "knock-down effect," since insects have been known to become resistant to synthetic insecticides such as D.D.T.

3. Maize, Cotton and Pyrethrum in East Africa.[1]

(i) Maize

As the staple food of East Africa, maize is grown widely in all three territories; the most important producing areas are as follows:

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1. For much of this Section I am indebted to A.M. O'Connor, "An Economic Geography of East Africa;" G. Bell, 1966.

Kenya

| Province | District |
|---|---|
| Coast | Lamu |
| | Kilifi |
| | Taita |
| Eastern | Machakos |
| Central | Nyeri |
| Rift Valley | Uasin Gishu |
| | Samburu |
| | Trans Nzoia |
| | Nandi |
| | Nakuru |
| Nyanza | South Nyanza |
| Western | Bungoma |
| | Kakamega |

Uganda

| Province | District |
|---|---|
| Eastern | Bugisu |
| | Sebei |
| Central | Busoga |
| Northern | West Nile |
| Western | Toro |

Tanzania

| Province | District |
|---|---|
| Southern Highlands | Songea |
| | Tunduru |
| | Mtwara |
| Central | Morogoro |
| | Ruvuma |
| Eastern | Kisarawe |
| | Rufiji |
| Tanga | Handeni |
| Southern | Njombe |
| | Iringa |
| | Rungwe |
| | Ulanga |
| Lake | Shinyanga |
| Western | Kasulu |
| West Lake | Karagwe |
| | Bukoba |

Maize is grown on about $4\frac{1}{2}$ million acres throughout East Africa: in Kenya it is planted on half the cultivated land, although little is found over 7,000 feet and it is often interplanted with other crops.

Almost all Africans grow some maize, usually for their own needs, but many now plant more than they require, selling any surplus for cash. With the movement of people into the towns and into regular forms of employment an increasing and stable market for maize foodstuffs has thus been created for growers. And East Africa exports annually about £K $2\frac{1}{2}$ million (See Table B).

In Kenya maize production has been encouraged by Governments concerned to achieve complete territorial self-sufficiency in food; maize is however, preferred more as a diet in Kenya than in Uganda, where people have been reluctant to change from their traditional staples of bananas, finger-millet and peas. In Tanzania maize has been readily accepted into the diet, yet it has not ousted millet or sorghum as far as in Kenya. The volcanic soils of central Kenya are very favourable for maize growing through their fertility and resistance to erosion, and they have the highest yields in East Africa.

Maize growing in Tanzania is concentrated in the Southern Provinces, and towards the Coast millet and sorghum become more important. In much of central Tanzania, soils are too poor and rainfall too low for good maize yields.

Maize acreages in East Africa in 1968[1] (000 acres)

| Kenya | Uganda | Tanzania |
|---|---|---|
| 2,078 | 501 | 1,971 |

1. Annual Reports of the Kenya, Uganda and Tanzania Directors of Agriculture for 1967 and 1968; Government Printers.

(ii) Cotton

As one of East Africa's principal cash crops, cotton is grown in all three territories. The most important cotton producing areas are as follows:

Kenya

| Province | District |
|---|---|
| Coast | Lamu |
| Nyanza | Siaya |
| | Kisumu |
| | South Nyanza |
| Western | Busia |

Uganda

| Province | District |
|---|---|
| Central | Bukedi |
| | Busoga |
| Northern | Lango |
| | Acholi |

Tanzania

| Province | District |
|---|---|
| Lake | Musoma |
| | Shinyanga |
| | Maswa |
| | Mwanza |
| | Geita |
| | Kwimba |

Cotton is East Africa's second most important export crop, earning annually about £K36½ million in foreign exchange (see Table B). The leading producer is Uganda where cotton occupies more land than any other crop. However, cotton production in Tanzania is now little less, having been expanded greatly since 1950, and it is being rapidly developed in Kenya. In Uganda, physical conditions are suitable for cotton growing throughout most of the country; its importance is greatest in

South East Uganda where it occupies over one third of the cultivated land in Busoga and Bukedi Districts.

In Tanzania, after a slow start, cotton production increased sevenfold between 1953 and 1967, and it is highly concentrated in the areas South and East of Lake Victoria. In Kenya, production has tended to fluctuate, but now exceeds 23,000 bales annually.[1] Nyanza and Western Provinces provide about three quarters of the total and Coast Province about one quarter. Although much of Kenya is too cool or too dry for cotton, far more could be produced in existing growing areas.

At present only about 7% of the locally grown cotton lint is processed by local spinning mills, and compared with the total yield in East Africa of around 920,000 bales, home consumption is only about 5%. But some large spinning mills are planned and under construction, and the East African demand for cotton lint will increase considerably.

Cotton acreages in East Africa in 1968[2] (000 acres)

| Kenya | Uganda | Tanzania |
|---|---|---|
| 173 | 2,039 | 1,692 |

(iii) Pyrethrum

As one of the main export crops of East Africa, pyrethrum is grown mainly in Kenya and Tanzania. The most important pyrethrum producing areas are as follows:

Kenya

| Province | District |
|---|---|
| Rift Valley | Laikipia |
| | Nakuru |
| Central | Nyandarua |
| | Fort Hall |
| Nyanza | Kisii |

Uganda

| Province | District |
|---|---|
| Western | Ankole |

1. 1 bale = 4 centals.
2. Annual Reports and Accounts of the Kenya Cotton Board, Uganda Lint Marketing Board, and Tanzania Lint and Seed Marketing Board: 1967-1968.

Tanzania

| Province | District |
|---|---|
| Northern | Kilimanjaro |
| Southern | Rungwe |
| Central | Mufindi |

East Africa provides well over half of the total world production of 20,000 tons of pyrethrum annualy.[1] Since about 1950 it has become the chief cash crop of many highland areas of East Africa, and earns nearly £K4½ million in exports annually for the three territories (see Table B). U.S.A. takes about 35% and UK about 25% of total production, but some pyrethrum is exported to over 50 countries.

In Kenya there is a larger area of highlands with rainfall and soil more suitable for pyrethrum growing than elsewhere. These Kenya highlands comprise the Kinangop plateau, the hills around Limuru and the Kisii highlands. Pyrethrum cultivation is thus spread widely, and the licensed acreage is distributed as evenly as possible among the different types of growers.

In Tanzania pyrethrum is cultivated in both the Northern and Southern highlands and since 1959 production has been much increased, especially in the Southern highlands. So much so, that by 1968 Tanzania had captured 28% of the world pyrethrum market, reducing Kenya's share of world production from over 60% in 1960 to 54% in 1968. There are small quantities of pyrethrum grown in the Western highlands of Uganda, and in Burundi.

Pyrethrum acreages in East Africa in 1968[2] (000 acres)

| Kenya | Uganda | Tanzania |
|---|---|---|
| 128 | 9 | 77 |

1. 1 ton = 22.4 centals.

2. Debate on the pyrethrum industry in East Africa in the Kenya National Assembly; First Parliament; Vol. XII, Fifth Session; page 568.

## Section 2.

## THE MARKETING SYSTEM

### 1. Background to producer marketing of maize, cotton and pyrethrum in East Africa

#### (a) Kenya

The present system can be traced back to the formation in 1919 of the British East Africa Famers' Association, to enable growers to sell their surplus maize on a pool or cooperative basis; and in 1922 it was decided to encourage production of maize in Kenya as a commercial crop where it had hitherto been grown merely for subsistence. The next major development was in 1928 when pyrethrum was grown experimentally, and a small committee of growers was formed; it decided to market all pyrethrum through the new Kenya Farmers' Association.

In 1935, the Pyrethrum Growers' Association was established, and it confirmed the position of the K.F.A. as its sole marketing agent. This arrangement lasted until 1938 when the Government set up the Pyrethrum Board of Kenya, but the K.F.A. continued to handle all production on behalf of the Pyrethrum Board until 1945. Subsequently, two Boards were formed: one controls pyrethrum production; the other is responsible for marketing, buys pyrethrum from small-scale growers through Cooperatives, and in 1965 was appointed agent for the other Pyrethrum Board.

Cotton has been marketed centrally in Kenya since 1945, and all production was handled by the Nyanza and Coast Provincial Cotton Committees until 1954 when the Cotton, Lint and Seed Marketing Board took over, and established a price assistance fund for growers. Before 1962, cotton was bought by ginners' agents at prices fixed by the

Minister of Agriculture on the advice of the Cotton Board. In 1962, the first cotton Cooperatives were registered in Nyanza and Western Provinces, by 1965 some of them had a monopoly of cotton buying, and were administered by District Unions who supplied the ginneries direct. Cooperatives have now been started in other Provinces, where cotton is still marketed mostly through ginners' agents.

A As long ago as 1932, however, the Kenya Farmers' Association had been registered as a Cooperative Society, and almost immediately its Board began to press the Government to compel all maize growers to sell their maize through one channel. And in 1936 the Agricultural Produce Marketing Act was passed, empowering the Government to set up Marketing Boards in any crop category; these Boards would have the power, among other things, to enforce a one channel distributive system.

In 1942, a scheme of Maize Control was introduced by the Kenya Government to handle maize grown throughout the country. The K.F.A. Was appointed agent to the Government for all maize produced by European and large-scale growers, and retains this function to-day. A different system applied to small-scale growers: Maize Control made well established produce traders its agents in rural markets who bought from these growers at a price guaranteed by Control, less handling and transportation charges. In 1945 a new Cooperative Societies Ordinance provided for the establishment of Cooperatives among African small-holders, and under it about 1,000 societies have been registered in the last twenty-five years.

In 1959 Maize Control was replaced by the Maize Marketing Board, a statutory body with growers, commercial and financial members, and government representatives. This Board was amalgamated in 1967 with the Kenya Agricultural Produce Marketing Board to become the Maize and Produce Board, and this now handles all general produce in addition of course to maize.

(b) Uganda

The cotton industry developed rapidly in Uganda after World War 1 under conditions of open competition in buying, ginning and export. Many trading centres were established where raw cotton was bought and sold, and these encouraged the production and sale of other crops, notably maize which had been grown in Uganda for over 100 years. In 1917, the estimated maize acreage was 17,000, rising to 142,000 by 1930. In 1920 a group of Mengo farmers formed the Buganda Growers' Association to market produce and cotton; but in 1933 it was reconstituted as the Uganda Growers Cooperative Society with the main object of marketing cotton; by 1955, this Union had grown to 203 primary societies with a total membership of about 10,000 producers. The first Cooperative Societies Ordinance was passed in 1946, by which time there were already over 50 agricultural marketing societies; it was amended in 1952 when a Cooperative Council was set up, and in the same year the Acquisition of Ginneries Ordinance was enacted by which the Government committed itself to a policy of assisting African participation in the processing industry.

Maize growing was greatly expanded in Uganda during World War II, when traders bought from growers and resold to wholesalers who acted as Government Agents, storing maize in their warehouses until the Supplies Department gave them an order for delivery, and paid them for it. This arrangement was superceded by the Produce Marketing Ordinance of 1953 under which buying licences for maize were issued to ordinary produce dealers, and the Government established rural produce markets.

A most important feature of producer marketing in Uganda has thus been the pre-eminence given, since 1945, to statutory marketing monopolies: the Lint Marketing Board was set up in 1949, with a new Cotton Price Assistance Fund in 1964; and in 1967 the Government passed an Act to establish a Produce Marketing Board which also deals in maize.

(c) Tanzania

Cooperatives have existed for many years in Tanzania. The earliest Cooperative Societies Ordinance was enacted in 1932, and some voluntary societies were operating even before then. By 1952 the Colonial Government concluded that marketing cooperatives of farmers were an appropriate form of economic organisation for Tanganyika and a period of substantial growth of the movement started. From 1952 to 1961 the number of registered Cooperative Societies increased from 172 to 857, particularly cotton societies in Sukumaland; in 1963 a new Cooperative Societies Ordinance was passed to accelerate cooperative development, and by 1968 registrations had reached 1,696.

The variety of Marketing Boards in Tanzania derives from the establishment after 1945 of the first producer commodity boards, such as the Pyrethrum Board in 1949. It was not, however, the Government which at that time took the initiative in setting them up, but the producers of exclusively non-African grown crops who wanted statutory powers of regulation from production to exportation. In the early fifties another type of marketing Board developed of which there was only one until after independence in 1961; the Lint and Seed Marketing Board. Its operations arose from the need to protect and promote a cotton industry in Tanzania, exclusively supplied by African small-holders who had become used to a system of assured outlets for their cotton under the then bulk purchase scheme of the British Government. After 1961 a number of other Boards came into existence, of which the most important is the National Agricultural Products Board in 1962, which handles maize.

## 2. Determinants of marketing organization in Kenya, Uganda and Tanzania

Marketing organization in East Africa must be viewed in terms of the three governments' interpretations of African Socialism, since the two institutions of Boards and Cooperatives are key instruments in its fulfilment. Through it, the economic benefits of political independence can reach not just the "elites" of African society, but the less organised growers, consumers and workers.

The Kenya Government's policy is that "The marketing boards will be used to promote a socialist organization of the country's economy. The growth of these boards in the past has been......in some cases intended to protect only one interest or group...... It is therefore necessary to review and streamline the.....operation of all marketing boards and to use them as a positive agency for promoting our socialist policies....(and) to promote the welfare of consumers as well as producers."[1] This has resulted in some amalgamation of these numerous institutions in order to bring the small-scale growers into a marketing system originally devised, however, with the interests of large-scale growers in mind; and this process of adaptation and absorption has not yet been entirely successful.

Another important determinant of marketing organization in East Africa has been the inherent weakness of African growers effectively to organize market power themselves, mainly due to their former dependence on the expatriate system which discouraged, through legislation, low cost competition by African small-holders, particularly in maize (contrast this with the situation in the former Belgian Congo where, since 1921, Europeans were actually prohibited from planting cotton, in order to encourage an indigenous cotton industry). These growers naturally looked to the new independent governments for assistance in establishing themselves into cooperatives; this is well illustrated in

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1. Kenya Government, Sessional Paper No.10 on African Socialism, page 39; Government Printer, Nairobi, 1966.

Uganda, where through a series of statutory measures the cooperative movement has been given, not only a foothold in the commerce of the country, but an entrenched position in the cotton trade with practically no competition.[1]

Such changes in marketing organisation reflect the Ugandan Government's declared aim of bringing cooperatives more and more into the distributive system. As a result, the small-scale grower "will be enabled to take part through his own cooperative organisation in the marketing and local processing of the fruits of his labour.....and to practise thrift through his own cooperative organisation, thus...... mobilising local savings to finance at least in part the marketing (and) processing activities of the.....movement."[2]

Increased control and regulation of the system by Government is another important determinant of marketing organisation in Tanzania. Indeed only in the market for domestically consumed foodstuffs (and this does not even include maize) is anything approaching a free market operating; even here there are frequently market regulations, dues, produce cesses, and so forth, which if they do not always directly affect the grower's market, tend to drive his produce into different channels. Nevertheless it is firm government policy to build the cooperative movement as the principal primary agricultural marketing agency, and at the same time to move it into a more production oriented role.[3]

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1. Cotton Act 1963; Laws of Uganda, Nos. 6 and 7; pages 71-115.
2. Uganda Government; Second Five Year Development Plan, 1966-71; Government Printer, Entebbe 1967. See also paragraph 100: "An integral part of the Government's policy for agriculture is..... the development of the Cooperative movement in the sphere of crop marketing....."; and paragraphs 121-123 headed Crop Marketing: "The Government intends to continue the policy of marketing the country's export crops through Marketing Boards,.....in the best interests of those engaged in the industries, and to extend these arrangements to other crops."
3. "Wages, Incomes, Rural Development, Investment and Price Policy;" Tanzania Government, White Paper No.4 of 1967, pages 16-17; Government Printer, Dar es Salaam.

The new Marketing Boards in Tanzania such as the National Agricultural Products Board are rooted in the country's political philosophy "Ujamaa," the Tanzanian version of African Socialism.[1] Under it, the Boards are viewed as the "pyramid top" or "umbrella" in a democratically controlled structure of which the cooperative movement forms the base, and within which all produce marketing must be channelled.[2]

Throughout East Africa, therefore, the organisation of the marketing system is being transformed by the predominant place accorded to Boards and Cooperatives by the state under African Socialism; this should not, however, be confused with state ownership.[3]

3. Inter-territorial marketing

The Treaty for East African Cooperation of 1966 specifically exempts most agricultural produce from its liberalising provisions, and inter-territorial trade in maize, cotton and pyrethrum has not therefore developed as rapidly as in other commodities. For example, it has been estimated that in an East African market free of restrictions, Uganda maize would be so competitive in Kenya and Tanzania that an output of 4,800,000 centals could be achieved and a quarter of this exported.[4] This can be compared with the present levels of inter-territorial maize marketing in Table A.

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1. "Ujamaa" means literally "togetherness." It was first promulgated as the official policy of the Tanganyika African National Union in the Arusha Declaration of 1966.

2. See Chapter III, headed The Rural Sector, paragraph 38, of the Tanzania Second Five Year Plan for Economic and Social Development, Government Printer, Dar es Salaam, 1969, Volume I: "The Cooperative is basically a socialist institution................The Cooperative Movement in Tanzania is a source of considerable strength for the growth of socialism - it represents a major advance over a private, capitalist marketing system."

3. In a speech on 20th May 1969 at Kenyatta College, the then Minister for Commerce and Industry, Mr. M. Kibaki said: "......expansion of the area of the economy controlled by.......Boards and Cooperatives ......would be a better means of achieving African Socialism than (the State) nationalising the means of production and distribution."

4. Economist Intelligence Unit, "A Study of Trends in the Economy of East Africa;" report submitted to the Uganda Government, 1965.

Restrictions have been imposed by bothethe exporting and importing countries and these have resulted in black markets flourishing along the frontiers, particularly when the price is higher in Tanzania or Uganda than in Kenya.[1]

Cotton was in a similar situation until 1964 when an amendment to the Cotton, Lint and Seed Marketing Bill was passed equalising Kenya and Uganda prices, to deter growers from crossing the frontiers to sell their cotton. Kenya and Uganda now agree to regulate the price of cotton, and to use the Cotton Price Stabilisation Fund when the Uganda price rises higher than Kenya can afford to pay.[2] The inter-territorial movements of cotton shown in Table A occur largely from Uganda to Kenya and Tanzania, and from Tanzania to Kenya; these reflect the diversification of the textile industry in East Africa, and the growth in local consumption of lint.

It can be seen from a comparison of Tables A and B that almost all the pyrethrum exported from Uganda goes to Kenya, and this is because it is marketed through the Kenya Pyrethrum Board (up to 1966 all Kenya cotton was disposed of through the Uganda Lint Marketing Board). Some pyrethrum from Tanzania is also sold to Kenya for processing; but most of the Tanzania pyrethrum is bought and processed in Arusha by Mitchell Cotts (East Africa) Ltd., and resold to the Tanzania Pyrethrum Board.

Gross marketed production of maize in Kenya in 1968 was 7,163,082 centals worth £K5,361,000;[3] this compares with total exports in Table A and B of 1,777,095 centals worth £K1,426,511, the difference being accounted for by local sales.

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1. This was noted by the Kenya Maize Commission of Inquiry in 1966; paragraphs 176 and 254, and page 192.
2. Debate in the Kenya National Assembly; First Parliament; Vol.III, Second Session; page 2424.
3. Third Annual Report of the Maize and Produce Board, 1969.

TABLE A

# East African inter-Territorial Trade 1968

| | Kenya | | | | Uganda | | | | Tanzania | | | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | To Uganda | | To Tanzania | | To Kenya | | To Tanzania | | To Kenya | | To Uganda | | | |
| | Centals | £K | Centals | £K | Centals | £K | Centals | £K | Centals | £K | Centals | £K | Centals | £K |
| Maize | 2,077 | 1,940 | 11,846 | 10,602 | 134,136 | 99,306 | 194,267 | 162,751 | 100,549 | 94,160 | 29,967 | 23,074 | 472,842 | 391,833 |
| Cotton | 288 | 777 | 189 | 827 | 46,139 | 58,519 | 1,426 | 5,709 | 67,661 | 87,310 | 574 | 731 | 116,217 | 153,873 |
| Pyrethrum | 15 | 374 | 192 | 3,095 | 2,635 | 19,972 | - | - | 3,008 | 38,927 | - | - | 5,850 | 62,368 |

1 Cental = 100 lbs.

Annual Trade Reports of the East African Commissioners for Customs and Excise; Table V.

TABLE B

East African Exports 1968

| | Kenya | | Uganda | | Tanzania | | Total | |
|---|---|---|---|---|---|---|---|---|
| | Centals | £K | Centals | £K | Centals | £K | Centals | £K |
| Maize | 1,763,172 | 1,413,969 | 628,006 | 578,221 | 713,834 | 633,490 | 3,105,012 | 2,625,680 |
| Cotton | 92,332 | 868,859 | 1,961,280 | 19,402,536 | 1,675,844 | 16,393,827 | 3,729,456 | 36,665,222 |
| Pyrethrum | 38,407 | 2,910,711 | 2,695 | 20,432 | 18,586 | 1,485,566 | 59,688 | 4,416,709 |

1 Cental = 100 lbs.

Annual Trade Reports of the East African Commissioners for Customs and Excise; Table III.

## 4. The economics of Statutory Marketing

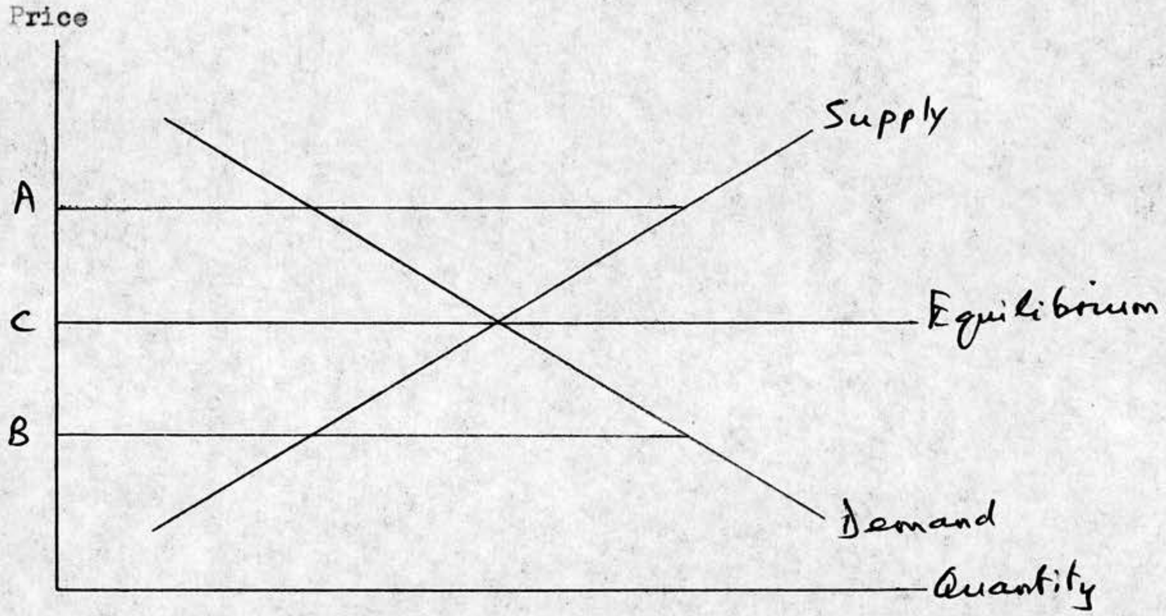
### (1) Supply and Demand

Any analysis of the effects of a statutory price on supply and demand rests on the relationship between this "fixed" price, and the "economic" price. Whilst quantity supplied responds differently to these prices, and different levels of demand are created by them, the fixed price need not attempt to equate supply with demand but the economic price will. The latter is the market-responsive price which is adjustable to induce a level of supply from producers sufficient to meet anticipated demand.

The mechanics of this analysis can be well illustrated in diagrammatic form, as in Figures 4, 5 and 6. The fixed or statutory price, unresponsive to the needs of the market, will be either low or high in relation to the economic price because the volume of produce marketed by the growers will directly depend upon the statutory price fixed for future deliveries to the Boards. Thus losses will occur, borne ultimately by the Government, in the form of surpluses of stocks which have been created by a "politically set" high price, and which can be disposed of by the Board concerned only at a loss - the loss being subsidised by Government. Alternatively, the statutory price will be low relative to both the domestic and export demand, with the result that growers will not be induced to market any substantial volume of produce, and the Board will be unable to meet demand, thus achieving sales revenue substantially below what would have been attainable with a price more responsive to the demand of the market.

These two situational alternatives are shown as follows:

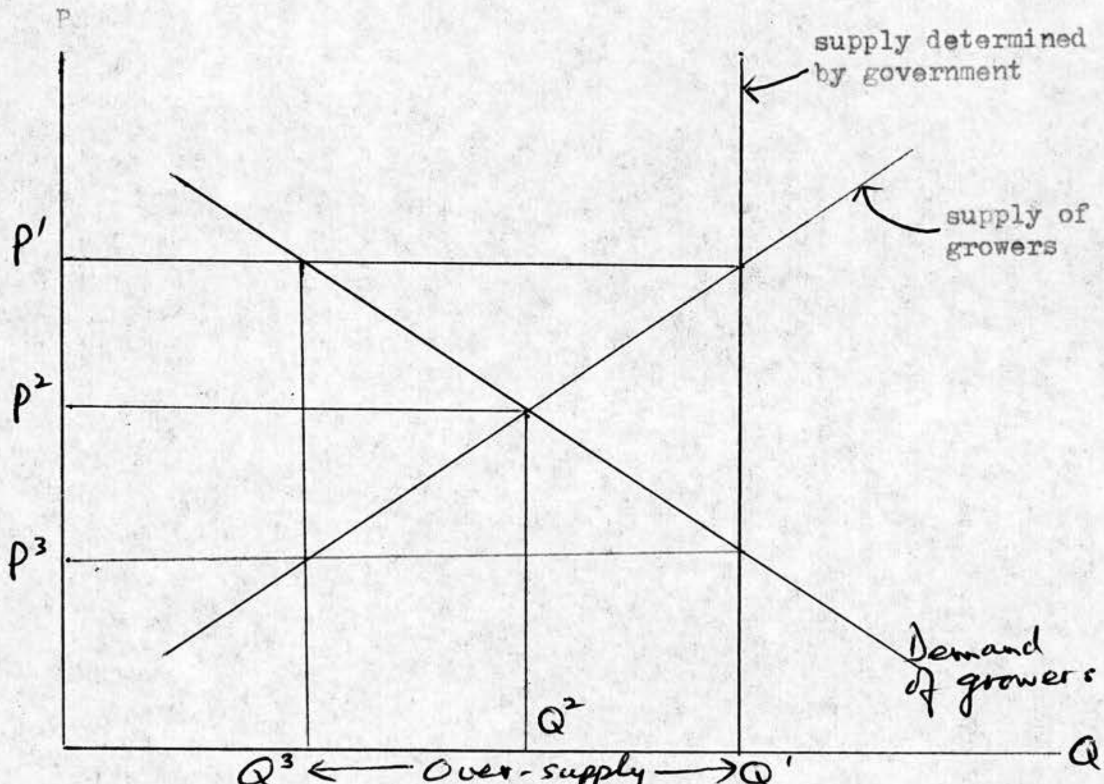
FIGURE 4




Thus if the statutory price to growers is fixed at "A" there will be over-supply, and if it is fixed at "B" there will be excess quantity demanded, or under-supply. But theeconomic price achieves equilibrium at "C", and thus moves up or down depending upon increases or decreases in demand.

Further analysis of prices fixed above or below "C" shows clearly why the consequences described above necessarily follow depending upon the level at which the Government fixes the statutory price, and guarantees this to growers.

FIGURE 5




In Figure 5, total revenue to growers is $P^1 \times Q^1$, where $P^1$ is the guaranteed price paid; but total revenue which should be received by growers if the price had been market responsive, is $P^2 \times Q^2$, and similarly supply would be $Q^2$; in fact supply is $Q^1$.

But at $P^1$, quantity demanded would have been $Q^3$ by any other buyer than a Statutory Board acting in accordance with Government policy. There is, therefore, at $P^1$, an over-supply equal to $Q^1 - Q^3$. Thus the Board has stocks of Q which it can dispose of only by lowering the price to $P^3$ (both internally and for export sale).

Thus, Government pays out to growers

$$P^1 - Q^1$$

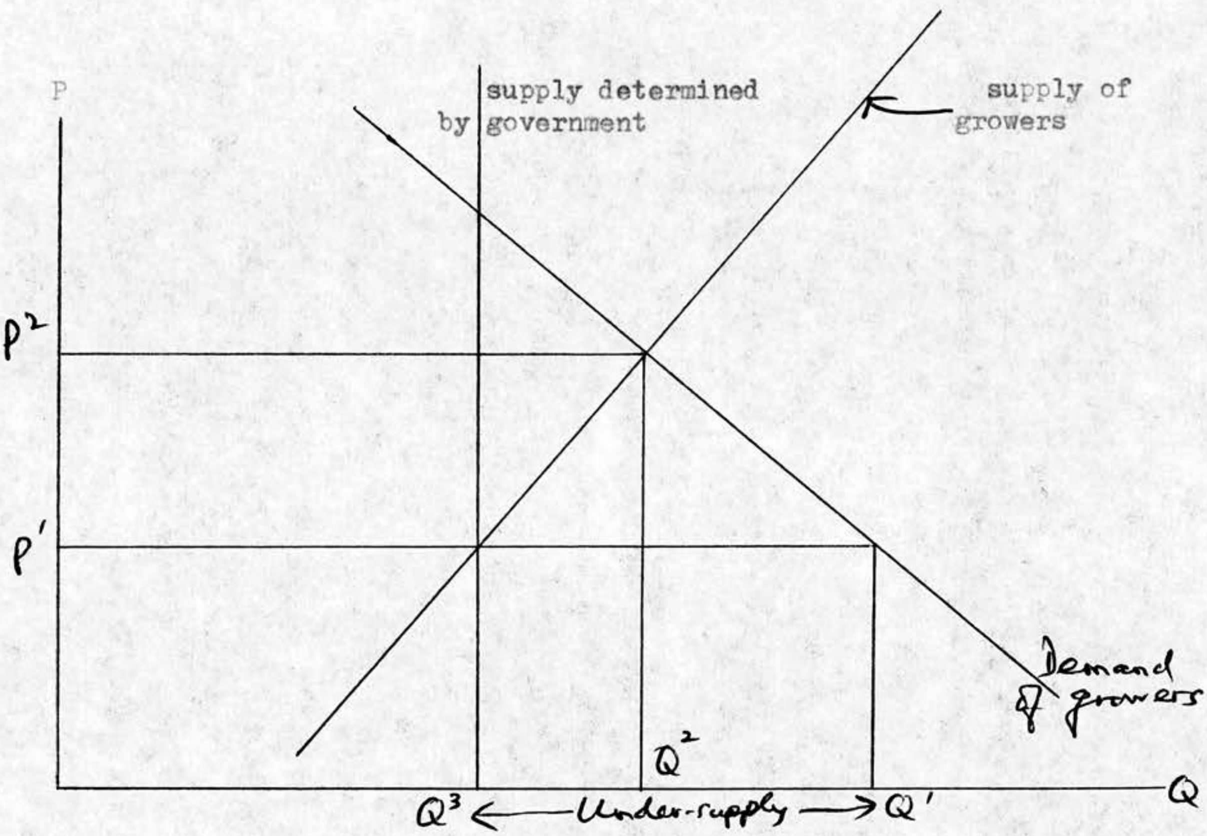
but receives back from the market

only $P^3 \times Q^1$

and therefore the loss to the Government is

$$(P^1 - P^3) \times Q^1$$

FIGURE 6




In Figure 6, the guaranteed price is $P^1$, and the quantity supplied is, therefore, $Q^3$. But the quantity supplied by growers if the price had been market responsive would have been $Q^2$.

The Government pays to growers $P^1 \times Q^3$, which is their total revenue, and the Government then sells $Q^3$. But the Board can obtain for itself the price of $P^2$ at $Q^3$, and thus can earn for the Government total revenue of $P^2 \times Q^3$.

Therefore, the government makes a profit of $(P^2 - P^1) \times Q^3$.

4. (2) Costs, Prices and Margins

The system of guaranteeing prices to producers by the Marketing Boards is intended to provide price stability in advance of planting, and to maintain levels of grower income. The Boards must, therefore, act as the producers' selling organization by bringing into relation prices obtainable for exports, prices for the local market and costs of production, so that speculative transactions between grower and trader are minimised, the grower is relieved of much of the burden of marketing costs, and any trading losses incurred are evenly shared by all producers.

Crucial factors in this are the "import parity" and "export parity" prices of maize, cotton and pyrethrum. If the domestic costs of production exceed the import parity price, or if the cost of exporting local produce exceeds the export parity price, a net financial loss will be suffered by the Marketing Boards. And though there may be some earnings of foreign exchange by domestic production, such losses cannot be written off against Treasury loans, but have to be recovered by lèvies on growers and higher consumer prices.

The extent of this differential between the import and export parity prices is shown in maize, where they are about Shs. 57/- and Shs. 20/- per bag respectively. Domestic costs of production in Kenya are at present within this parity price range; apart from foreign exchange considerations, it has thus become economic to produce maize for domestic consumption, but not to produce for export.

More serious aspects of Board pricing policy are, however, well illustrated in cotton. To subsidise cotton prices means that resources are being diverted to a sector of the economy when the true returns would not warrant their employment in growing cotton. For example, if the grower was paid the export price for his cotton, he might find it more profitable to use his labour and land for growing some other crop instead of using it all for cotton. Thus a subsidised price is preventing the grower from using his resources in a manner which will produce the greatest return to the economy. Moreover, in the short term the effects of a subsidised price are liable at least to delay payments, and can encourage a situation whereby, in the Cooperative sector, funds are embezzled, and the grower receives only a fraction of the payment due to him.

The Marketing Boards have done little to bring producer and export prices more into alignment,[1] although they can plead interference by Ministers reluctant to lower prices to producers for political reasons (this is one aspect of Board relationships referred to in the last paragraph of Section 2 (6) ). Indeed in the case of the Kenya Cotton Board there has been in the last few years a net outflow from the price assistance fund to finance this "loss marketing."

There are no standard procedures for announcing producer prices or for determining what proportions of the "gazetted prices" (those published in the Government Gazettes) shown in Tables C, D and E growers will actually receive. In 1968, the following delays occurred in the announcement of producer prices.

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1. This in spite of strong recommendations by Government Commissions such as that in paragraphs 30 and 31 of the Uganda Committee of Inquiry into the Cotton Industry in 1966:" We have agreed that a subsidised growers price......can only have a detrimental effect on Uganda's economy....We are of the opinion that the most pressing requirement at present is a pricing policy which is a realistic reflection of the World Market Price. We are aware that a fall in price of about 20 cents per lb. of A.R. seed cotton will be no easy decision to take."

FIGURE 7

| | Grower price should be announced | Grower price announced |
|---|---|---|
| Maize | September | April |
| Cotton | November | January |
| Pyrethrum | February | May |

Agents' commissions are shown in Table F, separately from processing costs because in most cases they undertake no processing themselves. As % margins on the gazetted price, they are 4.5 in maize, 5.7 in cotton, and 5.2 in pyrethrum, and represent the profit margins allowable to the Agents on acceptance of deliveries from growers, and on resale to Board depots. Where Cooperatives are granted agencies by the Boards it is intended that they pass on at least part of these margins to growers in higher prices, because Cooperatives can themselves deliver direct to Board depots. It is clear from Table G that this has not occurred, not even in maize, where Cooperatives were first appointed Agents.

The Governments have also been endeavouring gradually to reduce the level of processors' margins in order to minimise the losses incurred by the Marketing Boards. For instance, in cotton, the Uganda Government achieved a total reduction in ginners' allowances of 14.8% between 1961 and 1966. This trend has been halted and in some cases reversed where Cooperatives have been financed to take over ginneries; this is because Cooperatives cannot work even at break-even point in Kenya within the margin set by the licensed ginners at 4 Cents per lb; now the Cotton Board has to give Cooperatives doing the same work a margin of 7 Cents.

The Boards have difficulty in apportioning marketing costs, since these vary widely among producers. For example, many small-scale growers have no transport of their own and cannot deliver direct to Board depots;

others have small lots which are collected and sorted by Agents, on payment of commission. These costs are passed on to growers and recovered by the Boards when they determine the gazetted price payable to growers; other expenses such as Price Fund or Reserve tend to be fixed; details of all these costs can be found in Table F.

Whilst these costs are high in relation to the gazetted prices, particularly in cotton, deficiencies in Cooperative payments result in still further financial losses to growers. A comparison of average prices obtained by producers is contained in Table G, and in each of the three years pay-outs by Cooperatives have been lower than those at depots or from produce traders at rural markets. The Kenya Pyrethrum Board has recently drawn attention to the seriousness of this situation.[1]

Some Cooperatives are taking over marketing services for their members which the Boards still provide for non-members, such as collecting, grading and transporting. The costs incurred by Cooperatives in providing these are more than those of the Boards, and result in higher costs and lower pay-outs to producers. Added to this are delays in making the actual payments to members.

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1. On page 3 of the Board's Annual Report and Accounts for 1969 it records: "If Kenya is to retain its position as the major producer in the world ........ there must be efficient production with the resulting lowering of producer costs right from the smallholder's plot through his Cooperative Society to the final processing and marketing stages. One of the greatest dangers to the industry to-day is the fact that although the cash returns paid by the Board to the Cooperative Societies are much higher than in many other crops, the ultimate payments to individual Society members are in many cases so small that the producers....... hardly find it worthwhile growing the crop. This is mainly due to excessive deductions by the Societies concerned. The Board has involved the Commissioner for Cooperative Development more closely in such matters......"

   And in the revised 1968-73 Development Plan of the Pyrethrum Marketing Board, the Deputy Chief Executive notes ".....the difficulties created by unduly high commissions being charged by some Societies; commissions should be at a fixed rate per lb. of flowers rather than a percentage (as at present); the former method gives greater incentive to members anxious to improve the quality of their deliveries."

Since Cooperatives do not have the same fixed and operating costs as the Boards, their paid-out prices to growers should reflect this, and fall somewhere between those prices obtainable at markets and Board depots, and the gazetted price. Indeed, Cooperatives are intended to lower producer costs in order that growers may be enabled to make as much profit as possible on smaller quantities; this will contribute towards the lowering of producer prices by the Boards to bring them more into alignment with world export prices. The alternative of restricting production by quotas, as in pyrethrum, can reduce grower incomes without reducing costs.

5. <u>Distribution of the three commodities through Cooperatives and Boards.</u>

Reference has been made in the Introduction, Part 1, Section 1 (3), to the high proportions of produce sold to Boards which come from Cooperatives, notably cotton in Uganda and pyrethrum in Tanzania. Details of such sales in Kenya are contained in Table H: although all cotton in the Lake Victoria region is marketed through Cooperatives, only about 40% of the cotton growers have become members. Kenya Boards handled an estimated 58.9% of gross marketed production in 1968 worth £K70,617,157.[1] Whereas a substantial volume of cotton and pyrethrum is bought from Cooperatives, in maize the Cooperative share has not yet reached 10%, and this isdue to continuing distribution through other agencies.

It is noteworthy, though, that the proportions of cotton and pyrethrum sales to Boards deriving from Cooperatives fell between 1968 and 1969 from 63% to 54.9% in cotton, and from 82.5% to 62.2% in pyrethrum. This reflects, among other considerations examined in Part 2, failure by Cooperatives to deliver against agreed quotas, and a decline

1. Economic Survey 1969, Government Printer, Nairobi; this does not include tea, sisal and dairy products, because they are not marketed directly by their respective Boards.

TABLE C



Maize Producer Prices gazetted by the Marketing Boards.

| | KENYA | | UGANDA | |
|---|---|---|---|---|
| | Dry Maize Grade I Shs.per 200 lb.bag | Dry Maize Grade II Shs.per 200 lb.bag | Dry Maize Grade I Shs.per 200 lb.bag | Dry Maize Grade II Shs.per 200 lb.bag |
| 1963 | 27/00 | 26/10 | 25/50 | 24/60 |
| 1964 | 32/50 | 31/30 | 30/00 | 29/00 |
| 1965 | 32/50 | 31/30 | 30/00 | 29/00 |
| 1966 | 37/00 | 35/80 | 34/00 | 32/95 |
| 1967 | 37/00 | 35/80 | 34/00 | 32/95 |
| 1968 | 28/00 | 27/10 | 25/50 | 24/60 |
| 1969 | 28/00 | 27/10 | 25/50 | 24/60 |

Statistical Abstracts and Economic Surveys of Kenya and Uganda Governments; 1963-69.

TABLE D **Cotton Producer Prices gazetted by the Marketing Boards**

| | Kenya | | Uganda | | Tanzania | |
|---|---|---|---|---|---|---|
| | Seed Cotton AR Grade Cents per lb. | Seed Cotton BR Grade Cents per lb. | Seed Cotton AR Grade Cents per lb. | Seed Cotton BR Grade Cents per lb. | Seed Cotton AR Grade Cents per lb. | Seed Cotton BR Grade Cents per lb. |
| 1963 | 50 | 20 | 51 | 23 | 50 | 23 |
| 1964 | 50 | 26 | 57 | 26 | 50 | 22 |
| 1965 | 54 | 28 | 58 | 27 | 48 | 22 |
| 1966 | 50 | 25 | 52 | 23 | 46 | 20 |
| 1967 | 48 | 23 | 49 | 22 | 46 | 21 |
| 1968 | 48 | 20 | 50 | 24 | 48 | 22 |
| 1969 | 49 | 22 | 51 | 24 | 48 | 22 |

Statistical Abstracts, Background to the Budgets, and Economic Surveys of Kenya, Uganda and Tanzania Governments; 1963-69.

TABLE E

**Pyrethrum Producer Prices gazetted by the Marketing Boards**

| | Kenya | | Tanzania | |
|---|---|---|---|---|
| | Pyrethrum flowers of 1.5% pyrethrins Shs. per lb. | Pyrethrum flowers of 1.3% pyrethrins Shs. per lb. | Pyrethrum flowers of 1.5% pyrethrins Shs. per lb. | Pyrethrum flowers of 1.3% pyrethrins Shs. per lb. |
| 1963 | 1/90 | 1/65 | 2/40 | 2/08 |
| 1964 | 1/95 | 1/69 | 2/42 | 2/10 |
| 1965 | 2/45 | 2/12 | 2/50 | 2/17 |
| 1966 | 2/86 | 2/48 | 2/48 | 2/15 |
| 1967 | 2/78 | 2/41 | 2/30 | 2/00 |
| 1968 | 2/53 | 2/19 | 2/36 | 2/05 |
| 1969 | 2/51 | 2/16 | 2/33 | 2/02 |

Statistical Abstracts and Backgrounds to the Budgets of Kenya and Tanzania Governments; 1963-69.

TABLE F Analysis of Marketing Board and other costs in Kenya in 1969

| | Maize | Cotton | Pyrethrum |
|---|---|---|---|
| | Grade I<br>Shs.and Cents per<br>200 lb. bag | AR Grade<br>Cents per<br>lb.of seed | 1.5% pyrethrins<br>Shs.and Cents per<br>lb. of flowers |
| County Council cess | 1.00 | 1,00 | .10 |
| Cooperative Union fund | .50 | .36 | .5 |
| Agents' Commissions | 1.36 | 2.8 | .13 |
| Processing costs | 2.79 | 9.7 | .21 |
| Transport costs | 4.30 | 5.0 | .17 |
| Other marketing costs | .80 | 5.3 | .26 |
| Board Price Fund or Reserve | .60 | .83 | .6 |
| Export tax or Development levy | .45 | 1.00 | .4 |
| | Maize | Cotton | Pyrethrum |
| Gazetted producer price | Shs. 28/00 | Cts. 49.00 | Shs. 2/51 |
| Total costs as % of gazetted price | 39.8% | 52.9% | 40.6% |

Compiled from the Annual Reports and Accounts of the Maize & Produce, Cotton Lint and Seed, and Pyrethrum Marketing Boards; 1969.

TABLE G **Average prices obtained by small-scale growers in Kenya**

| | Maize | | | | Cotton | | | | Pyrethrum | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Cooperative Societies | | Depots and Markets | | Cooperative Societies | | Depots and Markets | | Cooperative Societies | | Depots and Markets | |
| | Grade I Shs.per bag | % deviation from gazetted price | Grade I Shs.per bag | % deviation from gazetted price | AR Grade Cents per lb. | % deviation from gazetted price | AR Grade Cents per lb. | % deviation from gazetted price | 1.5% pyrethrins Shs. per lb. | % deviation from gazetted price | 1.5% pyrethrins Shs. per lb. | % deviation from gazetted price |
| 1967 | 33/10 | -10.6 | 35/10 | - 4.9 | 42 | -12.4 | 46 | -4.2 | 2/41 | -13.3 | 2/49 | -10.4 |
| 1968 | 20/20 | -27.8 | 23/65 | -10.6 | 45 | - 6.3 | 46 | -4.2 | 2/12 | -15.6 | 2/29 | - 9.5 |
| 1969 | 21/40 | -23.5 | 25/10 | -10.4 | 47 | - 4.1 | 48 | -2.0 | 2/17 | -13.5 | 2/30 | -8.7 |

Personal interviews with Agricultural Officers and Provincial Cooperative Marketing Officers.

in the number of Cooperative members marketing their produce through their Cooperatives. At least the trend in Cooperative sales of maize is upward - 8.7% to 9.8% - if not markedly so.

Figure 8 shows the place of Boards, Cooperatives and these other agencies in the distributive system; the buying and selling chain includes the following transactions:

1. Grower to grower

This transaction occurs mostly in maize in the form of single lot deliveries direct from one grower to another to alleviate local shortages.

2. Grower to Cooperative

This comprises particularly bulk purchasing by the Cooperative of growers' produce; it includes collection, weighing and sorting at the Cooperative store.

3. Grower to Agent

Acceptance of numerous deliveries from growers is a condition of the agency licence; the Agent weighs and assembles these lots and dispatches them to the processor.

4. Produce Trader to Board Depot

Deliveries from the trader are weighed and graded at the depot as they are made, and stored pending dispatch to the Board's warehouse.

5. Cooperative to Board Depot

Cooperatives make bulk deliveries to Board depots, and the grades of each load are inspected by depot staff before being stored and dispatched together with produce from other agencies.

6. Agent to Processor

This consists of bulk deliveries by Agents, when their own stores are full, for processing by milling, ginning, drying or extracting.

7. Cooperative to Processor

Processing of produce from Cooperatives is undertaken on a contract basis after inspection and verification of grades delivered.

8. Processor to Board Warehouse

The processed products are packed and stored by the processor as they come off the processing lines, pending bulk deliveries to the Board's warehouses for labelling, crating and dispatching to customers of the Board as their orders are received.

6. Relationships of Boards and Cooperatives

The applications of conflict and cooperation discussed in Part 1, Section 2 (1) in marketing are particularly relevant to Board and Cooperative relationships. First, they are competing for business at the agency level: Board Agents accept growers' produce at their stores in the same way that Cooperatives accept it at theirs. Second, because Boards are the final handlers of this produce in the sense that the processed commodity is offered for resale to customers from the Boards' warehouses, Boards and Cooperatives are intended to cooperate in moving the produce from grower through the various intermediaries, outlined in Section 2 (5) of this Part, to the point of sale to the Boards' customers, both domestic and export.

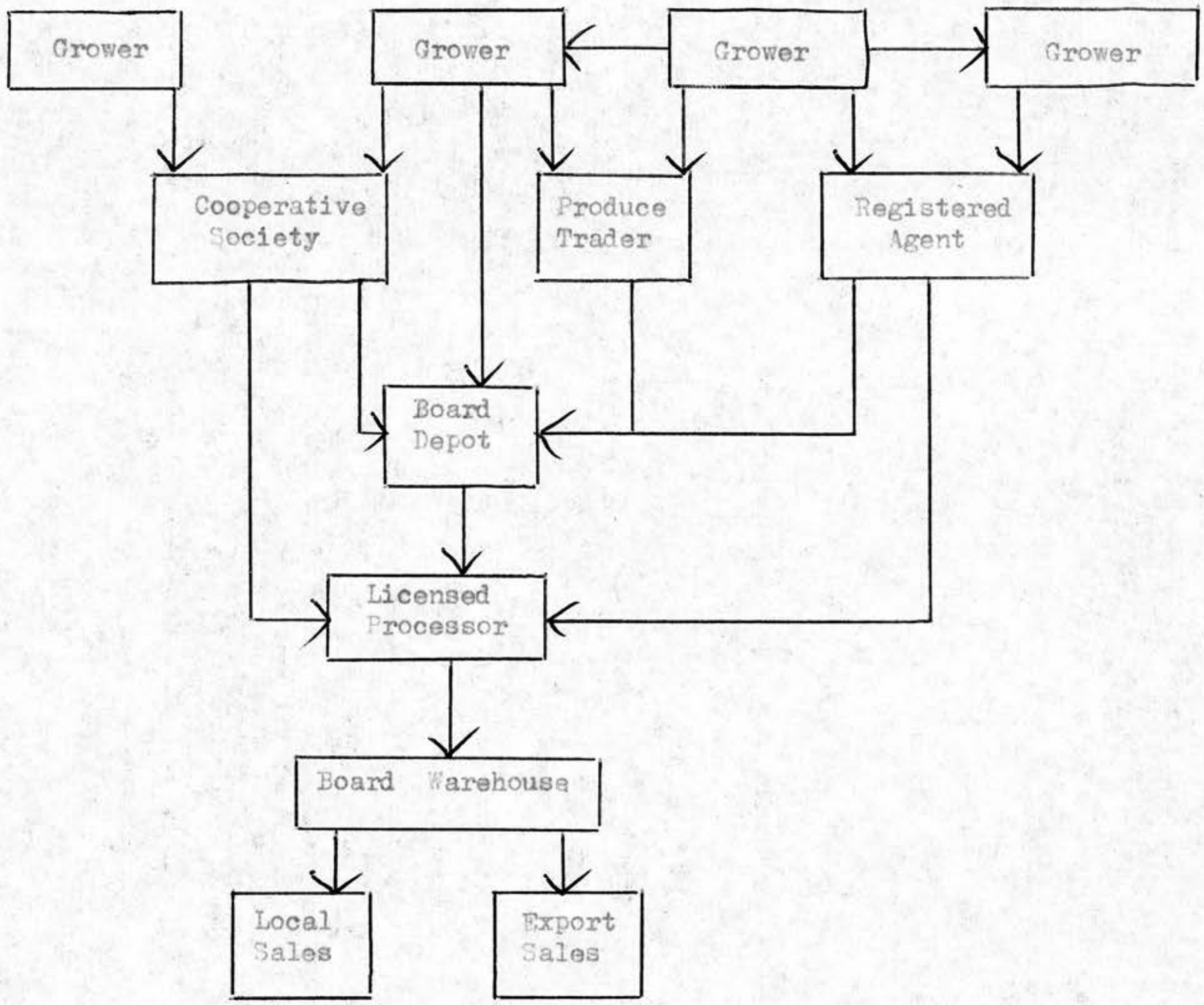
TABLE H Sales to Kenya Boards

| | Maize | | | Cotton | | | Pyrethrum | | |
|---|---|---|---|---|---|---|---|---|---|
| | bags | | % Cooperative share of all sales | bales | | % Cooperative share of all sales | tons | | % Cooperative share of all sales |
| | Total sales to Board | Cooperative sales to Board | | Total sales to Board | Cooperative sales to Board | | Total sales to Board | Cooperative sales to Board | |
| 1963 | 1,917,417 | 80,076 | 4.2 | 15,314 | 6,009 | 39.3 | 5,899 | 2,201 | 37.3 |
| 1964 | 2,094,770 | 117,844 | 5.9 | 17,333 | 9,614 | 55.4 | 6,022 | 2,784 | 46.5 |
| 1965 | 1,843,319 | 117,208 | 6.3 | 22,870 | 15,000 | 66.6 | 6,157 | 3,301 | 54.1 |
| 1966 | 1,531,048 | 101,743 | 6.6 | 23,424 | 10,552 | 44.8 | 7,751 | 3,794 | 48.9 |
| 1967 | 2,508,581 | 228,105 | 9.1 | 23,913 | 17,697 | 74.1 | 10,529 | 5,058 | 47.6 |
| 1968 | 3,580,046 | 312,319 | 8.7 | 20,072 | 12,634 | 63.0 | 11,059 | 9,156 | 82.5 |
| 1969 | 3,243,200 | 316,932 | 9.8 | 22,291 | 12,350 | 54.9 | 9,325 | 5,879 | 62.2 |

Consolidated Reports of the Kenya Commissioners for Cooperative Development: 1963–69.

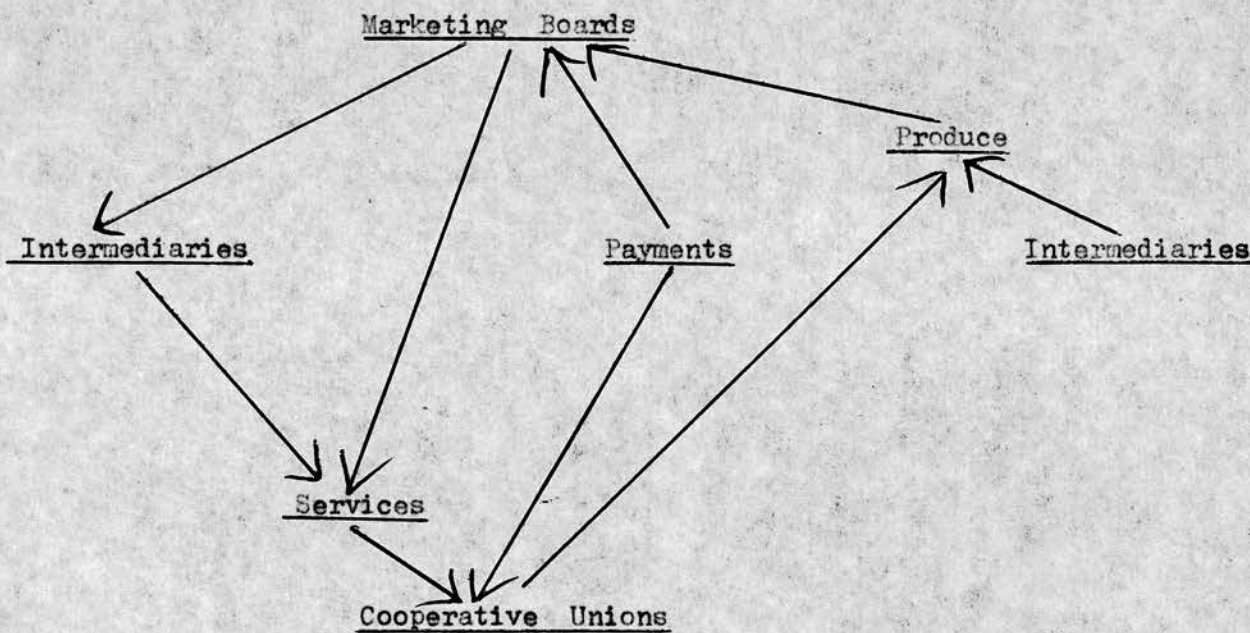
FIGURE 8

Channels of Distribution



There are thus "cross-flows" of finance, produce and services between Boards and Cooperatives; these can be explained diagrammatically:

FIGURE 9




But the performance of Cooperatives within this system has been a consistent disappointment to the Boards; this is clear from the Reports of the Boards and elsewhere.[1] Cooperatives have not been satisfactory as Agents (maize), they are unsuccessful in recovering loans (cotton), and they have failed to keep production within quota limits (pyrethrum).

Incentives provided by the Boards to improve quality, observe quotas and deliver promptly to depots are proving difficult to work through groups of members in Cooperatives more so than at the individual level. The Maize Board still accepts deliveries of small lots of 30 bags and over direct from individual growers. The Pyrethrum Board has already gone outside Cooperatives in offering quality premia to individuals; and the

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1. In a personal interview with officials of the Kenya Cotton Board in May 1968, the view was expressed that until and unless Cooperatives improve their standards, the Board will be unwilling to have the Cooperative system extended to the Coast; and the Government is aware of the Board's attitude.

same now applies to cotton: individuals are remunerated directly for cotton of high and low grade.

Yet in spite of these shortcomings, officials of District Cooperative Unions persist in demanding that the Boards hand over more and more of their marketing services to Cooperatives.[2] Growers themselves tend to support this attitude because they feel that their own interests are not adequately represented on the Boards. Not only must they be guaranteed places on them, but they should have a say as to which growers are to fill them; at present, Government appointed growers are regarded as yet another species of civil servant.

Conflicting relationships are, therefore, the consequence of this divergence of opinions, and the only Government expression of policy on relationships of Boards and Cooperatives is a hopeful statement by the then Minister of Cooperatives and Social Services, Mr. R. Ngala, when in a speech to the Kenya National Assembly on 30th November 1966, he said "I hope that we all, in this House, agree that the Cooperative Societies must grow to the height of ability, where the Government will feel that it is obliged to give them further responsibilities such as the functions which are being carried out by the Statutory Boards of Government."

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1. Typical of such demands is that reported in the East African Standard on 8th October 1969, headed "Turn over crop marketing to us say Co-ops;" it continued: "President Kenyatta was asked yesterday to turn over the responsibility for agricultural marketing to Cooperatives. He received a delegation from the Kenya National Federation of Cooperative Unions..... who told him that the present system of channelling agricultural crops through Statutory Boards was causing a lot of trouble for the Cooperatives. There was a need for a review of the relations between the Boards and the Cooperatives....This would be an appropriate (sic) time to give the Cooperatives more responsibility for marketing....(and) granting them monopolies. Where it was absolutely necessary to retain a Marketing Board, the growers, through their Cooperatives, should have the right to elect the Board with Ministerial nominees strictly limited. New crops should be the sole responsibility of Cooperatives, and middlemen should be eliminated as far as possible. (They) .....were appealing for a well defined Government policy in favour of Cooperatives."

Little has been said or done since then to define the relationships of Cooperatives and Boards in their joint marketing;[1] and this omission has been drawn attention to forcefully by Mr. O. Odinga, leader of the banned Kenya Peoples Union.[2]

It is is the Government which must say what are to be the relationships of Boards and Cooperatives, because it was the Government which established and urged on the present Cooperative movement long after the Statutory Boards had been set up and were functioning satisfactorily.[3]

There is also a tendency for the Boards themselves to become increasingly the recipients of directives from Ministers rather than their advisers.[4]

7. Produce Trading

There is a very close relationship in East Africa between produce trading and distributive trading; for many years the two types of trading have been completely inseparable. At all levels, the buying and selling of produce is carried on by the same concerns which import and market

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1. The Tanzania Presidential Special Committee of Enquiry in 1966 merely recommended "......that as a matter of policy the functions performed by the Boards..................should gradually be shifted to the Cooperatives as the capacities of the latter grow," paragraph 224; it added, however, in paragraph 245 that "It is time to regularise.....relationships between Boards and Cooperatives........"

2. ".......this Bill lays a lot of emphasis on what we call......producer Cooperatives.......I was wondering whether this is not a biased Bill which only deals with one sector....We have all kinds of Boards in this country.....how is (the Minister) going to marry the two....what are their relationships? Nothing is said here in this Bill to inform us of their relationships, and how these two organizations are going to work together." Debate on the new Cooperative Societies Bill in the Kenya National Assembly; First Parliament; Vol.X, Fourth Session; page 2196.

3. See the Bugisu Cooperative Union Report, Government Printer, Entebbe, 1958, page 26: "......because Government (has) preached the gospel of Cooperation....there is much readiness to lay all dissatisfaction with the marketing system at the door of Government."

4. "Who controls Industry in Kenya?" Report of a Working Party; East African Publishing House 1968; page 234.

consumer goods.[1] A produce trader owns a general store at or near a rural market; he buys from growers and resells to wholesalers, processors or Board depots at a fixed profit margin. Unlike a Registered Agent, he is not controlled by or in contract with either Boards or Cooperatives, but he has to hold a government licence to trade.

The produce trader is not obliged to buy growers' produce; but he does provide them with two things: credit (which growers cannot obtain elsewhere) and merchandise (e.g. bicycles, radios, parafin, watches, calicos, shoes, charcoal and other household requirements). The volume of this business is such that it channels a substantial volume of growers' produce through these traders, who allow the growers continuing credit only on the security of delivered produce in small lots. Whilst the Boards gain business, Cooperatives lost it.[2]

The importance of produce trading both to Cooperatives and Boards is thus considerable; it is naturally a very seasonal activity, and if carried on by itself, the trader is either inactive for half the year, incurring considerable overheads while doing very little business, or he has to close down completely and find another seasonal job. The obvious way out is to combine produce with distributive trading.

The quantity of produce to be bought in any one area is seldom so great that the buyer is unable to carry on another business at the same time. In this way he is able to make fuller use of all his resources, his shop, his storage space, his staff and family, his capital and his transport. This last one is particularly important, as transport costs are often a crucial factor in produce trading.[3] If a two-way load can be obtained, this is a big consideration; and a trader is much more likely to be able to arrange this if he is a distributor as well as a produce buyer.

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1. "The most successful of the African traders are those who combine the selling of goods with the buying of produce." An African Economy: A Study of the Economic Development of the Nyanza Province of Kenya, by H. Fearn; Oxford, 1961.

2. See Section 5; Distribution of the three commodities through Cooperatives and Boards, and Figure 2.

3. See Table F.

## 8. The role of Agents

The agency system is a direct consequence of the monopsony powers granted to the Marketing Boards,[1] as it provides a distributive network through which produce can be channelled to Board depots. It is difficult for the Boards to take deliveries direct from innumerable growers; the crux of the matter is the extent to which Cooperatives can fulfil this intermediary function. In pyrethrum the participation of Cooperative Unions in bulking growers' produce and delivering it to Board depots is essential to the running of the pyrethrum industry. In maize and cotton such participation is less advanced, where agencies are still in private hands, though unlike processing, they are not dominated by Asians and Europeans.

A registered Board Agent is obliged to accept deliveries of F.A.Q.[2] produce which growers make to his store, at a price and commission[3] determined by the Board concerned. Other conditions of his agency stipulate that:

(i) he must trade only within the locality defined by the Board in his Registration Certificate

he must have

(ii) sufficient capital for operations

(iii) full-time employees

(iv) suitable storage and transport facilities

and

(v) produce becomes the property of the Board when received in the Agent's store.

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1. Sections 16 and 17 (i) of the Kenya Pyrethrum Act, Chapter 340 (Revised 1967), state "No......grower shall deliver pyrethrum to any person other than the Marketing Board. No person other than the Marketing Board shall, without the permission of the.....Board, take delivery of any pyrethrum...from a pyrethrum grower...The Board shall take delivery of all pyrethrum......grown or produced by a licensed grower......."

2. Fair Average Quality.

3. See Table F.

There is an important distinction between a Board's power to appoint Agents and its obligation to do so, which is not clear in some legislation. For instance, Section 14 (1) of the Kenya Maize Marketing Act, Chapter 338, is only an enabling clause; but Section 13 (3) is mandatory: "The Board shall appoint Registered Agents......for the buying, storing and disposal of maize."

This latter clause is also costly as the Maize Board operates through approximately 1,000 Agents all over Kenya. Boards should be encouraged rather than forbidden to act increasingly on their own behalf: the consequent reduction in the number of Agents would lower distribution costs, as fewer intermediaries would be handling larger quantities.

There is confusion about the position of processors as Agents. Maize millers cannot be appointed Agents;[1] but cotton ginners can, according to Section 14 (1) of the Kenya Cotton, Lint and Seed Marketing Act, Chapter 335: ".....provided further that when a ginner is acting as Agent of the Board for the purchase of raw cotton from growers or grower Cooperatives, than all such.....cotton shall become the property of the Board when delivered to such ginner." But Part III of the Cotton Ordinance, Chapter 334 (Revised 1962), provides for the annual licensing of cotton buyers other than ginners to purchase cotton at buying centres and on certain days specified in their licences.[2]

Agents can undertake, for extra commission, to carry out for Cooperative Societies some of those functions which the Societies are not yet well equipped to do (e.g. collecting and grading). Cooperatives are intended, however, to assume more and more of these agency functions themselves; of course, every Cooperative acts as agent for its members

1. Section 27 (1) of the Maize Marketing Act.

2. Sections 12, 15 (1) and 17 (1) of the Cotton Ordinance.

in so far as it contracts to dispose of their produce.[1] But there is now provision for a Cooperative to be appointed sole Agent on behalf of a Board for the handling of certain commodities in selected Districts; hence the urgency of determining the role and identity of Agents in the present marketing system.

The granting of such monopolies to Cooperatives is ultimately at the discretion of the Minister of Cooperatives and Social Services; nevertheless the power which the Boards themselves have to appoint Registered Agents is probably the single most significant way in which the Boards can develop Cooperative marketing, that is by appointing Cooperatives as Agents.[2] This means, unavoidably, replacing the many existing individual Agents throughout each District, both Asians and Africans, by Cooperatives with exclusive agency rights, under which produce traders would also be barred from dealing in the scheduled commodities.

Cooperative control of the agency system on these terms, however, has already aroused hostility among existing Agents and traders, and it is arguable whether this sort of conflict can benefit either the growers or the Boards. Yet as early as July 1965, the Commissioner for Cooperative Development was requesting his Senior Cooperative Officers to recommend Cooperative Societies which "have the ability in terms of managerial staff as well as facilities to handle an agency....if handed to it by one of the Boards."[3] And in May 1968, the General Manager of the Maize Board was writing to his Area Managers "to remind you of our policy of giving Agencies to Cooperatives.... Every encouragement and assistance should therefore be given to them, but you must ensure that the highest standards of service to producers are maintained."[4]

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1. The Cooperative Societies Act, No.39 of 1966; Part VII, Section 30.
2. "One of the main aims of the Marketing Board system is....to foster the development of Cooperatives as a substitute for the private trader." An Introduction to Economics for East Africa, by I. Livingstone and H.W. Ord; Heinemann, 1968; page 168.
3. Commissioner's Circular No.21 of 1965.
4. Maize Board files.

All this undoubtedly reflects the Kenya Government's policy of giving Cooperatives more responsibility for the marketing of produce to the Boards.[1] And it was, therefore, decided to appoint Cooperatives sole Agents of the Boards in the Kwale, Kilifi, Bungoma and Kakamega Districts of Kenya. The decision was not a happy one: those Cooperatives concerned failed to make deliveries or payments, were unable to operate enough buying centres for all growers, and did not grade produce collected satisfactorily. As a result the Marketing Boards felt let down by the Cooperatives; at the same time, a delegation of Agents and traders from these few Districts, whose licences had been revoked, demanded re-instatement by the Minister of Agriculture. Within a year, the Cooperative agencies were rescinded, and the private intermediaries were back in business. Clearly, Cooperatives still have a long way to go before they can undertake agency services satisfactorily.[2]

## 9. Board and Cooperative participation in processing

Processing in East Africa has traditionally been in the hands of private, expatriate concerns. Since the achievement of independence by Kenya (1963), Uganda (1962), and Tanzania (1961), the control of processing has been subjected to much discussion and some controversy. The key issues are the extent to which Cooperativessshould and can be involved in the processing industry, and the role of the Marketing Boards in acquiring interests in processing companies on behalf of the growers. In cotton in Uganda and in pyrethrum in Kenya, Boards and Cooperatives are already

1. "The Minister (of Cooperatives and Social Services) is anxious to promote the policy of enhancing cooperation between the Cooperative movement and the cash crop Boards....by encouraging the granting of agencies to approved Cooperatives." Memorandum of September 1967 to the Commissioner for Cooperative Development.

2. "The cost of agency services such as buying, storing, handling and transporting the cotton crop to the ginneries is higher than previously now that Cooperatives are participating in this industry;" Fourteenth Annual Report and Accounts of the Kenya Cotton Board, 1968; page 5.

heavily committed as processors. And there is increasing acceptance of the need to offset and indeed replace the private sector in processing with more African grower participation, whether this is achieved through Cooperatives or Boards.

There are several reasons for this. There has always been some resentment against Asian and European processors as "extortionate middlemen," making the most of the monopoly positions granted to them by the Boards.[1] And this resentment is usually voiced as a demand that African producers take over these middlemen's functions themselves, and of course their profits. Such a demand was bluntly expressed by Mr. O. Tipis, a member of the Kenya National Assembly, when he said in 1964 "The Indians and Europeans do not produce the cotton, so why should they benefit? We do want these ginneries to benefit the African producers (who) should be encouraged to run them;.......we want the profits to go back to the African growers."[2] Cooperatives have become the practical means by which growers seek to take over processing, where they feel that they will be working for themselves, and not for someone else.

There is the further consideration that Cooperatives may not be economically viable unless they are given a broader base for their operations; that in order to render full economic value for cost to their members and to industry as a whole they should not be employed in producing only, but have an integrated role in producing, buying and processing.[3] Indeed, the splitting of the producing and processing

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1. "The Wasukuma cotton growers firmly believed that the Indian ginners took advantage of them, that (for example) they were not honest in weighing. A few test weighings proved that this belief was not unfounded though.....the practice of swindling was probably insignificant in the overall picture." Agricultural Development in Tanganyika by H. Ruthenberg; Afrika Studien 2, IFO, Munich, 1964; page 57.

2. First Parliament, Vol. III, Second Session; page 3510.

3. See Paragraph 8 (ii) of the Report of the Special Committee on Cotton Ginneries, and the statement to the Committee of the Commissioner for Cooperative Development.

functions between Cooperatives and the private sector has resulted in inefficiencies such as the building of a new store at each cotton ginnery merely in order to separate Cooperative owned seed cotton before it is sold to the ginner, from seed cotton bought and stored by the ginner himself.

The East African Governments, with their avowed commitment to African Socialism and all that it implies for the processing industry, have now endorsed greater Cooperative control of processing, though not unreservedly. The Tanzania Presidential Special Committee of Enquiry in 1966 welcomed it, in principle, but warned that processing must not be left in unskilled hands.[1]

Cooperative processing has progressed farthest in the cotton ginning industry in Uganda, where in 1952 Cooperatives were first empowered to acquire ginneries.[2] It is only in the last decade that such acquisitions have gathered momentum, as the following Figure shows:

FIGURE 10

| | Cooperative ginneries | Private ginneries |
|---|---|---|
| 1960 | 14 | 115 |
| 1969 | 59 | 47 |

It is arguable, however, that this momentum has not been entirely under control in view of the somewhat contradictory findings of the Uganda Committee of Inquiry into the Cotton Industry in 1966. It went

1. "One of the great opportunities of the Cooperative movement lies in the accumulation of capital for investment in factories for the processing of .....crops;" paragraph 172. But "Cooperative officials are growers and as such have little experience....relevant in the running of a factory......In the interests of the farmers whose money is in the factory, its management should be in the hands of people whose experience and training are relevant to the running of factories;" paragraph 173.
2. See Part 2, Section 2 (1); Background to Producer marketing; paragraph 7.

so far as to say in paragraph 82 "......the Committee do not consider that full competition is at present consistent with the highly desirable aim of encouraging the Cooperative sector of the (processing) industry;" yet it continues in paragraph 84 "......while welcoming this participation by the Cooperatives, (the Committee) must agree with the large body of informed opinion.....that the rate at which Cooperatives have expanded has been too rapid.....it has not been governed by ability to collect or even ginning capacity." Thus where private ginners' licences have been revoked and their plant and equipment expropriated, Cooperatives have, in their place, been unable to maintain a satisfactory level of services.

The Kenya Government is committed by later legislation to Cooperative ginning: under Clauses 9 (a) and 15 of the Cotton, Lint and Seed Marketing (Amendment) Bill of 1964, the Cotton Board has the power to acquire processing facilities on behalf of growers, who would take them over; and where cotton growers' Cooperatives are not able to buy the ginneries, the Board is also empowered to take the ginneries over and run them for the cotton growers until such time as the Cooperatives are able to do so.

In spite of this enabling legislation, Board and Cooperative participation in cotton ginning in Kenya remains minimal (the Cotton Board recently acquired one ginnery which had gone bankrupt). There is a high level of competitive services offered to growers by the private ginners which the Cotton Board is reluctant to destroy before it has resolved the production, collection and payment problems of the Cooperatives themselves. There are ten licensed ginneries in Kenya, with a combined annual capacity of 67,000 bales, as follows:

FIGURE 11

| Ginnery | Owner |
|---|---|
| Nambare | Folkes and Co. Ltd. (European) |
| Malakisi | Produce Dealers and Millers Ltd. (Asian) |
| Samia | Small and Co. Ltd. (Asian) |
| Homa Bay | Small and Co. Ltd. (Asian) |
| Kendu Bay | Small and Co. Ltd. (Asian) |
| Ndere | Kenya Industries Ltd. (European) |
| Kibos | Cotton, Lint and Seed Marketing Board |
| Kitui | Abdulali Jiwaji and Co. (Asian) |
| Malindi | Malindi Ginners Ltd. (Asian) |
| Lamu | Lamu Ginnery Co. (Asian) |

The Maize milling industry in Kenya is in a similar position to that of cotton in that there is so far no Board or Cooperative participation in processing. But there the similarity ends, and for no arguable reason; for there is no legislation which either facilitates or anticipates Board or Cooperative milling. Administrative functions are conferred on the Maize and Produce Board under Part V, Clause 39 of the Maize Marketing Act, to license millers, to establish rural markets, and to prevent "black marketing" and overcharging. No control of the maize milling industry by Boards or Cooperatives has ever been intended.[1]

A monopoly situation has developed recently in the milling industry[2] which casts doubt upon this quiescent policy, and makes urgent some official statement on the role of Boards and Cooperatives in maize milling, particularly in the light of their role in other processing industries. None

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1. When introducing the Second Reading of the Maize Marketing Bill in 1959, the Minister of Agriculture, Animal Husbandry and Water Resources gave this categorical assurance "....I would like to make it clear that we do not desire to control the milling industry." Legislative Council, Second Series, Third Session; Volumes 77-79, page 47.

2. See paragraphs 352-359 of the Kenya Maize Commission of Inquiry Report, 1966.

has been forthcoming. The position now is that in the private sector, Kenya National Mills Ltd. has three wholly owned subsidiaries: Unga Millers Ltd., Maida (Holdings) Ltd., and Riziki and Co. Ltd., ; and these companies control over half of the total milling capacity of Kenya. The absence of any Board or Cooperative participation in milling, by which the African growers might acquire an interest (not a controlling one) in the milling companies, is clearly at variance with the application of African Socialism to the processing industries.

There is a minority and entirely ineffectual Government interest in Kenya National Mills Ltd., through the Development Finance Company of Kenya. There are seventy-six other licensed millers of whom the eleven in Figure 12 control about another 40% of the milling industry.

FIGURE 12

| Miller | Town |
|---|---|
| Atta and Co. Ltd. | Mombasa |
| Nyanza Flour Mills | Kisumu |
| Ghelani Industries Ltd. | Kisumu |
| Kenya Oatmeal Ltd. | Nakuru |
| Wholesale Millers Ltd. | Kakamega |
| Maize Ltd. Eldoret | Eldoret |
| Kitale Posho Mill | Kitale |
| Coronation Mills | Nairobi |
| Maize Millers Ltd. | Nairobi |
| Dubois Oil Mills | Nairobi |
| Nairobi Flour Mills Ltd. | Nairobi |

Board and Cooperative involvement in milling would be a preferable means of ensuring some public accountability of the existing milling industry, than Government having a monopoly as it does in Tanzania through the Tanzania National Milling Corporation; there a continuing shortage has resulted of entrepreneurs willing and able to run state processing enterprises which have replaced the private companies, and processing services have deteriorated. There can, therefore, be no certainty that a public monopoly of this sort would be more efficient than a controlled private monopoly. But the Maize Board should have much wider powers than it has at present to oversee and influence a combine which is able to dominate the production of such a staple food-stuff as maize flour. Moreover, milling would lend itself more to Cooperative participation than cotton or pyrethrum, being a considerably simpler process technically than ginning or drying and extracting.

The pyrethrum processing industry is differently organised to those of cotton and maize. There is no Cooperative participation, but the Pyrethrum Board does exercise some control by owning 58% of the shares of the principal processing company at Nakuru, the Pyrethrum Processing Company of Kenya Ltd. This has become necessary owing to the technical complexity of drying and extracting high concentrate pyrethrins from the flowers. Other pyrethrum processing is carried out by the East African Extract Corporation and Mitchell Cotts (Pyrethrum) Ltd., in Nairobi both appointed contractors to the Pyrethrum Board. The combined annual processing capacity of these three companies is 12,000 tons; they have a monopoly of pyrethrum processing because unlike maize or cotton, the licensing Ministry wishes to avoid duplicating investment in the high capital costs of the plant, and has licensed only three processing factories.

The Board itself retains some discretion in the appointment of processing contractors; under Section 10 (d) of the Pyrethrum Act of 1964, "the Board may....with the approval of the Minister arrange the appointment of contractors for the processing of pyrethrum, and the negotiation of fees thereof." There is no provision for Cooperative contracting.

The small-scale growers of Kenya should ultimately benefit from partial ownership and control of maize, cotton and pyrethrum processing, on a Cooperative basis, even where none exists at present, as in maize and pyrethrum. By having an investment in processing, growers will recieve a share of the profits; but Cooperative participation can benefit also the processing industries, because growers will be more receptive to improvements in a marketing system where they can play a fuller part; this has already been shown in tea and rice where Cooperatives already have a share in processing. Cooperatives must, however, demonstrate that their operations in this sector are as economical as any alternative buying methods available to the Boards.

Similarly there would be advantages in Board participation in processing, where there is none (maize), and a strengthening of this participation elsewhere (cotton); because the Boards are statutory bodies, the Kenya Government would have, indirectly, power to ensure that the processing industries conform more closely in organisation and objective to the priorities of the new National Development Plan.

Apart from the fact that an interest by Boards and Cooperatives in processing would be more consistent with African Socialism, there are two other advantages which would accrue to the Boards. First, by participating in processing, the Boards would have direct access to more information about costs, operations and quality than they can now obtain from independent processors.[1] Second, it would give the Boards more control of the operational patterns and establishment of the processing sector, and facilitate a more unified management approach to its problems.

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1. Even the Kenya Maize Commission of Inquiry""...found the greatest difficulty in getting a clear picture...because of the hesitation, to put it mildly, of the bigger millers to disclose information on costing..." paragraphs 350 and 359.

There is a lack of a defined, purposeful Government policy setting out the roles of Boards and Cooperatives in the processing industry. There is inconsistency to be resolved, where in maize neither Board nor Cooperatives are involved; in cotton the Board only marginally, and Cooperatives not yet at all; in pyrethrum, the Board heavily involved, but again, not the Cooperatives. It is true that such inconsistency reflects how effectively the private sector has undertaken processing; it is also true that the private sector has acquired a monopoly position in processing to the exclusion of Boards and Cooperatives, and in Tanzania where a similar situation obtained, the result has been complete nationalisation. Yet the examples of Cooperative cotton ginning in Uganda, and Board pyrethrum processing in Kenya suggest that Board and Cooperative participation are both feasible and desirable; and legislation exists to bring it about. Moreover, the Kenya Government has set itself firmly against outright state 'control.'[1]

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1. See the last paragraph of Part 2, Section 2 (?), Determinants of Marketing Organisation.

# PART 3

## Section 1

## DATA EVALUATION

### 1. Presentation of Survey data.

As explained in Part I, Section 1 (7), the Survey Analysis has involved the administering of separate Questionnaires to small-scale growers, and to Board and Cooperative personnel. 1,200 growers, 408 Board and 408 Cooperative respondents were interviewed throughout twelve Kenya Districts. These twelve Districts comprised four for each of the three commodities - maize, cotton and pyrethrum. Complete details of the planning and administration of the Survey, including Questionnaire construction, are contained in Section 3 of this Part. The answers given by these growers and the other respondents to the Questionnaires have been precoded, punched onto cards, and the totals tabulated in Part 4, Section 1.

The resulting Survey Tables are now commented upon under the following topic headings, which correspond closely to the order in which the Tables themselves are set out.

(1) Growers' membership of Cooperatives.
(2) Non-membership of Cooperatives.
(3) Cooperative marketing services.
(4) Advantages of growers not Cooperative members.
(5) Growers' contacts with Boards, Cooperatives and Agents.
(6) Weaknesses in Cooperatives experienced by growers.
(7) Cooperative services and produce handled.
(8) Competition between Cooperatives and other buyers.
(9) Comparison of marketing services obtained from Cooperatives, produce traders and Board Agents.

(10) Cooperative meetings.

(11) Cooperative Secretaries and growers' influence.

(12) Growers' use of distributive channels.

(13) Single and multi-crop Cooperatives and monopsony.

(14) Direct selling to the Boards, quantity differentials and processing.

(15) Boards' marketing services to growers.

(16) Quotas, levies and cesses.

(17) Payment of producer prices by the Boards.

(18) Improvements in the Boards' services to growers.

(19) Expansion of Cooperative marketing services.

(20) Joint marketing by Boards and Cooperatives.

(21) Improvements in joint marketing by Boards and Cooperatives.

(22) Difficulties in Board Marketing .

(23) Weaknesses in Cooperatives experienced by Board and Cooperative personnel.

(24) Boards raising the standards of Cooperative marketing services to growers.

(25) Government improving the performance of Cooperatives.

(26) Licensing and deployment of Board Agents and Cooperative Secretaries.

(27) Government policy towards Boards and Cooperatives.

(28) Contacts among intermediaries in the marketing system.

(29) Derivation of commodities marketed.

(30) Board losses, Cooperative surpluses and Government subsidies.

(31) Statutory functions and Board and Cooperative marketing policy.

The numerical results of these Survey Tables come out in two forms: first, where respondents have been required to choose one of two simple answers (e.g. Yes/No), the commentary is in straightforward narrative style. Second, there are multiple choice questions where each respondent has been required to rank a number of alternative responses in order of preferred importance; here the presentation of the data takes the form of responses ordered numerically according to the importance assigned to them by all respondents.

Thus, $\boxed{\text{Rating in Column 1}}$ indicates

how many respondents rated a particular response as being the most important in the Survey Table.

Similarly, $\boxed{\text{And ranked high in Column(s)}}$ refers to any

high rankings assigned to this response in the remaining columns of the Table by the other respondents.

## 2. COMMENTARY ON SURVEY DATA.

### (1) Growers' membership of Cooperatives.

The membership figures out of 400 in Survey Table 1 are 88 among maize growers, 22%, 168 among cotton growers, 42%, and 332 among pyrethrum growers, 83%. Pyrethrum Cooperatives have clearly been successful in attracting a high proportion of growers as members; in this they have been actively assisted by the Pyrethrum Board which has the power to make Cooperative membership a condition of small-scale pyrethrum growing. Cotton Cooperatives are concentrated round Lake Victoria, although cotton growing flourishes in other regions, particularly at the Coast; this accounts for there being slightly under half of all cotton growers in Cooperatives.

There seems, however, to be marked reluctance by maize growers to join Cooperatives, less than a quarter of them having done so. This is the more serious in view of the Maize Board's declared policy of appointing Cooperative Societies its sole buying Agents in selected

Districts; low Cooperative membership has resulted in opposition to this among produce traders who do a brisk business in maize buying from growers who are not Cooperative members, and indeed among some who are.

Out of 312 maize growers who are not now members of Cooperatives 97 have once been members. This is a larger proportion of past members than in cotton, 62 out of 170, or pyrethrum, 17 out of 51, and indicates a higher rate of drop-out among members of maize Cooperatives than among members of cotton and pyrethrum Cooperatives. Totals of non-members in Survey Table 2 are made up of growers who are or are not interested in joining a Cooperative; most cotton and pyrethrum growers are: 144 out of 232 and 41 out of 68. But of 312 maize growers only 115, or 37% are interested. And in Survey Table 3 most of the respondents know very few maize growers who have joined a Cooperative, 302 out of 400; there is a similar reaction among cotton growers though with a smaller gap between "Most" and "Few." The opposite response comes from pyrethrum respondents where 311 of the 400 reckon that most of the growers they know who are not already members are interested in joining a Cooperative.

Survey Table 1 is referred to again in Survey Tables 4,5 and 6, 20 and 21, 29 and 30, 32 and 33, 35, and 57.

(2) Non-membership of Cooperatives

Reasons for non-membership of a Cooperative among growers, in order of most importance, are as follows:

| Rating in Column 1 | Maize growers in Survey Table 4 | And ranked high in Column(s) |
|---|---|---|
| 112 | Higher prices in selling independently | 3 and 4 |
| 95 | No confidence in the management of the Society's affairs. | 2 |
| 91 | Deductions from prices paid for produce | 5 |
| 86 | Member subscriptions too high | 3 and 3 |
| 85 | Being owed money by a Society | 2 and 5 |

| Rating in Column 1 | Cotton growers in Survey Table 5 | And ranked high in Column(s) |
|---|---|---|
| 75 | Being owed money by a Society | 2 |
| 71 | No confidence in the management of the Society's affairs | 3 and 5 |
| 68 | Deductions from prices paid for produce | 2 |
| 63 | Member subscriptions too high | 4 |
| 54 | Higher prices in selling independently | 5 |
| | **Pyrethrum growers in Survey Table 6** | |
| 29 | Member subscriptions too high | |
| 23 | Being owed money by a Society | 5 |
| 21 | Deductions from prices paid for produce | 4 |
| 18 | No confidence in the management of the Society's affairs | 3 |
| 12 | Higher prices in selling independently | 2 |

(3) Cooperative marketing services

Principal services offered members by Cooperatives, in order of most importance, are as follows:

| Rating in Column 1 | Maize growers in Survey Table 7 | And ranked high in Column(s) |
|---|---|---|
| 106 | Convenient buying points | 4, 7, 8 and 9 |
| 101 | Guaranteed purchases of produce | 2 |
| 96 | Access to wide markets | |
| 88 | Mechanised ploughing of land | 2 and 5 |
| 82 | Loans for development | |
| 81 | Collection, transport and storage services | 3 and 6 |
| 73 | Advice on growing methods | 2, 4 and 5 |
| 66 | Advance crop payments | 2 and 3 |
| 55 | Seeds, pesticides, fertilisers and implements at cost | 6 and 14 |

| Rating in Column 1 | Cotton growers in Survey Table 8 | And ranked high in Column(s) |
|---|---|---|
| 125 | Guaranteed purchases of produce | 3 and 5 |
| 99 | Collection, transport and storage services | 6 and 7 |
| 93 | Access to wide markets | 3 |
| 92 | Convenient buying points | 2 |
| 85 | Loans for development | 5 and 6 |
| 63 | Advice on growing methods | 2, 4 and 9 |
| 60 | Mechanised ploughing of land | 4, 7 and 8 |
| 58 | Advance crop payments | 8 |
| 53 | Seeds, pesticides, fertilisers and implements at cost | 3 |
| | **Pyrethrum growers in Survey Table 9** | |
| 131 | Guaranteed purchases of produce | 5 and 7 |
| 120 | Access to wide markets | 2 and 6 |
| 104 | Advice on growing methods | 2 |
| 99 | Collection, transport and storage services | 4 |
| 81 | Mechanised ploughing of land | 2 and 8 |
| 79 | Advance crop payments | 2,6,7 and 8 |
| 78 | Convenient buying points | 4, 5 and 6 |
| 72 | Seeds, pesticides, fertilisers and implements at cost | 9 |
| 67 | Loans for development | 3 |

(4) Advantages of growers not Cooperative members

These advantages non-members have over members of Cooperatives, in order of most importance, are as follows:

| Rating in Column 1 | Maize growers in Survey Table 10 | And ranked high in Column(s) |
|---|---|---|
| 156 | Quicker realisation of full cash price for produce | 4 and 6 |
| 141 | Freedom to sell where they can obtain the best price | 2 |
| 124 | No member subscriptions to pay | |
| 114 | Freedom to manage their own affairs | 3 |

| Rating in Column 1 | Maize growers in Survey Table 10 (continued) | And ranked high in Column(s) |
|---|---|---|
| 103 | Direct access to Board Agents | 2, 3 and 5 |
| 87 | Freedom to grow and market any type of crops | 5 and 6 |
| | **Cotton growers in Survey Table 11** | |
| 160 | Quicker realisation of full cash prices for produce | 4 |
| 141 | No member subscriptions to pay | 5 and 6 |
| 139 | Freedom to sell where they can obtain the best price | |
| 103 | Freedom to manage their own affairs | 3 |
| 95 | Direct access to Board Agents | 2, 3 and 4 |
| 62 | Freedom to grow and market any type of crops | 2 and 5 |
| | **Pyrethrum growers in Survey Table 12** | |
| 144 | Quicker realisation of full cash price for produce | |
| 139 | No member subscriptions to pay | 2 |
| 107 | Freedom to grow and market any type of crops | 5 and 6 |
| 92 | Direct access to Board Agents | 3, 4 and 5 |
| 87 | Freedom to sell where they can obtain the best price | 3 |
| 75 | Freedom to manage their own affairs | 3 and 4 |

(5) Growers' contacts with Boards, Cooperatives and Agents.

Out of 800 in Survey Table 15, only 146 maize and 185 cotton growers have had visits from Board research or extension teams, but 231 out of 400 pyrethrum growers have been visited. Of 800 in Survey Table 14, 214 maize and 211 pyrethrum growers consider that there is working contact between Cooperative Assistants and Board field staff, but 242 cotton growers think there is not. Growers without any contacts with Board or Cooperatives are 519 in maize, 419 in cotton, 412 in pyrethrum, and these are the totals to which the "Yes" and "No" responses in Survey Table 13 add up. Most of these 1,350 growers say that there must be more working contacts between Cooperative Assistants and Board field staff: 231 in maize, 314 in cotton and 289 in pyrethrum.

A majority of all growers in Survey Table 14 say that Cooperative field staff can do more to explain to them the purposes and functions of Cooperative Societies: 250 in maize, 221 in cotton and 214 in pyrethrum. Of the 1,350 in Survey Table 13, however, only maize growers reiterate this; cotton growers are almost equally divided; and for most pyrethrum growers, Cooperative staff have done enough in this respect, 277 to 135.

Out of 800 in Survey Table 16, 264 cotton growers and 271 pyrethrum growers replied that the Marketing Boards do take sufficient interest in their work; rather more than half the maize growers replied that their Board does not. In Survey Table 13, this trend is reversed among cotton growers of whom 229 out of 419 are without any contacts with Board or Cooperatives and consider that they take insufficient interest in growers' work; of a total of 931, however, 274 maize and 218 pyrethrum growers in this Table reply that the Boards do take some interest.

The Cotton and Pyrethrum Boards have tried to explain to a majority of their growers in Survey Table 16 what they are there for and how they work: 248 in cotton and 227 in pyrethrum. The Maize Board has not attempted this for all its growers in this Table, but a majority of maize respondents in Survey Table 13 consider that it has made an effort to do this, 304 out of 519, and so do pyrethrum growers in the same Table, 218 out of 412. Slightly more than half of the cotton growers without any contacts with Cooperatives or Boards say that their Board has made little effort, 221 to 198.

Many maize, cotton and pyrethrum growers in Survey Table 14 consider that their Board's field staff can do more to help Cooperatives to improve their services: 720 out of 1,200. However, all three Boards come out quite well in Survey Table 15 in that 726 out of 1,200 maize, cotton and pyrethrum growers have received some encouragement to market new and hybrid crop varieties.

Supervision of Agents by Boards in Survey Table 16 varies; for pyrethrum growers such supervision is very satisfactory, for cotton growers more than adequate; but 210 out of 400 maize growers maintain that the Maize Board does notsupervise its Agents closely enough.

(6) Weaknesses in Cooperatives experienced by growers

These weaknesses of Cooperative Primary Societies, in order of most importance, are as follows:

| Rating in Column 1 | Maize growers in Survey Table 17 | And ranked high in Column(s) |
|---|---|---|
| 143 | Poor or untrained management | 5 |
| 127 | Delays in payments to growers | 2 and 3 |
| 110 | Prices inferior to those of produce traders | 3 and 5 |
| 97 | Shortage of ready cash | 7 |
| 96 | Dealing in too many other crops | 6 |
| 90 | Inability to give help or advice to producers in crop marketing | 2, 6 and 7 |
| 89 | Lack of member support and interest | 4 and 7 |

| Rating in Column 1 | Cotton growers in Survey Table 18 | And ranked high in Column(s) |
|---|---|---|
| 147 | Shortage of ready cash | 3 |
| 121 | Delays in payments to growers | 3 |
| 117 | Poor or untrained management | 4 |
| 105 | Prices inferior to those of produce traders | 4 and 7 |
| 776 | Inability to give help or advice to producers in crop marketing | 3 and 5 |
| 73 | Lack of member support and interest | 2, 5 and 6 |
| 71 | Dealing in too many other crops | 2, 3 and 6 |

| Rating in Column 1 | Pyrethrum growers in Survey Table 19 | And ranked high in Column(s) |
|---|---|---|
| 123 | Poor or untrained management | 2 and 7 |
| 103 | Shortage of ready cash | 2, 3 and 6 |
| 98 | Lack of member support and interest | 2 and 3 |
| 94 | Delays in payments to growers | 2, 3 and 6 |
| 81 | Inability to give help or advice to producers in crop marketing | 5 |
| 75 | Dealing in too many other crops | 4 and 7 |
| 60 | Prices inferior to those of produce traders | 4 and 6 |

(7) Cooperative services and produce handled.

Only present members of Cooperatives answered the questions in Survey Tables 20 and 21; in Survey Table 20 many maize and cotton growers are not satisfied with existing marketing services from their Cooperatives, 151 out of 256. 185 pyrethrum growers out of 332 are, however, satisfied. And in Survey Table 21, 174 of these pyrethrum growers are increasing their sales to their Board; this is also true of 89 out of 168 cotton growers who are Cooperative members. Less than half the maize growers are increasing their sales direct to the Maize Board, 41 out of 88.

Survey Table 22 applies to all growers, whether members of Cooperatives or not, and it refers to multi-crop Cooperatives. It is of interest to compare maize Cooperative members' replies to Survey Table 21 with those of all maize growers. In Survey Table 22 maize is the only one of the three commodities where respondents consider that Cooperatives are dealing in other low profit subsistence crops, such as beans, groundnuts and sorghum, which are handled by the Maize Board. Maize Cooperatives also appear to be losing out to produce traders in the marketing of other high profit cash crops such as cashew nuts and castor seed, 250 growers out of 400.

The position of produce traders and Cooperatives in cotton in Survey Table 22 is somewhat equivocal in that slightly over half of all growers reckon that both Cooperatives and produce traders are dealing in other high profit produce, 415 out of 800. Pyrethrum Cooperatives have the edge on produce traders in this respect: majorities of growers consider that in pyrethrum produce traders are dealing mostly in low profit produce while Cooperatives are handling more of the high profit produce, 482 out of 800.

(8) <u>Competition between Cooperatives and other buyers</u>.

Those growers in Survey Table 23 obtaining more services from buyers other than Cooperatives are particularly in maize, 312 out of 400; and those obtaining higher prices from buyers other than Cooperatives are in cotton, 297 out of 400. Elsewhere in this Survey Table, as many as 281 maize growers can also obtain higher prices outside Cooperatives, but just over half the cotton and pyrethrum growers can obtain more services outside Cooperatives, 422 out of 800. Only 174 pyrethrum growers replied that higher prices are obtainable outside their Cooperatives.

This trend of pyrethrum growers' replies is supported in Survey Table 24 where 255 out of 400 consider that Cooperatives are successfully competing with produce traders for their produce; cotton growers are almost equally divided on this question, 196 to 204, as they are on higher prices in Survey Table 23. 219 maize growers replied that Cooperatives are not successfully competing with these traders.

(9) Comparison of marketing services obtained from Cooperatives, produce traders and Board Agents.

The numbers of growers marketing produce outside Cooperatives are 347 in maize, 259 in cotton, and 92 in pyrethrum. In all three commodities these figures exceed those in Survey Table 1 of growers who are not at present members of Cooperatives, whether or not they have been in past: 312, 232 and 68. This means that 35 maize Cooperative, 27 cotton Cooperative and 24 pyrethrum Cooperative members are selling some of their produce directly to other traders and not to their own Cooperatives. This by-passing is particularly serious in maize Cooperatives where 40% of all members are involved in it; in cotton Cooperatives it is 16% and in pyrethrum Cooperatives only 7%.

Survey Tables 25 and 26 give estimates of the various facilities offered by Cooperatives and other traders, and Survey Tables 25 and 27 of those offered by Board Agents and produce traders. In Survey Table 26 numbers in the "Better" columns under Cooperative and the "Worse" columns under Trader are identical because replies Coded 0 or 1 for Cooperatives must result in replies coded 1 or 0 for Traders.

Transport: most maize and cotton growers in Survey Table 25 favour Cooperative transport, 396 out of 606, and 54 out of 98 pyrethrum growers do not; but of all 1,200 growers who replied to Survey Table 26, in maize, cotton and pyrethrum 661 respondents also favour Cooperative transport.

Collection: more than half of the 698 growers in Survey Table 25 consider that collection of produce by Cooperatives compares well with other traders: this trend of opinion is supported by 447 of all maize and cotton growers in Survey Table 26 who consider that traders' collection facilities are worse than Cooperatives.' 209 pyrethrum growers replied that collection by traders is better.

Payments: Cooperatives compare very badly with traders and Board Agents in Survey Table 25 according to as many as 544 out of 698 maize, cotton and pyrethrum growers; there is a similar but less marked reaction from all growers replying to Survey Table 26 where 674 prefer traders' payments.

Price: this is viewed in the same way in Survey Table 25 as payments by maize and pyrethrum growers, 257 out of 439, but 151 out of 259 cotton growers think that the price offered by Cooperatives compares well with that of other traders. Of the 800 maize and cotton growers who replied to Survey Table 26, however, 461 consider their Cooperatives' price inferior to that of produce traders; 206 pyrethrum growers reckon the produce traders' price to be inferior.

Buying points: most maize and pyrethrum growers in Survey Table 25 consider that Cooperative buying points compare badly with those of Board Agents and produce traders, 332 out of 439; 187 out of 259 cotton growers replied that Cooperative buying points compare well. In Survey Table 26, as with price, a majority of all maize and cotton growers consider that Cooperatives do not offer as much as other traders, 433 to 367, whereas 228 out of 400 pyrethrum growers replied that traders' buying points are inferior to those of Cooperatives.

The number of buying points offered by Board Agents compares very well with those of produce traders: in Survey Table 25, 473 out of the 698 maize, cotton and pyrethrum growers replied to this effect and in

Survey Table 27 so did 522 of all 800 maize and pyrethrum growers; 284 of all cotton growers in Survey Table 27 consider that Board Agents' buying points are fewer than those of produce traders.

Only pyrethrum growers in Survey Table 25 prefer payments for small quantities from Board Agents, 57 to 35; 321 out of 606 maize and cotton growers consider such payments from Agents compare unfavourably with those of produce traders. In Survey Table 460 out of all 800 maize and pyrethrum growers prefer payments for small quantities by Board Agents, but many cotton growers replied that produce traders offer more payment, 215 out of the 400.

(10) <u>Cooperative meetings</u>.

All growers replied to Survey Table 28 since they must be aware of frequency or absence of Cooperative society meetings in their own localities. Maize Cooperatives do not hold meetings regularly according to 276 out of 400 maize growers, and cotton Cooperative meetings do not seem to occur very frequently either, although a higher proportion of cotton growers replied that meetings are held more often than in maize, 167 to 233. Most pyrethrum growers consider that their Cooperatives do hold meetings regularly, 224 out of 400.

Only Cooperative members, however, replied to Survey Tables 29 and 30, as they alone have had the necessary experience of Cooperative meetings. In Survey Table 29 there are more maize members of Cooperatives absent from meetings than present, and also more who say that these meetings are not usually well supported, 101 out of 176. Slightly over half cotton members do not normally attend Cooperative meetings, but 99 out of 168 say that they are generally well attended. A majority of pyrethrum members attend regularly, 212 to 121, and consider that their Cooperative meetings normally are well supported, 227 out of 332.

Topics of interest at Cooperative meetings in Survey Table 30 which are much discussed are: the day to day problems of the growers in pyrethrum; the affairs of the Cooperative management in cotton and pyrethrum; arrears of subscriptions in maize, cotton and pyrethrum; and late or insufficient payments to producer members in maize. But 390 out of the 588 growers consider that the direction of policy within the Cooperative is little discussed.

One cannot assume from this that there are no problems for growers of maize and cotton, since it is clear from other Survey Tables that there are; maize and cotton members do not apparently look upon Cooperative meetings as the most appropriate means of airing or solving them. Cotton and pyrethrum members also take more interest in the management of their Cooperatives than maize growers, 399 out of 500. Maize and cotton growers do seem to be behind in paying their member subscriptions, and this creates a considerable financial problem for their Cooperatives. Equally, however, maize growers are not receiving prompt or sufficient payments for their produce and their concern is shown by the 63 out of 88 members who replied that this problem is much discussed.

(11) Cooperative Secretaries and growers' influence

Survey Table 31 was answered by all growers as the activities of Cooperative Society Secretaries are well-known in their localities. Many maize and cotton growers say that these Secretaries are not looking after growers' interests, 429 to 371; over half the pyrethrum growers replied that they are.

Cooperative Secretaries do not come out well in growers' assessments of their competence and honesty; into these figures in Survey Table 31, however, must be read the tendency of many small-scale growers to attribute all the ills of their Cooperatives to the management, where some might be the results of the failure of the long rains or arrears in member subscriptions. Nevertheless Cooperative Secretaries are thought by 281 maize growers to be incompetent in their jobs, and by 288 cotton growers to be dishonest in their handling of Cooperative finances. There does seem also to be general dissatisfaction with the financial management of both maize and pyrethrum Cooperatives.

Survey Table 32 was directed at Cooperative members only; other growers would not by definition be expected to have much say in Cooperatives. 57 out of 88 maize members and 97 out of 168 cotton members consider that they have no say in their Cooperatives; and the same is true of 182 Pyrethrum members.

(12) <u>Growers' use of distributive channels</u>.

Cooperative members wishing to sell to produce traders as well as to their Cooperatives in Survey Table 33 are 35 in maize, 37 in cotton and 34 in pyrethrum; these figures added to those against growers wishing to sell only to Cooperatives in Survey Table 34 are 53 in maize, 131 in cotton, and 298 in pyrethrum. Together these give the total membership of Cooperatives of 88 in maize, 168 in cotton and 332 in pyrethrum. The numbers of growers selling to Cooperative Societies in Survey Table 35 to not, however, add up to these membership figures; the reasons are that in maize and pyrethrum some growers find it convenient in areas of heavy cooperative membership to sell their produce to Cooperatives but are not themselves members because they have not paid joining fees, 101 and 360 respectively; in cotton some

Cooperative members produce enough to sell direct to ginneries, 149, by-passing their Cooperatives completely. The other point to note is that 40% of maize, 16% of cotton and only 10% of pyrethrum members wish to sell to produce traders, and not only to their Cooperatives.

Many growers who are not members of Cooperatives predictably replied in Survey Table 33 that they certainly favour freedom of those who are to sell any of their produce to produce traders, except that in cotton, the proportion is lower than in maize or pyrethrum, 138 out of 232 non-members. As it is, all growers, Cooperative members and non-members, answered the same question in Survey Table 34 about freedom to market produce outside Cooperatives; and number 282 in maize, 165 in cotton and 93 in pyrethrum.

Most non-members in Survey Table 33 also consider that growers should be free to choose whether or not they join and sell through Cooperatives: 294 out of 312 in maize, 211 out of 232 in cotton and 60 out of 68 in pyrethrum. The response to the same question among members of Cooperatives is correspondingly low, 151 out of 588, as is that of non-members to the proposal in the same table that growers should be obliged to join Cooperatives to sell their produce, 47 out of 612. Indeed this is supported by most maize Cooperative members, 69 out of 88, but less so by cotton members, 115 out of 168, or by pyrethrum members, 253 out of 332, suggesting more competitive markets for growers' produce, particularly in pyrethrum. These responses by members and non-members are totalled in Survey Table 34.

Cooperative members in Survey Table 33 selling cotton and pyrethrum do not, however, appear to be taking advantage of these markets as only 54 out of 500 of them are in fact selling any produce to produce traders; this is probably due to cotton and pyrethrum members simply asserting their independence of market choice without doing very much about it.

But in maize 29 or 33% of Cooperative members are selling to produce traders. The private sector is well supported by those growers in this Survey Table who are not Cooperative members: 225 out of 312 maize growers, 189 out of 232 cotton growers, and 40 out of 68 pyrethrum growers. Again responses by members and non-members are totalled in Survey Table 35.

The volume of produce sold to these produce traders exceeds that sold to Board Agents from 172 maize growers, 155 cotton growers and 42 pyrethrum growers in Survey Table 36; this Table also shows 473 out of 800 maize and cotton growers, and almost all pyrethrum growers, 358 out of 400, selling more to Board Agents. These respondents are split in Survey Table 33 between Cooperative members and non-members; again, a higher proportion of maize members sell more to produce traders, 10 out of 88, than do cotton or pyrethrum members.

The uses of distributive channels in Survey Table 35 reveal the following preference by growers: Board Agents (301), Board depots, (277) and produce traders (254) for maize growers; processors (271), Cooperatives (249) and produce traders (209) for cotton growers; and Cooperative Societies (360) and processors (301) for pyrethrum growers. The numbers in the three columns all total much more than the 400 growers of each commodity; this is due to the multiple use of the different distributive channels by large sections of these growers, already discussed.

Credit has been obtained in Survey Table 36 from produce traders or Board Agents by 239 maize growers, 177 cotton growers, and 99 pyrethrum growers. More direct selling to Board depots and Board Agents is done by maize growers than by the other two; and more selling to Cooperatives and processors is done by pyrethrum growers.

(13) Single and multi-crop Cooperatives and monopsony

Only 456 out of 1,200 maize, cotton and pyrethrum growers in Survey Table 37 have experience of both single and multi-crop Cooperatives; many growers, 807 out of 1,200 consider the single crop Cooperative to be the more successful, and 784 out of 1,200 say that the multi-crop is not a successful form of Cooperative. There are more pyrethrum growers without experience of both types than of maize and cotton growers.

Related to the type of Cooperative is monopsony in Survey Table 38; many maize and pyrethrum growers favour monopsony applied to selected produce, 483 out of 800, and pyrethrum growers in selected Districts, 264 out of 400. Although in Survey Table cotton growers support single crop Cooperatives which are the more appropriate to exercise monopsony, they are against any such monopsony of selected produce or in certain Districts, 474 out of 800, as cotton Cooperatives do not operate throughout Kenya.

(14) Direct selling to the Boards, quantity differentials and processing.

Cooperative membership as a condition of direct selling to Boards is assessed by growers in Survey Table 39; it does not apply to maize growers according to 289 out of 400, but it does apply to 208 cotton growers, and to most pyrethrum growers, 299 out of 400.

The reasons for the varying applications of this condition must be the considerable differences both in the membership of Cooperatives and in the volume of produce sold by individual growers. For instance, a maize grower can market as much as he can produce, and often enough to sell direct to a Board depot; a pyrethrum grower is limited by quota within his own Cooperative, and cannot, like the large-scale pyrethrum grower, produce sufficient volume for such direct delivery.

The amounts of produce marketed thus determine in the Survey Table 40 whether or not maize and pyrethrum growers sell direct to Boards, 559 out of 800, but 215 cotton growers say they are not affected. Many maize growers replied that this quantity condition is not a satisfactory arrangement, 251 to 149, whereas the majority of pyrethrum growers replied that it is, 294 to 106; cotton growers are undecided about it.

The volume of produce deriving from small-scale growers affects not only grower to Board transactions, but those of grower to processor, whether the processing is undertaken privately, or wholly by the Boards. For produce must be delivered in sufficient quantities for this processing to be done continuously and economically.

Processing is undertaken as detailed in Survey Table 41: milling of maize and ginning of cotton mostly by private concerns, 619 out of 800, and pyrethrum processing by the Board, 320 out of 400. Price control, according to weight and quality of produce delivered for processing is also exercised by the Boards for cotton and pyrethrum growers but not for maize growers. This probably accounts for most maize growers maintaining that some of the increased revenue from their processed produce should be paid to them, 232 to 168; 499 out of 800 cotton and pyrethrum growers replied that any such revenue should be retained by the Boards in reserve.

(15) <u>Boards' marketing services to growers</u>

These services which growers can obtain from the Boards, in order of most importance, are as follows:

| Rating in Column 1 | Maize growers in Survey Table 42 | And ranked high in Column(s) |
|---|---|---|
| 133 | Registering Agents to buy produce | |
| 127 | Buying all the quality produce grown | 2 |
| 112 | Granting monopoly trading rights | 2 and 9 |
| 109 | Price guarantees in advance | 5, 7 and 8 |
| 99 | Ensuring stable incomes for producers | 4 and 6 |
| 96 | Guaranteeing a market | 5, 6 and 7 |
| 90 | Acceptance of minimum quantities which growers can deliver direct to Board depots | 2, 3 and 6 |
| 89 | Stockholding | 3 |
| 88 | Sorting, grading and packing produce | 4, 5 and 8 |
| 81 | Selling surpluses overseas | |
| 78 | Forward buying | 7 and 9 |
| 75 | Operating cesses or levies for its services | 2, 3 and 8 |
| 74 | Processing produce locally | 3, 4 and 8 |
| 68 | Market research | 2, 5 and 8 |
| 63 | Licensing growers | 6 and 9 |
| 59 | Protecting market by controlling entry | 3, 4 and 7 |

| | Cotton growers in Survey Table 43 | |
|---|---|---|
| 145 | Price guarantees in advance | 4 and 7 |
| 122 | Ensuring stable incomes for producers | 2 and 4 |
| 114 | Processing produce locally | 8 |
| 111 | Forward buying | 2, 5 and 6 |
| 105 | Buying all the quality produce grown | 4 and 8 |
| 98 | Sorting, grading and packing produce | 2 and 9 |
| 96 | Selling surpluses overseas | 3, 7 and 9 |
| 92 | Guaranteeing a market | 2 and 3 |
| 87 | Registering Agents to buy produce | 2 and 8 |
| 87 | Operating cesses or levies for its services | 2, 6 and 7 |
| 81 | Granting monopoly trading rights | 3, 5 and 6 |
| 68 | Licensing growers | 3 |
| 67 | Stockholding | 8 and 9 |

| Rating in Column 1 | Cotton growers in Survey Table 43 (continued) | And ranked high in Column(s) |
|---|---|---|
| 67 | Acceptance of minimum quantities which growers can deliver direct to Board depots | 3, 5 and 7 |
| 66 | Protecting market by controlling entry | 4 and 5 |
| 60 | Market research | 4 and 6 |

**Pyrethrum growers in Survey Table 44**

| | | |
|---|---|---|
| 116 | Price guarantees in advance | 2 |
| 113 | Licensing growers | 2 and 9 |
| 112 | Buying all the quality produce grown | |
| 109 | Processing produce locally | 2 and 9 |
| 103 | Market research | 3, 4 and 6 |
| 102 | Protecting market by controlling entry | 5 and 8 |
| 102 | Ensuring stable incomes for producers | 3 and 5 |
| 96 | Guaranteeing a market | 2 and 6 |
| 95 | Forward buying | 3, 7 and 8 |
| 93 | Stockholding | 2 and 3 |
| 83 | Sorting, grading and packing produce | 4, 6 and 9 |
| 82 | Selling surpluses overseas | 5 and 7 |
| 77 | Operating cesses or levies for its services | 4 and 7 |
| 71 | Acceptance of minimum quantities which growers can deliver direct to Board depots | 2 and 5 |
| 62 | Granting monopoly trading rights | 7 and 8 |
| 59 | Registering Agents to buy produce | 6, 8 and 9 |

(16) Quotas, levies and cesses

Levies, cesses and quotas restrict the amount of produce which small-scale growers can market, and reduce their payouts from the produce they do market. In Survey Table 45, many maize and cotton growers, 519 out of 800, have not experienced any quotas, but 318 pyrethrum growers have quotas applied to their produce.

In Survey Table 46, slightly over half of cotton growers know what levies the Board raises on their produce, how these levies are used, how they are raised and why they are operated, 862 out of 1,600; among maize growers there is some ignorance which must be attributed to poor publicity by the Maize Board: the figures of "Don't knows" corresponding to those of the cotton growers are 242, 228, 257, and 202 respectively; all the more serious as most maize and cotton growers' produce is subject to local authority cesses, 299 and 374. The responses of pyrethrum growers in Survey Table 46 are more mixed: many do know what levies their Board raises, and do understand how these levies are used, 237 and 252; yet they do not know how such levies are raised or why they are operated, 235 and 261. This equivocation probably results from the failure of pyrethrum Cooperatives to explain to growers exactly what the levy elements in their payment deductions are. Pyrethrum is not generally subject to a local authority cess.

(17) Payment of producer prices by the Boards.

The total number of growers replying to Survey Table 47 are 237 in maize, 261 in cotton, and 157 in pyrethrum; these figures derive from Survey Table 50 and represent those growers dissatisfied with Board payouts whether or not the Boards' resale prices exceed guaranteed producer prices. Most of these growers consider that producer prices should be fixed in advance, 505 to 150; indeed a majority of all growers in Survey Table 48 say so: 542 out of 800 cotton and pyrethrum growers, and an even higher proportion of maize growers 310 out of 400.

89 out of the 157 pyrethrum growers in Survey Table 47 replied that there should not be guaranteed minimum prices; maize growers in this table are undecided, 120 to 117, and so are cotton growers, 129 to 132. In response to the same question in Survey Table 48, of all 400 maize growers, 291 prefer guaranteed minimum prices; pyrethrum growers

are again opposed to such minimum prices, 223 to 177 and cotton growers are again undecided.

Many cotton and pyrethrum growers are against Boards offering fixed prices only in Survey Table 47, 284 out of 418 ; most maize growers in this Table prefer fixed prices, 183 to 54. All cotton growers in Survey Table 48 again voice the same response as those cotton growers in Survey Table 47, 284 out of 400. But maize and pyrethrum growers in Survey Table 48 reverse the opinions of those who replied to Survey Table 47; only 189 out of 300 maize growers but 242 out of 400 pyrethrum growers prefer fixed prices. The reasons for this are that in Survey Table 47 maize growers are unhappy about the fluctuations in payouts by the Maize Board, and pyrethrum growers want to take advantage of price ranges which offer them higher returns for meeting their quotas, 133 to 24. So do most of all pyrethrum growers in Survey Table 48, 289 out of 400.

Responses among the other growers, however, to guaranteed price ranges are much the same in Survey Tables 47 and 48; most maize growers are against them, 129 to 108 and 232 to 168; most cotton growers are in favour of them, 197 to 64, and 284 to 116.

Variations between Board announced prices and Board paid out prices have been experienced by maize and cotton growers both in Survey Table 47, 348 out of 498, and in Survey Table 41, 493 to 307. But most pyrethrum growers have not experienced such variations in either Survey Table, 327 out of 557. Again in Survey Tables 47 and 49, the majority of maize growers can sometimes obtain higher prices than those offered by the Board, 366 to 271, while most cotton and pyrethrum growers replied that they cannot, 369 to 192 and 438 to 119.

Maize and cotton growers are mostly in favour of support prices being in operation continuously in Survey Table 49, 647 out of 800; in pyrethrum, where over-production is more of a threat to producers' incomes, growers prefer support prices to be offered only when this occurs, 260 to 140. Almost all growers say that they are offered price differentials for varying qualities of produce, 974 out of 1,200.

Most maize growers in Survey Table 49 consider that Boards should offer different prices based on quality, 283 to 117, but a lower proportion claim to have no trouble in meeting the highest quality standards, 227 to 173. Cotton growers seem undecided about their difficulties in achieving high quality grades, and only a small majority think that the Board's top prices should be based on them, 210 to 190; this indecision reflects the costly and extensive care required throughout the year to produce and market a high quality lint.

Pyrethrum growers in Survey Table 49 do have quality standard difficulties, 289 to 111, but more than half still prefer Boards to offer price differentials for quality, 237 to 163; this shows the greater assistance given by the Pyrethrum Board to its small-scale growers to improve the pyrethrum content of their flowers.

Pay-outs by Boards are not satisfactory in the view of almost all maize and cotton growers in Survey Table 50, either when Board resale prices are less than or exceed guaranteed producer prices, 1,074 out of 1,200. Most pyrethrum growers are satisfied with Board pay-outs in either circumstance, 60% of them; this is probably accounted for by the promptness and reliability of the Pyrethrum Board's producer payments.

Other complaints against the Boards are voiced in Survey Table 51, although pyrethrum growers are almost equally divided about whether two of these complaints are justified or not. A majority of maize and cotton growers complain about low prices paid because of deductions by Boards, 281 to 119 and 269 to 132, and about heavy Board expenses borne by producers, 293 to 107 and 230 to 170. The Maize Board comes out worst in these complaints.

Suggestions for improving these pay-outs by the Boards are agreed upon by many maize and pyrethrum growers in Survey Table 50; 571 out of 800 think that surpluses earned by the Boards should be utilised in providing improved services to growers. Well over half the cotton growers, 259 to 141, prefer these surpluses to be paid out directly to them in the year in which they are earned, and this reflects the heavy research and extension programmes which the Cotton Board is known to have financed largely out of trading revenue.

(18) Improvements in the Boards' services to Growers

Ways in which the Boards' services to growers can be improved, in order of most importance, are as follows:

| Rating in Column 1 | Maize growers in Survey Table 52 | And ranked high in Column(s) |
|---|---|---|
| 135 | Higher support prices | 2 |
| 123 | Extending agencies to Cooperatives | 5 and 8 |
| 121 | Announcement of buying prices during the planting season | 6 |
| 104 | Quicker payments | 2, 8 and 9 |
| 102 | Lower levies on produce | 5 and 7 |
| 97 | More buying points | 5 and 8 |
| 95 | Increasing local processing facilities | 3, 4 and 7 |
| 84 | Research services | 2, 3 and 9 |
| 77 | Financial assistance to growers | 3 and 7 |
| 73 | More advice and assistance in the field | 3,4 and 6 |
| 70 | Provision of seeds, fertilisers and sacks | 4, 5 and 8 |
| | Cotton growers in Survey Table 53 | |
| 129 | More buying points | |
| 115 | Financial assistance to growers | 2 and 6 |
| 112 | Lower levies on produce | 6, 8 and 9 |

| Rating in Column 1 | Cotton growers in Survey Table 53 (continued) | And ranked high in Column(s) |
|---|---|---|
| 107 | Higher support prices | 6 and 8 |
| 102 | Announcement of buying prices during the planting season | 4 and 6 |
| 99 | Increasing local processing facilities | 2 and 3 |
| 93 | Research services | 2, 3 and 5 |
| 90 | Quicker payments | 2, 4 and 7 |
| 75 | More advice and assistance in the field | 6 and 8 |
| 70 | Extending agencies to Cooperatives | 4, 5 and 9 |
| 69 | Provision of seeds, fertilisers and sacks | 3, 7 and 9 |

| | Pyrethrum growers in Survey Table 54 | |
|---|---|---|
| 96 | More advice and assistance in the field | 4, 7 and 9 |
| 90 | More buying points | 6 |
| 88 | Increasing local processing facilities | 3 and 7 |
| 81 | Extending agencies to Cooperatives | 2 |
| 79 | Announcement of buying prices during the planting season | |
| 74 | Quicker payments | 2, 5 and 8 |
| 71 | Research services | 3, 8 and 9 |
| 70 | Financial assistance to growers | 2 and 5 |
| 69 | Higher support prices | 3, 6 and 7 |
| 64 | Lower levies on produce | 4 |
| 62 | Provision of seeds, fertilisers and sacks | 3, 7 and 9 |

(19) Expansion of Cooperative marketing services

Government is assigned by 645 out of 800 maize and cotton growers and by 221 pyrethrum growers in Survey Table 55 the responsibility for ensuring that Cooperatives improve their marketing services to growers. The lower figure for pyrethrum growers reflects the higher Cooperative membership among them, and consequently their tendency to give their Cooperatives a more independent role.

Marketing services, outlined in Survey tables 23 to 27, are also commented upon in Survey Tables 56 and 57 where growers are divided between Cooperative members and non-members. The totals of members and non-members in Survey Table 57 add up to the totals of "Yes" under maize, cotton, and pyrethrum in Table 56. There is a clear preference among maize, cotton and pyrethrum growers in Survey Table 56 for Cooperatives to take over more of the marketing services at present provided by Board Agents, 838 to 364; in Survey Table 57 a much higher proportion of maize Cooperative members than any other category of grower, 94%, state this preference but a lower proportion of non-members among maize growers than among cotton and pyrethrum growers, 54%, share this opinion; the other percentages of non-members are 73 in cotton and 72 in pyrethrum.

In response to the same question about produce traders in Survey Table 56, maize and cotton growers are undecided, but pyrethrum growers have doubts about their Cooperatives taking over more of produce traders' services, 222 to 178. These doubts are not, however, shared by very high proportions of maize and cotton Cooperative members in Survey Table 57; 86% and 82% respectively, replied that their Cooperatives can take over more of these services; 42% of pyrethrum Cooperative members agree with them. Among non-members, only 26% of cotton growers, 41% of maize growers, and 56% of pyrethrum growers favour Cooperative undertaking more of these services; this suggests considerable confidence among all pyrethrum growers in their Cooperatives and a marked lack of it among cotton growers.

Most maize and pyrethrum growers in Survey Table 56 do not consider that their Cooperatives can take over more of the marketing services at present provided by licensed processors, 524 to 276; but a majority of cotton growers do, 296 to 104, and this difference of opinion very likely arises from the Government's declared policy of securing for cotton

Cooperatives a bigger share of the processing industry, hitherto controlled by the private sector.

It is also reflected in Survey Table 57 where 94% of all cotton Cooperative members favour their Cooperatives taking over more of the processors' services; the corresponding percentages are 50 in maize, but only 29 in pyrethrum where processing is firmly in the hands of the Board and a small private sector.

Among non-members replying to this question in Survey Table 57, the lowest response comes, predictably, from pyrethrum growers, 21%. 39% of maize and 60% of cotton growers say that Cooperatives can undertake more in the processing sector, a lower proportion of cotton growers than that suggested in Survey Table 56, and possibly accounted for by the high level of services non-members experience from private ginners.

(20) Joint marketing by Boards and Cooperatives

Of 272 cotton and pyrethrum Board respondents in Survey Table 58,167 consider the delivery of produce by Cooperatives and its collection by Boards to be working well in their Districts. A slightly higher proportion think that the marketing of this produce by Boards and Unions is also satisfactory outside their Districts, 174 out of 272. But many maize Board respondents replied that neither delivery and collection within their Districts nor produce marketing outside them is working well, 146 to 126.

To the same question in Survey Table 58, maize Cooperative respondents are more emphatic in their dissatisfaction with joint marketing, 176 to 96. The reactions from the others are mixed: cotton Cooperative respondents consider that delivery and collection of produce within their Districts, and pyrethrum respondents that its marketing outside their Districts are satisfactory, 83 to 53 and 85 to 51. However, produce marketing outside their Districts is not thought to be working well by most cotton Cooperative respondents, 91 out of 136, nor delivery and collection within their Districts by pyrethrum respondents, 81 out of 136.

It is significant in this Survey Table that both maize Board and Cooperative respondents are concerned about the delivery and collection of maize inside and its marketing outside their Districts. The particular difficulties in this joint marketing of maize, and possible improvements, are detailed in subsequent tables, but such unanimity of concern adds urgency to it, and suggests that the Maize Board's existing distributive channels are not easily adaptable to Cooperative participation. There does seem too, to be a delivery and collection problem for cotton Cooperatives, and this is probably due to inadequate control by the Cotton Board of the ginners who, on the Board's behalf are directly involved with cotton Cooperatives in this internal distribution. A little surprising is the dissatisfaction voiced by Cooperative respondents about the marketing of pyrethrum outside their Districts, but this may reflect a demand by pyrethrum Cooperatives, which are amongst the most advanced, to be more involved by the Pyrethrum Board in the external marketing of their crop.

The totals of the "Yes" and "No" replies in Survey Tables 59, 60 and 61 derive from those respondents who replied "No" to both the questions in Survey Table 58, as follows: maize Board 70, and maize Cooperative 82; cotton Board 55, and cotton Cooperative 53; pyrethrum Board 43, and pyrethrum Cooperative 51. In Survey Tables 59 to 61, the first two topics are also dealt with by all respondents in Survey Table 62, and the last two topics by all respondents in Survey Tables 63, 64 and 65.

Cooperatives having more autonomy in the marketing of their produce, and their ability to undertake more of their own marketing are, therefore, discussed in Survey Tables 59 to 62. Of all maize Board respondents in Survey Table 62, 81 to 55 consider that Cooperatives should have more autonomy, but a slightly higher proportion doubts their fitness for it, 86 to 50. Almost all the maize Board respondents in Survey Table 59 are emphatically against giving Cooperatives more of this autonomy, 51 to 19, but only just over half, 38 to 32, doubt their ability to undertake it, which suggests some dissatisfaction with the maize Board's part in joint marketing.

Maize Cooperative respondents are in favour, not unexpectedly, of Cooperatives having more control of their marketing in Survey Table 62, 89 out of 136; and more so in Survey Table 59, 59 out of 82, where the clear implication is that joint marketing would be improved by the Cooperatives being given more of this control. Similarly, these respondents in both Survey Tables have confidence in the ability of Cooperatives to carry out more of the marketing of their produce, 77 to 59 in Survey Table 62, and 52 to 30 in Survey Table 59.

A small majority of Board respondents support cotton Cooperatives being granted more marketing autonomy in Survey Table 60, 32 to 23, and in Survey Table 62, 71 to 65, suggesting some dissatisfaction with cotton Board marketing in Survey Table 60. Replies in both these Tables are, however, equivocal about Cooperatives' fitness for such added responsibility: 69 to 67 in Survey Table 62, and 27 to 28 in Survey Table 60; and this must reflect the concern of the Board about the performance of cotton Cooperatives.

The replies in Survey Table 60 from Cooperatives respondents show support for their Cooperatives having more autonomy in the marketing of their produce, 33 out of 53, and confidence in their ability to exercise it, 32 out of 53, this again reflecting dissatisfaction with Board marketing. Such optimism is not entirely shared by all cotton Cooperative respondents who replied to Survey Table 62, since although 82 out of 136 say that Cooperative should be given more autonomy, 77 out of 136 doubt whether they would be able to undertake more of their own marketing.

Pyrethrum Board respondents are against Cooperatives being given more control of marketing in both Survey Tables 61, 26 to 17, and 62, 93 to 43, and they do not consider that pyrethrum Cooperatives would be able to undertake more marketing functions anyway: 24 to 19 in Survey Table 61, and 89 to 47 in Survey Table 62. In Survey Table 61, these replies show not so much concern with the failure of pyrethrum Cooperatives to carry out their own marketing functions as a clear recognition of the limits to existing Cooperative capabilities.

This view is strengthened by the reaction of pyrethrum Cooperative respondents to the same questions; in Survey Table 61 they are uncommitted about the desirability of Cooperatives being granted more autonomy in the marketing of their produce, 26 to 25, although admittedly confident of their ability to exercise it, 31 to 20. In Survey Table 62, of all the Cooperative respondents who replied, 83 out of 136 agree with their Board counterparts that such autonomy in marketing is inappropriate for pyrethrum Cooperatives; again slightly over half consider that Cooperatives would be able to carry out more of their own marketing, 70 out of 136.

Distributive channels of Boards and Cooperatives are dealt with again in Survey Tables 59 to 61, and also in Survey Tables 63, 64 and 65.

Maize Board respondents in both Survey Tables 59 and 63 consider first, that Cooperatives should sell direct to produce traders and other buyers, such as processors: 86 to 50, and 39 to 31; and second, that the Board should go on buying direct from growers and traders in Districts where there are Cooperatives dealing in the same produce: 90 to 46, and 54 to 16. This similarity of reaction among all respondents and those already dissatisfied with joint marketing (Survey Table 59) is probably due to the wish of Board respondents to see more competition in distribution between Cooperatives and other participants. Certainly such competition is not welcomed by most maize Cooperative respondents answering the same two questions: in Survey Table 59 they are almost equally divided as to whether Cooperatives should sell direct to traders, 42 to 40, but amongst all respondents firmly against it in Survey Table 63, 89 to 47. Similarly, of those replying in Survey Table 59, 60 out of 82 are opposed to the Board buying from growers and traders in Districts where Cooperatives are dealing in the same produce, and in Survey Table 63, 87 out of 136.

The opinions of all cotton Board respondents about Cooperatives selling to and the Board buying from produce traders are very similar to those of maize Board respondents in that they favour competition in both distributive channels in Survey Table 64, by 89 to 47, and 102 to 34; and in the second channel, in Survey Table 60, by 34 to 21. But 39 out of 55 in Survey Table 60 replied that cotton Cooperatives should not sell direct to other buyers; this may reflect what cotton Board respondents see as an important advantage which the Pyrethrum Board enjoys over their own Board in being able to buy direct from Cooperatives produce for processing, and thereby not having the responsibility of supervising independant processors such as ginners who buy from Cooperatives. It is significant that this view is reversed by cotton Cooperative respondents in Survey Table 60, 35 to 18, who are already dissatisfied with joint marketing, and are unwilling to see any further control of this sort exercised by the cotton Board over Cooperatives. In other respects, the replies by these Cooperative respondents are very comparable to those of their maize colleagues: 38 to 15 in Survey Table 60, and 195 to 77 in Survey Table 64.

The opinions of pyrethrum Board respondents are clear enough: against Cooperatives selling direct to produce traders and other buyers; 31 to 12 in Survey Table 61, and 111 to 25 in Survey Table 65; and in favour of the Board continuing to buy direct from growers in Districts where there are Cooperatives dealing in the same produce, 30 to 13 in Survey Table 61, and 98 to 38 in Survey Table 65. The agreement about this second distributive channel among all respondents, and those dissatisfied with joint marketing, stems from the volume purchases which the Pyrethrum Board makes from large-scale growers outside Cooperatives, enabling the Board to maintain high quality standards and to finance more marketing services to small-scale growers. Indeed, disagreement with these Board opinions among pyrethrum Cooperative respondents is only by a small margin in Survey Table 65, 71 to 65 and 73 to 63, and suggests simply a general attitude among all these respondents that as much produce as possible should be channelled through Cooperatives. In Survey Table 61, Cooperative respondents are undecided about Cooperatives selling direct to produce traders and other buyers, 26 to 25, but are opposed to the Board buying direct except from Cooperatives, 29 to 22, as in the other Survey Table.

The two remaining questions are Cooperatives selling direct to Boards, and compulsory Cooperative membership, and these are answered in Survey Tables 63, 64 and 65. Board respondents in all three commodities support direct sales by Cooperatives to Boards, particularly in pyrethrum: 83 to 53 in Survey Table 63: 94 to 42 in Survey Table 64, and 105 to 31 in Survey Table 65. Most Cooperative respondents also support this arrangement for cotton in Survey Table 64, 85 to 51, and for pyrethrum in Survey Table 65, 89 to 47. Only in maize do these respondents mostly demur, 79 to 57, and almost certainly because of the quicker cash payments for maize obtainable from produce traders.

Compulsory Cooperative membership must be one of the few questions about which maize and pyrethrum Board and Cooperative respondents agree; in Survey Table 63, 80 to 56 and 98 to 38, and in Survey Table 65, 109 to 27 and 89 to 47; but for different reasons. Maize Cooperatives cannot be viable and effective as long as growers who are Cooperative members continue to sell outside their Cooperatives; and many do, as the Survey Tables on Questionnaire 1 make clear. Pyrethrum is a more complex crop which small-scale growers find difficult to cultivate, treat and market on their own. Cotton Board respondents, however, in Survey Table 64 are against compulsory Cooperative membership, 93 to 43 as there are Districts where small-scale growing outside Cooperatives is being undertaken successfully; cotton Cooperative respondents are in favour of it probably for much the same reason as maize Cooperative respondents.

(21) Improvements in joint marketing by Boards and Cooperatives

These improvements in joint marketing by Boards and Cooperatives, in order of most importance, are as follows:

| Rating in Column 1 | Maize Board respondents in Survey Table 66 | And ranked high in Column(s) |
|---|---|---|
| 41 | Greater involvement by the Board in maintaining higher standards of service by Cooperatives | 2 and 3 |
| 38 | Joint working groups to investigate marketing problems by commodity or area | 6 |
| 37 | More Cooperatives appointed as Board Agents | 2 |
| 31 | Regular contacts at District level between Cooperative Assistants and Board Agents | 3 and 6 |
| 29 | Granting monopoly buying rights to Cooperatives to resell to the Board | 3, 4 and 5 |
| 27 | Parity of terms, payment and agency services | 4 |
| | **Maize Cooperative respondents in Survey Table 67** | |
| 43 | More Cooperatives appointed as Board Agents | 2 |
| 39 | Granting monopoly buying rights to Cooperatives to resell to the Board | 2 and 3 |
| 35 | Parity of terms, payment and agency services | 2 and 6 |
| 31 | Greater involvement by the Board in maintaining higher standards of service by Cooperatives | 3 and 4 |
| 29 | Joint working groups to investigate marketing problems by commodity or area | 4 and 5 |
| 27 | Regular contacts at District level between Cooperative Assistants and Board Agents | 2, 5 and 6 |

| Rating in Column 1 | | And ranked high in Column(s) |
|---|---|---|
| | Cotton Board respondents in Survey<br>Table 68 | |
| 40 | Regular contacts at District level between Cooperative Assistants and Board Agents | 4 |
| 34 | Greater involvement by the Board in maintaining higher standards of service by cooperatives | 2,3 and 6 |
| 33 | More Cooperatives appointed as Board Agents | 5 |
| 29 | Parity of terms, payment and Agency services | 3 and 4 |
| 26 | Joint working groups to investigate marketing problems by commodity or area | 5 |
| 24 | Granting monopoly buying rights to Cooperatives to resell to the Board | 2 and 6 |
| | Cotton Cooperative respondents in Survey<br>Table 69 | |
| 39 | Joint working groups to investigate marketing problems by commodity or area | 2 and 4 |
| 37 | Parity of terms, payments and agency services | 3 and 6 |
| 31 | Regular contacts at District level between Cooperative Assistants and Board Agents | 3 and 6 |
| 31 | Greater involvement by the Board in maintaining higher standards of service by Cooperatives | 2 and 4 |
| 29 | More Cooperatives appointed as Board Agents | 2, 3 and 5 |
| 28 | Granting monopoly buying rights to resell to the Board | 5 |
| | Pyrethrum Board respondents in Survey<br>Table 70 | |
| 42 | Parity of terms, payment and agency services | 6 |
| 40 | Greater involvement by the Board in maintaining higher standards of service by Cooperatives | 2, 3 and 4 |
| 33 | Joint working groups to investigate marketing problems by commodity or area | 3 and 5 |

| Rating in Column 1 | Survey Table 70 (continued) | And ranked high in Column(s) |
|---|---|---|
| 32 | Regular contacts at District level between Cooperative Assistants and Board Agents | 2, 5 and 6 |
| 27 | Granting monopoly rights to Cooperatives to resell to the Board | 4 |
| 26 | More Cooperatives appointed as Board Agents. | 2 and 6 |
| | Pyrethrum Cooperative respondents in Survey Table 71 | |
| 41 | Greater involvement by the Board in maintaining higher standards of service by Cooperatives | 2 |
| 40 | Joint working groups to investigate marketing problems by commodity or area | 3 |
| 32 | Granting monopoly buying rights to resell to the Board | 3 |
| 31 | Regular contacts at District level between Cooperative Assistants and Board Agents | 2, 4 and 5 |
| 30 | More Cooperatives appointed as Board Agents | 2 and 6 |
| 30 | Parity of terms, payment and agency services | 3, 4 and 5 |

(22) Difficulties in Board marketing

The difficulties encountered in Board marketing, in order of most importance, are as follows:

| Rating in Column 1 | Maize Board respondents in Survey Table 72 | And ranked high in Column(s) |
|---|---|---|
| 31 | Weaknesses in Cooperative Primary Societies | 2, 3 and 5 |
| 25 | Shortage of trained management at the Board's headquarters | 3 and 7 |
| 24 | Meeting the marketing costs of the Board | 3 and 6 |

| Rating in Column 1 | Survey Table 72 (continued) | And ranked high in Column(s) |
|---|---|---|
| 23 | Political intervention by Government | 2, 4 and 9 |
| 23 | Few technical staff to liaise with Ministry of Agriculture on crop marketing | 4, 6 and 7 |
| 22 | Integrating the grading, processing and packing stages before resale | 5 and 8 |
| 20 | Finance required to back support prices | 7 and 8 |
| 20 | The need to diversify cash crop varieties | 2, 5 and 7 |
| 19 | Insufficient experienced Area managers and Field Officers | 3, 4 and 6 |
| 15 | Lack of market research | 4 and 5 |

Maize Cooperative respondents in Survey Table 73

| | | |
|---|---|---|
| 27 | Shortage of trained management at the Board's headquarters | 2 and 4 |
| 27 | Meeting the marketing costs of the Board | 3 and 5 |
| 26 | Insufficient experienced Area managers and Field Officers | 2 and 6 |
| 25 | Political intervention by Government | 5 and 9 |
| 25 | Integrating the grading, processing and packing stages before resale | 3 and 7 |
| 24 | Lack of market research | 4 and 7 |
| 23 | Finance required to back support prices | 4, 6 and 8 |
| 23 | Few technical staff to liaise with Ministry of Agriculture on crop marketing | 2 and 5 |
| 20 | The need to diversify cash crop varieties | 5 and 8 |
| 19 | Weaknesses in Cooperative Primary Societies | 3, 5 and 7 |

Cotton Board respondents in Survey Table 74

| | | |
|---|---|---|
| 30 | Weaknesses in Cooperative Primary Societies | 2 |
| 27 | Finance required to back support prices | 3 and 6 |
| 25 | Political intervention by Government | 4 and 7 |

| Rating in Column 1 | Survey Table 74 (continued) | And ranked high in Column(s) |
|---|---|---|
| 24 | Meeting the marketing costs of the Board | 2 and 3 |
| 23 | Integrating the grading, processing and packing stages before resale | 6 and 8 |
| 22 | Insufficient experienced Area managers and Field Officers | 5 |
| 19 | Lack of market research | 2, 5 and 7 |
| 18 | Few technical staff to liaise with Ministry of Agriculture on crop marketing | 8 and 9 |
| 15 | Shortage of trained management at the Board's headquarters | 3 and 4 |
| 15 | The need to diversify cash crop varieties | 4 and 9 |

Cotton Cooperative respondents in Survey Table 75

| | | |
|---|---|---|
| 28 | Insufficient experienced Area managers and Field Officers | 2 and 5 |
| 27 | Finance required to back support prices | 2, 3 and 7 |
| 27 | Integrating the grading, processing and packing stages before resale | 3 |
| 27 | Meeting the marketing costs of the Board | 3, 7 and 9 |
| 26 | Lack of market research | 6 |
| 25 | Political intervention by Government | 9 |
| 23 | Few technical staff to liaise with Ministry of Agriculture on crop marketing | 4 and 5 |
| 22 | Shortage of trained management at the Board's headquarters | 6 and 8 |
| 19 | The need to diversify cash crop varieties | 2 and 7 |
| 18 | Weaknesses in Cooperative Primary Societies | 3 and 6 |

Pyrethrum Board respondents in Survey Table 76

| | | |
|---|---|---|
| 28 | Weaknesses in Cooperative Primary Societies | 3 |
| 26 | Finance required to back support prices | 2 and 4 |

## Survey Table 76
(continued)

| Rating in Column 1 | | And ranked high in Column(s) |
|---|---|---|
| 25 | Political intervention by Government | 7 and 8 |
| 24 | Integrating grading, processing and packing stages before resale | 2 |
| 24 | Meeting the marketing costs of the Board | 2, 4 and 6 |
| 19 | Insufficient experienced Area managers and Field Officers | 5 |
| 19 | The need to diversify cash crop varieties | 3, 5 and 7 |
| 18 | Lack of market research | 5 and 9 |
| 16 | Few technical staff to liaise with Ministry of Agriculture on crop marketing | 3 and 7 |
| 15 | Shortage of trained management at the Board's headquarters | 6 and 8 |

## Pyrethrum Cooperative respondents in Survey Table 77

| | | |
|---|---|---|
| 30 | Insufficient experienced Area managers and Field Officers | 4 |
| 28 | Meeting the marketing costs of the Board | 2 and 8 |
| 27 | Integrating the grading, processing and packing stages before resale | |
| 26 | Finance required to back support prices | 2 and 4 |
| 23 | Political intervention by Government | 5 and 7 |
| 21 | Weaknesses in Cooperative Primary Societies | 3, 6 and 9 |
| 18 | Lack of market research | 5 |
| 18 | The need to diversify cash crop varieties | 3 and 6 |
| 18 | Few technical staff to liaise with Ministry of Agriculture on crop marketing | 3, 4 and 8 |
| 17 | Shortage of trained management at the Board's headquarters | 5 and 8 |

(23) Weaknesses in Cooperatives experienced by Board and Cooperatives personnel

These weaknesses in Cooperative Primary Societies, in order of most importance, are as follows:

Maize Board respondents in Survey
Table 78

| Rating in Column 1 | | And ranked high in Column(s) |
|---|---|---|
| 32 | Low quality of produce sold to the Board | 3 and 6 |
| 30 | Inability to compete with produce traders | 2 |
| 29 | Poor marketing services to growers | 2 and 9 |
| 28 | Late payments to growers | 2 and 8 |
| 27 | Untrained management | 3 and 5 |
| 26 | Lack of member support | 6 |
| 26 | Conflict between members and management | 6 and 7 |
| 24 | Proportion of dormant societies | 4 and 5 |
| 20 | Insufficient capital | 4 |
| 18 | Indebtedness to suppliers or government agencies | 6 and 7 |

Maize Cooperative respondents in Survey
Table 79

| | | |
|---|---|---|
| 35 | Indebtedness to suppliers or government agencies | 3, 4 and 7 |
| 33 | Insufficient capital | 3 |
| 29 | Lack of member support | 6 |
| 29 | Late payments to growers | 3 and 5 |
| 28 | Inability to compete with produce traders | 2, 4 and 6 |
| 25 | Poor marketing services to growers | 2 and 7 |
| 23 | Proportion of dormant Societies | 2 |
| 22 | Low quality of produce sold to the Board | 5, 8 and 9 |
| 21 | Conflict between members and management | 4 and 8 |
| 19 | Untrained management | 3 |

## Cotton Board respondents in Survey

### Table 80

| Rating in Column 1 | | And ranked high in Column(s) |
|---|---|---|
| 30 | Low quality or produce sold to the Board | 6 |
| 29 | Late payments to growers | 2 and 4 |
| 28 | Untrained management | 2 and 5 |
| 27 | Poor marketing services to growers | 3 and 7 |
| 27 | Inability to compete with produce traders | 7 and 9 |
| 24 | Insufficient capital | 4 and 5 |
| 21 | Lack of member support | 3 |
| 20 | Conflict between members and management | 7 and 8 |
| 19 | Indebtedness to suppliers or government agencies | 6 |
| 18 | Proportion of dormant Societies | 4 and 8 |

## Cotton Cooperative respondents in Survey

### Table 81

| | | |
|---|---|---|
| 30 | Indebtedness to suppliers or government agencies | 4 and 8 |
| 29 | Late payments to growers | 2 and 4 |
| 28 | Poor marketing services to growers | 3 and 9 |
| 28 | Low quality of produce sold to the Board | 2 and 5 |
| 27 | Untrained management | 5 and 6 |
| 25 | Insufficient capital | 3 and 4 |
| 25 | Proportion of dormantSocieties | 6 and 8 |
| 23 | Inability to compete with produce traders | 2 |
| 22 | Lack of member support | 5 |
| 22 | Conflict between members and management | 7 |

| Rating in Column 1 | | And ranked high in Column(s) |
|---|---|---|
| | **Pyrethrum Board respondents in Survey Table 82** | |
| 29 | Low quality of produce sold to the Board | 2 and 3 |
| 26 | Poor marketing services to growers | 2 and 9 |
| 25 | Insufficient capital | 4 and 7 |
| 23 | Lack of member support | 4 and 8 |
| 22 | Untrained management | 3 and 5 |
| 20 | Conflict between members and management | 5 |
| 19 | Late payments to growers | 3 and 6 |
| 18 | Indebtedness to suppliers or government agencies | 2, 5 and 6 |
| 16 | Proportion of dormant Societies | 8 |
| 15 | Inability to compete with produce traders | 4, 7 and 9 |
| | **Pyrethrum Cooperative respondents in Survey Table 83** | |
| 28 | Low quality of produce sold to the Board | 7 and 8 |
| 27 | Conflict between members and management | 2 |
| 24 | Insufficient capital | 3 and 6 |
| 21 | Late payments to growers | 3 and 4 |
| 21 | Indebtedness to suppliers or government agencies | 8 |
| 20 | Untrained management | 4 and 5 |
| 20 | Poor marketing services to growers | 5 |
| 20 | Inability to compete with produce traders | 2 and 5 |
| 19 | Lack of member support | 7 and 9 |
| 17 | Proportion of dormant Societies | 4 and 6 |

(24) Boards raising the standards of Cooperative marketing services to growers

Ways in which the Boards can raise the standards of these services to growers, in order of most importance, are as follows:

| Rating in Column 1 | Maize Board respondents in Survey Table 84 | And ranked high in Column(s) |
|---|---|---|
| 41 | Insisting on higher quality produce | 2 |
| 39 | Helping with training | 3 |
| 36 | Field inspection and extension services | 4 |
| 32 | Granting agencies to Cooperatives on condition of prompt deliveries of produce | 2 and 4 |

| | Maize Cooperative respondents in Survey Table 85 | |
|---|---|---|
| 44 | Granting agencies to Cooperatives on condition of prompt deliveries of produce | 2 |
| 37 | Field inspection and extension services | 4 |
| 34 | Helping with training | 3 |
| 28 | Insisting on higher quality produce | 2 |

| | Cotton Board respondents in Survey Table 86 | |
|---|---|---|
| 38 | Insisting on higher quality produce | 2 |
| 36 | Field inspection and extension services | 4 |
| 32 | Helping with training | 2 and 3 |
| 28 | Granting agencies to Cooperatives on condition of prompt deliveries of produce | 3 and 4 |

| | Cotton Cooperative respondents in Survey Table 87 | |
|---|---|---|
| 37 | Insisting on higher quality produce | 2 |
| 37 | Field inspection and extension services | 2 and 3 |

| Rating in Column 1 | Survey Table 87 (continued) | And ranked high in Column(s) |
|---|---|---|
| 36 | Granting agencies to Cooperatives on condition of prompt deliveries of produce | |
| 29 | Helping with training | 3 and 4 |

**Pyrethrum Board respondents in Survey Table 88**

| | | |
|---|---|---|
| 41 | Insisting on higher quality produce | 2 and 4 |
| 39 | Helping with training | |
| 35 | Field inspection and extension services | 4 |
| 32 | Granting agencies to Cooperatives on condition of prompt deliveries of produce | 3 |

**Pyrethrum Cooperative respondents in Survey Table 89**

| | | |
|---|---|---|
| 41 | Insisting on higher quality produce | 2 |
| 37 | Field inspection and extension services | 2 |
| 36 | Helping with training | 3 and 4 |
| 32 | Granting agencies to Cooperatives on condition of prompt deliveries of produce | 4 |

(25) Government improving the performance of Cooperatives

Ways in which the Government can improve the performance of Cooperatives, in order of most importance, are as follows:

| Rating in Column 1 | Maize Board respondents in Survey Table 90 | And ranked high in Column(s) |
|---|---|---|
| 37 | Require all Cooperative Primary Societies to join District Unions | 3 |
| 34 | Intensify Cooperative management training | 4 and 6 |
| 31 | Bond trained Cooperative Secretaries to reduce wastage of skilled staff | 2 |

## Survey Table 90

(continued)

| Rating in Column 1 | | And ranked high in Column(s) |
|---|---|---|
| 29 | Monopoly purchasing in selected Districts or of selected produce | 5 |
| 28 | Institute centralised accounting | 2 and 3 |
| 25 | Longer term and more loan facilities | 5 and 6 |

## Maize Cooperative respondents in Survey Table 91

| | | |
|---|---|---|
| 39 | Intensify Cooperative management training | 3 and 4 |
| 31 | Monopoly purchasing in selected Districts or of selected produce | 2 and 3 |
| 35 | Institute centralised accounting | 5 |
| 34 | Require all Cooperative Primary Societies to join District Unions | 4 and 6 |
| 33 | Longer term and more loan facilities | 6 |
| 27 | Bond Cooperative Secretaries to reduce wastage of skilled staff | 5 |

## Cooperative Board respondents in Survey Table 92

| | | |
|---|---|---|
| 35 | Bond Cooperative Secretaries to reduce wastage of skilled staff | 6 |
| 34 | Require all Cooperative Primary Societies to join District Unions | 2, 3 and 4 |
| 32 | Intensify Cooperative management training | 2 and 3 |
| 28 | Institute centralised accounting | 4 and 5 |
| 28 | Monopoly purchasing in selected Districts or of selected produce | 3 and 6 |
| 25 | Longer term and more loan facilities | 2 and 5 |

## Cotton Cooperative respondents in Survey Table 93

| | | |
|---|---|---|
| 39 | Monopoly purchasing in selected Districts or of selected produce | 2 |
| 37 | Require all Cooperative Primary Societies to join District Unions | 2 and 5 |

| Rating in Column 1 | Survey Table 93 (continued) | And ranked high in Column(s) |
|---|---|---|
| 33 | Longer term and more loan facilities | 4 and 6 |
| 32 | Intensify Cooperative management training | 3 |
| 30 | Bond trained Cooperative Secretaries to reduce wastage of skilled staff | 3 and 4 |
| 21 | Institute centralised accounting | 5 |
| | Pyrethrum Board respondents in Survey Table 94 | |
| 38 | Intensify Cooperative management training | 3 and 4 |
| 37 | Bond trained Cooperative Secretaries to reduce wastage of skilled staff | 2 and 6 |
| 34 | Require all Cooperative Primary Societies to join District Unions | 5 |
| 30 | Institute centralised accounting | 2 and 4 |
| 30 | Monopoly purchasing in selected Districts or of selected produce | 4 |
| 28 | Longer term and more loan facilities | 3 and 5 |
| | Pyrethrum Cooperative respondents in Survey Table 95 | |
| 38 | Monopoly purchasing in selected Districts or of selected produce | 5 and 6 |
| 36 | Bond trained Cooperative Secretaries to reduce wastage of skilled staff | 3 |
| 35 | Intensify Cooperative management training | 4 and 5 |
| 32 | Longer term and more loan facilities | |
| 32 | Require all Cooperative Primary Societies to join District Unions | 2 |
| 30 | Institute centralised accounting | 4 |

(26) Licensing and deployment of Board Agents and Cooperative Secretaries

Respondents in Survey Tables 96, 97 and 98 give their opinions about the people many growers have direct dealings with: Cooperative Society Secretaries, Board Agents, processors and produce traders.

Survey Table 96 deals with the licensing of Board Agents: maize Board respondents are quite satisfied with the way in which the Board issues and withdraws agency licences, 183 to 89, and pyrethrum Board respondents particularly so, 195 to 77. There is some uncertainty however, about the appointment of Agents among cotton Board and maize Cooperative respondents, of whom only just over half replied "Adequate," 143 to 129. Pyrethrum and cotton Cooperative respondents are mostly in favour of the present system of agency licensing and revocation, 152 to 120 and 163 to 109.

The two most significant opinions are those of many cotton Board respondents who are dissatisfied with the withdrawal or agency licences by their Board, 82 to 54, and maize Cooperative respondents who are critical of the maize Board's appointment of Agents, 91 to 45. This suggests, first that the cotton Board has been taking away agency licences from ginners, who in the opinion of many cotton Board respondents, are more reliable Agents than the Cooperatives to whom agencies have been granted; and second, that according to more than half of the Cooperative respondents, the maize Board has been appointing produce traders and not enough Cooperatives as Board Agents.

And the replies of these two types of respondents in Survey Table 97 support this inference: more than half of the cotton Board respondents replied that whereas licensed processors had not in their experience proved unsuitable as Agents, 98 to 38, Cooperative societies had, 91 to 43; moreover, they are undecided about existing Board Agents' unsuitability, 71 to 65, and marginally satisfied with the past performance of produce traders, 78 to 58. On the other hand, 97 out of 136 maize Cooperative respondents maintain that Cooperatives have not proved unsuitable as Agents for the Board, but 95 out of 136 say that produce traders have. Nor do these respondents favour the continued agency services of either millers or the existing Agents, 171 to 101.

But Cooperative Societies have proved unsuitable as Board Agents in the experience of both maize Board and pyrethrum Board respondents, 93 to 43 and 87 to 49. And these respondents agree about the suitability of licensed processors as Agents, 95 to 41 and 103 to 33, and about the satisfactory performance of the present Agents, 89 to 47 and 106 to 30. Maize Board respondents do, however, have some doubts about the continued performance of produce traders as Board Agents, 66 to 70, and their pyrethrum counterparts are in less doubt that produce traders have not been satisfactory, 81 to 55.

Cotton and pyrethrum Cooperative respondents are in agreement on the suitability of Cooperatives as Agents for their Boards, 174 to 98, and on the unsuitability of produce traders, 169 to 103. It is interesting to note that they are not in agreement about processors: many cotton Cooperative respondents have found ginners unsatisfactory as Agents, 77 to 59, but many pyrethrum respondents replied that licensed processors have proved satisfactory, 76 to 60. Clearly the Pyrethrum Board has, to Cooperative respondents, been more successful than the Cotton Board in integrating processing and agency services, and in involving Cooperatives in both. It is thus not surprising that most pyrethrum Cooperative respondents are satisfied with the performance of Board Agents, 88 to 48, whereas most of the cotton respondents are not, 83 to 53.

The basis of Survey Table 98 is that some improvement is always possible in the deployment of Cooperative society Secretaries, and this is shown in the replies of both Board and Cooperative respondents. In maize and cotton, improvements are recommended in the way these Secretaries are recruited, trained, and remunerated with, predictably, almost all Cooperative respondents strongly in favour of more pay.

It can be assumed from the replies about the supervision of maize, cotton and pyrethrum Cooperative Secretaries, that "improvements" mean more supervision required to Board respondents, and less supervision to Cooperative respondents.

Maize and cotton respondents' opinions are shared by pyrethrum Board respondents about training and pay, and by pyrethrum Cooperative respondents about recruitment and pay. There seems to be some uncertainty about the need for improvements among pyrethrum Board respondents about recruitment, and among pyrethrum Cooperative respondents about training; this implies higher standards of recruitment and training among Secretaries of pyrethrum Cooperatives than in maize or cotton Cooperative Societies.

(27) Government policy towards Boards and Cooperatives

Government policy towards Marketing Boards is understood by the majority of maize, cotton and pyrethrum respondents in Survey Table 99, with the exceptions of maize and pyrethrum Cooperative respondents, 95 to 41 and 70 to 66. This indecision on the part of the pyrethrum respondents suggests that the Government and the pyrethrum Board can do more to explain official policy to Cooperative Officers and particularly Cooperative Secretaries. In the case of the maize respondents, the negative replies probably reflect disagreement among many of them with Government policy towards the Maize Board, and hence a reluctance to admit to a full understanding of it.

There are no such claims to lack of understanding of Government policy towards Cooperatives in Survey Table 100 however. This is undoubtedly due to the strenuous efforts which the Government has been making both by public speeches and in official documents to publicise the importance which it attaches to the Cooperative movement in advancing the social and economic interests of the nation.

(28) Contacts among intermediaries in the marketing system

Contacts refer to face to face relationships and correspondence in their work between Board and Cooperative respondents and among both.

Maize Board respondents give somewhat equivocal replies about their contacts in Survey Table 101. Just over half say that they have no continuing contacts in their work with Cooperative Officers and Assistants, 77 to 59, and Registered Board Agents, 73 to 63. And the same proportion claim to have such contacts with Cooperative Society Secretaries, 70 to 66; but these respondents are more emphatic in claiming to have no contacts with Board Area Managers, 84 to 52. The impression given by these replies of maize Board respondents is one of uncertainty about the usefulness and extent of their contacts with Cooperatives Officers, Cooperative Society Secretaries, and Board Agents, and of poor contacts with Board Area Managers. Interestingly, cotton Board respondents also complain of a lack of contact with these Managers in Survey Table 102, 89 to 47, and in Survey Table 103 pyrethrum Board respondents are almost equally divided about the extent of their contacts with them, 69 to 67. Board Area Managers are obviously not spending enough time in the field liaising with these other intermediaries about marketing problems.

Cotton and pyrethrum Board respondents' other contacts seem satisfactory: with Cooperative Officers and Assistants, 173 to 99; with Cooperative Society Secretaries, 179 to 93; and with Registered Board Agents, 174 to 98.

The replies by Cooperative respondents in these three Survey Tables, however, present a more disturbing picture: contacts among them are consistent and adequate, but their contacts with Board respondents are clearly neither. Contacts of Cooperative respondents with Cooperative Officers and Assistants are 89 to 47 in maize, 91 to 45 in cotton, and 98 to 38 in pyrethrum; and with Cooperative Society Secretaries: in maize 81 to 55, in cotton 97 to 39, and in pyrethrum 108 to 28.

Their lack of contacts with Board respondents is as follows: Board Area Managers: in maize 79 to 57, in cotton 94 to 42, and in pyrethrum 107 to 29; Registered Board Agents: 72 to 64 in maize, 88 to 48 in cotton, and 90 to 46 in pyrethrum. In view of the importance the Government attaches to developing the joint marketing of the three commodities by Boards and Cooperatives, this lack of working liaison is most serious; a first approach might be to issue a directive to Board and Cooperative respondents about regular meetings and joint reports.

(29) Derivation of commodities marketed

In all three commodities there is a marked trend in Survey Table 104 in favour of the small-scale grower and against the large-scale grower. This is not surprising, as the large-scale grower has traditionally been an expatriate, and much of the produce now grown by small-scale growers, who are almost all Africans, is within scheduled areas formerly occupied by expatriate growers. This is particularly true of pyrethrum, where 100 out of 136 Board respondents replied that the proportion by quantity of produce handled by their Board is increasingly deriving from small-scale growers, and not from large-scale growers, 97 to 36. The same pattern of replies is found among maize and cotton Board respondents, though perhaps not quite so emphatic: produce is increasingly coming from small-scale growers by 91 to 45 in maize, and 94 to 42 in cotton, and not from large-scale growers by 89 to 47 in maize, and 85 to 51 in cotton.

But when these Board respondents are asked about the derivation of commodities marketed from Cooperative Societies in Survey Table 104, any similarity of responses ends abruptly. This is all the more significant because Cooperative membership is now made up almost entirely of small-scale growers; only in pyrethrum do most Board respondents point to a definite increase in the volume of produce coming from Cooperatives, 102 to 34. Most maize and cotton Board respondents deny any such increase: 89 to 47 in maize, and 85 to 51 in cotton. The inescapable conclusion is that although increasing amounts of maize and cotton are reaching the Boards from small-scale growers, they are not all being marketed through Cooperative Societies. This conclusion is not affected by the replies of Cooperative respondents in this Survey Table which affirm that the proportions by quantity of produce handled by Cooperatives are increasingly deriving from small-scale growers, and not from large-scale growers: 111 to 25 in maize, 102 to 34 in cotton, and 115 to 21 in pyrethrum.

A partial explanation of produce by-passing Cooperatives can be found in Survey Table 105, where black markets are, according to most Cooperative respondents, still flourishing in maize and cotton. This is nothing new, as easy access across Lake Victoria, and the contiguity of some maize and cotton Districts to the Uganda and Tanzania frontiers result in illegal marketing outside Kenya where prices, particularly for maize, are often higher. Indeed, there is some illegal selling within Kenya, where for example, the movement of maize in unground form from District to District is prohibited without an official permit. Cooperative respondents are thus claiming, by 96 to 40 in maize, and 91 to 45 in cotton, that at least some of the produce which grower members ought to be selling to their Cooperatives, is finding its way to black markets. But this cannot entirely explain the failure of Cooperatives to attract more produce from small-scale growers; the full explanation of this failure can be found, for example, in shortcomings of Cooperatives themselves which are discussed in the other Tables of the Survey.

These circumstances do not apply to pyrethrum in which there is practically no illegal marketing; and, again in Survey Table 105, pyrethrum Board agree with Cooperative respondents in this respect: 106 to 30 and 97 to 39. Maize and cotton Board respondents, however, accept that there are black markets operating from time to time in their commodities, 89 to 47 and 76 to 60.

(30) <u>Board losses, Cooperative surpluses and Government subsidies</u>

Maize Board and Cooperative respondents agree in Survey Table 106 about the financing of the Boards when trading losses are incurred: Board respondents replied, 157 to 115, that such losses should not be recovered by levies imposed on growers and Cooperatives. Not unexpectedly, maize Cooperative respondents, 196 to 76, argue this too, and so do Cooperative respondents, 194 to 78. Cotton Board respondents, however, are undecided about levies on growers, 69 to 67, and many of them say that the Boards themselves should finance any trading deficits, 89 to 47. Interestingly, pyrethrum Board respondents in this Survey Table are of the same opinion: 70 to 66 being against grower levies, and 90 to 46 in favour of Board financing of deficits. Cotton and pyrethrum Board respondents do seem to recognise that export trading is entirely the responsibility of their Boards, and should not in any way be subsidised by growers or Cooperatives. Pyrethrum Cooperative respondents also agree with their counterparts in maize and cotton in their replies to these two questions, 87 to 49 and 84 to 52.

In Survey Table 107, maize and cotton respondents are in broad agreement about the handling of Cooperative Society surpluses: this must reflect concern at the infrequency with which Primary Societies show any operating surpluses at all, and the urgent need for them to build up some reserves to avoid being unable to pay out their members because of continuing bank overdrafts. Thus, both maize and cotton Board respondents maintain that Cooperatives have not been paying back to growers any operating surpluses, 179 to 93 and 183 to 89, and that Cooperatives should reduce any surplus payments (not suspend them) to members to accumulate reserves, 185 to 87 and again, 183 to 89. According to most pyrethrum respondents, however, pyrethrum Cooperatives have been paying to growers some operating surpluses, 153 to 119, but Board and Cooperative respondents also argue, as in maize and cotton, that such pay-outs should be reduced to accumulate reserves, 165 to 107.

There is disagreement between maize Board and Cooperative respondents in Survey Table 108 about Government subsidies, the former being opposed to any subsidies for Cooperatives and in favour of subsidies for Boards, and the latter supporting subsidies for Cooperatives, but opposing them for Boards. The implication is that maize Board and Cooperative respondents see subsidies being used justifiably to support their own institutions, but to conceal shortcomings in others. Cotton and pyrethrum respondents in this Survey Table certainly adopt a more objective and constructive approach. Cotton Board and Cooperative respondents, while being against subsidies for their Cooperatives, 191 to 81, are very much in favour of the Cotton Board receiving a subsidy from Government, 188 to 84, and this is entirely sensible in view of the heavy capital costs of research and extension programmes which this Board has to undertake and which it is unable to meet from its present funds.

The pyrethrum Board has fortunately more funds of its own which it has accumulated during a longer period of successful trading overseas, and this is recognised by pyrethrum Board and Cooperative respondents, who although not emphatically against subsidies for their Board in principle, are undecided about the present desirability of any, 137 to 135. Also most pyrethrum respondents are against subsidising their Cooperatives, 181 to 91, very probably because many of the larger pyrethrum Cooperatives are buying and selling profitably enough without them.

(31) Statutory functions and Board and Cooperative marketing policy

The responses under "Important" in Survey Table 109 form the basis of those in Survey Tables 112 to 114, and of the comparisons between these three Survey Tables and Tables 110 and 111. There seems to be agreement among most respondents in Survey Table 109 that the Marketing Boards have an important role in helping to develop Cooperative marketing: Board respondents, 264 to 144, and Cooperative respondents 274 to 134. Replies to the second question in Survey Table 109 are mixed: in maize and pyrethrum a substantial majority of Cooperative respondents consider that their Cooperative Unions collectively should play a major part in the formulation of the marketing strategy of the Boards, 201 to 71; most maize and pyrethrum Board respondents, however, say that they should not, 180 to 92. In cotton, just over half of the Board and Cooperative respondents think that it is important for Cooperatives to have a say in Board marketing policy, 77 to 59 and 72 to 64.

Therefore the number of respondents who replied to Survey Tables 112, 113 and 114 are as follows: maize Board 52, maize Cooperative 82; cotton Board 77, cotton Cooperative 72; pyrethrum Board 40, pyrethrum Cooperative 93.

Among all Board respondents who replied to Survey Table 110, 277 out of 408 maintain that the three Marketing Boards are fulfilling all their statutory duties, and 193 out of 272 that cotton and pyrethrum Cooperative societies are meeting the objectives set by Government within the terms of Cooperative legislation; 99 out of 136 consider that only maize

Cooperatives are not meeting these objectives. Many Cooperative respondents too seem satisfied that Cooperative Societies are achieving their official objectives, 263 out of 408, and that the cotton and pyrethrum Boards are fulfilling their duties, 162 out of 272. Again only in maize are there many respondents who think that the Board is falling short in this respect, 85 out of 136.

It is illuminating to note that this general optimism about the performance of Boards and Cooperatives is not shared by either the Board or the Cooperative respondents who replied to Survey Tables 112 to 114; this suggests that among those who attach particular importance to developing Board and Cooperative marketing jointly, there is a greater awareness of the present shortcomings of Boards and Cooperatives and the obstacles these present to the joint marketing of the three commodities. In Survey Table 112, 68 to 38 Board and 87 to 77 Cooperative respondents are not satisfied with the performance of the maize Board and maize Cooperatives. In Survey Table 113, 100 to 54 Board and 79 to 65 Cooperative respondents are not satisfied with the performance of the cotton Board and cotton Cooperatives. And in Survey Table 114, 55 to 25 Board, and 104 to 82 Cooperative respondents are not satisfied with the performance of the pyrethrum Board and pyrethrum Cooperatives. The other point which emerges from the replies to this cross-tabulation is that except in pyrethrum, Cooperative respondents are much more critical of Boards than Board respondents are of Cooperatives.

Of all Cooperative respondents who replied to Survey Table 111, nearly 70% argue that joint marketing by Boards and Cooperatives would be furthered by the Boards doing away with Registered Agents and buying direct from Cooperatives; and 104 to 32 pyrethrum Board respondents agree with them. Maize and cotton Board respondents, however, favour retaining Agents, 177 to 95. Perhaps not surprisingly a majority of all respondents in Survey Tables 112 to 114 replied that joint Board and Cooperative marketing would be better off without Registered Agents coming between the two: maize in Survey Table 112, Board 29 to 23, Cooperative 47 to 35; cotton in Survey Table 113, Board 49 to 28, Cooperative 57 to 15; and pyrethrum in Survey Table 114, Board 29 to 11, Cooperative 61 to 32.

## 3. ASSESSMENT OF PROBLEMS

### A. Problems

These are the problems stated in Part 1, Section 1 (6) of the thesis:

1. Conflict between growers and intermediaries.
2. Effects of producer protection on price levels.
3. Viability of single crop Primary Societies.
4. Inducing growers to join Cooperatives.
5. Failure of Cooperatives to pay growers.
6. Financing of payments between Boards and Cooperatives.
7. Costs incurred by Boards and Cooperatives.
8. Uses of distributive channels.
9. Effects of establishing Cooperatives for political reasons.
10. Government financial policy towards Boards.
11. Place of the private sector in the marketing system.

### B. Complaints

There are also complaints, again outlined in Part 1, Section 1 (6) of the thesis, as follows:

1. Growers

   (a) Fixing of producer prices by the Boards.
   (b) Delays and variations in the payment of these prices.
   (c) Competitiveness of Cooperative and private sector services.

2. Cooperatives

(a) Boards' failure to give agencies to Cooperatives.

(b) Their growers' lack of representation on Boards.

3. Boards

(a) Low quality of produce deriving from Cooperatives.

(b) Government's interference in pricing.

(c) Compulsory Registration of Agents.

4. Intermediaries

(a) Registered Agents -
Business lost because of Cooperative monopolies.

(b) Produce traders -
Business lost because of Cooperatives handling small quantities.

(c) Licensed processors -
Cooperatives not equipped to provide processing services.

A. PROBLEMS

1. Conflict between Growers and intermediaries

This is a serious problem in that because intermediaries have been mostly Asians, Cooperative Unions are, in the name of the African growers, campaigning for the total replacement of non-African traders and processors by Cooperative based institutions. These Unions have been encouraged in their demands by statements of government policy expressing concern for the interests of the African growers which can be furthered by giving their Cooperatives a broader base for their operations - to include, for example, processing. Instances of both growers' resentment against non-African intermediaries, and official support for Cooperatives taking over from them have been given in Part 2, Section 2 (9).

Yet when growers are approached directly, as in Survey Table 24, about the competition between Cooperatives and these intermediaries for the purchase of their produce, they do not exude the sort of confidence in Cooperatives which politicians have claimed:

| Growers who say that Cooperatives are not competing successfully with traders for their produce | % | | |
|---|---|---|---|
| | Maize | Cotton | Pyrethrum |
| | 55 | 51 | 36 |

This reaction of growers to intermediaries so publicly maligned seems to be based, at least in part, on their replies to this extract from Survey Table 22:

| Growers who find produce traders rather than Cooperatives dealing in high profit cash crops | % | | |
|---|---|---|---|
| | Maize | Cotton | Pyrethrum |
| | 63 | 53 | 47 |

Where intermediaries are dealing in produce profitable not only to them but to growers, there is less attraction in selling only to Cooperatives. And indeed some members of Cooperatives themselves do not wish to be barred from selling to produce traders; the relevant part of Survey Table 33 is:

| Cooperative members wishing to sell to produce traders as well as to their Cooperatives | % | | |
|---|---|---|---|
| | Maize | Cotton | Pyrethrum |
| | 40 | 22 | 10 |

It is also significant that Cooperative personnel do not look upon the elimination of private intermediaries as likely to benefit the growers; for in this extract from Survey Tables 67, 69 and 71, they infer that joint marketing by Boards and Cooperatives should be based on parity of terms between Cooperatives and these intermediaries:

| Cooperative personnel ranking parity of terms, payment and agency services as the most important improvement in joint marketing by Boards and Cooperatives | % | | |
|---|---|---|---|
| | Maize | Cotton | Pyrethrum |
| | 33 | 34 | 27 |

This problem is, therefore, characterised by an official policy of enhancing the Cooperative share of agency services, by resentment against private intermediaries for having monopolised distribution to the exclusion of the African grower, but also by the continued reliance by both Boards and growers upon these intermediaries to maintain an acceptable level of these services. The political hostility towards Asians has resulted too in demands that Cooperatives on behalf of the growers have sole agency rights, for example a monopoly of stockholding and forward buying, but there is doubt in the minds of many growers themselves of the extent to which they would materially benefit from such a development.

2. Effects of producer protection on price levels

The mechanics of paying out a statutory price which does not approximate to the world market price have been illustrated in Figures 4, 5 and 6. And in Part 2, Section 2, 4 (2), Costs, prices and margins, the problem of relating the producer paid price of maize to the world price was discussed in paragraph 3. The essence of the problem is that the grower ultimately subsidises a producer price which is in excess of the world price, by levies imposed on him in subsequent years by the Board concerned. This is more acceptable politically than one alternative of a sudden drastic lowering of the producer price, which in the case of maize led to a severe shortage in Kenya in 1965. The other alternative of Government making up any trading deficit incurred by the Boards by a direct subvention out of general revenue is supported for maize and cotton but not for pyrethrum by Board respondents, according to these replies to Survey Table 108:

| Board personnel who argue that Government should make subsidies available to Boards incurring trading losses | % | | |
|---|---|---|---|
| | Maize | Cotton | Pyrethrum |
| | 74 | 72 | 49 |

A progressive alignment of producer prices with world prices is therefore necessary; the problem, however, cannot be solved simply by a more realistic domestic pricing policy, as the movement of world prices is beyond the control of any one producing country. World commodity agreements, such as those operating for coffee, sugar and sisal, are the only means ultimately to overcome it. But adherence to such agreements, and the enjoyment by producers of their benefits such as comparative price stability, is possible only if internal producer pricing is related more closely to forseeable export demand.

3. Viability of single crop Primary Societies

This is the problem of achieving commercial viability of the small Primary Society, dealing as it does in one category of produce which limits patronage of it to a section of growers. Membership of a District

Union assures a Primary Society of certain centralised services at an economic cost, and these are detailed both in Figure 3 and in Part 3, Section 3 (5), Populations of Boards and Cooperatives. It has also been shown in Part 2, 1 (5) that achieving a satisfactory level of membership is essential to the success of a single-crop Cooperative. For example, in Busia District of Kenya, the average membership figure is 682, while the minimum membership necessary for a Cooperative to function profitably has been found in the experience of Provincial Cooperative Marketing Officers to be around 500. Nevertheless, there are some, notably in maize, which have attracted fewer members than this.

It is significant that in Survey Table 37 most small-scale growers maintain that Primary Societies are more successful as single crop Cooperatives:

| Growers who consider the single crop Cooperative to be more successful than the multi-crop Society | % | | |
|---|---|---|---|
| | Maize | Cotton | Pyrethrum |
| | 54 | 70 | 78 |

This reinforces the importance of the District Union in servicing and bringing together numerous single crop Societies; and not in all Districts have these Unions yet begun to function effectively in this respect.

4. Inducing growers to join Cooperatives

The figures for Cooperative membership are contained in Survey Table 1:

| | % | | |
|---|---|---|---|
| Growers who | Maize | Cotton | Pyrethrum |
| are members | 23 | 42 | 83 |

The problem of attracting membership has been largely overcome in pyrethrum, tackled in cotton, but it dominates the maize sector. Two developments must be borne in mind when making an assessment of this Cooperative membership. First, the continuing use made by Cooperative members of distributive channels outside their Cooperatives, and second, the practice by lapsed and indeed non-members to sell to Cooperative stores if they happen to be nearer for delivery than rural markets or agents' depots. And this latter development continues regardless of whether the Cooperative members of a given locality are marketing more than 60% of the volume of produce grown in that locality; if this condition applies then, of course, growers use Cooperative agency services, whether members or not, and the Cooperative is legally obliged to accept deliveries of produce within that area. There is no such obligation otherwise, and indeed the problem of patronage of Cooperatives is aggravated by the realisation among members that their Cooperative is financing and providing services for growers who are not paid up members.

Why do growers not join Cooperatives? Some answer to this problem can be found in Survey Tables 4, 5 and 6, although there is no evidence from these Tables that membership subscriptions have the effect of discouraging patronage by requiring a small initial capital outlay to be made:

| | | | |
|---|---|---|---|
| Growers ranking deductions from grower prices as their most important reason for non-membership | % | | |
| | Maize | Cotton | Pyrethrum |
| | 39 | 32 | 39 |
| Growers ranking higher prices in selling independantly as their most important reason for non-membership | % | | |
| | Maize | Cotton | Pyrethrum |
| | 46 | 31 | 28 |
| Growers ranking lack of confidence in the Cooperative management as their most important reason for non-membership | % | | |
| | Maize | Cotton | Pyrethrum |
| | 41 | 37 | 33 |

Indeed the problem of "selling" Cooperative membership to growers is one of the most crucial dealt with in the entire thesis. Coercive membership would be a poor substitute for membership based firmly upon a collective but voluntary appreciation of the benefits from Cooperatives by growers seeking improved ways of marketing their produce. The East African Governments recognise the sense of this, and the law relating to the use of Cooperative distribution operates only where voluntary membership has already achieved control of a substantial amount of the total volume of the commodity or category of produce marketed.

What marketing services in particular have proved over a period to be of most benefit to existing Cooperative members? For these should be the ones which all Cooperativesseek to provide to new and to promote to potential members. The relevant considerations here are the following extracts from Survey Tables 7, 8 and 9:

| | | | |
|---|---|---|---|
| Growers ranking access to wide markets as the most important marketing service offered members by their Cooperative | % | | |
| | Maize | Cotton | Pyrethrum |
| | 30 | 28 | 36 |
| Growers ranking guaranteed purchases of produce as the most important marketing service offered members by their Cooperative | % | | |
| | Maize | Cotton | Pyrethrum |
| | 31 | 37 | 38 |
| Growers ranking collection, transport and storage as the most important marketing service offered members by their Cooperative | % | | |
| | Maize | Cotton | Pyrethrum |
| | 27 | 30 | 31 |

Certainly, growers who can receive tangible benefits of this sort from Cooperatives are prepared to pay the membership fee in order to enjoy them; although lapsed members making use of Cooperative marketing services may encourage others to default, this is a matter of tightening Cooperative financial control rather than discouraging membership, as the slight initial reduction in income can manifestly be outweighed by these benefits. But Cooperative Secretaries themselves must do more to promote their Societies to all growers as the following extract from Survey Table 14 shows:

| Growers who consider that Cooperative Field staff can do more to explain to them the purposes and functions of Cooperatives | % | | |
|---|---|---|---|
| | Maize | Cotton | Pyrethrum |
| | 63 | 55 | 54 |

This assessment of this problem highlights the priorities for its solution: improve those Cooperative services which are at present less attractive to growers than those offered by the private sector; maintain those services which have proved to bring benefits to Cooperative members which growers marketing outside Cooperatives cannot obtain; and finally, promote more actively and to wider sections of growers the actual and potential advantages to the growers themselves if more and more of them join Cooperative Societies.

5. Failure of Cooperatives to pay growers

There is, however, a notable omission from the undoubted benefits of Cooperative membership analysed from Survey Tables 7, 8 and 9; whilst this omission may be ignored by Cooperative Society Secretaries anxious to increase the patronage of their Societies, it cannot be denied: advance crop payments is not rated highly as a benefit of Cooperative membership in these three Survey Tables. Yet this is often publicised as the most tangible reward of patronage. Growers have been told of "initial" or "advance" payments, to be followed by a second payment; often the first payment is not made by the Cooperative in advance, for instance prior to delivery, and when it is made, it turns out to be the only payment which members receive. This is therefore, partly a problem of the rate of payment, rather than the level of payment which has already been discussed. It is also partly a problem of indebtedness of Cooperatives to growers as well as to other agencies. Another extract from Survey Tables 5, 6 and 7 explains this in terms of past Cooperative members who have been owed money by their Societies for produce delivered by them to the Cooperative store, and growers who are aware of these debts which Societies incur with their present members:

| Growers ranking non-payment by Cooperatives of their debts to growers as the most important reason for non-membership | % | | |
|---|---|---|---|
| | Maize | Cotton | Pyrethrum |
| | 37 | 39 | 43 |

More serious still are the delays in the payments that are made to growers, and both these delays and the failures to make any payments must derive from both lax financial control and defective management within the Societies' executive committees. The relationship with this problem of payments is brought out in two parts of Survey Tables 17, 18 and 19:

| | % | | |
|---|---|---|---|
| Growers ranking poor or untrained management as the most important operational weakness of Cooperatives | Maize | Cotton | Pyrethrum |
| | 44 | 39 | 40 |
| Growers ranking delays in payments to growers as the most important operational weakness of Cooperatives | % | | |
| | Maize | Cotton | Pyrethrum |
| | 38 | 39 | 31 |

And it is not only growers to whom Cooperative Societies become indebted, and this is pointed out by Board and Cooperative respondents in their replies to Survey Tables 79, 81 and 83, as follows:

| Cooperative personnel ranking indebtedness to suppliers or Government agencies as the most important weakness of Primary Cooperatives | % | | |
|---|---|---|---|
| | Maize | Cotton | Pyrethrum |
| | 30 | 27 | 21 |

These suppliers would be those who sell to Cooperative Unions the items and equipment illustrated in Figure 3, and Government agencies would include Cooperative and Land Banks which make loans available to Cooperatives.

The extent of this indebtedness by Cooperatives is a direct cause of their chronic shortage of cash; this is referred to by growers, particularly cotton growers, again in Survey Tables 17, 18 and 19, in this section:

| Growers ranking shortage of ready cash as the most important operational weakness of Cooperatives | % | | |
|---|---|---|---|
| | Maize | Cotton | Pyrethrum |
| | 31 | 44 | 32 |

Such a shortage of cash has serious implications: not only are many growers unpaid, but Cooperatives lack any reserves either for contingencies such as poor harvests, or more importantly to finance some expansion of their functions. They are limited in the extent of the agency services which they can take over from the private sector, and they cannot put any capital up for participation in processing industries.

This point was discussed in Part 2, Section 2 (9), where lack of liquidity is argued to be the immediate obstacle to the achievement of a broader base for Cooperative operations, particularly in processing; this would itself enable them to provide more services to growers and make higher profits, some of which at least would alleviate this cash shortage. Thus, the problem has a much wider application than that of Cooperatives owing money to growers: and only by more stringent management of Cooperative finances - for example, putting a stop to loans to officials from Cooperative funds, - can it be tackled; if it is, expansion of Cooperative activity in areas other than primary marketing can be achieved, as intended by the East African Governments.

## 6. Financing of payments between Boards and Cooperatives

The cross-flows of finance, produce and services between Marketing Boards and Cooperative Unions were illustrated in Figure 9. Promptness of payment for produce delivered is the service which Boards advertise to growers at large and to Cooperatives, particularly the Maize Board; often, such payments constitute the only source of cash flow to Cooperatives with arrears of membership subscriptions and interest payments to the Cooperative and Land Banks. But there can be no prompt payments by the Boards unless there are prompt deliveries of produce to their warehouses by Cooperatives; Boards cannot finance Cooperatives in advance of delivery, and delays in delivery do result in Cooperatives having to finance acceptance, storage and transport for growers for longer periods than they can afford. For the Boards themselves have to meet such costs out of reserves until they complete their annual sales of the processed produce in the domestic and export markets, and sales revenue begins to flow in; and the negotiation of volume sales by the Boards can take many weeks to complete.

Indeed it has already been pointed out in Part 2, Section 2 (4) 2, Costs, prices and margins, that the cash returns paid by the Boards to Cooperatives for commodities such as pyrethrum are higher than for most other produce, yet the Cooperative Unions fail to make use of this cash flow by investment and advance purchases at favourable rates of equipment, storage space and transport; not even the Primary Cooperative members benefit in improved returns for their deliveries. This would be more acceptable to growers if lower cash returns were the result of their Unions building up cash reserves, as is the policy of the Boards; many Cooperative personnel see the sense of this policy in Survey Table 107; failure to pursue it is the crux of this problem:

| Cooperative respondents who consider that Cooperatives should retain any surplus payments due to members to accumulate reserves | % | | |
|---|---|---|---|
| | Maize | Cotton | Pyrethrum |
| | 66 | 59 | 54 |

Certainly, prompt deliveries of produce by Cooperatives would increase their cash flows, and demonstrate their fitness to take on more agency services; these would require the additional financing which Cooperatives at present cannot provide. The benefits of prompt deliveries would not, therefore, solely be financial; their importance is appreciated, again even by Cooperative personnel, in the relevant sections of Survey Tables 85, 87 and 89:

| Cooperative respondents ranking the agency condition of prompt deliveries of produce as the most important way in which the Boards can raise the standards of Cooperative marketing services | % | | |
|---|---|---|---|
| | Maize | Cotton | Pyrethrum |
| | 41 | 37 | 33 |

And because the Marketing Boards already can obtain further loan finance from the commercial Banks only to the extent of sales, prompt deliveries are essential to the Boards if they are to generate sales revenue with which to meet operating costs and to accumulate reserves. Some Boards make loans to Cooperatives at the same time as paying off interest on their own Bank loans, and this aggravates the shortage of working capital out of which the Boards are expected to finance marketing services to Cooperatives and other growers. Whilst there appears to be some inflexibility on the part of the commercial Banks in helping to finance Boards, it can be argued that Boards should not themselves offer loans to growers, and that they, as statutory bodies, should seek subventions from Government, where the Banks are unwilling to increase the Boards' supply of loan finance in advance of sales.

At any rate this assessment is further supported by the following figures.[1] In 1969, the Maize and Produce Board had a Bank overdraft on its Maize account of £K 482,669 against a surplus of £K 107,743; and against this surplus was set the loss taken over from the former Provincial Maize Marketing Boards, leaving a net balance in the Maize Reserve Account

1. Annual Reports and Accounts of the Kenya Maize, Cotton and Pyrethrum Marketing Boards, 1968 and 1969.

of only £K 71,622.

At the end of 1968, the Cotton Board had outstanding loans to growers and growers' Cooperatives, including accrued interest, of £K 94,426, against a deficit of £K 67,460 in the Board's trading account. The extent of this deficit has been due to (a) high prices paid to producers compared to world markets available to Kenya cotton, (b) wastage in the free issue of cotton seed, (c) overcapitalisation of the processing industry in relation to the availability of raw cotton and (d) the cost of extended credit facilities to cotton lint buyers.

There is, however, a clear relationship between the financial policies adopted by the Boards, and the dependence of both Boards and Cooperatives on loan finance to support marketing services; the ability of Cooperatives in particular to improve their agency services is seriously compromised, but the remedy is largely with the Cooperatives themselves, and to a lesser extent with the Boards.

## 7. Costs incurred by Boards and Cooperatives

All the costs taken into account by the Boards before gazetting grower prices have been detailed in Table F; they can be grouped as follows, with the % proportions of total costs to show where the heaviest single costs fall.

| | Maize % | Cotton % | Pyrethrum % |
|---|---|---|---|
| Local authority cess | 8.5 | 3.9 | 9.8 |
| Cooperative Union fund | 4.2 | 1.4 | 4.9 |
| Agents' commissions | 11.6 | 10.4 | 12.8 |
| Processing costs | 23.6 | 37.5 | 20.6 |
| Transport costs | 36.4 | 19.3 | 16.7 |
| Other marketing costs | 6.8 | 20.4 | 25.5 |
| Board Price Fund | 5.1 | 3.2 | 5.9 |
| Export or Development tax | 3.8 | 3.9 | 3.8 |
| Total Costs | 100% | 100% | 100% |

The assessment of this problem therefore rests on an appreciation of all the costs which are incurred by whatever institutions and for whatever function. The point is that the Marketing Boards recover some of these costs on behalf of other institutions when payouts are finally made to growers. "Other marketing costs" such as collection, inspection and storage, and in addition, agency handling, transportation and processing, comprise the largest cost sector:

| | Maize % | Cotton % | Pyrethrum % |
|---|---|---|---|
| Total Marketing costs as % of total costs | 78.3 | 87.9 | 74.0 |

The Boards must, therefore, recover from the growers their estimated total costs of accepting, processing and storing growers' produce for resale to the domestic and export markets. But the Boards can achieve some economies of scale in their marketing operationsbecause of the extent of the distributive network which they operate. Probably more can be done though to explain to growers exactly what these various services are which the Boards undertake for them, particularly in maize and cotton, as suggested in these replies to Survey Table 13:

| Growers to whom the Boards have not tried to explain what they are there for and how they work | % | | |
|---|---|---|---|
| | Maize | Cotton | Pyrethrum |
| | 59 | 53 | 43 |

Certainly growers would be less hostile towards paying for these costs if more of them were made aware of the nature and extent of the Boards' marketing services financed by them.

But this is certainly not the end of the problem. Although the Boards levy less directly for their Reserve and Price funds (averaged at 4.7% of all costs) than do, for example, County Councils for their Cesses (averaged at 7.4%), they recover their own marketing costs such as those for processing as well as charging up the costs of those marketing services performed by other intermediaries - these are a substantial proportion of all total costs as already illustrated. And within these total marketing costs there are one or two anomalies in the relative costings of some comparable marketing services: processing costs are much higher in cotton (37.5% of total costs) than in maize (23.6%) or in pyrethrum (20.6%), and this suggests higher margins enjoyed by ginners being subsidised ultimately by the growers. There is no reason for margins in cotton ginning to be higher than in pyrethrum processing, which is anyway technically more complex, and the Cotton Board must take steps to bring its processors' margins more into line with those of maize and pyrethrum processors.

Collection, inspection, grading, storage under other marketing costs are much higher relatively in cotton and pyrethrum than in maize, yet maize is a bulky commodity requiring more storage space than either cotton or pyrethrum; clearly those intermediaries handling cotton and pyrethrum between their delivery by growers and their acceptance in the Boards' warehouses are exacting unjustifiably high margins for doing so. And again, these margins are costed out by the Boards in determining the gazetted prices for cotton and pyrethrum, and thus are passed on to the growers. This anomaly is highlighted by a comparison of transport costs which are more sensibly distributed: maize, having a high weight ratio to volume, requires higher percentage transport costs (36.4) than cotton (19.3) or pyrethrum (16.7), yet requires only 6.8% "other marketing costs" compared to cotton (20.4%) and pyrethrum (25.5%).

The proportions of total marketing costs are broadly comparable although the figure for cotton (87.9%) is higher than maize (78.3%) or pyrethrum (74.0%), but this can be accounted for by the exhorbitant cost of processing, already analysed.

These costs are, therefore, taken into consideration by the Boards when they determine the producer prices to be gazetted year by year; the other aspect of this problem is the deductions made by produce traders, intermediaries, and particularly, Cooperative Societies from this gazetted price. As a result, growers usually do not recieve the full gazetted price; the level of these deductions has been indicated in Table G. "The continuing high level of deductions" mentioned in this problem refers particularly therefore, to Cooperative rather than to Board costs; indeed Cooperatives are intended to realise for their members producer prices at least as high as the Boards' gazetted prices, by cutting out private intermediaries' commissions and by bulk handling, storage and transportation. The existence of this problem then, is itself evidence that Cooperatives are nowhere near achieving this and whilst some blame attaches to Boards for not exercising the fullest possible control of costs, Cooperatives are mainly culpable; and as indicated elsewhere, their managements are more intractable and less competent in the tackling of this problem.

8. <u>Uses of distributive channels</u>

The patterns of distribution have been illustrated in Figures 1, 2 and 8 and explained in detail in Part 2, Section 2 (5). There are a number of distributive channels available to growers, many of whom continue to use two or more channels, for example, selling to produce traders, Registered Agents or licensed processors, wherever the best terms are available. Cooperative members, too, sell some of their produce outside their Cooperatives, particularly if their routing, collection and delivery to store services are irregular. Indeed, Cooperative respondents themselves admit to limited success in competing with produce traders in the same distributive channels: the relevant sections of Survey Tables 79, 81 and 83 are:

| Cooperative personnel ranking inability to compete with private traders as the most important weakness of Cooperatives | % | | |
|---|---|---|---|
| | Maize | Cotton | Pyrethrum |
| | 24 | 23 | 21 |

There is also a trend of opinion among those Board respondents who are not satisfied with the present prospects for joint marketing by Boards and Cooperatives that existing competition within the present channels of distribution should be maintained; this trend is clear in Survey Tables 59, 60 and 61:

| Board personnel who consider that the Boards should continue buying direct from growers and traders in Districts where Cooperatives are dealing in the same produce | % | | |
|---|---|---|---|
| | Maize | Cotton | Pyrethrum |
| | 77 | 62 | 70 |

9. Effects of establishing Cooperatives for political reasons

It is in Tanzania that the Cooperative movement has been most conspicuously expanded since independence for political reasons, notably because the Cooperative form of organisation is argued to be "superior socially" to the capitalist form, and to be more appropriate to the fulfilment of African Socialism. References to these political arguments can be found in Part 2, Section 2 (2), but whatever their rights and wrongs, the fact is that all three East African Governments are now committed to accord Cooperatives a significant if not a dominant role in the marketing system. It is the small-scale African growers who have been led to expect most benefits from this policy, yet the only people who appear to the growers to have benefitted are the Cooperative management committees who misappropriate funds, and Cooperative Secretaries who are salaried. And because Cooperatives have tended to be set up at the instigation of Government officials, growers lack confidence in them; this is borne out by their replies to these sections of Survey Tables 4, 5 and 6:

| Growers ranking lack of confidence in the management of Cooperatives as the most important reason for non-membership | % | | |
|---|---|---|---|
| | Maize | Cotton | Pyrethrum |
| | 41 | 37 | 33 |

and to this section of Survey Table 31, remembering that respondents include members of Cooperatives:

| Growers who consider that Cooperative Secretaries are incompetent at their jobs | % | | |
|---|---|---|---|
| | Maize | Cotton | Pyrethrum |
| | 68 | 56 | 58 |

And this trend is supported by their replies to Survey Table 55 where the clear implication is that because Cooperatives have tended to be organised from "on top", it is no concern of the growers to remedy their defects:

| Growers who consider that it is Government's responsibility to ensure that Cooperatives improve their marketing services | % | | |
|---|---|---|---|
| | Maize | Cotton | Pyrethrum |
| | 76 | 85 | 55 |

An indication of how Government should set about this task is given by Board respondents in the relevant parts of Survey Tables 90, 92 and 94:

| Board personnel ranking intensification of Cooperative management training as the most important way in which Government can improve the performance of Cooperatives | % | | |
|---|---|---|---|
| | Maize | Cotton | Pyrethrum |
| | 32 | 30 | 34 |

And some encouragement can be taken from the fact that a majority of Cooperative personnel say in Survey Table 100 that they understand Government policy towards Cooperatives: 71% in maize, 67% in cotton, and 74% in pyrethrum.

There are, however, still some marketing services in Survey Table 56 which many growers, including members, doubt the ability of Cooperatives to take over, and which, therefore should not be handed over to Cooperatives on a monopoly basis; they are as follows:

| Growers who consider that Cooperatives cannot take over the marketing services at present provided by: | % | | |
|---|---|---|---|
| | Maize | Cotton | Pyrethrum |
| Board Agents | 38 | 30 | 18 |
| Produce traders | 48 | 50 | 55 |
| Licensed processors | 59 | 27 | 72 |

10. Government financial policy towards Boards

The Marketing Boards in Kenya are now, as a matter of policy, striving to become self-financing, if not consistently profitable; the Maize Board has recently achieved this, although at the cost of bank loans, and hopes to generate profits without further Government subsidies.[1] But the Cotton Board remains heavily dependent on Treasury support for research and extension programmes, and the Pyrethrum Board still incurs losses in its processing operations. The problem is, therefore, partly one of Government helping to finance the Boards only when the guaranteed producer prices are appreciably below world market prices that the Boards will be paid, and partly a matter of the internal financial management of the Boards, and this has been already assessed in detail under Problem 6. There remains the question of Government's financial commitments to the three Boards, and Board respondents themselves see this commitment increasingly as one of subsidies for research into quality yields and processing technology rather than for trading losses. This is certainly the implication to be drawn from this section of Survey Table 106:

| Board respondents who consider that the Boards ought to make up any trading deficits from their own resources | % | | |
|---|---|---|---|
| | Maize | Cotton | Pyrethrum |
| | 71 | 65 | 66 |

11. Place of the private sector in the marketing system

It has now been established, particularly in Part 2, Section 2 (8) and (9), that whilst it is both desirable in the growers' interests, and

1. Statement of the Chairman of the Maize and Produce Board when introducing the Annual Report and Accounts for 1968/69.

feasible within the marketing system, to establish individual Cooperative Unions as Agents or licensed processors where they can demonstrate competence over a period, it is certainly in nobody's interest to replace "en bloc" the existing private sector with Cooperatives endowed with monopoly agency and processing functions. The size of the private sector must, therefore, depend upon the extent to which Cooperatives can discharge these functions effectively and competitively; the degree to which this has been achieved has so far been limited by their lack of competitiveness in Cooperative agency services, and by problems of existing overcapacity, technical shortcomings and lack of capital in the processing industries. It is one thing to set the political objective of more participation by Cooperatives in a system of joint marketing with the Boards by legislating accordingly, but it is another thing to achieve the practicality of it. Certainly, Board respondents are doubtful whether Cooperatives are at present coming up to this sort of expectation, according to Survey Tables 112, 113, and 114, as follows:

| Board personnel who consider that Cooperatives are not meeting objectives set by Government within the terms of Cooperative legislation | % | | |
|---|---|---|---|
| | Maize | Cotton | Pyrethrum |
| | 67 | 70 | 75 |

And these are the very Board respondents who, as explained in these three Survey Tables, attach particular importance to the development of joint marketing by Boards and Cooperatives.

There is, therefore, no hostility by Boards or indeed by the private sector towards greater participation by Cooperatives in the marketing system; but whether monopoly powers can be a substitute for ineffectiveness in competitive distributive channels is highly doubtful.

B. COMPLAINTS

1. Growers' complaints

(a) Fixing of producer prices by the Boards

It is understandable that it appears to growers that producer prices have suffered because of the expenses of the Boards, while growers' expenses have increasingly narrowed their margins between costs and sales. This cannot, however, be said to be entirely the fault of the Boards. Tables C, D and E have shown varying falls in payouts by the Boards, but these reflect reductions in the world prices obtainable: average prices for the highest grades dropped between 1965 and 1969 for maize from Shs. 31/25 to Shs. 26/75 per bag, for cotton from Cts. 53.3 to Cts. 49.3 per lb., and between 1966 and 1969 for pyrethrum from Shs. 2/67 to 2/42 per lb. At the same time, growers have continued to receive in rural markets less than the full producer prices gazetted by the Boards, and less still from Cooperative Societies. Certainly, if the Boards have exercised some control over their own operating expenses, which are taken into account when grower prices are fixed (see Table F), they have certainly not exercised any control of the deductions which intermediaries have been making from received producer prices (see Table G).

The extent to which growers consider this to be a very real problem, particularly in maize and cotton, is shown by these extracts from Survey Tables 50 and 51:

| Growers dissatisfied with the way payouts are made when the Boards' resale prices exceed guaranteed producer prices | % | | |
|---|---|---|---|
| | Maize | Cotton | Pyrethrum |
| | 71 | 73 | 39 |

| Growers who complain of heavy expenses of Boards borne by producers | % | | |
|---|---|---|---|
| | Maize | Cotton | Pyrethrum |
| | 73 | 58 | 52 |

Whilst there is some substance to this complaint, if growers' expenses have not diminished neither have anybody else's, and as long as Boards buy through the private sector growers must accept the highest prices they can obtain locally as the alternative would be wholly uneconomic transportation of produce to urban buying points.

(b) Delays and variations in the payment of these prices

Variations between gazetted and paid-out prices to producers have been encountered according to the relevant part of Survey Table 49:

| Growers who have experienced variations between prices gazetted by the Boards and the prices subsequently obtained | % | | |
|---|---|---|---|
| | Maize | Cotton | Pyrethrum |
| | 70 | 54 | 46 |

This complaint is substantiated by the figures in Table G collected independently of the Survey. These show average deviations from gazetted prices during 1969 of -16.9% for maize, -3.1% for cotton and -11.1% for pyrethrum.

Delays in the announcement of producer prices by the Boards detailed in Figure 7 are drawn attention to in the Survey Analysis by growers' preferences for producer prices to be fixed in advance, and by the proportions of growers who regard the announcing of buying prices by the Boards during the planting season - several months in advance of selling - as an urgent improvement in the Boards' marketing services to them.

The relevant extracts from Survey Table 48 are:

| | % | | |
|---|---|---|---|
| | Maize | Cotton | Pyrethrum |
| Growers preferring producer prices to be fixed in advance | 78 | 73 | 62 |

and from Survey Tables 52, 53 and 54:

| | % | | |
|---|---|---|---|
| | Maize | Cotton | Pyrethrum |
| Growers ranking announcement of buying prices during planting as the most important improvement in Board marketing services | 37 | 32 | 25 |

The criticism by growers that Boards do not keep them informed of prices obtained by the Boards in outside markets is not wholly supported by these figures from Survey Table 16:

| | % | | |
|---|---|---|---|
| | Maize | Cotton | Pyrethrum |
| Proportions of growers to whom the Boards have explained their purpose and functions | 43 | 62 | 57 |

(c) Competitiveness of Cooperative and private sector services

The allegation of growers that payments and marketing services obtainable from the private sector are more attractive than those offered by Cooperatives is supported by the data in Table G which shows clearly that the shortfalls from gazetted producer prices are worse in Cooperatives than among other buying agencies. Between 1967 and 1969 the deficiencies in Cooperative payouts were 20.6% in maize, 7.6% in cotton, and 14.1% in pyrethrum, whilst for private agencies the corresponding figures were only 8.6%, 3.5% and 9.5%. The disparities in these payouts also reflect the inability of Cooperatives to operate profitably within the margins accepted by, for example, produce traders and licensed processors, and this point has been corroborated in paragraph 6 of Part 2, Section 2, 4 (2) on Costs, prices and margins.

Because it falls to growers selling to Cooperatives to finance these bigger margins, most of them find higher prices and more services available outside Cooperatives, as Survey Table 23 shows:

| | % | | |
|---|---|---|---|
| | Maize | Cotton | Pyrethrum |
| Growers obtaining from buyers other than Cooperatives higher prices and more services | 74 | 65 | 47 |

This general complaint is also given consistency by the extent to which growers selling both through and outside Cooperatives elaborate it in Survey Table 26, where these facilities from Cooperatives and traders are compared: transport, collection, payments, price and buying points. The relevant parts of this Survey Table can be summarised as follows:

| Growers replying that these facilities from Cooperatives do not match up to those of traders and Agents | % | | |
|---|---|---|---|
| | Maize | Cotton | Pyrethrum |
| Transport | 48 | 46 | 41 |
| Collection | 45 | 43 | 52 |
| Payments | 56 | 60 | 52 |
| Price | 59 | 57 | 48 |
| Buying Points | 53 | 55 | 44 |

It is not, therefore, that growers are unaware of Government policy towards Cooperatives, it is that they are not convinced - according to the material benefits so far of Cooperative marketing - that this policy can be wholly to their benefit.

As to local authority cesses, one part of Survey Table 46 shows:

| Growers whose produce is subject to a cess imposed by their local authority | % | | |
|---|---|---|---|
| | Maize | Cotton | Pyrethrum |
| | 75 | 93 | 33 |

Growers' resentment against cesses is undoubtedly exacerbated by the failure of some, not all, local authorities to maintain services such as cotton roads which these cesses are supposed to finance.

2. Cooperatives' complaints

(a) Boards' failure to give agencies to Cooperatives.

In Survey Table 111, Cooperative respondents based this criticism that Boards are reluctant to appoint Cooperatives Agents on the need to improve joint marketing:

| Cooperative respondents who consider that joint marketing by Boards and Cooperatives would be furthered by the Boards doing away with Registered Agents and buying direct from Cooperatives | % | | |
|---|---|---|---|
| | Maize | Cotton | Pyrethrum |
| | 72 | 57 | 80 |

It is not so much a question of whether the Boards are reluctant to grant sole agencies to Cooperatives, as whether such reluctance is justified. Boards do not hide their disappointment with the performance of Cooperatives, and the Cotton Board has been quoted as an example of this in Part 2, Section 2 (6). Nor is it true that the Boards have made no attempts to channel distribution of produce through Cooperatives in accordance with Government policy; the Maize Board's experience in this respect has been fully detailed in Part 2, Section 2 (8). In fact, it has been the patent inability of many Cooperatives to provide all the agency services to growers which has led to the withdrawal of existing Cooperative agencies, and the Boards' diffidence about establishing any new ones. The Government is aware of this situation, and indeed looks to the Boards for assistance in developing Cooperatives to the point where they can satisfactorily assume sole agencies, as intended.

The complaint as such originates from CooperativesSociety Secretaries, many of whom in Survey Tables 91, 93 and 95 argue that monopoly purchasing can itself improve Cooperative marketing; their replies can be summarised thus:

| Cooperative Society Secretaries ranking monopoly purchasing as the most important way Government can improve the performance of Cooperatives | % | | |
|---|---|---|---|
| | Maize | Cotton | Pyrethrum |
| | 36 | 35 | 36 |

Yet Board managers and field officers, and Registered Agents have found that whilst licensed processors are satisfactory as Agents of the Boards, Cooperatives are not, as this extract from Survey Table 97 shows:

| | % | | |
|---|---|---|---|
| | Maize | Cotton | Pyrethrum |
| Board personnel who have found processors to be suitable as Agents | 70 | 72 | 76 |
| | % | | |
| | Maize | Cotton | Pyrethrum |
| Board personnel who have found Cooperatives unsuitable as Agents | 67 | 67 | 64 |

It also seems inapt to complain that growers' produce is not being channelled through Cooperatives when many growers themselves continue to prefer to sell through the private sector, a preference clearly expressed in Survey Table 35:

| | % | | |
|---|---|---|---|
| | Maize | Cotton | Pyrethrum |
| Growers selling to Cooperative Societies | 25 | 37 | 90 |
| Growers selling to the private sector | 75 | 68 | 75 |

(b) Their growers' lack of representation on Boards.

The Cooperative movement is represented on the executive committees of most Boards by the Commissioner for Cooperative Development and to the extent that the movement consists of small-scale growers, he represents them too. There are, however, no representatives of their interests alone to balance the committee members from the large-scale growers such as the Kenya Planters' Union. So at present, this complaint is more real for growers as a whole than for Cooperatives and this was discussed in paragraph 2 of Part 2, Section 2 (6). What also worries many growers who are Cooperative members is the limited extent to which they feel that they have any influence in the running of their own Cooperatives, according to Survey Table 32:

| | % | | |
|---|---|---|---|
| Cooperative members who consider that they have no say in their Cooperatives | Maize | Cotton | Pyrethrum |
| | 65 | 58 | 55 |

3. Boards' complaints

(a) Low quality of produce deriving from Cooperatives

Their criticism that Cooperatives continue to sell produce of poor quality is supported by a number of points. First, the general improvement in the quality of all produce which the Boards have handled other than from Cooperatives in the past few years; second, the efforts by small-scale growers to improve the quality of their produce in order to realise the highest possible selling prices, and third the slow rate of increase of Cooperative sales to Boards relative to the rise in sales to the Boards from all sectors.

This latter point was illustrated in Table H: between 1963 and 1969, total sales to the Boards rose as follows - 70.5% in Maize, 45.7% in cotton, and 57.8% in pyrethrum. But the Cooperative share of all sales during the same period was up from 4.2% to 9.8% in maize, 39.3% to 54.9% in cotton, and 37.3% to 62.2% in pyrethrum. These points together suggest that many growers are not using Cooperatives to market more higher quality produce, and that Cooperatives are continuing to handle lower grades of produce, because the total increases of sales to Boards are only partially accounted for by increased deliveries from Cooperatives.

Indeed this is regarded as a major weakness of Cooperatives by Board respondents in the relevant parts of Survey Tables 78, 80 and 82:

| Board personnel ranking low quality of produce sold to the Boards by Cooperatives as the most important weakness of Cooperatives | % | | |
|---|---|---|---|
| | Maize | Cotton | Pyrethrum |
| | 27 | 25 | 24 |

And these Board respondents further support this claim in Survey Tables 84, 86, and 88, not by reiterating their complaint, but by a positive suggestion of how to answer it:

| Board personnel ranking insistence on higher quality produce from Cooperatives as the most important way in which Boards can raise the standard of Cooperatives' marketing services to growers | % | | |
|---|---|---|---|
| | Maize | Cotton | Pyrethrum |
| | 40 | 34 | 36 |

(b) Government's interference in pricing

The setting of producer prices by Government at levels higher than world export prices for political reasons, and the intervention by Government in the Boards' pricing policies have been discussed in Part 2, Sections 2, 4 (2) and 6. For instance, the Minister for Agriculture has the right to attend meetings of Board Executive

Committees, and usually does so when prices are to be reviewed, to ensure that any reviews are in accordance with overall Government economic policy. As the Boards themselves are statutory bodies with monopoly powers, it is only reasonable to ensure that their use of such powers does not conflict with such policy. However, there is a case for closer consultation between Boards and Government. In one section of Survey Tables 72, 74 and 76 Board respondents were asked about this:

| | % | | |
|---|---|---|---|
| | Maize | Cotton | Pyrethrum |
| Board personnel ranking political intervention by Government as one of the main difficulties in Board marketing | 20 | 22 | 22 |

(c) Compulsory Registration of Agents

Details of applications for, and registrations and appointments of Agents and buyers are given in Pro Formas 4, 7 and 8. These Agents obtain commissions shown in Table F, which give an average % margin on the gazetted prices of 5.1 - hardly an exhorbitant commission, when compared in the same Table, for example, with the cesses levied by local authorities. These three Pro Formas and the conditions of Agency outlined in Part 2, Section 8 also indicate the extent of the control exercised by the Boards over their Registered Agents. Thus, while there is some case for reducing the number of Agents, particularly in maize, there is not much to be gained by abolishing them, as some form of intermediary must exist to handle numerous small delivery loss from growers to Boards. Certainly, Cooperatives are not increasing their share of grower deliveries sufficiently to justify forcing all other intermediaries out of business.

This complaint by the Boards should not therefore be directed at their own Agents: an average commission of 5.1% cannot be said substantially to raise the consumer price or to lower the growers' price. It should be directed at those other institutions and intermediaries which clearly, in Table F, enforce at present substantial levies from the growers' price, particularly private hauliers, Cooperative Unions, local authorities, and to a lesser extent, processors. Where the Boards themselves have powers to reduce such levies, they should do so, or seek the granting of these powers in Board legislation. There is in short, no evidence that the Boards would be able to act more economically without any Registered Agents, as less control could be exercised over other intermediaries such as produce traders, who would replace at least some of the Agents, if only to maintain buying points.

Indeed, growers in Survey Tables 52, 53 and 54 require more not fewer, of these buying points; the relevant extract is:

| | % | | |
|---|---|---|---|
| | Maize | Cotton | Pyrethrum |
| Growers ranking more buying points as one of the most important ways in which Marketing Board services to them can be improved | 31 | 39 | 29 |

And, furthermore, according to Survey Table 39, 49% of growers do not have to join Cooperatives in order to sell direct to existing Board Agents.

## 4. Complaints of intermediaries

### (a) Registered Agents - Business lost because of Cooperative monopolies.

Their oposition to Cooperatives being appointed sole Agents of the Boards is not unexpected, but not entirely well grounded. Their position as Agents is secured by legislation, for example in maize, and recent attempts to replace them by Cooperatives have been made entirely on the basis of administrative decisions, and not by statutory instruments. Whatever such decisions have been taken, however, they have been reversed within a year, restoring to individual Agents all their previous trade. This has been detailed in the penultimate paragraph of Part 2, Section 2 (8) on the role of Agents. Nevertheless, there is a long term threat to Registered Agents who have come to depend wholly upon buying from growers and reselling to Boards in that it is a clear policy of the Government to develop Cooperatives to the point where they can satisfactorily take over more agency services. Many individual Agents realise this, and, like produce traders, have diversified their business to deal in general merchandise, haulage, commission trading, and retailing. But growers who are not members of Cooperatives still value direct access to Board Agents as a significant advantage of selling outside Cooperatives, according to these sections of Survey Tables 10, 11 and 12:

| Growers ranking direct access to Board Agents as the most important advantage non-members of Cooperatives have over members | % | | |
|---|---|---|---|
| | Maize | Cotton | Pyrethrum |
| | 31 | 34 | 29 |

It must be noted, however, that Registered Agents are opposed primarily to the appointment of Cooperatives as sole agents of the Boards; they do not object in principle to the granting of some agencies to Cooperatives who are able to handle one on competitive basis. This is evident from the replies of Board respondents to these extracts from Survey Tables 66, 68, and 70.

| Board personnel ranking the appointment of Cooperatives as Board Agents as the most important improvement to joint marketing by Boards and Cooperatives | % | | |
|---|---|---|---|
| | Maize | Cotton | Pyrethrum |
| | 33 | 31 | 27 |

These Board personnel, therefore, view as important Cooperative participation in the existing agency system and they argue that the criteria by which Boards appoint agents can be applied to Cooperatives as to other intermediaries; part of Survey Table 96 refers to this:

| Board respondents who consider adequate the criteria by which Boards appoint their Agents | % | | |
|---|---|---|---|
| | Maize | Cotton | Pyrethrum |
| | 71 | 53 | 75 |

(b) Produce traders - Business lost because of Cooperatives handling small quantities.

Growers are allowed to deliver direct to Board depots in stipulated minimum lots, for example, 30 maize bags as in Figure 2; the majority of these growers, however, sell direct to intermediaries small loads which produce traders then make up into bigger lots for delivery to the nearest Board depot. Similarly, Cooperatives should deliver to these depots, only in large loads, economical to handle and store; in fact, many Cooperatives make frequent deliveries of small quantities to Board depots. This is the substance of the produce traders' complaint, and it is based on Cooperatives continuing to accept such deliveries of produce from growers who are either lapsed members or have never even been members; it is these growers' business that produce traders are being done out of, because of laxity in Cooperative control of membership. It is questionable, however, whether the actual amount of business lost is substantial, despite the complaint, as according to Survey Table 35, produce traders, except in pyrethrum, are still enjoying more patronage from growers than Cooperatives:

| | % | | |
|---|---|---|---|
| | Maize | Cotton | Pyrethrum |
| Growers selling to Cooperatives | 25 | 37 | 90 |
| | % | | |
| | Maize | Cotton | Pyrethrum |
| Growers selling to produce traders | 63 | 52 | 19 |

(c) Licensed processors - Cooperatives not equipped to provide processing services.

It has already been established in Part 2, Section 2 (9) that Cooperative participation in processing has not yet been established in maize or pyrethrum, and only partially in cotton. Licensed processors appear, therefore, to be protesting against any likely Cooperative control of processing, seeing it clearly as a threat to their own livelihoods. In common with the rest of the private sector, they object to any dominance or monopoly of processing industries or agency services by Cooperatives with statutory powers; their case is stronger than that of Agents and traders in that whereas only storage and capital are required for agency services, considerable investment in plant and technical expertise are required in processing industries. Licensed processors object, therefore, more to Cooperative control of processing than to Cooperative participation in processing on a fully competitive basis.

However groundless this complaint may be argued to be, in that it refers to a likely rather than to an actual situation, licensed processors can point to the misgivings which two Presidential Committees of Enquiry in 1966 expressed about the competence of Cooperatives to undertake processing, mentioned in paragraphs 4 and 5 of Part 2, Section 2 (9). There has certainly been no dramatic improvement in the performance of Cooperatives since then entirely to allay these misgivings, which are still expressed, particularly in the light of the increased production targets set out in the new Development Plans.

It should be remembered that processors themselves take some produce for processing locally direct from growers, particularly pyrethrum growers; the relevant section of Survey Table 35 is:

| | % | | |
|---|---|---|---|
| | Maize | Cotton | Pyrethrum |
| Growers selling direct to processors | 49 | 68 | 75 |

And the fact that not all processing is undertaken centrally is reflected in the following replies to Survey Tables 42, 43 and 44:

| Growers ranking processing of produce locally as the most important marketing service undertaken by the Boards | % | | |
|---|---|---|---|
| | Maize | Cotton | Pyrethrum |
| | 23 | 34 | 34 |

And the Boards exercise control over the prices at which these licensed processors buy produce locally from growers, but this control is not absolute, as this extract from Survey Table 41 shows:

| Growers who sell their produce to processors at prices controlled by the Boards | % | | |
|---|---|---|---|
| | Maize | Cotton | Pyrethrum |
| | 42 | 77 | 83 |

It is inconsistent, though that processors should object to possible Cooperative control of processing, and yet make no complaint at all about the extent to which Boards now control the processing industries - particularly in view of their regulation of the prices which growers are paid for their produce by private processing concerns.

## 4. FINDINGS

These findings derive directly from both Section 1, Commentary on Survey data, and Section 2, Assessment of Problems. They consolidate the significant results of the discussions and arguments contained in these two Sections, and form the basis of the Recommendations outlined in Section 5. They are arranged in the following order:

A. Cooperative membership.

B. Cooperative services.

C. Board Services.

D. Board and Cooperative marketing.

E. Distribution through intermediaries.

A. COOPERATIVE MEMBERSHIP

1. Higher prices by selling independently is an important cause of non-membership of Cooperatives among maize growers.

2. The indebtedness of Cooperatives to their members has deterred many cotton and pyrethrum growers from joining Cooperatives.

3. A big advantage non-members have over members of Cooperatives is quicker realisation of the full cash price for their produce.

4. Maize growers are more reluctant to join Cooperatives than cotton or pyrethrum growers, and there is a higher "drop out" rate among maize Cooperative members.

5. Many growers of maize and pyrethrum are using Cooperatives to dispose of their produce without becoming members, or without renewing their membership.

6. Much has been done to publicise the benefits to growers of Cooperative membership, but poor Cooperative performance has rendered these benefits both elusive and illusory.

7. Many members feel that they have no say in the way their Cooperatives are run, and indeed this causes conflict between members and management.

8. Direct access to Board Agents is the most valued advantage non-members have over Cooperative members.

9. There is a lack of identification with Cooperatives among growers as organisations serving their vital interests.

10. Many members have no confidence in their Cooperative management and this is largely due to the organisation of Cooperatives from "on top" by officials.

B. COOPERATIVE SERVICES

1. Maize and cotton growers particularly are dissatisfied with existing marketing services obtainable from their Cooperatives.

2. Growers consider that it is primarily the responsibility of Government to improve Cooperative marketing services to them, especially by intensifying management training.

3. Untrained management and shortages of ready cash are among the most important weaknesses in Cooperatives.

4. Another significant shortcoming in Cooperatives is delays in payments to growers.

5. Guaranteed purchases of produce and access to wide markets are valuable marketing services offered growers by Cooperatives.

6. Cooperative members have been receiving from their Cooperatives lower cash prices for their produce than those obtained by growers from produce traders and Registered Agents.

7. Cooperatives frequently fail to make second payments to growers for produce delivered and on occasions any payments at all.

8. Growers are in general willing to forego surplus payments from Cooperatives to enable their Societies to build up reserves, if they can be assured that such reserves would not be misappropriated by officials loaning themselves Cooperative funds.

9. Indebtedness to suppliers or Government agencies is particularly serious in Maize and Cotton Cooperatives.

10. Maize Cooperatives especially suffer from a marked shortage of capital which prevents them from providing processing services for growers.

C. BOARD SERVICES

1. Boards have not publicised their activities sufficiently, failing to make growers aware of the various marketing services which the Boards can offer them, and at what cost.

2. The most important Board services to growers are price guarantees in advance of deliveries and buying all the quality produce grown, notably through Registered Agents.

3. A necessary improvement in the Boards' services to growers is the provision of more buying points.

4. All growers have experienced variations between the producer prices gazetted by the Boards and the prices finally paid out to them.

5. The announcement of producer prices during the planting season would be the most appreciated improvement in the Boards' services to growers.

6. Boards have been late, for no explained reasons, in gazetting producer prices.

7. There is sometimes interference by Government Ministers in the setting of the Boards' producer prices.

8. The Boards have not made any sustained attempts to bring paid out producer prices into line with world market prices.

9. The Boards' Field staff are not sufficiently exercising control or checking the performance of their Registered Agents.

10. Processing produce locally is a Board service highly valued by cotton and pyrethrum growers.

11. Maize and cotton growers would not benefit from a licensing system such as that operated by the Pyrethrum Board.

12. Only pyrethrum growers view market research as a Board service with any relevance to their interests.

D. BOARD AND COOPERATIVE MARKETING

1. A recurring problem in joint marketing is the low quality of produce sold by Cooperatives to the Boards.

2. Priorities in improving Board and Cooperative marketing are more involvement by the Boards in maintaining high standards of service by Cooperatives and insistence by the Boards on higher quality of produce delivered by Cooperatives.

3. The main problems in Board marketing are weaknesses in Cooperative Primary Societies and finance required to back support prices.

4. The relationships between Boards and Cooperatives have not been clearly established, and this is inhibiting their joint marketing.

5. Cooperative Unions have not supported the Boards in their attempts to raise the quality of produce marketed.

6. Cooperative marketing Officers are not active enough in developing Cooperative marketing at the level of the Primary Society.

7. Local authorities have failed to maintain services such as feeder roads for which they have imposed levies or cesses on growers.

8. The interests of growers are not sufficiently represented on the Boards' management committees when marketing policies are determined.

9. Boards and Cooperatives have become both dependant themselves upon loan finance and involved in making loans to growers with the result that there are loans outstanding to Banks, interest on loans to growers unpaid, and Cooperatives in debt to suppliers; all this restricts the expansion of their own marketing services.

10. Delays in payments by the Boards to Cooperatives for produce are largely the result of late or irregular deliveries by Cooperatives.

11. Board Area Managers and Field Officers are not visiting Cooperatives in their localities with the result that the Boards are unable to assist Cooperatives to improve their marketing services at District level.

12. Joint working groups to investigate marketing problems by commodity or area would much improve Board and Cooperative marketing in the experience of Maize and Pyrethrum Board and Cotton and Pyrethrum Cooperative personnel who were interviewed.

13. Cotton and pyrethrum Cooperative personnel do not give such a high priority as their Maize counterparts to the granting of sole agencies to Cooperatives as likely to improve Board and Cooperative marketing in the short term.

## E. DISTRIBUTION THROUGH INTERMEDIARIES

1. Parity of the terms, payments and agency services offered by Cooperatives and private intermediaries is an important factor in improving Board and Cooperative marketing.

2. Cooperatives do not yet offer agency services entirely comparable or competitive with those obtainable from produce traders and Registered Agents.

3. Collection of produce by Cooperatives compares well with that of produce traders, but Cooperative payments and buying points do not.

4. Cooperatives cannot work without incurring a loss within the profit margins allowed to Registered Agents and produce traders, and this weakens their ability to compete with such intermediaries for growers' produce.

5. Substantial amounts of produce are being delivered to Board depots and processing plants through distributive channels other than Cooperatives.

6. There is still some conflict between African growers and non-African intermediaries based on their alleged exploitation of growers, which has been exaggerated.

7. There is a conflict of policy about the appointment of processors as Agents, where in maize processors cannot act as Agents, but in cotton they can.

8. Pyrethrum processing is overcapitalised and cotton ginning is costing much more than maize milling or pyrethrum processing because of a lack of control by the Cotton Board on behalf of the growers.

9. Cooperatives cannot provide all the agency services and processing capacity required by growers.

10. Maize and cotton growers particularly can obtain from buyers other than Cooperatives higher prices, and more services such as transport, collection and buying points.

11. Board personnel have found licensed processors more suitable than Cooperatives as their Agents.

12. Government policy towards processing is inconsistent, where in maize there is no control, in cotton only Cooperative partici-pation, and in pyrethrum only Board participation.

13. Some Cooperative members sell produce outside their Cooperatives, and almost all growers are using more than one distributive channel.

14. Boards are willing in principle to grant agencies to Cooperat-ives on a competitive basis, but the experience of Cooperatives enjoying sole trading rights has not been encouraging.

15. Cooperatives are not participating in maize or pyrethrum pro-cessing, but are already involved in cotton ginning, yet some participation by Cooperatives is intended both by legislation and as a matter of policy under African Socialism.

## 5. CONCLUSION

1. A Cooperative handling a group of products seems the most viable form of organisation to further growers' interests. In areas of diversified cultivation, only a variety organisation may be able to command sufficient volume of business to keep down overhead costs, or to maintain the interests of members. The vertically integrated Cooperatives, for example, those involved in processing, may also require a variety of products in order to minimise per unit handling, grading, storing and other selling costs. The adaptation of a Cooperative to suit local conditions is thus primarily a matter for the Cooperative management, and the quality and experience of this management are, therefore, crucial to the success of a Cooperative venture.

Profits should also accrue to members of Cooperatives which otherwise would go to investors in the private sector. Such profits, however, are not as large as many growers are sometimes led to expect. Even when the profits per shilling invested are fairly large, they generally amount to much less per shilling of business transacted by members which is the basis on which they are distributed. However, even small patronage dividend payments are much appreciated by grower members as tangible evidence that their Cooperative is successful.

Cooperatives should achieve savings from reductions in marketing costs in addition to obtaining the profits which would otherwise go to private marketing agencies, in two ways. First, by handling a large volume of business, made possible by the support of a large membership; second, by integration of distributive channels, for instance, by-passing local handlers.

2. The roles of Boards and Cooperatives in every aspect of distribution require clarification in the light of existing Cooperative standards and Board policies. The powers of the Boards to buy from all growers should be extended to Cooperatives only in a distributive structure where competition from other agencies will ensure a high level of marketing services; for the time being Boards should retain these powers themselves, nor should Cooperatives have a monopoly of sales to the Boards unless there is genuine local support for them and almost unanimous membership among growers in the District.

Even when Cooperatives are in a position to provide agency services, it is still doubtful whether monopoly agencies should be granted to them. It will put many African traders out of business, remove from growers freedom to choose distributive channels, and involve the Boards in crop financing at earlier stages of distribution than is necessary with, for example, produce traders. Above all, it will remove the competitive element in agency services just when it is most needed to improve Cooperatives' performance as Agents. Only then should Cooperatives be encouraged to fulfil this more responsible role in the marketing system; but it should not be to the exclusion of other intermediaries such as produce traders and licensed processors.

It cannot be in the interests of the growers, nor of the maize, cotton and pyrethrum industries, to provide uncompetitive margins so as to set up Cooperatives as Agents and processors to the exclusion of privately owned enterprises. Government must insist that Cooperatives improve their operating efficiency within the lowest possible margins, which has always been the declared intention.

Clearly there is wasteful use of resources in Cooperatives, extravagance in the purchase of equipment and vehicles, and administrative incompetence in their failure to channel back to growers fairer returns for their labour. These shortcomings must be eliminated if Cooperatives are to undertake marketing competitively; stricter control by Cooperatives Marketing Officers and more participation by Board Field Staff in the setting up of marketing services are, therefore, imperative.

Again, too rapid a substitution of private agents by Cooperatives can seriously reduce the efficiency of Board operations. Such replacement should occur only when the Cooperatives can guarantee fulfilment of their marketing responsibilities. In this way, any gradual replacement plan would depend primarily upon the availability of experienced and qualified staff.

3. Governments and Boards are increasingly being called upon to finance and operate facilities to cope with production increases because private investments are less likely to be forthcoming. For staple food crops, Boards are having to provide and also operate facilities while often using their own personnel to make purchases and retail sales in certain areas where reliable traders or Cooperatives are not operating. This increased participation of Boards in the execution of their programmes not only results in a heavier financial burden and responsibility, but puts a greater strain on the limited qualified and experienced staff available.

Furthermore, replacement of marketing Boards by Cooperative organisations is sometimes argued. It is, of course, questionable whether or not governments are prepared to hand over control of export activities and a major source of foreign exchange to any genuine growers' organisation, as has been done in certain developed countries, for example, Denmark. However, if the Cooperative movement, as in some African countries, continues to be only an extension of government statutory marketing organisations, a transfer of responsibilities from

Boards to national Cooperative Unions can take place as this would still leave overall direction in government hands.

4. Distribution costs would be lowered if the processors were empowered to act as Agents because they would combine two functions which are at present being carried out separately. For example, different premises, staffs and facilities would no longer be required to handle first the buying, and subsequently the processing of produce. Certainly, it seems arbitrary, as is the case in Kenya, on the one hand to prohibit processors from being registered as Agents, and superfluous on the other to appoint processors as Agents and in addition to license buyers. The role of Agents in buying and processing, and their relationships with the Boards must be set out clearly, and put on a more workable basis.

And there is also the question of how participation by Boards and Cooperatives in processing can best be implemented and developed in the light of legislation to which the East African governments are clearly committed. Among the alternatives which have been discussed in Part 2, Section 2 (9), ownership of equity seems to offer the brightest prospect. It has the advantage of assuring Boards and Cooperatives an entrepreneurial interest in their particular processing industries, but has none of the disadvantages, for example, of involving Cooperatives in technical operations, plant maintenance and factory management which they are manifestly unfitted to undertake.

It is the Cooperative movement's chronic lack of liquidity which is the biggest single obstacle to the acquisition of share units by its individual members in processing enterprises. How can these shares be bought? There is little likelihood of voluntary savings among growers already hard pressed to pay their taxes and buy seed and tools;

nor would they tolerate any further enforced deductions by their Cooperative Societies from producer prices. The most practical proposition is a cess to acquire shares on behalf of growers' Cooperatives administered by the respective Board. Similarly, the Boards should be enabled and encouraged to buy shares in the processing companies on their own behalf.

The additional equity thus bought or created might be held in a new National Processing (Holdings) Corporation, with operating subsidiaries to process different crops such as maize, cotton and pyrethrum; the interests of Government, Boards, Cooperatives and the private sector would be represented, with no one group having a controlling share interest. The ownership of the produce would pass to the processing company once the produce is delivered for processing, and not remain with the Cooperatives.

There are one or two difficulties which would have to be tackled in setting up Board and Cooperative participation in this way. For example, that of equating relevant use of the processing plant to share ownership in the processing concern: the former may become disproportionate to the latter with changes in Cooperative and private shares of total crop production. There is likely to be a problem of Cooperatives with inadequate equity interest due to shortage of cash, and the need to protect their holding; here the processing subsidiary might be set up as a company with limited dividends. In this way, each contributor to the capital would be paid for his use of the capital at a moderate rate of interest, but would have no incentive to make large profits at the expense of the under-represented Cooperatives, since these could not be reflected in high dividends. Alternatively, the Government might, through an appropriate Ministry, regulate the sale price of the processed produce and the charge made to growers.

Another point is that where the equity in processing is owned partly by Cooperatives and partly by other interests, including the Board, the need for regulation of profits may be even greater as there is less likelihood of Cooperatives complaining of overcharging because of their investment in the plant. What, above all, such regulating machinery must ensure is to prevent some Cooperatives already enjoying such investments, from exploiting (e.g. short-changing) other Cooperatives who have none; and this, quite as much as to prevent alleged exploitation by private enterprise of the Cooperative movement as a whole.

Certainly, the evidence so far strongly suggests that Board and Cooperative participation in processing is a more workable way of achieving some accountability both to growers and consumers than direct state control.

5. The integration of the activities of Boards, Cooperatives and other agencies in the marketing by growers of maize, cotton and pyrethrum is essential to the marketing system if it is to remain competitive and continue to provide a high level of services, and to operate in accordance with the principles of African Socialism. Such integration has not yet been achieved; the obstacles to its achievement and the importance of overcoming them have been the 'raison d'être' of this thesis.

The Recommendations to be outlined in Part 3, Section 5 are a first step in successfully integrating these different institutions. What of the roles of these institutions themselves in realising such integration? The Boards must involve themselves more actively in raising the standard of Cooperative marketing services to growers, for example, by quality differentials; Cooperatives themselves must press for further support from Government in the form of centralised management services; Government must enforce stricter control of Cooperative finances. The private sector must continue to offer highly competitive services as these will be its justification for continued participation in the marketing system; certainly it should not be squeezed out of the system by Government for political reasons.

Because Boards exercise an ultimate monopsony, there is no reason either to exclude produce traders and Registered Agents from handling numerous lots of small quantities from growers for redelivery to Board depots, and similarly there is no reason to grant a monopoly of sales to Cooperatives to resell to Board depots, when Cooperatives themselves cannot fulfil all the obligations of such sole trading rights. Licensed processors, too, have been shown to have a significant role not only in processing, but in their opportunities to "double up" both as Agents and processors, thus achieving economy of functions.

Finally, this thesis has not questioned the existence of Boards and Cooperatives, it has set out their roles in and contributions to the marketing system and suggested ways in which both can be made more effective. Neither has the existence of a flourishing private sector been questioned; indeed its continuance is very much in the interests of the growers.

## 6. RECOMMENDATIONS

1. That there be no provision for compulsory Cooperative membership. (Findings A6, A9 and E13.) Provided that Cooperatives offer services valued by growers, there will be no need to force them to take out membership; and if Cooperatives cannot, growers will continue to use other distributive channels whether or not they have to join Cooperatives. Coercive membership will achieve nothing, as if there are no benefits it cannot be justified, and if there are it will not be necessary.

2. That no Board make Cooperative membership a condition for growers wishing to market maize, cotton or pyrethrum. (Findings A8 and A10). It is not in the interests of the Boards or the growers to make Cooperative membership a precondition for the purchase and storage of produce delivered from growers marketing maize, cotton or pyrethrum, because other agencies are effectively handling a large volume of such produce.

3. That the Government intensify Cooperative management training, establish a corps of professional Cooperative Secretaries, and require all Primary Societies to join District Unions. (Findings B2, B3 and D6.) Training of Cooperative Society Secretaries will not in itself remedy the deficiencies of Cooperative management: a higher calibre of personnel must be attracted to the Cooperative movement. A distinct cadre of Secretaries having recognised qualifications and with its own terms of service is essential.

4. That closer control must be exercised by Government over the running of Cooperatives, through the Registrar or the Commissioner, and the Cooperative legislation amended to facilitate this. (Findings B2 and D11). Stricter control would contribute to the elimination of at least some of the shortcomings of Cooperatives and more supervision of officials at the Primary level by the Commissioner should be enforced through District Union Secretaries.

5. That when Cooperatives fail to make initial or second payments to growers, in the following crop season the Boards withhold payments to these Cooperatives and make them direct to the members. (Findings B4 and B7). Growers must not be allowed to suffer financially because Cooperatives fail to pay them for produce delivered; the Boards already have the distributive network with which to arrange direct payments where they become necessary.

6. That Cooperatives improve the collection of produce from their members for delivery to Board depots, so that these growers can receive payments which approximate more closely to the gazetted producer price. (Finding B6). Growers' cash receipts have been consistently below the prices gazetted by the Boards, and one of the priorities of Cooperatives must be to pass on savings which should result from bulk handling to growers in the form of payments which are higher than those generally obtainable outside Cooperatives.

7. That Cooperatives be permitted to accumulate limited reserves under the strictest control of the District Union, by retaining some of the surplus payments due to members, provided that the members agree. (Finding B8). Shortage of cash is a recurrent problem among Cooperatives, whether caused by inefficiency or dishonesty, and its effects are serious: Cooperatives lack the capital necessary for expansion. Provided that the strictest possible control can be exercised the long term advantage to members of accumulating reserves would be considerable.

8. That the provision of loans from Boards to growers cease, and the granting of credit by Cooperatives to officials and members be severely curtailed. (Findings B8 and D9). Boards and Cooperatives have become too involved in both the provision and receipt of loan finance, with the result that loans remain unpaid, interest charges accumulate, and working capital is severely depleted.

9. That the Boards bring paid out producer prices for maize, cotton and pyrethrum more into alignment with world market prices and announce guaranteed producer prices by the beginning of each planting season. (Findings C2, C5 and C6). Continued heavy subsidising of produce prices imposes a financial strain on the Boards and does not channel growers' efforts towards the marketing of those commodities with the most profitable demand. Delays in gazetting these prices also hamper growers in deciding what to plant and sell.

10. That the Boards themselves provide more buying points for growers (Findings C3). Transport costs have eroded profits of the growers, particularly those in remote areas, and Cooperatives have so far not set up as many buying points as are needed to enable their members to achieve economies of local delivery and storage.

11. That the Boards retain price stabilisation funds, but have recourse to them only when there occurs an unforseen fall in world demand in any one year. (Finding C8). There must be some provision against sudden and uncontrollable collapses in the world demand for primary products, as so many growers' livelihoods depend on it. Such provision should however take the form of a contingency payment rather than a continuing subsidy.

12. That processors continue to be eligible for appointment as Registered Agents, but that the Boards reduce the present large number of Agents, and impose stricter conditions before granting registration. (Findings C9 and E11). Many local processors are in a position both to provide and to finance agency services to growers where there may not be sufficient volume of business to support full-time Registered Agents; and even where there is, such an arrangement can avoid much needless duplication of functions. There is no inconsistency in the Boards reducing the number of Agents and increasing the number of buying points, since these can be located at rural markets and produce traders' stores.

13. That the Boards insist on the delivery of higher quality produce from Cooperatives by enforcing more stringent quality differentials. (Findings D1 and D2). Cooperatives continue to market low quality produce; exhortations from the Boards to raise quality have achieved little, and there is therefore a need for some clear financial incentive to be incorporated into a price structure based on a scale of different quality grades.

14. That the relationships which the Government wishes to bring about between Cooperatives and Boards be set out urgently and clearly. (Finding D4). The Boards are not clear about their responsibility in helping to develop Cooperative marketing and there is uncertainty about the extent to which Cooperatives will complement or even replace some Board services. A clarification of their relationships is needed.

15. That the Boards involve their Field Staff much more closely in raising the level of Primary Cooperative marketing services to growers. (Finding D6). Field staff employed by the Boards have tended to become too involved in the minutiae of Board administration, and have not concentrated on developing working contacts with Cooperatives in their Districts.

16. That the Boards pursue the policy of becoming self-financing in all but research and extension programmes and capital expenditure for processing. (Finding D9). Much of the finance needed for research and extension programmes and

(Recommendation 16, continued)

for technical innovation in processing for the growers is beyond the resources of the Boards; this is no reason, however, for the Boards to incur losses on their trading accounts if such capital finance is forthcoming from the Government.

17. That the Cooperatives pay more attention to prompt deliveries of their produce to Boards' depots. (Finding D10). Delays in payments from Boards to Cooperatives are caused largely by the failure of Cooperatives to deliver produce collected from growers promptly and regularly to Board depots. Boards cannot finance Cooperatives any more than Cooperatives can finance growers in advance of delivery.

18. That joint marketing by Boards and Cooperatives should be based on parity of terms, payments and agency services between Cooperatives and private intermediaries. (Findings E1 and E14). Continuing participation in the marketing system by private agencies in no way inhibits the development of joint marketing by Boards and Cooperatives; and no subsidies or monopolies should be granted to Cooperatives to enable them to compete with the private sector, which would otherwise enjoy parity of terms and payments and still be able to offer better services to growers.

19. That the granting of agencies to Cooperatives be entirely at the discretion of the Marketing Boards concerned, and that the Boards' powers to register and operate through Agents be discretionary and not mandatory. (Findings E2, E4, and E14). The appointment of Cooperatives as Agents should depend upon their proved ability to fulfil all the conditions of an agency, otherwise the Boards cannot operate or finance direct agency systems of their own in competition with private intermediaries such as produce traders.

20. That the private sector continues to function in the present marketing system both to compete with Cooperatives and to ensure the provision of agency services and processing capacity. (Findings E2, E9 and E13). The private sector, on the basis of its present contribution to the marketing system, is in fact the best guarantee of the efficient and profitable functioning of the Cooperative movement within the system.

21. That the Government determine the position of Registered Agents as processors. (Finding E7). Clarification is required of the position of existing processors who act as Agents, apart from the policy consideration of the suitability of processors in general to undertake agency services.

22. That a National Processing (Holdings) Corporation be established with processing subsidiaries for maize, cotton and pyrethrum, and that these subsidiary companies be owned jointly by Cooperatives, Boards, Government and private interests, with no one party having a controlling interest. (Findings E8, E9, E12 and E15). Monopoly control of processing, whether by the private sector or by the State is inappropriate to the conditions of the processing industry in East Africa, and at variance with the aims of African Socialism under which Governments are committed to secure for growers and Cooperatives participation in processing. Such participation, if it is to be direct and realistic, must give Cooperatives and other parties an entrepreneurial commitment in processing without impairing the day to day functioning and maintenance of the processing plants, most of which require highly skilled management.

23. That under no circumstances should Cooperatives be permitted, let alone encouraged, to take over the processing industries 'en bloc.' (Findings E12 and E15). Cooperatives are not in a position to run large-scale processing industries, having neither the financial resources nor the technical skills to do so; nothing will be gained by adding to their responsibility in this way at a time when they are barely able to meet existing commitments; some Cooperatives are, however, running a few small-scale processing concerns successfully, but it is too soon to assess their experience gained in terms of acquisitions of processing factories.

24. That Boards appoint suitable Cooperatives as their Agents wherever possible, as this is the most practical way of improving Cooperative marketing. (Finding E14). Cooperatives must accept clear responsibilities towards the Boards in the form of deliveries and sales, in addition to those other responsibilities which they have incurred towards their grower members. Registration as Board Agents is one of the most practical ways of consolidating these responsibilities so that Cooperatives will be better able to discharge them.

## 7. Sources

### A. Commissions of Inquiry

1. Ibbotson on maize; MacGillivray on Organisation of Agriculture, 1960; Maize Commission of Inquiry, 1966.
2. East Africa Royal Commission Report, 1953-1955, HMSO, London.
3. Uganda and Tanzania Presidential Committees of Inquiry into Cooperative Unions and Statutory Boards, 1966/1968.
4. Uganda Government Committee of Inquiry into the Cotton Industry, 1966.
5. Commission of Inquiry into Certain Matters concerning the Pyrethrum Industry, 1964.
6. Special Committee on Cotton Ginneries in Kenya, 1967.

### B. Research and Conference Publications

1. IFO-Institut fur Wirtschaftsforschung, Munich; Afrika Studien.
2. Centre of African Studies, Edinburgh University.
3. Institute for Social and Economic Research, Makerere University College, Kampala.
4. Economic Research Bureau, University College, Dar-es-Salaam.
5. Institute for Development Studies, University College, Nairobi.
6. Food and Agriculture Organisation, Rome; Marketing Guides.
7. International Economic Association; Conference papers.

8. East African Agricultural Economics Society; East African Economics Review and Journal of Rural Development.

9. Journal of the East African Management Foundation.

10. Proceedings of the EAAES Conference on Agricultural Marketing in East Africa, 25th-28th June 1968, at Makerere, Uganda.

11. Report of the FAO Seminar on the operation and management of Marketing Boards in Africa; Ibadan, Nigeria, 11th-30th July 1966.

12. International Labour Organisation, Geneva; Cooperative Management and Administration, 1964.

13. Ministry of Overseas Development, London; Research Publications.

C. Working Data

1. Newspaper cuttings and extracts from periodicals.

2. Letters and official correspondence files.

3. Internal government papers and memoranda.

4. Excerpts from official or public speeches.

5. Records of personal interviews at and visits to Cooperatives, Boards and Ministries.

D. Government Publications

1. White Papers.

2. Sessional Papers.

3. National Assembly Debates and Official Reports of Parliamentary proceedings.

4. Maize, Cotton and Pyrethrum Marketing Board Acts, and the Agricultural Produce Marketing Ordinances.

5. Official Economic Surveys and Development Plans.

6. Statistical Abstracts and Censuses.

7. Cooperative Societies Acts, and Model By-Laws of a Cooperative Society.

8. Rules and Procedures of the Cotton, Lint and Seed, and Pyrethrum Marketing Boards.

E. Departmental and Board Reports

1. Consolidated Reports of the Commissioners for Cooperative Development.

2. Reports of the Kenya, Uganda and Tanzania Directors of Agriculture.

3. Trade Reports of the East African Commissioners for Customs and Excise.

4. Annual Reports and Accounts of the Pyrethrum Boards.

5. Annual Reports of the Maize and Produce Board.

6. Annual Reports and Accounts of the Cotton, Lint and Seed Marketing Boards.

7. Annual Reports and Accounts of the Tanzania National Agricultural Products Board, and the Uganda Produce Marketing Board.

8. Bibliography


Abbott, J.C. "Marketing Problems and Improvement Programmes;" FAO Marketing Guide No.1; Rome, 1966.

Abbott, J.C. and Creupelandt, H.C. Agricultural Marketing Boards: their Establishment and Operation;" FAO Marketing Guide No.5; Rome, 1966.

Alderson, W. "Dynamic Marketing Behaviour;" Irwin, 1965.

Baker, R.W. "Marketing in Nigeria;" Journal of Marketing, Vol. XXIX, July 1965.

Belshaw, D.G.R. "Price and Marketing policy for Uganda's Export Crops;" East African Journal of Rural Development; Vol. 1, No.2; July 1968.

Blair, T.L.V. "Africa: A Market Profile;" Business Publications, London, 1965.

Bohannan, P. and Dalton, G. edited "Markets in Africa;" Northwestern University, African Studies No.9, 1962.

Brown, D.R.N. "The Marketing of Agricultural Crops in Uganda and Tanganyika;" Makerere Readings, Vol;11, No.2.

Carey Jones, N.S. "Why Organise Agriculture?"; East African Economics Review, Vol. 7, No.2; December 1960.

Cave, R.C. "Cooperative Development and Outlook in East and Central Africa;" San Francisco, 1961.

Chaturvedi, J.N. "Theory of Marketing in Underdeveloped Countries" Allahabad, 1959.

Dewey, A. "Peasant Marketing in Java;" Glencoe, 1961.

Drucker, P. "Marketing and Economic Development;" Journal of Marketing, Volume XXII, January 1958.

| | |
|---|---|
| East African Publishing House | "Who Controls Industry in Kenya?" Report of a Working Party, 1968. |
| Elkan, W. | "Half a Century of Cotton Marketing in Uganda"; Indian Journal of Economics, April 1958. |
| Fearn, H. | "An African Economy: A Study of the Economic Development of the Nyanza Province of Kenya"; Oxford, 1961. |
| Fisk, G. | "Marketing Systems: An Introductory Analysis"; Harper and Row, 1967. |
| Forbes-Watt, D. | "Uganda's Agricultural Development Policy"; East African Economics Review, December 1966. |
| Gorst, S. | "Cooperative Organisation in Tropical Countries"; Blackwell, 1959. |
| Green, R. | "Ghana Marketing Board Policy"; Nigerian Institute of Social and Economic Research, December 1960. |
| Green, R.H. | "Four African Development Plans"; Yale, 1965. |
| Goldman, M. | "Distribution in a Controlled Economy"; Glencoe, 1963. |
| Hailey, Lord | "An African Survey"; Oxford, 1957. |
| Halbert, M. | "The Meaning and Source of Marketing Theory"; McGraw Hill, 1965. |
| Hawkins, H.C.G. | "Wholesale and Retail Trade in Tanganyika: A Study of Distribution in East Africa"; Economist Intelligence Unit; Praeger, New York, 1965. |
| Hazlewood, A. | "Trade Balances and Statutory Marketing in Primary Exporting Countries"; The Economic Journal, Vol. LXVII, No.265, March 1957. |
| Helleiner, G.K. | "Agricultural Export Pricing Strategy in Tanzania"; East African Journal of Rural Development; Vol. 1, No.1, January 1968. |

Helleiner, G.K. "The Fiscal Role of the Marketing Boards in Nigerian Economic Development"; The Economic Journal, Vol. LXXIV, September 1964.

Heyer, J.U. "Kenya's Agricultural Development Policy"; East African Economics Review, December 1966.

Holton, R.H. and Collins, N.R. "Programming Changes in Marketing in Planned Economic Development"; Kyklos, International Review for Social Sciences, Fasch. I, XVI, 1963.

Holton R.T. "Marketing Structure and Economic Development"; Quarterly Journal of Economics, Vol. LXVII, 1965.

Houston, G. "Marketing Boards in U.K.; A General Appraisal"; Agriculture, November 1963; Vol. 70, No.11, H.M.S.O.

Knowles, O.S. "The Development of Agricultural Marketing in Kenya"; East African Economics Review, Vol. 3, No.1, November 1956.

Kyesimira, Y. "Agricultural Export Development"; East African Studies No. 34, Makerere Institute of Social Research; East African Publishing House, 1969.

Lamade, W. "The Role of Marketing Boards in Tanzania"; Economic Research Bureau, Dar-es-Salaam; Paper 67, 1967.

Langweni, A.A. "The Economics of Pyrethrum"; The Kenya Farmer, No.121, August 1966.

Livingstone, I. and Ord, H.W. "An Introduction to Economics for East Africa"; Heinemann, 1968.

Mattsson, L.G. "Integration and Efficiency in Marketing Systems"; The Economic Research Institute, Stockholm, 1969.

Martin, A. "The Marketing of Minor Cash Crops in Uganda"; Overseas Research Publications Nol; H.M.S.O. 1963.

Mead, M. Edited — "Competition and Cooperation among Primitive Peoples"; McGraw Hill, 1937.

Meier, G.M. edited — "Leading Issues in Development Economics"; Oxford, 1964.

Mellor, J. — "The Process of Agricultural Development in Low Income Countries"; Journal of Farm Economics, August 1962.

Miracle, M.P. — "An Economic Appraisal of Kenya's Maize Control"; East African Economics Review, Vol. 6, No.2; December 1959.

Myers, K. and Smalley, O. — "Marketing History and Economic Development"; Business History Review, Volume XXXIII.

O'Connor, A.M. — "An Economic Geography of East Africa"; Bell, 1966.

Oloya, J.J. — "Coffee, Cotton, Sisal and Tea in the East African Economies"; East African Literature Bureau, 1968.

Paulus, M. — "The Cooperative Movement in Tanzania and Uganda - Possibilities and Objectives"; IFO, Munich; Afrika Studien 15, 1967.

Prakash, O. — "The Theory and Working of State Corporations"; Allen and Unwin, 1962.

Robinson, E.A.G. edited — "Problems in Economic Development"; Macmillan 1965.

Ruthenberg, H. — "Agricultural Development in Tanganyika" IFO, Munich; Afrika Studien 2, 1966.

Ruthenberg, H. — "African Agricultural Production Development Policy in Kenya"; IFO, Munich; Afrika Studien 10, 1966.

Sherbini, A.A.E.and Sherif, A.F. — "Marketing Problems in Underdeveloped Countries"; Société Orientale de Publicité; Cairo, 1956.

Stewart, I.G. and Ord, H.W. edited — "African Primary Products and International Trade"; Edinburgh, 1965.

Thomson, F.L. — "Agricultural Marketing"; McGraw Hill, 1958.

Turner, P.H. — "The Commerce of New Africa"; Harrap, 1969.

## Section 2.

## PRO FORMAS

### Pro Forma 1

Application for Registration as a Cooperative Society.
(under the Cooperative Societies Ordinance)

To: The Registrar of Cooperative Societies

............................ Limited.

1. We, the undersigned, apply that the above society may be registered as a Cooperative Society under Section 10 of the Ordinance.

2. Two copies of the application and three copies of the by-laws are enclosed, together with the following fees, as required by rule 44 of the Cooperative Societies Rules:-

| | | Shs. |
|---|---|---|
| (i) | on application | 40 |
| (ii) | on issue of Certificate of Registration | 20 |
| (iii) | on registration of by-laws | 400 |
| | | 460/- |

3. Particulars of members (name, address, age, residence, Local Authority) are enclosed.

4. Particulars of proposed Society (address, objects, area of operations, tribe of members, membership qualifications, commodity or a category of produce to be dealt in, liability, entrance fee, value of shares, amount of levy or cess, name of branch of bank, financial year) are enclosed.

Pro Forma 2

## Annual Return of a Cooperative Society

(Under Rule 38 of the Cooperatives Societies Act, No.39 of 1966)

1. Name of the society.......................................................
2. Registered Number ...............................................
   Date of Registration ...............................................
3. Registered address ...............................................
4. Type of Society ...............................................
5. The liability of the members is *
   (i) limited to the nominal value of each share held;
   (ii) limited to ................ times the nominal value of each share held;
   (iii) unlimited.
6. The number of members of the Society is ......................
7. The number of shares issued is ............................
8. The nominal value of one share is Shs......................
9. The total indebtedness of the Society secured by registered charges is Shs.........................................
10. The maximum liability which the Society may incur in loans or deposits is Shs.........................................
11. The date of the Annual General Meeting was .................
12. Particulars of Officials elected for the year ............... to ......................................are as follows:-

| Title of Office | Name of Holder |
|---|---|
| Chairman | ............................. |
| Vice-Chairman | ............................. |
| Secretary | ............................. |
| Treasurer | ............................. |
| Committee Members | ............................. |
| | ............................. |
| | ............................. |
| | ............................. |
| | ............................. |

13. A copy of the last audited Balance Sheet is filed herewith.

Dated this ...................... day of .............19....

(signed) ......................
Secretary

* Delete as necessary

Pro Forma 3

Eligibility for Cooperative Membership

(under Section 5 of the Model By-Laws of a Cooperative Society, Chapter 490, Laws of Kenya)

A person shall be eligible for membership who possesses all of the following characteristics:-

(1) Ordinarily resides or owns land in ..................
.................................................

(2) Is of good character

(3) Is not less than 18 years of age, except in the case of a minor heir of a deceased member

(4) Is the "bona fide" grower of produce......capable of being marketed in accordance with by-law 3 (a) which states that (the object of a Society is) to arrange for the cooperative marketing, processing, grading, packing, transporting and all such other operations as may be necessary for the most profitable disposal of the produce..........of members.

Pro Forma 4

Certificate of Appointment of Agent.

I hereby certify that the............................Board on the ............................19..............appointed under Section............of the.........Marketing Ordinance, ............(hereinafter called "the Agent"), to be a Registered Agent of the Board for the buying, storage and disposal of ..............and matters incidental thereto, but excluding the handling of ..............and................products for export, as from.............................19............ on the following terms and conditions:-

1. The Agent shall act only within the following area.....................................

2. The Agent shall be remunerated in such manner as may be agreed between the Board and the Agent.

3. The Agent shall comply at all times with the order and directions of the Board.

(Insert any special conditions)

(Dated......................(Signed)...................

(Designation)....................

.......................Board

Pro Forma 5

Application for Registration as a Maize Miller.

1. Name of Applicant ..............................
Name of Applicant's Firm ........................
Names of Partners or Directors .................
..................................................

2. Situation of Mill : Plot Number
Street ............................
Township ..........................
Postal Address ....................
District ..........................

3. My/our mill is licensed by the local authority (District/County Council) under the Public Health (Manufacture, Preparation, Packing and Re-packing of Food) Rules, and I append the licence.

4. Class of mill; state whether
(i) Water
(ii) Roller
(iii) Hammer

5. State whether you/your firm intend to:
(i) mill maize for a fee ............
(ii) mill maize and retain part of the maize or maize products in consideration of a fee ....................
(iii) carry on business of milling for re-sale.. .........

6. State (i) the amount of maize purchased by you/your firm during the year ended 31st July............
(ii) the storage capacity of your mill..........
(iii) the output capacity of your mill...........

7. State if you or your partner / either/any of your partners have been previously registered as a miller, and if so give particulars ......................................................

8. State if you or your partner / either/any of your partners are a producers of maize ................................
.......................................................

9. State whether licensed by the local authority for the area in which the mill is situated under the Trade Licensing Act.

I (name of applicant) ............................hereby apply for registration as a miller under Section 27 of the Maize Marketing Ordinance, and declare that all particulars given herein are correct.

(Date) ...................... (Signed) ..................

Pro Forma 6

Maize Miller's Registration Certificate.

(Under the Maize Marketing Ordinance)

Certificate No.....................................

.................................................. of

..................................................

is hereby registered as a miller of maize under Section 27 of the Ordinance in respect of his mill situated at

...................................................

subject to the limitations and conditions imposed by the Maize Marketing Regulations

This registrationsshall expire on ........... 19 .......

Fee paid 50/-. Receipt No. ...............

Date of issue ............ (Signed) ...................

(Designation) ......................

Maize and Produce Board

Pro Forma 7

Application for the Issue of a Cotton Buying Licence.
(under Rule 10 of the Cotton Rules)

To the District Commissioner, ..........................District

I, ............................ (full name) of ....................

aged ...................., by occupation ..........................

do hereby apply for a buying licence.

place of business ...........................

I hereby declare:-

(a) that I have not within two years of the date of this application been convicted of an offence under the Cotton Ordinance

(b) that I have not at any time been convicted of an offence involving dishonesty; and

(c) that I have not previously been refused a buying licence, nor had my licence cancelled or suspended.

I hereby declare that the above particulars are correct

Date ..................... 19................................

(Signature of Application)

I..................of............................Hereby declare

that this application was signed in my presence by ..................

whom I have personally known for ................years

.............................

(Signature of person witnessing Applicant's signature)

Pro Forma 8

Cotton Buying Licence.
(under Rules 9 and 15 of the Cotton Rules)

Licence No..........................Province...........District...........
Licence is hereby given to ...................................
of ............................, to purchase and store unginned cotton at a building situated at ......................in the...........District.

This licence expires on 31st May, 19.......................

This Licence is subject to the conditions printed hereunder.

..............................
(Signature of Licensee)

Dated at.............this..............day of..............19........

......................
Provincial Commissioner

CONDITIONS

The licensee -

(a) shall not make delivery of any cotton bought or received by him except at buying stores in respect of which licences have been issued to him;

(b) shall keep this licence posted in a prominent position at the buying store described in the licence;

(c) shall keep at each buying store duplicate books of account in English or Kiswahili in which shall be entered daily by the purchaser the following particulars concerning all purchases of unginned cotton -

(i) the date of purchase
(ii) the price and total daily weight of each quality of cotton purchased; and
(iii) the total weight of each quality of cotton purchased since the date notified for the opening of the buying season

(d) shall on demand by the District Commissioner or any inspecting officer produce for inspection all books of account kept by him under the foregoing conditions of the Cotton Rules, and allow copies to be taken; and

(e) shall preserve all books of account kept by him under the foregoing conditions of the Cotton Rules for a period of at least three years after the date of the last entry therein.

Pro Forma 9

Cotton Ginning Licence
(under Rule 34 of the Cotton Rules)

Licence No......................Province..................District...

Name of Licensee..........................................
Address of Licensee.......................................
Ginnery at ...............................................

Licence is hereby given to the above-named to gin cotton at the ginnery specified above.

This licence shall remain in force until it is suspended or revoked.

This licence is subject to the under-mentioned conditions.

Dated at ..................this..............day of.......... 19.........

Fee : 150/-

..............................
Provincial Commissioner

CONDITIONS

1. The Licensee shall maintain ................gins of................ variety.

2. Such number of gins shall not be exceeded without the permission of the Director of Agriculture.

3. If the Director of Agriculture by notice in writing requires the licensee to increase such number of gins, the licensee shall comply with such notice.

4. The licensee shall keep at his ginnery duplicate books of account in English or Kiswahili in which shall be entered daily particulars of all cotton delivered, purchased, ginned and baled.

5. These books of account shall at all times be open for inspection by the District Commissioner or any inspecting Officer.

6. The Licensee shall comply with Rule 29 under which he must forward each month to the Secretary of the Cotton Board returns of unginned cotton bought.

Pro Forma 10

Pyrethrum Grower's Licence.
(issued under the Pyrethrum Act)

..............................................................

of ...............................................(address)

being the proprietor, lessee or occupier of L.R. No.......
..........................................(description of land)

is hereby licensed subject to the conditions set out in the Schedule hereto to grow a maximum of ......................
(acres or quantity) of pyrethrum during the period ending
.....................................(end of pool year)

Schedule of Conditions

......................................
(for the Pyrethrum Board of Kenya)

Fee : Shs. 50/-

Pro Forma 11

Pyrethrum Statistical Return
(under Rule 17 of the Pyrethrum Rules)

Name of Licence Holder ..................................

Address ............................................................

1. Pyrethrum licence No.....................

2. L.O. Number (s) of land .......................

3. Total acreage under pyrethrum cultivation

| | |
|---|---|
| (a) Planted before 19.............. | ...........acres |
| (b) Planted 19............. | ...........acres |
| Total | acres |

4. Method of drying -

(a) Sun drying
(b) Wood fuel drier
(c) Charcoal drier
(d) Oil fuel drier
(e) ...............

Signed............................

Date ..............................

To: The Secretary,
Pyrethrum Board of Kenya,
P.O. Box 420,
Nakuru,
Rift Valley Province,
Kenya.

## Section 3.

## SURVEY ANALYSIS OF PRODUCER MARKETING IN TWELVE DISTRICTS OF KENYA

### 1. Survey Design

Preliminary work was carried out in December 1967 and March 1968 to determine how the survey should be designed, and in what form it should be presented. This involved discussions with officials at the Department of Cooperative Development, members of the Nordic Cooperative Project and the Marketing and Field Service Managers of the respective Boards. Also contacted in the field were Registered Agents, licensed processors, growers and Cooperative Assistants around Nakuru, Kakamega and Kisumu.

In the course of this work the following points were explored:

(1) The main concentrations of the three commodities and the Districts concerned.

(2) The identity of the likely respondents to the questionnaires.

(3) The form in which such questionnaires would be most readily answerable by these respondents.

(4) Marketing contacts between Board and Cooperative employees.

(5) Problems in maintaining or developing these contacts.

(6) The priorities in the development of Boards and Cooperatives by Government.

(7) Areas of discontent among members of Cooperatives.

(8) Growers' awareness of the marketing objectives and performance of Boards and Cooperatives.

(9) The role of other participants in marketing, and their relationships with Boards and Cooperatives at District level.

(10) Length of the questionnaires, and the likely duration of the Survey.

(11) How far Board and Cooperative respondents see their marketing functions as complementary or as conflicting.

(12) The most frequently recurring difficulties or weaknesses in the marketing of maize, cotton and pyrethrum at District level.

2. Location of the Survey.

This was determined by the concentrations of maize, cotton and pyrethrum growing throughout the territory.

Maize is grown all over Kenya, but the volume of maize production, both for local consumption and for resale, varies considerably among the different Provinces. Indeed, of the total annual purchases by the Maize and Produce Board, amounting to 2,508,581 bags in 1967, about 88% was produced in the Rift Valley and Western Provinces.[1]

Cotton growing is confined to the Nyanza, Coast, Eastern and Central Provinces. By far the highest concentration of cotton growing is found in those Districts bordering Lake Victoria, which produce approximately 75% of the total annual crop in Kenya, valued at £K 975,752 in 1967.[1]

The production of pyrethrum is concentrated in Central Province, but there is substantial production too in some Districts of the Rift Valley and Nyanza Provinces. About 56% of the total pyrethrum production quotas for all Cooperative Societies amounting to 7,168 tons in 1967 came from Central Province alone.[1]

Finally, it was important for comparative purposes to choose Districts for the Survey where there are Cooperatives already dealing in the three commodities, in addition to small and large-scale growers, produce traders and Registered Board Agents. For example, although considerable quantities of cotton are grown in the Coast Province, the Cotton Board buys lint from Cooperatives only in the Lake region; Districts where only Boards operate could not be included.

The Provinces where the Survey was undertaken are, therefore, as follows:

Maize

Western
Rift Valley

---

1. Annual Reports and Accounts of the Kenya Maize, Cotton and Pyrethrum

Cotton

Nyanza

Western

Pyrethrum

Central

Rift Valley

Nyanza

Details of the Districts, Divisions and Locations covered by the Survey can be found in Appendix G.

3. Personal Interviewing.

The three Questionnaires have been administered by personal interviewing rather than by other means for several reasons: the difficulties of contacting respondents by post or telephone in the remoter parts of East Africa; the personal help that many growers might require in completing their answers and in understanding all the questions; the elimination of the problem of non-response both by face to face contact and by establishing a quota sample; finally, the supervision exercised over the enumerators themselves in their interviewing.

Students in the Faculty of Commerce at University College, Nairobi, acted as enumerators, and undertook the interviewing in July, August and December 1968, and February, April and December 1969. Their notes and instructions are listed in Appendix H and are self-explanatory. Where possible, student enumerators were selected whose homes were in the twelve Districts of the Survey; their familiarity with local agriculture, geography and tribal customs proved valuable. Each enumerator was told exactly how many respondents to interview; he also had with him a signed letter of introduction to the District Commissioner concerned; this was necessary because the Kenya Government stipulates that no interviewing may be carried out without the knowledge and consent of the local Administrative Officer. It is reproduced in Appendix I. Details of the students who took part in the Survey can be found in Appendix J.

4. Identity of Respondents.

A small-scale grower is defined as the head of a family exercising control over all the operations and activities on an agricultural unit not exceeding 15 acres. As the Survey is concerned with maize, cotton and pyrethrum, only those growing these particular crops were interviewed. Such growers are obliged to sell these crops directly or indirectly to the three Marketing Boards, but they do not all sell through Cooperatives. Interviewing has therefore included small-scale growers who are not members of Cooperative Societies as well as those who are.

Board respondents refer to Board Area Managers, Field Officers and Field Assistants and those traders registered by the Boards as their Agents in the Districts.

Cooperative respondents refer to Government Cooperative Officers at Provincial and District levels and Cooperative Assistants; Secretaries of District Cooperative Unions and Secretaries of Cooperative Primary Societies have also been interviewed.

5. Population size

The completeness and accuracy of the population data of small-scale growers vary from District to District, and some interpolation of the figures collected has been necessary. The Government is at present undertaking its own statistical census of small farms in Kenya, but it is complete only for certain Districts, and incomplete for some of those included in this Survey. However, all the data available has been analysed.[1] Three methods have been adopted to obtain the populations of small-scale growers in different Districts.

First, in discussions with the District Agricultural and Cooperative Officers concerned, and from returns and records in District Offices, membership figures have been computed as percentages of the total numbers growers of maize, cotton and pyrethrum.

Second, the total populations of all types of small-scale growers are on record in some Districts; here similar computations have been made about what proportions of these populations are represented by maize, cotton and pyrethrum growers.

Third, in other Districts, notably pyrethrum, totals of particular crop growers have been obtained direct from the Marketing Board concerned and these comprise Cooperative members and non-members.

A. <u>Population of small-scale growers</u>

MAIZE

Bungoma District.

There are 17, 586 growers who are also members of maize Cooperatives; these represent 46% of the total in the District who amount to 38,633.

---

1. Throughout this collection of population data, records have been sought and analysed in the Inspection and Audit Section of the Department of Cooperative Development, the Economics and Market Research Division of the Ministry of Agriculture, the Agriculture Section of the Statistics Division of the Ministry of Economic Planning and Development, and the Land Office and Survey of Kenya where details of agricultural holdings are available.

| | |
|---|---|
| Kimilili Division | 22,582 |
| Naitiri/Ndalu Division | 3,840 |
| Kavujai Division | 12,211 |
| total | 38,633 |

To make clear how the population of one type of grower is distributed, detailed figures for the Kavujai and Kimilili Divisions of Bungoma District are contained in Appendix K.

Trans Nzoia District.

Membership of maize Cooperatives amounts to 4,145 and this is 22% of all maize growers in the District; therefore the total comes to 18,805.

Kakamega District

The number of small-scale growers is 98,367; of these 90% are estimated to grow maize in any substantial quantity. Not all of these grow it for resale, but no figures at all are available to show what proportion of maize growers plant the crop for subsistence only. However, when a plentiful crop is harvested almost all growers will have some surplus maize to dispose of to Board Agents or through Cooperatives.

| Divisions | Maize growers |
|---|---|
| Lurambi | 32,085 |
| Central | 17,108 |
| Mumias | 20,480 |
| Lugari | 10,260 |
| Vihiga | 8,419 |
| total | 88,352 |

Members of maize Cooperatives are about 10,000 or 11% of all maize growers.

Nandi District

The membership of maize Cooperatives is 2,323, representing 10% of all small-scale maize growers.

| | | Maize growers |
|---|---|---|
| Mosop North Division | | 12,209 |
| Aldai South Division | | 11,021 |
| | total | 23,230 |

COTTON

Siaya District

There are 15,536 members of cotton Cooperatives constituting 45% of all small-scale cotton growers, who therefore total 34,515.

Busia District

In this District more detailed figures of cotton Cooperative membership by Division were available.

| Divisions | Cooperative membership | % of total growers | Number of Cotton growers |
|---|---|---|---|
| Northern | 2,657 | 58 | 4,552 |
| Central | 5,483 | 22 | 24,610 |
| Southern | 7,563 | 38 | 19,680 |
| | | total | 48,842 |

Kisumu District

Members of cotton Cooperatives number 14,781 and they comprise 47% of all small-scale cotton growers; the total cotton growing population is 31,490.

South Nyanza District

Cotton Cooperative membership amounts to 13,958; this is 39% of all small-scale cotton growers. Their total in this District is thus 35,980.

PYRETHRUM

The population sizes of small-scale pyrethrum growers has been worked out directly from figures supplied by the Head Office of the Pyrethrum Board at Nakuru, in the Rift Valley Province.

Kisii District

29,314 pyrethrum growers

Nyandarua District

35,871 pyrethrum growers

Nakuru District

12,433 pyrethrum growers

Fort Hall District

9,717 pyrethrum growers

Throughout these four Districts, the average Cooperative membership amounts to about 83% of all growers.

The total populations of the three crop growers in the twelve Districts can, therefore, be summarised as follows:

| | |
|---|---|
| Maize | 169,020 |
| Cotton | 150,827 |
| Pyrethrum | 87,335 |
| Total | 407,182 |

B. Populations of Boards and Cooperatives

The number of Board respondents who are direct employees of the Marketing Boards is 108. These are Area Managers, Field Officers and Assistants, and they have all been contacted. Some sampling has, however, been necessary in the case of the Boards' Registered Agents, of whom there are 3,771 throughout the twelve Districts. The total Board population therefore comes to 3,879.

Every Registered Agent is licensed to trade on behalf of a Marketing Board in one particular market to which the small-scale growers come to sell their produce. The Agent makes his profit by reselling growers' produce in larger quantities to the nearest Board depôt or licensed processor; the Board then pays him a commission based on weight and quality.

To show how Board Agents are distributed, detailed data has been collected for Kakamega, and can be found in Appendix L; this District has the largest number of Agents.

Similarly, the number of Cooperative respondents who are official employees of the Department of Cooperative Development is limited; this Department is part of the Ministry of Cooperatives and Social Services. Its staff in the twelve Districts consists of six Provincial and twelve District Cooperative Officers, and twelve Cooperative Assistants who work out in the Locations; in addition there are six Assistant Cooperative Officers with special responsibilities for the marketing of each of the three commodities. All these 36 Cooperative officials have been contacted in the Survey.

There are also the full-time Secretaries of Cooperative Primary Societies, and details of these are as follows:

| District | Number of Cooperative Society Secretaries | District Cooperative Union |
|---|---|---|
| MAIZE | | |
| Bungoma | 63 | Mount Elgon |
| Kakamega | 91 | Kakamega |
| Nandi | 17 | Sirikwa |
| Trans Nzoia | 32 | Trans Nzoia |
| COTTON | | |
| Siaya | 14 | Siaya |
| Kisumu | 12 | Homa Bay |
| South Nyanza | 34 | Rachuonyo |
| Busia | 23 | Luanda |
| PYRETHRUM | | |
| Kisii | 63 | Masaba |
| Nakuru | 11 | Nakuru |
| Fort Hall | 14 | Muranga |
| Nyandarua | 51 | Nyandarua |
| Total | 425 | |

In addition, all twelve Secretaries of the District Cooperative Unions have been interviewed. A Cooperative Union groups all Primary Societies in its District and it is intended to provide them with certain centralised services such as budgeting and credit, recruitment and training, insurance, maintenance and supplies, bulk collecting, and delivery and sales outside the District.

Throughout the twelve Districts, the total population of Cooperative respondents is 473.

The names of Cotton Cooperative Societies in Busia District and Pyrethrum Cooperative Societies in Nyandarua District are in Appendices M and N.

6. Sample Size

The populations of the three types of growers in the twelve

Districts are large, and can be assumed to be normally distributed. In making this assumption, a formula is required to determine the size of the sample n for a given precision, interpreting precision here to mean the width of the % confidence limit. For example, where N is large, the 95% confidence limit is

$$p - 1.96 \quad p < \pi < \quad p + 1.96p$$

$$\text{where } \sigma p = \sqrt{\frac{\pi \ (1-\pi)}{n}}$$

The difference $p - \pi$ shows the error of the estimation, and this can be abbreviated to e as a measure of reliability:

thus $\quad e = p -$

The formula for the sample frame used in this Survey was worked out and first used by the Bureau of Research in the New York State Division of Housing and Community Renewal.[1] It is given by

$$n = \frac{N}{1 + Ne^2}$$

where n is the sample, N the population, and (as already shown) $e = \pi - p$; p being the proportion of the population, and $\pi$ the proportion of the sample. Both these proportions refer to membership and non-membership of Cooperative Societies among small-scale growers; the nearer to 50% p is the larger the sample size required to estimate it.

The full tabulation of this formula at the $2\sigma$ Confidence Interval is contained in Appendix O, and it is reproduced with permission.

From this Table, the 10% Confidence limit has been selected as being sufficiently accurate for the purposes of this Survey in view of:

(i) the large population sizes of growers in the twelve Districts

and (ii) the difficulties in achieving completeness and accuracy when compiling the population data (for example, the lack of comprehensive census records).

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1. It was published in September 1948 as "A Method for Employing Sampling Techniques in Housing Surveys."

This confidence limit extends 10% either side of the mean, $\bar{x}$ in the sample and $\mu$ in the population; this gives the largest possible proportions of members and non-members of Cooperatives, and hence the maximum size of sample.

The assumptions in the Table in Appendix O are:

$$\pi = 0.5$$

$$z = 2$$

and the difference between the true proportion and the sample proportion is 0.1, given that the population N is large.

The Standard Error of the sample proportion is

$$SE\,(p) = \frac{(1 - \pi)}{n}, \quad \text{where } q = 1 - p$$

And the variance of the probability distribution of a single draw from an entire population is

$$\sigma^2 p = \pi(1 - \pi) = 0.5^2$$

$$\text{Thus} \quad \sigma_s^{\,2} = \frac{\sigma^2 p}{n} \qquad \therefore \sigma_s = \frac{\sigma}{\sqrt{n}} = \frac{0.5}{\sqrt{n}}$$

$$\text{And} \quad \frac{0.5}{\sqrt{n}} = 0.05$$

$$\sqrt{n} = 10 \text{ and } n = 100.$$

Now the population sizes of small-scale growers by commodity and District are as follows:

Maize

| | | |
|---|---|---|
| Bungoma | | 38,633 |
| Trans Nzoia | | 18,800 |
| Kakamega | | 88,352 |
| Nandi | | 23,230 |
| | total | 169,015 |

Cotton

| | | |
|---|---|---|
| Siaya | | 34,515 |
| Busia | | 48,842 |
| Kisumu | | 31,490 |
| South Nyanza | | 35,980 |
| | total | 150,827 |

Pyrethrum

| | | |
|---|---|---|
| Kisii | | 29,314 |
| Nyandarua | | 35,871 |
| Nakuru | | 12,433 |
| Fort Hall | | 9,717 |
| | total | 87,335 |

Referring again to the Table in Appendix O, the sample size of 100 (already worked out) is applicable to populations of 20,000 and over. This population size is found in all but three Districts: Trans Nzoia 18,800; Nakuru 12,433; and Fort Hall 9,717.

As the results of the three Questionnaires are to be processed by commodity only, the sample size of 100 can be assumed for each of the twelve Districts, since the populations of growers of maize, cotton and pyrethrum are 169,015; 150,827; and 87,335 respectively.

The total sample size of respondents to Questionnaire No.1 is therefore 1,200 and this number of small-scale growers has been interviewed; 400 each in maize, cotton and pyrethrum.

Among the Districts, however, there are substantial variations in the numbers of growers, and to have assigned 100 of Questionnaire 1 to each District would have distorted the overall results, particularly in comparing the three crops. Weighting was therefore essential.

A weight of 1 was given to the District with the lowest number of growers of maize, cotton and pyrethrum. Weights for the remaining three

Districts were worked out proportionately, and these four weights then interpolated to give the exact numbers of growers to be interviewed in each District.

Maize

| District | Number of growers | Weight assigned | Sample of growers interviewed |
|---|---|---|---|
| Bungoma | 38,633 | 2.06 | 93 |
| Trans Nzoia | 18,800 | 1.0 | 44 |
| Kakamega | 88,352 | 4.71 | 208 |
| Nandi | 23,230 | 1.28 | 55 |
| | | total | 400 |

Cotton

| | | | |
|---|---|---|---|
| Siaya | 34,515 | 1.09 | 91 |
| Busia | 48,842 | 1.55 | 130 |
| Kisumu | 31,490 | 1.0 | 84 |
| South Nyanza | 35,980 | 1.12 | 95 |
| | | total | 400 |

Pyrethrum

| | | | |
|---|---|---|---|
| Kisii | 29,314 | 3.04 | 135 |
| Nyandarua | 35,871 | 3.7 | 164 |
| Nakuru | 12,433 | 1.28 | 57 |
| Fort Hall | 9,717 | 1.0 | 44 |
| | | total | 400 |

As noted earlier, some sampling was required of Board respondents who total 3,879; but as 408 of them have been interviewed, 34 per District and 136 for each crop, it has not been necessary to test this sampling statistically since it represents over 10% of the total Board population.

An even larger proportion of Cooperative respondents has been contacted: 408 out of 473, again 34 per District and 136 for each crop.

It must be emphasised, though, that all the direct employees of both the Marketing Boards and the Department of Cooperative Development in the twelve Districts have been interviewed: 108 for Boards and 48 for Cooperatives (this includes the twelve Secretaries of the District Cooperative Unions). The differences between these figures and the large sample sizes of 408 are made up of Registered Board Agents and Cooperative Society Secretaries respectively.

The enumerators in this Survey have thus undertaken the interviewing of a quota sample of all respondents, since they were instructed to interview fixed quotas of crop growers per District, and of Board and Cooperative respondents. The individual identities of those drawn in the sample are not as important as their characteristics meeting the requirements of these quotas.

## 7. Questionnaire Construction

The questions in the three Questionnaires in Appendices A to F have been set up in two forms.

First, there are yes/no or simple alternative response questions.

Examples: Do you belong to a Cooperative Society at present? Column (4). Are the growers you know in your locality interested in being members of Cooperatives? Column (34).

Do you market your produce directly to a Marketing Board? Column (84). Are you selling any of your produce direct to produce traders? Column (109). Do the Boards offer price differentials for lower qualities or produce? Column (131).

Are Cooperatives and Boards working well together in your District? Columns (165) and (245). Have processors in your experience proved unsuitable as Agents? Columns (209) and (289).

Second, there are multiple choice questions in which respondents are required to say:

(i) which of the different possible answers listed they consider to be important, and

(ii) of those responses thought to be important, in which order of preference would respondents rank their importance, and

(iii) which of the different responses they are undecided about; whilst respondents were encouraged to rank answers about which they held opinions, without an "undecided" category, they would have been obliged to give a rating to every opinion whether or not they genuinely held it.

Examples: Whether or not you belong to a Cooperative Society, what in general do you consider to be their main operational weaknesses? Columns (27) to (33). In what ways do you consider that the services of the Marketing Boards to you and other growers can be improved? Columns (133) to (143).

What problems do you see in the furtherance of the Boards' marketing programmes and in the carrying out of their statutory responsibilities? Columns (174) to (183) and (254) to (263). How can Government increase the performance of Cooperatives? Columns (198) to (203) and (278) to (283).

Within both these simple alternative and generalised responses, there are three broad types of question put to respondents:

(i) questions of fact
(ii) question of knowledge
(iii) questions of opinion

A. Questions of fact

Factual questions are concentrated in Questionnaire No.1 administered to growers. They establish certain straightforward facts about the respondent, which he is able to give without difficulty, about his own work. A grower cannot, for instance, be expected to answer factual questions about the Boards' budgeting, nor a Board or Cooperative official about details of payments offered to growers by produce traders.

These questions are thus easy to answer but limited in scope.

Examples: Have you ever been a member of a Cooperative Society? Column (5). Do you market all your produce through Cooperative Societies? Column (37). Do you normally attend Cooperative Society meetings? Column (45). Have you had experience of both multi-crop and single crop Cooperatives? Column (68).

Do you sell to Registered Board Agents? (Column 85). Do the Boards you sell to carry out all the processing of your produce themselves? Column (144).

Have you continuing contacts in your work, where applicable, with Cooperative Officers and Board Managers in your District/commodity? Columns (224), (225) and (304), (305).

B. Questions of knowledge

The success of the marketing system depends partly upon the knowledge which its actual and potential participants have of its trading opportunities. This second group of questions is therefore concentrated on what growers know about the marketing of their produce through Boards and Cooperatives, and what these two agencies are doing to publicise their own activities to all the respondents interviewed. The range of these questions is again confined to areas of knowledge useful to the particular respondents. Growers, for instance, are not asked what they know about the criteria by which Boards appoint Registered Agents and withdraw agency licences; Board and Cooperative respondents are; Columns (206), (208), and (286), (287).

Examples: What are thechief discussion topics at Cooperative Society meetings attended by you? Columns (47) to (51).

Have the Boards tried to explain to you what they are there for, and how they work? Column (117). Do you know what levies the Boards raise on your produce? Column (118). Do you understand how these levies are used and raised, and why they are operated? Columns (120) to (122).

Do you understand clearly Government policy towards Boards and Cooperatives? Columns (212), (214) and (292), (294). Are the proportions by quantity of the produce collected by the Boards in your District increasingly deriving from small-scale or large-scale growers, or from Cooperatives? Columns (228), (229), (230) and (308), (309), (310).

C. Questions of opinion

The views of all respondents have been sought, for instance, in the form of preferences for particular types of Agents, complaints against Boards and Cooperatives, and suggestions for improvements to the existing marketing system. Each respondent is also asked how he particularly would benefit in his own day to day work from any such improvements, and how far Government should be responsible for bringing them about. Questions of opinion are concentrated in Questionnaires 2 and 3.

Examples: What advantages do you consider that growers not members of Cooperatives have over those who are? Columns (21) to (26). Would you say that those who are members of a Cooperative are satisfied with its existing services? Column (36). Do you as an individual member consider that you have any say in the affairs of your Cooperative? Column (55).

How do the number of buying points offered to you by Board Agents compare with those obtained from produce traders? Column (112).

In what ways might joint marketing by Boards and Cooperatives be improved? Columns (166) to (171) and (246) to (251). How can the Boards help Cooperatives to raise the standard of their marketing services to growers? Columns (194) to (197) and (274) to (277). Should a Marketing Board require growers to join a Cooperative if they wish to grow certain crops? Columns (217) and (297).

8. Programming of Results

Cards 1 and 2 of Questionnaire 1, and Questionnaires 2 and 3 have 80 questions each, and therefore fit precisely on to four 80 column punch cards. Questionnaire 1 is on a multi-card record, and Questionnaires 2 and 3 are each on single record cards. The Questionnaires themselves are pre-coded, thus making it possible for the 4 cards to be punched directly from the completed answer columns. More detailed instructions have already been referred to in Appendix H.

The need to limit the questions to the row and column numbers on the four cards may be thought to have resulted in simple alternative response questions which are over-simplified, and multiple choice questions which are arbitrary in their selection of the possible responses listed. This indicates a dilemma encountered in all survey analysis work: the more sophisticated the questions the greater the complexities in programming answers to them; the priority must be that the results obtained are meaningful and manageable. In this Survey a balance between the extremes of simplicity and sophistication has been aimed at; but within this constraint, every effort has been made to direct evaluative as well as factual questions at respondents.

The total number of data cards punched was as follows:

Questionnaire 1 = 2,400 cards.
Questionnaires 2 and 3= 816 cards.

These cards were then machine sorted at the Nairobi Head Office of International Computers and Tabulators (East Africa) Ltd.

The object of this sorting is, of course, to present all the Survey data in tabular form; this is done in Part 4, Section 1. And in this sorting, some important cross-tabulations have been worked out, in two forms. In Questionnaire 1 some of the replies by each respondent to questions on Card 1 have been cross-tabulated with his answers to other questions on Card 2. There are no Code spaces in Questionnaire 1 to indicate a grower's identity; therefore Cards 1 and 2, which together comprise his replies to Questionnaire 1, were marked with identical numbers after being punched. These numbers were entered for every grower consecutively on Cards 1 and 2 from 1 to 1,200, to prevent one respondent's replies to Card 1 being confused with another respondent's replies to Card 2, during sorting. And with this numbering, all replies on Cards 1 and 2 can be checked to ensure that they originate from the same respondent.

With Board and Cooperative respondents, the cross-tabulations are between Questionnaire 2 and Questionnaire 3. Here it is the Questionnaires which are identical, but the respondents who are different.

Some examples of both forms of these cross-tabulations can now be given:

How many of those growers who are selling to produce traders, Column (38), are now marketing less and less of their produce to Cooperatives? Column (40).

Do those growers who expect a wider range of services from Cooperatives, Columns (12) to (20), also demand improvements in Board services? Columns (133) to (143); and are they envisaging Cooperatives being able to take over more of the marketing services provided by other agencies? Columns (158) to (160).

Are complaints by growers about payouts to them by both Boards and Cooperatives related? Columns (28), (29), (31), (134), (148), (149), (154), and (155).

How do growers view costs incurred by Boards and Cooperatives for marketing services? Column (7), (118), (120) and (121).

Differences of view as to how to improve their joint marketing by Board and Cooperative respondents, Columns (166) to (171) and (246) to (251). In their consideration of the marketing problems facing Boards and Cooperatives, do Board or Cooperative respondents rank high in importance shortcomings particularly in Boards or Cooperatives? Columns (174), (175), (176), (186), (190), (191), (254), (255), (256), (270) and (271).

# PART 4

## Section 1

## SURVEY TABLES

### 1. Presentation of the Tables

The Survey Tables resulting from Questionnaire 1 and Questionnaires 2 and 3 are grouped together by topic.

In Survey Tables 1 to 57 (Questionnaire 1) the total number of replies for each of the three commodities is 400, unless stated otherwise. For example, where only members of Cooperatives replied, as in Table 29, total responses are less than 400; or where more growers replied "Yes" to a group of questions than "No", as in Table 35, total responses exceed 400.

In Survey Tables 58 to 114 (Questionnaires 2 and 3) the total number of replies for each of the three commodities is 136, except where answers are given by some only of the Board and Cooperative respondents, as in Tables 59, 60 and 61.

In all the multiple choice questions the numbers in the columns headed 0 (Undecided) and 1 up to a maximum of 9 add up to 400 in Survey Tables 1 to 57, and 136 in Survey Tables 58 to 114. The number of responses declines along the "number of respondents who replied Important" scale, owing to a not unexpected tendency by all respondents to rank fewer and fewer responses as this scale declines in perceived importance.

Where cross-tabulations occur, the precise identity of the respondents is made clear in the appropriate Table; as in Table 47 where opinions are sought from growers who replied "No" to Questionnaire Columns 154 and 155, or in Tables 109 to 114 where opinions are sought from respondents who replied "Important" to Questionnaire Columns 172, 173, 252 and 253.

## 2. Survey Tables 1 to 57 on Questionnaire 1

### SURVEY TABLE 1

### Growers and Cooperative membership

| | Maize | Cotton | Pyrethrum |
|---|---|---|---|
| Number of growers who are members of Cooperatives | 88 | 168 | 332 |
| Number of growers who have never been members | 215 | 170 | 51 |
| Number of growers who have been members but are not now | 97 | 62 | 17 |

SURVEY TABLE 2

Growers' interest in Cooperative Societies

| | Respondents who replied No to Questionnaire Column 4 | | |
|---|---|---|---|
| | Maize | Cotton | Pyrethrum |
| Number of growers interested in joining a Cooperative | 115 | 114 | 41 |
| Number of growers not interested in joining a Cooperative | 197 | 88 | 27 |

SURVEY TABLE 3

**Growers joining Cooperatives**

| | Maize | | Cotton | | Pyrethrum | |
|---|---|---|---|---|---|---|
| | Most | Few | Most | Few | Most | Few |
| Proportions of growers known by respondents to have joined a Cooperative in their locality | 98 | 302 | 165 | 235 | 311 | 89 |

SURVEY TABLE 4

Reasons for non-membership of a Cooperative among Maize growers

| | 312 Maize growers who said No to Questionnaire Column 4 | | | | | |
|---|---|---|---|---|---|---|
| | Number of these respondents who replied | | | | | |
| | Undecided | Important | | | | |
| | 0 | 1 | 2 | 3 | 4 | 5 |
| Deductions from prices paid for produce | 76 | 91 | 54 | 37 | 29 | 25 |
| Higher prices in selling independantly | 66 | 112 | 45 | 38 | 30 | 21 |
| No confidence in the management of the Society's affairs | 82 | 95 | 61 | 34 | 22 | 18 |
| Member subscriptions too high | 79 | 86 | 49 | 39 | 40 | 19 |
| Being owed money by a Society | 81 | 85 | 58 | 31 | 28 | 29 |

SURVEY TABLE 5

Reasons for non-membership of a Cooperative among Cotton growers

| | 232 cotton growers who said No to Questionnaire Column 4 | | | | | |
|---|---|---|---|---|---|---|
| | Number of these respondents who replied | | | | | |
| | Undecided | Important | | | | |
| | 0 | 1 | 2 | 3 | 4 | 5 |
| Deductions from prices paid for produce | 49 | 68 | 53 | 26 | 19 | 17 |
| Higher prices in selling independantly | 57 | 54 | 42 | 30 | 22 | 27 |
| No confidence in the management of the Society's affairs | 40 | 71 | 39 | 37 | 25 | 20 |
| Member subscriptions too high | 50 | 63 | 36 | 31 | 34 | 18 |
| Being owed money by a Society | 37 | 75 | 59 | 25 | 21 | 15 |

SURVEY TABLE 6

Reasons for non-membership of a Cooperative
among Pyrethrum growers

| | 68 pyrethrum growers who said No to Questionnaire Column 4 | | | | | |
|---|---|---|---|---|---|---|
| | Number of these respondents who replied | | | | | |
| | Undecided | Important | | | | |
| | 0 | 1 | 2 | 3 | 4 | 5 |
| Deductions from prices paid for produce | 14 | 21 | 10 | 7 | 12 | 4 |
| Higher prices in selling independantly | 25 | 12 | 18 | 6 | 5 | 2 |
| No confidence in the management of the Society's affairs | 13 | 18 | 13 | 15 | 6 | 3 |
| Member subscriptions too high | 11 | 29 | 14 | 5 | 4 | 5 |
| Being owed money by a Society | 15 | 23 | 12 | 7 | 3 | 8 |

SURVEY TABLE 7

Marketing services offered members by Maize Cooperatives

| | Number of Maize growers who replied | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Undecided | | | | Important | | | | | |
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Advance crop payments | 95 | 66 | 61 | 47 | 41 | 32 | 24 | 19 | 10 | 5 |
| Access to wide markets | 77 | 96 | 50 | 45 | 38 | 37 | 34 | 18 | 3 | 2 |
| Loans for development | 128 | 82 | 51 | 39 | 27 | 36 | 17 | 15 | 2 | 3 |
| Advice on growing methods | 108 | 73 | 57 | 33 | 46 | 41 | 19 | 12 | 9 | 2 |
| Convenient buying points | 58 | 106 | 52 | 27 | 47 | 34 | 17 | 33 | 14 | 12 |
| Guaranteed purchases of produce | 72 | 101 | 58 | 47 | 30 | 33 | 29 | 16 | 9 | 5 |
| Seeds, pesticides, fertilisers and implements at cost | 119 | 55 | 49 | 41 | 39 | 31 | 35 | 17 | 4 | 10 |
| Collection, transport and storage services | 98 | 81 | 35 | 48 | 40 | 31 | 37 | 20 | 3 | 7 |
| Mechanised ploughing of land | 64 | 88 | 61 | 39 | 36 | 43 | 29 | 28 | 7 | 5 |

SURVEY TABLE 8

Marketing services offered members by Cotton Cooperatives

| | Number of Cotton growers who replied | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Undecided | Important | | | | | | | | |
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Advance crop payments | 111 | 58 | 57 | 48 | 33 | 29 | 24 | 19 | 15 | 6 |
| Access to wide markets | 65 | 93 | 52 | 59 | 35 | 41 | 27 | 16 | 9 | 3 |
| Loans for development | 94 | 85 | 49 | 38 | 24 | 55 | 33 | 15 | 3 | 4 |
| Advice on growing methods | 105 | 63 | 70 | 42 | 59 | 22 | 11 | 13 | 7 | 8 |
| Convenient buying points | 96 | 92 | 75 | 41 | 34 | 21 | 25 | 5 | 9 | 2 |
| Guaranteed purchases of produce | 62 | 125 | 43 | 56 | 38 | 44 | 15 | 10 | 4 | 3 |
| Seeds, pesticides, fertilisers and implements at cost | 112 | 53 | 61 | 58 | 30 | 32 | 24 | 13 | 12 | 5 |
| Collection, transport and storage services | 77 | 99 | 46 | 42 | 36 | 27 | 38 | 21 | 8 | 6 |
| Mechanised ploughing of land | 149 | 60 | 17 | 23 | 56 | 35 | 25 | 18 | 13 | 4 |

SURVEY TABLE 9

Marketing services offered members by Pyrethrum Cooperatives

| | Number of Pyrethrum growers who replied | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Undecided | Important | | | | | | | | |
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Advance crop payments | 85 | 79 | 61 | 47 | 36 | 30 | 26 | 24 | 5 | 7 |
| Access to wide markets | 66 | 120 | 59 | 41 | 29 | 26 | 36 | 9 | 12 | 2 |
| Loans for development | 101 | 67 | 51 | 59 | 38 | 34 | 28 | 10 | 7 | 5 |
| Advice on growing methods | 70 | 104 | 64 | 42 | 36 | 29 | 21 | 22 | 9 | 3 |
| Convenient buying points | 83 | 78 | 40 | 47 | 42 | 41 | 34 | 17 | 16 | 2 |
| Guaranteed purchases of produce | 57 | 131 | 53 | 33 | 35 | 31 | 24 | 20 | 13 | 3 |
| Seeds, pesticides, fertilisers and implements at cost | 122 | 72 | 42 | 47 | 36 | 24 | 16 | 22 | 11 | 8 |
| Collection, transport and storage services | 83 | 99 | 55 | 45 | 44 | 23 | 17 | 18 | 10 | 6 |
| Mechanised ploughing of land | 96 | 81 | 59 | 46 | 31 | 25 | 24 | 15 | 19 | 4 |

SURVEY TABLE 10

Advantages non-members have over members of Maize Cooperatives

| | Number of Maize growers who replied | | | | | | |
|---|---|---|---|---|---|---|---|
| | Undecided | Important | | | | | |
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| Freedom to sell where they can obtain the best price | 91 | 141 | 84 | 40 | 29 | 12 | 3 |
| No member subscriptions to pay | 105 | 124 | 60 | 42 | 47 | 14 | 8 |
| Freedom to grow and market any type of crops | 114 | 87 | 56 | 52 | 37 | 35 | 19 |
| Quicker realisation of full cash price for produce | 61 | 156 | 65 | 44 | 49 | 8 | 17 |
| Freedom to manage their own affairs | 82 | 114 | 59 | 62 | 46 | 28 | 9 |
| Direct access to Board Agents | 65 | 103 | 70 | 55 | 48 | 43 | 16 |

SURVEY TABLE 11

Advantages non-members have over members of Cotton Cooperatives

| | Number of Cotton growers who replied | | | | | | |
|---|---|---|---|---|---|---|---|
| | Undecided | Important | | | | | |
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| Freedom to sell where they can obtain the best price | 113 | 139 | 65 | 37 | 24 | 16 | 6 |
| No member subscriptions to pay | 104 | 141 | 54 | 29 | 32 | 25 | 15 |
| Freedom to grow and market any type of crops | 143 | 62 | 80 | 48 | 35 | 23 | 9 |
| Quicker realisation of full cash price for produce | 89 | 160 | 43 | 35 | 44 | 17 | 12 |
| Freedom to manage their own affairs | 133 | 103 | 66 | 50 | 17 | 21 | 10 |
| Direct access to Board Agents | 117 | 95 | 67 | 61 | 50 | 6 | 4 |

SURVEY TABLE 12

Advantages non-members have over members of Pyrethrum Cooperatives

| | Number of Pyrethrum growers who replied | | | | | | |
|---|---|---|---|---|---|---|---|
| | Undecided | Important | | | | | |
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| Freedom to sell where they can obtain the best price | 139 | 87 | 58 | 65 | 30 | 14 | 7 |
| No member subscriptions to pay | 101 | 139 | 72 | 37 | 29 | 19 | 3 |
| Freedom to grow and market any type of crops | 99 | 107 | 49 | 60 | 35 | 34 | 16 |
| Quicker realisation of full cash price for produce | 92 | 144 | 77 | 46 | 24 | 9 | 8 |
| Freedom to manage their own affairs | 113 | 75 | 53 | 72 | 46 | 31 | 10 |
| Direct access to Board Agents | 83 | 92 | 42 | 75 | 53 | 42 | 13 |

SURVEY TABLE 13

Growers without any contacts with Cooperatives or Boards

| | Opinions of respondents who replied No to Questionnaire Columns 57 and 106 | | | | | |
|---|---|---|---|---|---|---|
| | Maize | | Cotton | | Pyrethrum | |
| | Yes | No | Yes | No | Yes | No |
| There should be more working contact between Cooperative Assistants and Board Field staff | 231 | 288 | 314 | 105 | 289 | 123 |
| Cooperative field staff can do more to explain to all growers the purpose and functions of Cooperative Societies | 303 | 216 | 210 | 209 | 135 | 277 |
| Do the Boards take enough interest in the work of the growers? | 274 | 245 | 190 | 229 | 218 | 194 |
| Have the Boards tried to explain to growers what they are there for and how they work? | 215 | 304 | 198 | 221 | 292 | 220 |

SURVEY TABLE 14

Growers' relationships with Board and Cooperative personnel

| | Growers who replied | | | | | |
|---|---|---|---|---|---|---|
| | Maize | | Cotton | | Pyrethrum | |
| | Yes | No | Yes | No | Yes | No |
| Can Board field staff do more to help Cooperatives to improve their services to growers? | 266 | 134 | 231 | 169 | 223 | 177 |
| Is there enough working contact between growers and Cooperative Assistants? | 135 | 265 | 196 | 204 | 157 | 243 |
| Is there any working contact between Cooperative Assistants and Board field staff? | 214 | 186 | 158 | 242 | 211 | 189 |
| Can Cooperative field staff do more to explain to growers the purposes and functions of Cooperatives? | 250 | 150 | 221 | 179 | 214 | 186 |

SURVEY TABLE 15

Research by Marketing Boards

| | Maize | Cotton | Pyrethrum |
|---|---|---|---|
| Growers visited by research or extension teams from Boards | 146 | 185 | 231 |
| Growers who have not been visited by any | 254 | 215 | 169 |
| Growers encouraged by Boards to market new and hybrid crop varieties | 261 | 222 | 243 |
| Growers who have received no such promotion or help | 139 | 178 | 157 |

SURVEY TABLE 16

Board relationships with growers and Agents

| | Growers who replied | | | | | |
|---|---|---|---|---|---|---|
| | Maize | | Cotton | | Pyrethrum | |
| | Yes | No | Yes | No | Yes | No |
| Do you consider that the Boards take enough interest in your work. | 188 | 212 | 264 | 136 | 271 | 129 |
| Do the Boards maintain adequate supervision of their Agents who buy from you | 190 | 210 | 254 | 146 | 322 | 78 |
| Have the Boards tried to explain to you what they are there for and how they work | 171 | 229 | 248 | 152 | 227 | 173 |

SURVEY TABLE 17

Weaknesses in Maize Cooperatives experienced by growers

| | Number of Maize growers who replied | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Undecided | Important | | | | | | |
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Poor or untrained management | 72 | 143 | 51 | 44 | 32 | 39 | 14 | 5 |
| Shortage of ready cash | 91 | 97 | 64 | 47 | 39 | 26 | 20 | 16 |
| Delays in payments to growers | 63 | 127 | 65 | 53 | 46 | 30 | 12 | 4 |
| Dealing in too many other crops | 106 | 96 | 48 | 45 | 37 | 31 | 27 | 10 |
| Prices inferior to those of produce traders | 65 | 110 | 63 | 54 | 46 | 37 | 19 | 6 |
| Lack of member support and interest | 79 | 89 | 50 | 45 | 64 | 33 | 24 | 16 |
| Inability to give help or advice to producers in crop marketing | 74 | 90 | 68 | 39 | 43 | 35 | 34 | 17 |

SURVEY TABLE 18

Weaknesses in Cotton Cooperatives experienced by growers

| | Number of Cotton growers who replied | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Undecided | Important | | | | | | |
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Poor or untrained management | 98 | 117 | 55 | 46 | 43 | 18 | 15 | 8 |
| Shortage of ready cash | 65 | 147 | 92 | 40 | 26 | 19 | 5 | 6 |
| Delays in payments to growers | 93 | 121 | 58 | 76 | 22 | 16 | 11 | 3 |
| Dealing in too many other crops | 138 | 71 | 69 | 59 | 15 | 20 | 23 | 5 |
| Prices inferior to those of produce traders | 91 | 105 | 68 | 42 | 37 | 29 | 18 | 10 |
| Lack of member support and interest | 97 | 73 | 79 | 58 | 41 | 28 | 19 | 5 |
| Inability to give help or advice to producers in crop marketing | 106 | 76 | 61 | 65 | 32 | 37 | 16 | 7 |

SURVEY TABLE 19

Weaknesses in Pyrethrum Cooperatives experienced by growers.

| | Number of Pyrethrum growers who replied | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Undecided | Important | | | | | | |
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Poor or untrained management | 95 | 123 | 70 | 36 | 31 | 20 | 14 | 11 |
| Shortage or ready cash | 77 | 103 | 81 | 55 | 36 | 24 | 30 | 4 |
| Delays in payments to growers | 92 | 94 | 68 | 51 | 39 | 22 | 29 | 5 |
| Dealing in too many other crops | 101 | 75 | 49 | 42 | 68 | 35 | 18 | 12 |
| Prices inferior to those of produce traders | 122 | 60 | 55 | 27 | 65 | 32 | 36 | 3 |
| Lack of member support and interest | 89 | 98 | 75 | 60 | 34 | 17 | 23 | 4 |
| Inability to give help or advice to producers in crop marketing | 92 | 81 | 63 | 39 | 51 | 40 | 25 | 9 |

SURVEY TABLE 20

Members' satisfaction with Cooperative services

| | Maize | Cotton | Pyrethrum |
|---|---|---|---|
| Members satisfied with existing marketing services from their Cooperatives | 31 | 74 | 185 |
| Members who are not satisfied | 57 | 94 | 147 |

SURVEY TABLE 21

Quantities of produce handled by Cooperatives

| | Maize | | Cotton | | Pyrethrum | |
|---|---|---|---|---|---|---|
| | Declining | Increasing | Declining | Increasing | Declining | Increasing |
| Members whose volume of produce sold to Cooperatives is | 47 | 41 | 79 | 89 | 158 | 174 |

SURVEY TABLE 22

High and low profit produce.

| | Growers who replied | | | | | |
|---|---|---|---|---|---|---|
| | Maize | | Cotton | | Pyrethrum | |
| | Cooperative societies | Produce traders | Cooperative societies | Produce traders | Cooperative societies | Produce traders |
| Those dealing in other high profit cash crops | 191 | 250 | 203 | 212 | 268 | 186 |
| Those dealing in other low profit subsistence crops | 209 | 150 | 197 | 188 | 132 | 214 |

SURVEY TABLE 23

Competitive prices and services

| | Maize | | Cotton | | Pyrethrum | |
|---|---|---|---|---|---|---|
| | Higher prices | More services | Higher prices | More services | Higher prices | More services |
| Growers obtaining from buyers other than Cooperatives | 281 | 312 | 297 | 219 | 174 | 203 |

SURVEY TABLE 24

Cooperative Societies and growers' produce.

| | Maize | Cotton | Pyrethrum |
|---|---|---|---|
| Growers who replied that Cooperatives are successfully competing with traders for their produce | 181 | 196 | 255 |
| Growers who replied that Cooperatives are not competing successfully with traders | 219 | 204 | 145 |

SURVEY TABLE 25

Assessment of services by growers marketing produce outside Cooperatives

| The facilities offered by Cooperatives compare badly with those of Board Agents and produce traders in terms of | Opinions of respondents who replied No to Questionnaire Column 37 | | | | | |
|---|---|---|---|---|---|---|
| | Maize | | Cotton | | Pyrethrum | |
| | Yes | No | Yes | No | Yes | No |
| Transport | 143 | 204 | 67 | 192 | 54 | 38 |
| Collection | 156 | 191 | 126 | 133 | 21 | 71 |
| Payments | 281 | 66 | 205 | 54 | 58 | 34 |
| Price | 208 | 139 | 108 | 151 | 49 | 43 |
| Buying points | 272 | 75 | 72 | 187 | 60 | 32 |
| The facilities offered by Board Agents compare badly with those of produce traders in terms of | Maize | | Cotton | | Pyrethrum | |
| | Yes | No | Yes | No | Yes | No |
| Number of buying points | 110 | 237 | 87 | 172 | 28 | 64 |
| Payments for small quantities | 178 | 169 | 143 | 116 | 35 | 57 |

SURVEY TABLE 26

What Cooperatives offer all growers compared with other traders

| | Maize | | | | Cotton | | | | Pyrethrum | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Cooperative Society | | Produce trader | | Cooperative Society | | Produce trader | | Cooperative Society | | Produce trader | |
| | Worse | Better | Worse | Better | Worse | Better | Worse | Better | Worse | Better | Worse | Better |
| Transport facilities | 192 | 208 | 208 | 192 | 182 | 218 | 218 | 182 | 165 | 235 | 235 | 165 |
| Collection facilities | 180 | 220 | 220 | 180 | 173 | 227 | 227 | 173 | 209 | 191 | 191 | 209 |
| Payments | 225 | 175 | 175 | 225 | 239 | 161 | 161 | 239 | 210 | 190 | 190 | 210 |
| Price | 231 | 169 | 169 | 231 | 230 | 170 | 170 | 230 | 194 | 206 | 206 | 194 |
| Buying points | 213 | 187 | 187 | 213 | 221 | 179 | 179 | 221 | 172 | 228 | 228 | 172 |

SURVEY TABLE 27

Competitive buying arrangements

| How these offered by Board Agents compare with what can be obtained from produce traders | Growers who replied | | | | | |
|---|---|---|---|---|---|---|
| | Maize | | Cotton | | Pyrethrum | |
| | Fewer | More | Fewer | More | Fewer | More |
| Number of buying points | 159 | 241 | 284 | 116 | 119 | 281 |
| | Lower | Higher | Lower | Higher | Lower | Higher |
| Payments for small quantities | 192 | 208 | 215 | 185 | 148 | 252 |

SURVEY TABLE 28

Cooperative Society meetings

| | Maize | | Cotton | | Pyrethrum | |
|---|---|---|---|---|---|---|
| | Regularly | Infrequently | Regularly | Infrequently | Regularly | Infrequently |
| Cooperatives thought by growers to hold their meetings | 124 | 276 | 167 | 233 | 224 | 176 |

SURVEY TABLE 29

Attendance by members at Cooperative Society meetings

| | Maize | Cotton | Pyrethrum |
|---|---|---|---|
| Members normally attending | 36 | 86 | 212 |
| Members normally absent | 52 | 82 | 121 |
| Meetings usually well supported | 39 | 99 | 227 |
| Meetings not usually well supported | 49 | 69 | 105 |

SURVEY TABLE 30

Discussion topics at Cooperative Society meetings

| | Members who consider that these are or are not the principal topics of interest | | | | | |
|---|---|---|---|---|---|---|
| | Maize | | Cotton | | Pyrethrum | |
| | Much discussed | Little discussed | Much discussed | Little discussed | Much discussed | Little discussed |
| The day to day problems of the growers | 24 | 64 | 86 | 82 | 231 | 101 |
| The affairs of the Cooperative management | 33 | 55 | 110 | 58 | 229 | 103 |
| The direction of policy within the Cooperative | 30 | 58 | 74 | 94 | 94 | 238 |
| Arrears of subscriptions | 65 | 23 | 109 | 59 | 163 | 169 |
| Late or insufficient payments to producer members | 63 | 25 | 40 | 128 | 145 | 187 |

SURVEY TABLE 31

Growers' opinions of Cooperative Society Secretaries

| | Growers who replied | | | | | |
|---|---|---|---|---|---|---|
| | Maize | | Cotton | | Pyrethrum | |
| | Yes | No | Yes | No | Yes | No |
| Are they looking after growers' interests? | 177 | 223 | 194 | 206 | 211 | 189 |
| Are they competent in their jobs? | 119 | 281 | 175 | 225 | 168 | 232 |
| Are they honest in their handling of Cooperative finances? | 141 | 259 | 112 | 288 | 177 | 223 |

SURVEY TABLE 32

Growers' influence in Cooperatives

| | Maize | Cotton | Pyrethrum |
|---|---|---|---|
| Cooperative members who think they have any say in their Cooperatives | 31 | 71 | 150 |
| Members who consider they have no say | 57 | 97 | 182 |

SURVEY TABLE 33

**Assessment of distributive channels by members of Cooperatives and non-members**

| | Respondents who replied to Questionnaire Column 4 | | | | | |
|---|---|---|---|---|---|---|
| | Maize | | Cotton | | Pyrethrum | |
| | Members | Non-members | Members | Non-members | Members | Non-members |
| Number wishing to sell to produce traders as well as to Cooperatives | 35 | 247 | 37 | 138 | 34 | 59 |
| Number who consider that growers should be free to choose whether or not they join and sell through Cooperatives | 19 | 294 | 53 | 211 | 79 | 60 |
| Number who consider that growers should be obliged to join Cooperatives to sell their produce | 69 | 18 | 115 | 21 | 253 | 8 |
| Number who are selling any produce to traders | 29 | 225 | 20 | 189 | 34 | 40 |
| Number of growers whose volume of produce sold to produce trader exceeds that sold to Board Agents | 10 | 162 | 9 | 146 | 14 | 28 |

SURVEY TABLE 34

**Growers' freedom to market their own produce**

| | Maize | Cotton | Pyrethrum |
|---|---|---|---|
| Growers wishing to sell to [illegible] produce traders as well as to Cooperatives | 282 | 165 | 93 |
| Growers wishing to sell only to Cooperatives | 53 | 131 | 298 |
| Growers wishing to choose whether or not they join Cooperatives | 313 | 264 | 139 |
| Growers who consider that it should be compulsory for all of them to join Cooperatives | 87 | 136 | 261 |

SURVEY TABLE 35

Produce sold direct to Boards and other agencies

| | Maize | Cotton | Pyrethrum |
|---|---|---|---|
| Growers marketing direct to Boards | 277 | 125 | 91 |
| Growers selling to Registered Board Agents | 301 | 113 | 189 |
| Growers selling to Cooperative Societies | 101 | 149 | 360 |
| Growers selling to produce traders | 254 | 209 | 74 |
| Growers selling to licensed processors | 194 | 271 | 301 |

SURVEY TABLE 36

Board Agents and Produce traders.

| | Maize | Cotton | Pyrethrum |
|---|---|---|---|
| Growers who have obtained credit from Agents or traders to whom they sell their produce | 293 | 177 | 99 |
| Growers who have not obtained any such credit | 107 | 223 | 301 |
| Growers whose volume of produce sold to produce traders exceeds what they are selling to registered Board Agents | 172 | 155 | 42 |
| Growers who sell less to traders than to these Agents | 228 | 245 | 358 |

SURVEY TABLE 37

Single and Multi-crop Cooperative Societies

| | Maize | | Cotton | | Pyrethrum | |
|---|---|---|---|---|---|---|
| Growers with experience of both types | 152 | | 189 | | 124 | |
| Growers without experience of both types | 248 | | 211 | | 276 | |
| | Maize | | Cotton | | Pyrethrum | |
| | Multi crop | Single crop | Multi crop | Single crop | Multi crop | Single crop |
| Growers who consider these types of Cooperatives successful | 178 | 216 | 97 | 280 | 143 | 311 |
| Growers who consider these types of Cooperative unsuccessful | 222 | 184 | 303 | 120 | 257 | 89 |

SURVEY TABLE 38

Cooperative monopsony

| Should Cooperative Societies have a monopsony in the buying from small-scale growers? | Growers who replied | | | | | |
|---|---|---|---|---|---|---|
| | Maize | | Cotton | | Pyrethrum | |
| | Yes | No | Yes | No | Yes | No |
| Of selected produce | 257 | 143 | 169 | 231 | 226 | 174 |
| In certain Districts | 162 | 238 | 157 | 243 | 264 | 136 |

SURVEY TABLE 39

Cooperatives marketing direct to Boards

| | Maize | Cotton | Pyrethrum |
|---|---|---|---|
| Growers who have to join a Cooperative before they can sell direct to the Boards | 111 | 208 | 299 |
| Growers who do not have to join a Cooperative to sell to Boards | 289 | 192 | 101 |

SURVEY TABLE 40

Board quantity differentials

| | Growers who replied | | | | | |
|---|---|---|---|---|---|---|
| | Maize | | Cotton | | Pyrethrum | |
| | Yes | No | Yes | No | Yes | No |
| In your locality, does the amount of produce you market determine whether or not you sell directly to the Boards? | 247 | 153 | 185 | 215 | 312 | 88 |
| Where this system of quantity differentials applies, is it a satisfactory arrangement for the growers? | 149 | 251 | 199 | 201 | 294 | 106 |

SURVEY TABLE 41

Processing of produce.

| | Maize | Cotton | Pyrethrum |
|---|---|---|---|
| Growers whose produce is all processed by the Boards | 105 | 76 | 320 |
| Growers whose produce is processed independently by private concerns | 295 | 324 | 80 |
| Growers who sell their produce to processors at prices controlled by the Boards | 167 | 308 | 331 |
| Growers who consider that some of the increased revenue deriving from the sale of processed products should be paid to them | 232 | 188 | 113 |
| Growers who consider that all such revenue from processing should be retained by the Boards in reserve | 168 | 212 | 287 |

SURVEY TABLE 42

Maize Board marketing services to growers

| | Number of Maize growers who replied | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Undecided | Important | | | | | | | | |
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Price guarantees in advance | 69 | 109 | 42 | 38 | 35 | 51 | 25 | 28 | 17 | 6 |
| Forward buying | 101 | 78 | 49 | 37 | 38 | 27 | 22 | 20 | 15 | 13 |
| Selling surpluses overseas | 108 | 81 | 45 | 40 | 34 | 29 | 24 | 19 | 12 | 8 |
| Market research | 115 | 68 | 57 | 33 | 27 | 44 | 19 | 16 | 18 | 3 |
| Guaranteeing a market | 75 | 96 | 50 | 41 | 31 | 35 | 28 | 23 | 13 | 8 |
| Registering Agents to buy produce | 73 | 133 | 51 | 30 | 28 | 25 | 23 | 17 | 16 | 4 |
| PProtecting market by controlling entry | 107 | 59 | 53 | 51 | 43 | 26 | 20 | 24 | 11 | 6 |
| Sorting, grading and packing produce | 80 | 88 | 49 | 36 | 40 | 30 | 22 | 25 | 19 | 11 |
| Licensing growers | 136 | 63 | 39 | 43 | 35 | 24 | 25 | 16 | 10 | 9 |
| Buying all the quality produce grown | 63 | 127 | 79 | 45 | 24 | 22 | 19 | 12 | 9 | 2 |
| Stockholding | 81 | 89 | 56 | 49 | 37 | 28 | 23 | 18 | 12 | 7 |
| Ensuring stable incomes for producers | 79 | 99 | 53 | 38 | 39 | 21 | 30 | 19 | 14 | 8 |
| Operating cesses or levies for its services | 77 | 75 | 71 | 48 | 38 | 29 | 20 | 22 | 15 | 5 |
| Granting monopoly trading rights | 84 | 112 | 66 | 36 | 25 | 24 | 16 | 17 | 11 | 9 |
| Processing produce locally | 72 | 74 | 58 | 50 | 44 | 30 | 25 | 16 | 21 | 10 |
| Acceptance of minimum quantities which growers can deliver direct to Board depots | 76 | 90 | 71 | 57 | 27 | 21 | 31 | 14 | 10 | 3 |

SURVEY TABLE 43

Cotton Board marketing services to growers

| | Number of Cotton growers who replied | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Undecided | Important | | | | | | | | |
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Price guarantees in advance | 59 | 145 | 42 | 29 | 41 | 22 | 17 | 29 | 12 | 4 |
| Forward buying | 67 | 111 | 60 | 46 | 25 | 33 | 32 | 10 | 9 | 7 |
| Selling surpluses overseas | 64 | 96 | 55 | 48 | 29 | 30 | 23 | 26 | 19 | 10 |
| Market research | 117 | 60 | 56 | 31 | 48 | 18 | 36 | 16 | 13 | 5 |
| Guaranteeing a market | 72 | 92 | 67 | 57 | 22 | 21 | 25 | 12 | 18 | 14 |
| Registering Agents to buy produce | 79 | 87 | 72 | 39 | 29 | 20 | 28 | 17 | 21 | 8 |
| Protecting market by controlling entry | 92 | 66 | 41 | 44 | 57 | 35 | 15 | 25 | 16 | 9 |
| Sorting, grading and packing produce | 81 | 98 | 63 | 40 | 38 | 23 | 16 | 19 | 10 | 12 |
| Licensing growers | 122 | 68 | 45 | 63 | 32 | 18 | 24 | 14 | 11 | 3 |
| Buying all the quality produce grown | 74 | 105 | 37 | 42 | 54 | 27 | 17 | 12 | 21 | 11 |
| Stockholding | 103 | 67 | 42 | 49 | 25 | 30 | 26 | 19 | 26 | 13 |
| Ensuring stable incomes for producers | 46 | 122 | 75 | 38 | 43 | 20 | 28 | 18 | 8 | 2 |
| Operating cesses or levies for its services | 71 | 87 | 59 | 51 | 29 | 15 | 44 | 26 | 12 | 6 |
| Granting monopoly trading rights | 55 | 81 | 58 | 60 | 16 | 36 | 49 | 21 | 14 | 10 |
| Processing produce locally | 62 | 114 | 45 | 41 | 30 | 24 | 28 | 17 | 31 | 8 |
| Acceptance of minimum quantities which growers can deliver direct to Board depots | 78 | 67 | 47 | 55 | 25 | 40 | 16 | 39 | 22 | 11 |

SURVEY TABLE 44

Pyrethrum Marketing Board services to growers

| | Number of Pyrethrum growers who replied | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Undecided | Important | | | | | | | | |
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Price guarantees in advance | 76 | 116 | 63 | 40 | 29 | 18 | 24 | 21 | 9 | 4 |
| Forward buying | 79 | 95 | 54 | 51 | 34 | 27 | 16 | 35 | 6 | 3 |
| Selling surpluses overseas | 84 | 82 | 57 | 39 | 22 | 34 | 23 | 32 | 18 | 9 |
| Market research | 67 | 103 | 50 | 44 | 45 | 26 | 33 | 16 | 10 | 6 |
| Guaranteeing a market | 78 | 96 | 66 | 36 | 29 | 25 | 34 | 14 | 15 | 7 |
| Registering Agents to buy produce | 116 | 59 | 43 | 35 | 30 | 28 | 35 | 23 | 17 | 14 |
| Protecting market by controlling entry | 64 | 102 | 45 | 47 | 37 | 32 | 24 | 16 | 28 | 5 |
| Sorting, grading and packing produce | 71 | 83 | 52 | 36 | 39 | 30 | 35 | 24 | 20 | 10 |
| Licensing growers | 69 | 113 | 65 | 38 | 34 | 21 | 16 | 19 | 14 | 11 |
| Buying all the quality produce grown | 86 | 112 | 48 | 43 | 36 | 29 | 24 | 13 | 7 | 2 |
| Stockholding | 77 | 93 | 63 | 48 | 22 | 23 | 31 | 22 | 16 | 5 |
| Ensuring stable incomes for producers | 61 | 102 | 49 | 52 | 32 | 40 | 15 | 24 | 17 | 8 |
| Operating cesses or levies for its services | 83 | 77 | 55 | 40 | 43 | 28 | 19 | 33 | 13 | 9 |
| Granting monopoly trading rights | 110 | 62 | 50 | 43 | 32 | 30 | 22 | 27 | 18 | 6 |
| Processing produce locally | 73 | 109 | 59 | 37 | 36 | 18 | 24 | 23 | 11 | 10 |
| Acceptance of minimum quantities which growers can deliver direct to Board depots | 95 | 71 | 58 | 40 | 28 | 44 | 26 | 16 | 15 | 7 |

SURVEY TABLE 45

Marketing Board quotas

| | Maize | Cotton | Pyrethrum |
|---|---|---|---|
| Growers who have quotas applied to their produce by quantity or quality | 122 | 159 | 318 |
| Growers who have not experienced any quotas | 278 | 241 | 82 |

SURVEY TABLE 46

Levies and cesses on growers.

| | Maize | Cotton | Pyrethrum |
|---|---|---|---|
| Growers who know what levies the Boards raise on their produce | 158 | 205 | 237 |
| Growers who are not aware of any levies | 242 | 195 | 163 |
| Growers whose produce is subject to a cess imposed by their local authority | 299 | 374 | 130 |
| Growers whose produce is not subject to any cess | 101 | 26 | 270 |
| Growers who understand how such levies are used | 172 | 213 | 252 |
| Growers who do not understand how these levies are used | 228 | 187 | 148 |
| Growers who know how these levies are raised | 143 | 204 | 165 |
| Growers who do not know how these levies are raised | 257 | 196 | 235 |
| Growers who understand why such levies are operated | 198 | 240 | 139 |
| Growers who do not understand why these levies are operated | 202 | 160 | 261 |

SURVEY TABLE 47

Growers dissatisfied with the way pay-outs are made to producers by the Boards

| | Opinions of respondents who replied No to Questionnaire Columns 154 and 155 | | | | | |
|---|---|---|---|---|---|---|
| | Maize | | Cotton | | Pyrethrum | |
| | Yes | No | Yes | No | Yes | No |
| Producer prices should be fixed in advance | 192 | 45 | 201 | 60 | 112 | 45 |
| There should be guaranteed minimum prices | 117 | 120 | 132 | 129 | 68 | 89 |
| There should be guaranteed price ranges | 108 | 129 | 197 | 64 | 133 | 24 |
| There should be fixed prices only | 183 | 54 | 86 | 175 | 48 | 109 |
| There have been variations between the prices announced to these growers for their produce and the prices subsequently obtained | 205 | 32 | 143 | 118 | 47 | 110 |
| There are times when these growers can obtain higher prices for their produce than those offered by the Boards | 131 | 106 | 73 | 188 | 32 | 125 |

SURVEY TABLE 48

The fixing of producer prices by the Boards

| | Maize | Cotton | Pyrethrum |
|---|---|---|---|
| Number of growers preferring producer prices to be fixed in advance | 310 | 293 | 249 |
| Number of growers preferring guaranteed minimum prices | 291 | 196 | 177 |
| Number of growers preferring Boards to offer guaranteed price ranges | 168 | 284 | 289 |
| Number of growers preferring fixed prices only | 189 | 135 | 242 |

SURVEY TABLE 49

The payment of producer prices by the Boards

| | Maize | Cotton | Pyrethrum |
|---|---|---|---|
| Growers who have experienced variations between prices gazetted by the Boards and the prices subsequently obtained | 278 | 215 | 183 |
| Growers who have not experienced any such price variations | 122 | 185 | 217 |
| Growers who wish support prices to be operated only in times of over-production | 109 | 44 | 260 |
| Growers wishing such support prices to be in force continuously | 291 | 356 | 140 |
| Growers who can sometimes obtain higher prices for their produce than those offered by the Boards | 235 | 119 | 87 |
| Growers who cannot obtain higher prices elsewhere | 165 | 181 | 313 |
| Growers who are offered price differentials by the Boards for lower qualities of produce | 302 | 325 | 347 |
| Growers who are not offered any such price differentials | 98 | 75 | 53 |
| Growers who have difficulties meeting the quality standards required to obtain the Boards' best prices | 173 | 192 | 289 |
| Growers who have no difficulties in meeting such quality standards | 227 | 208 | 111 |
| Growers who consider that Boards should continue to offer these quality differentials | 283 | 190 | 237 |
| Growers who consider that Boards should not offer such differentials | 117 | 210 | 163 |

SURVEY TABLE 50

Boards' pay-outs and surpluses.

| | Maize | Cotton | Pyrethrum |
|---|---|---|---|
| Number of growers satisfied with the way pay-outs are made when the Boards' resale prices are less than guaranteed producer prices | 163 | 139 | 235 |
| Growers dissatisfied with such pay-outs | 237 | 261 | 165 |
| Number of growers satisfied with the way pay-outs are made when the Boards' resale prices exceed guaranteed producer prices | 116 | 108 | 243 |
| Growers dissatisfied with these pay-outs | 284 | 292 | 157 |
| Number of growers who consider that surpluses earned by the Boards in their current trading should be utilised to provide improved services to growers | 278 | 141 | 293 |
| Growers who consider that such surpluses should be paid out directly to growers in the year in which they are earned | 122 | 259 | 107 |

SURVEY TABLE 51

Growers' complaints against the Boards

| | Low prices paid to producers because of deductions by Boards | | |
|---|---|---|---|
| | Maize | Cotton | Pyrethrum |
| Growers who complain | 281 | 268 | 205 |
| Growers who do not complain | 119 | 132 | 195 |

| | Heavy expenses of Boards borne by producers | | |
|---|---|---|---|
| | Maize | Cotton | Pyrethrum |
| Growers who complain | 293 | 230 | 208 |
| Growers who do not complain | 107 | 170 | 192 |

SURVEY TABLE 52

Ways in which Marketing Board services to Maize growers can be improved

| | Number of Maize growers who replied | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Undecided | Important | | | | | | | | |
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| More buying points | 87 | 97 | 48 | 45 | 35 | 36 | 20 | 12 | 15 | 5 |
| Quicker payments | 86 | 104 | 67 | 39 | 27 | 23 | 18 | 13 | 14 | 9 |
| More advice and assistance in the field | 97 | 73 | 56 | 48 | 46 | 22 | 29 | 16 | 10 | 3 |
| Higher support prices | 62 | 135 | 71 | 43 | 26 | 20 | 15 | 14 | 8 | 6 |
| Research services | 93 | 84 | 64 | 50 | 36 | 26 | 17 | 10 | 12 | 8 |
| Lower levies on produce | 64 | 102 | 70 | 45 | 35 | 30 | 23 | 18 | 9 | 4 |
| Increasing local processing facilities | 83 | 95 | 54 | 47 | 40 | 33 | 16 | 15 | 10 | 7 |
| Extending agencies to Cooperatives | 100 | 123 | 61 | 26 | 22 | 29 | 11 | 9 | 13 | 6 |
| Financial assistance to growers | 79 | 77 | 64 | 58 | 32 | 24 | 26 | 19 | 11 | 10 |
| Provision of seeds fertilisers and sacks | 108 | 70 | 53 | 35 | 47 | 29 | 17 | 20 | 13 | 8 |
| Announcement of buying prices during the planting season | 70 | 121 | 57 | 41 | 37 | 22 | 26 | 11 | 8 | 7 |

SURVEY TABLE 53

Ways in which Marketing Board services to Cotton growers can be improved

| | Number of Cotton growers who replied | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Undecided | Important | | | | | | | | |
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| More buying points | 65 | 129 | 56 | 44 | 38 | 22 | 15 | 18 | 8 | 5 |
| Quicker payments | 59 | 90 | 71 | 47 | 54 | 23 | 13 | 27 | 9 | 7 |
| More advice and assistance in the field | 105 | 75 | 54 | 42 | 38 | 28 | 21 | 15 | 16 | 6 |
| Higher support prices | 74 | 107 | 53 | 40 | 32 | 24 | 30 | 12 | 19 | 9 |
| Research services | 87 | 93 | 61 | 49 | 27 | 40 | 18 | 17 | 6 | 2 |
| Lower levies on produce | 80 | 112 | 44 | 34 | 39 | 29 | 21 | 20 | 13 | 8 |
| Increasing local processing facilities | 79 | 99 | 65 | 50 | 33 | 28 | 20 | 16 | 7 | 3 |
| Extending agencies to Cooperatives | 68 | 70 | 59 | 58 | 45 | 37 | 17 | 23 | 12 | 11 |
| Financial assistance to growers | 71 | 115 | 73 | 42 | 29 | 16 | 22 | 18 | 9 | 5 |
| Provision of seeds, fertilisers and sacks | 73 | 69 | 56 | 51 | 44 | 40 | 17 | 28 | 13 | 9 |
| Announcement of buying prices during the planting season | 72 | 102 | 49 | 37 | 43 | 33 | 30 | 20 | 8 | 6 |

SURVEY TABLE 54

Ways in which Marketing Board services to Pyrethrum growers can be improved

| | Number of Pyrethrum growers who replied | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Undecided | Important | | | | | | | | |
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| More buying points | 91 | 90 | 62 | 31 | 36 | 22 | 29 | 18 | 14 | 7 |
| Quicker payments | 84 | 74 | 70 | 49 | 33 | 39 | 20 | 13 | 16 | 2 |
| More advice and assistance in the field | 62 | 96 | 57 | 34 | 52 | 26 | 23 | 25 | 15 | 10 |
| Higher support prices | 91 | 69 | 58 | 53 | 24 | 37 | 32 | 22 | 9 | 5 |
| Research services | 65 | 71 | 63 | 54 | 30 | 48 | 24 | 17 | 19 | 9 |
| Lower levies on produce | 102 | 64 | 58 | 47 | 37 | 31 | 25 | 18 | 12 | 6 |
| Increasing local processing facilities | 80 | 88 | 53 | 56 | 32 | 22 | 28 | 27 | 11 | 3 |
| Extending agencies to Cooperatives | 79 | 81 | 76 | 49 | 35 | 24 | 20 | 15 | 13 | 8 |
| Financial assistance to growers | 72 | 70 | 61 | 57 | 34 | 42 | 23 | 17 | 15 | 9 |
| Provision of seeds, fertilisers and sacks | 77 | 62 | 53 | 59 | 37 | 27 | 34 | 22 | 18 | 11 |
| Announcement of buying prices during the planting season | 81 | 79 | 56 | 46 | 42 | 36 | 21 | 19 | 12 | 8 |

SURVEY TABLE 55

Government and Cooperative Societies

| | Maize | Cotton | Pyrethrum |
|---|---|---|---|
| Number of growers who consider that it is Government's responsibility to see that Cooperatives improve their services to growers | 303 | 342 | 221 |
| Number of growers who think that it is not the responsibility of Government | 97 | 58 | 179 |

SURVEY TABLE 56

Cooperatives and marketing services

| Can Cooperatives take over more of the marketing services at present provided by | Growers who replied | | | | | |
|---|---|---|---|---|---|---|
| | Maize | | Cotton | | Pyrethrum | |
| | Yes | No | Yes | No | Yes | No |
| Board Agents | 250 | 150 | 281 | 119 | 327 | 73 |
| Produce traders | 207 | 193 | 198 | 202 | 178 | 222 |
| Licensed Processors | 165 | 235 | 296 | 104 | 111 | 289 |

SURVEY TABLE 57

Assessment of Cooperative performance by members of Cooperatives and non-members

| Cooperatives can take over more of the marketing services at present provided by | Respondents who replied to Column 4 | | | | | |
|---|---|---|---|---|---|---|
| | Maize | | Cotton | | Pyrethrum | |
| | Members | Non-members | Members | Non-members | Members | Non-members |
| Board Agents | 83 | 167 | 113 | 168 | 278 | 49 |
| Produce traders | 79 | 128 | 137 | 61 | 140 | 38 |
| Licensed Processors | 44 | 121 | 158 | 138 | 97 | 14 |

3. Survey Tables 58 to 114 on Questionnaires 2 and 3

SURVEY TABLE 58

Joint marketing by Boards and Cooperatives.

<table>
<tr><td rowspan="3"></td><td colspan="6">Board respondents who replied</td></tr>
<tr><td colspan="2">Maize</td><td colspan="2">Cotton</td><td colspan="2">Pyrethrum</td></tr>
<tr><td>Yes</td><td>No</td><td>Yes</td><td>No</td><td>Yes</td><td>No</td></tr>
<tr><td>Is the delivery of produce by Primary Cooperatives and its collection by Boards working well in your District?</td><td>60</td><td>76</td><td>78</td><td>58</td><td>89</td><td>47</td></tr>
<tr><td rowspan="5">Is the marketing of this produce by Boards and Cooperative Unions satisfactory outside your District?</td><td>66</td><td>70</td><td>81</td><td>55</td><td>93</td><td>43</td></tr>
<tr><td colspan="6">Cooperative respondents who replied</td></tr>
<tr><td colspan="2">Maize</td><td colspan="2">Cotton</td><td colspan="2">Pyrethrum</td></tr>
<tr><td>Yes</td><td>No</td><td>Yes</td><td>No</td><td>Yes</td><td>No</td></tr>
<tr><td>42</td><td>94</td><td>45</td><td>91</td><td>85</td><td>51</td></tr>
<tr><td>Is this delivery and collection of produce working well in your District?</td><td>54</td><td>82</td><td>83</td><td>53</td><td>55</td><td>81</td></tr>
</table>

SURVEY TABLE 59

Opinions of Maize respondents dissatisfied with the joint marketing of maize by Board and Cooperatives.

| | Maize Board respondents who replied No to Questionnaire Columns 164 and 165 | | Maize Cooperative respondents who replied No to Questionnaire Columns 244 and 245 | |
|---|---|---|---|---|
| | Yes | No | Yes | No |
| Cooperatives should have more autonomy in the marketing of their produce | 19 | 51 | 59 | 23 |
| They would be able to undertake more of their own marketing | 32 | 38 | 52 | 30 |
| Cooperatives should sell direct to produce traders and other buyers | 39 | 31 | 42 | 40 |
| The Board should continue buying direct from growers or traders in Districts where Cooperatives are dealing in the same produce | 54 | 16 | 22 | 60 |

SURVEY TABLE 60

Opinions of Cotton respondents dissatisfied with the joint marketing of Cotton by Board and Cooperatives.

| | Cotton Board respondents who replied No to Questionnaire Columns 164 and 165 | | Cotton Cooperative respondents who replied No to Questionnaire Columns 244 and 245 | |
|---|---|---|---|---|
| | Yes | No | Yes | No |
| Cooperatives should have more autonomy in the marketing of their produce | 32 | 23 | 33 | 20 |
| They would be able to undertake more of their own marketing | 27 | 28 | 32 | 21 |
| Cooperatives should sell direct to produce traders and other buyers | 16 | 39 | 35 | 18 |
| The Board should continue buying direct from growers or traders in Districts where Cooperatives are dealing in the same produce | 34 | 21 | 15 | 38 |

SURVEY TABLE 61

Opinions of Pyrethrum respondents dissatisfied with the joint marketing of Pyrethrum by Board and Cooperatives

| | Pyrethrum Board respondents who replied No to Questionnaire Columns 164 and 165 | | Pyrethrum Cooperative respondents who replied No to Questionnaire Columns 244 and 245 | |
|---|---|---|---|---|
| | Yes | No | Yes | No |
| Cooperatives should have more autonomy in the marketing of their produce | 17 | 26 | 26 | 25 |
| They would be able to undertake more of their own marketing | 19 | 24 | 31 | 20 |
| Cooperatives should sell direct to produce traders and other buyers | 12 | 31 | 25 | 26 |
| The Board continue to buy direct from growers or traders in Districts where Cooperatives are dealing in the same produce | 30 | 13 | 22 | 29 |

SURVEY TABLE 62

Cooperatives' control of marketing

| | Opinions of all respondents | | | | | |
|---|---|---|---|---|---|---|
| | Maize | | Cotton | | Pyrethrum | |
| | Board | Cooperative | Board | Cooperative | Board | Cooperative |
| Cooperatives should have more autonomy in the marketing of their produce | 81 | 89 | 71 | 82 | 43 | 53 |
| They should not have more autonomy | 55 | 47 | 65 | 54 | 93 | 83 |
| Cooperatives would be able to undertake more of their own marketing | 50 | 77 | 69 | 59 | 47 | 70 |
| They would not be able to undertake it | 86 | 59 | 67 | 77 | 89 | 66 |

SURVEY TABLE 63

Distribution channels of the Maize Board and Maize Cooperatives

| | Board respondents who replied | | Cooperative respondents who replied | |
|---|---|---|---|---|
| | Yes | No | Yes | No |
| Ought Cooperatives to market their produce only to the Board | 83 | 53 | 57 | 79 |
| Should the Board require growers to join a Cooperative if they wish to market certain crops | 80 | 56 | 98 | 38 |
| Should Cooperatives sell direct to produce traders and other buyers | 86 | 50 | 47 | 89 |
| Ought the Board to go on buying direct from growers or traders in Districts where there are Cooperatives dealing in the same produce | 90 | 46 | 49 | 87 |

SURVEY TABLE 64

Distribution channels of the Cotton Board and Cotton Cooperatives

| | Board respondents who replied | | Cooperative respondents who replied | |
|---|---|---|---|---|
| | Yes | No | Yes | No |
| Ought Cooperatives to continue marketing their produce only to the Board | 94 | 42 | 85 | 51 |
| Should the Board require growers to join a Cooperative if they wish to market certain crops | 43 | 93 | 79 | 57 |
| Should Cooperatives sell direct to produce traders and other buyers | 89 | 47 | 38 | 98 |
| Ought the Board to go on buying direct from growers or traders in Districts where there are Cooperatives dealing in the same produce | 102 | 34 | 39 | 97 |

SURVEY TABLE 65

Distribution channels of the Pyrethrum Board

Pyrethrum Cooperatives

| | Board respondents who replied | | Cooperative respondents who replied | |
|---|---|---|---|---|
| | Yes | No | Yes | No |
| Ought Cooperatives to continue marketing their produce only to the Board | 105 | 31 | 84 | 52 |
| Should the Board require growers to join a Cooperative if they wish to market certain crops | 109 | 27 | 89 | 47 |
| Should Cooperatives sell direct to produce traders and other buyers | 25 | 111 | 71 | 65 |
| Ought the Board to go on buying direct from growers or traders in Districts where there are Cooperatives dealing in the same produce | 98 | 38 | 63 | 73 |

SURVEY TABLE 66

**Improvements in the joint marketing of Maize by Board and Cooperatives**

| | Number of Maize Board respondents who replied | | | | | | |
|---|---|---|---|---|---|---|---|
| | Undecided | Important | | | | | |
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| More Cooperatives appointed as Board Agents | 24 | 37 | 27 | 20 | 13 | 11 | 4 |
| Regular contacts at District level between Cooperative Assistants and Board Agents | 28 | 31 | 18 | 23 | 17 | 10 | 9 |
| Joint working groups to investigate marketing problems by commodity or area | 30 | 38 | 21 | 18 | 13 | 9 | 7 |
| Granting mohopoly buying rights to Cooperatives to resell to the Board | 20 | 29 | 25 | 24 | 22 | 14 | 2 |
| Greater involvement by the Board in maintaining higher standards of service by Cooperatives | 25 | 41 | 26 | 21 | 12 | 8 | 3 |
| Parity of terms, payment and agency services | 33 | 27 | 17 | 16 | 26 | 12 | 5 |

SURVEY TABLE 67

Improvements in the joint marketing of Maize by Board and Cooperatives

| | Number of Maize Cooperative respondents who replied | | | | | | |
|---|---|---|---|---|---|---|---|
| | Undecided | Important | | | | | |
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| More Cooperative appointed as Board Agents | 22 | 43 | 28 | 15 | 11 | 13 | 4 |
| Regular contacts at District level between Cooperative Assistants and Board Agents | 26 | 27 | 25 | 13 | 17 | 18 | 10 |
| Joint working groups to investigate marketing problems by commodity or area | 32 | 29 | 21 | 14 | 19 | 14 | 7 |
| Granting monopoly buying rights to Cooperatives to re-sell to the Board | 24 | 39 | 30 | 23 | 7 | 8 | 5 |
| Greater involvement by the Board in maintaining higher standards of service by Cooperatives | 21 | 31 | 22 | 18 | 25 | 11 | 8 |
| Parity of terms, payment and agency services | 28 | 35 | 26 | 17 | 15 | 6 | 9 |

SURVEY TABLE 68

**Improvements in the joint marketing of Cotton by Board and Cooperatives**

| | Number of Cotton Board respondents who replied | | | | | | |
|---|---|---|---|---|---|---|---|
| | Undecided | Important | | | | | |
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| More Cooperatives appointed as Board Agents | 31 | 33 | 24 | 19 | 12 | 15 | 2 |
| Regular contacts at District level between Cooperative Assistants and Board Agents | 28 | 40 | 23 | 9 | 19 | 10 | 7 |
| Joint working groups to investigate marketing problems by commodity or area | 24 | 26 | 24 | 20 | 16 | 21 | 5 |
| Granting monopoly buying rights to Cooperatives to resell to the Board | 40 | 24 | 29 | 18 | 13 | 3 | 9 |
| Greater involvement by the Board in maintaining higher standards of service by Cooperatives | 21 | 34 | 31 | 21 | 17 | 4 | 8 |
| Parity of terms, payment and agency services | 26 | 29 | 18 | 23 | 22 | 12 | 6 |

SURVEY TABLE 69

Improvements in the joint marketing of Cotton by Board and Cooperatives.

| | Number of Cotton Cooperative respondents who replied | | | | | | |
|---|---|---|---|---|---|---|---|
| | Undecided | Important | | | | | |
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| More Cooperatives appointed as Board Agents | 28 | 29 | 24 | 20 | 14 | 16 | 5 |
| Regular contacts at District level between Cooperative Assistants and Board Agents | 30 | 31 | 19 | 26 | 13 | 7 | 10 |
| Joint working groups to investigate marketing problems by commodity or area | 23 | 39 | 26 | 17 | 20 | 8 | 3 |
| Granting monopoly buying rights to Cooperatives to resell to the Board | 31 | 28 | 23 | 19 | 12 | 15 | 8 |
| Greater involvement by the Board in maintaining higher standards of service by Cooperatives | 22 | 31 | 34 | 18 | 14 | 11 | 6 |
| Parity of terms, payment and agency services | 27 | 37 | 19 | 21 | 10 | 13 | 9 |

SURVEY TABLE 70

Improvements in the joint marketing of Pyrethrum by Board and Cooperatives.

| | Number of Pyrethrum Board respondents who replied | | | | | | |
|---|---|---|---|---|---|---|---|
| | Undecided | Important | | | | | |
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| More Cooperatives appointed as Board Agents | 38 | 26 | 23 | 17 | 14 | 10 | 8 |
| Regular contacts at District level between Cooperative Assistants and Board Agents | 25 | 32 | 29 | 21 | 13 | 14 | 2 |
| Joint working groups to investigate marketing problems by commodity or area | 30 | 33 | 22 | 25 | 10 | 11 | 5 |
| Granting monopoly buying rights to Cooperatives to re-sell to the Board | 41 | 27 | 21 | 13 | 25 | 3 | 6 |
| Greater involvement by the Board in maintaining higher standards of service by Cooperatives | 23 | 40 | 27 | 23 | 15 | 5 | 3 |
| Parity of terms, payment and agency services | 29 | 42 | 21 | 18 | 13 | 4 | 9 |

SURVEY TABLE 71

Improvements in the joint marketing of Pyrethrum by Board and Cooperatives

| | Number of Pyrethrum Cooperative respondents who replied | | | | | | |
|---|---|---|---|---|---|---|---|
| | Undecided | Important | | | | | |
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| More Cooperatives appointed as Board Agents | 39 | 30 | 27 | 15 | 12 | 4 | 9 |
| Regular contacts at District level between Cooperative Assistants and Board Agents | 26 | 31 | 28 | 13 | 17 | 16 | 5 |
| Joint working groups to investigate marketing problems by commodity or area | 31 | 40 | 25 | 19 | 9 | 8 | 4 |
| Granting monopoly buying rights to Cooperatives to resell to the Board | 29 | 32 | 26 | 16 | 15 | 11 | 7 |
| Greater involvement by the Board in maintaining higher standards of service by Cooperatives | 27 | 41 | 29 | 14 | 13 | 9 | 3 |
| Parity of terms, payment and agency services | 24 | 30 | 21 | 20 | 19 | 14 | 8 |

SURVEY TABLE 72

Difficulties in Board marketing of Maize

| | Number of Maize Board respondents who replied | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Undecided | Important | | | | | | | | |
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Shortage of trained management at the Board's headquarters | 20 | 25 | 23 | 15 | 11 | 12 | 7 | 13 | 4 | 6 |
| Insufficient experienced Area managers and Field officers | 22 | 19 | 14 | 21 | 17 | 10 | 15 | 5 | 9 | 4 |
| Weaknesses in Cooperative Primary societies | 16 | 31 | 24 | 20 | 11 | 17 | 4 | 8 | 3 | 2 |
| Political intervention by Government | 19 | 23 | 26 | 13 | 18 | 11 | 8 | 6 | 5 | 7 |
| Finance required to back support prices | 18 | 20 | 13 | 17 | 14 | 12 | 10 | 12 | 15 | 5 |
| Lack of market research | 29 | 15 | 20 | 10 | 25 | 16 | 4 | 6 | 8 | 3 |
| Integrating the grading, processing and packing stages before resale | 15 | 22 | 19 | 21 | 12 | 13 | 10 | 7 | 9 | 8 |
| The need to diversify cash crop varieties | 27 | 20 | 24 | 14 | 9 | 17 | 6 | 10 | 3 | 6 |
| Meeting the marketing costs of the Board | 20 | 24 | 21 | 19 | 14 | 8 | 11 | 9 | 7 | 3 |
| Few technical staff to liaise with Ministry of Agriculture on crop marketing | 17 | 23 | 22 | 16 | 15 | 9 | 10 | 12 | 8 | 4 |

SURVEY TABLE 73

Difficulties in Board marketing of Maize

| | Number of Maize Cooperative respondents who replied | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Undecided | Important | | | | | | | | |
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Shortage of trained management at the Board's headquarters | 19 | 27 | 18 | 22 | 8 | 11 | 14 | 5 | 9 | 3 |
| Insufficient experienced Area managers and Field Officers | 20 | 26 | 24 | 19 | 10 | 7 | 13 | 9 | 6 | 2 |
| Weaknesses in Cooperative Primary societies | 29 | 19 | 12 | 20 | 11 | 15 | 8 | 13 | 5 | 4 |
| Political intervention by Government | 18 | 25 | 23 | 16 | 10 | 14 | 7 | 6 | 9 | 8 |
| Finance required to back support prices | 16 | 23 | 21 | 18 | 15 | 8 | 12 | 7 | 11 | 5 |
| Lack of market research | 21 | 24 | 20 | 16 | 14 | 9 | 10 | 12 | 7 | 3 |
| Integrating the grading, processing and packing stages before resale | 17 | 25 | 19 | 22 | 13 | 12 | 8 | 14 | 4 | 2 |
| The need to diversify cash crop varieties | 23 | 20 | 13 | 17 | 16 | 15 | 7 | 9 | 10 | 6 |
| Meeting the marketing costs of the Board | 16 | 27 | 22 | 19 | 10 | 14 | 8 | 6 | 9 | 5 |
| Few technical staff to liaise with Ministry of Agriculture on crop marketing | 27 | 23 | 22 | 13 | 12 | 17 | 9 | 6 | 5 | 2 |

SURVEY TABLE 74

Difficulties in Board marketing of Cotton

| | Number of Cotton Board respondents who replied | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Undecided | Important | | | | | | | | |
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Shortage of trained management at the Board's headquarters | 23 | 15 | 21 | 18 | 20 | 13 | 11 | 7 | 3 | 5 |
| Insufficient experienced Area managers and Field Officers | 24 | 22 | 19 | 17 | 11 | 16 | 9 | 10 | 6 | 2 |
| Weaknesses in Cooperative Primary societies | 18 | 30 | 24 | 16 | 9 | 13 | 12 | 4 | 7 | 3 |
| Political intervention by Government | 21 | 25 | 14 | 19 | 15 | 8 | 11 | 13 | 4 | 6 |
| Finance required to back support prices | 19 | 27 | 13 | 22 | 9 | 10 | 18 | 6 | 8 | 4 |
| Lack of market research | 24 | 19 | 23 | 10 | 13 | 17 | 8 | 14 | 3 | 5 |
| Integrating the grading, processing and packing stages before resale | 17 | 23 | 20 | 18 | 12 | 11 | 15 | 7 | 10 | 3 |
| The need to diversify cash crop varieties | 22 | 15 | 19 | 13 | 16 | 13 | 12 | 10 | 9 | 7 |
| Meeting the marketing costs of the Board | 16 | 24 | 22 | 20 | 11 | 14 | 6 | 9 | 8 | 6 |
| Few technical staff to liaise with Ministry of Agriculture on crop marketing | 25 | 18 | 16 | 14 | 10 | 15 | 11 | 7 | 12 | 8 |

SURVEY TABLE 75

Difficulties in Board marketing of Cotton

| | Number of Cotton Cooperative respondents who replied | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Undecided | Important | | | | | | | | |
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Shortage of trained management at the Board's headquarters | 16 | 22 | 18 | 17 | 19 | 8 | 15 | 7 | 12 | 2 |
| Insufficient experienced Area managers and Field officers | 15 | 28 | 25 | 18 | 11 | 12 | 9 | 6 | 8 | 4 |
| Weaknesses in Cooperative Primary societies | 27 | 18 | 12 | 22 | 14 | 8 | 15 | 8 | 9 | 3 |
| Political intervention by Government | 24 | 25 | 13 | 10 | 17 | 11 | 12 | 9 | 8 | 7 |
| Finance required to back support prices | 18 | 27 | 24 | 21 | 10 | 9 | 8 | 10 | 4 | 5 |
| Lack of market research | 22 | 26 | 19 | 15 | 12 | 11 | 13 | 7 | 5 | 6 |
| Integrating the grading, processing and packing stages before resale | 23 | 27 | 25 | 11 | 18 | 10 | 7 | 8 | 4 | 3 |
| The need to diversify cash crop varieties | 31 | 19 | 20 | 15 | 12 | 8 | 9 | 14 | 6 | 2 |
| Meeting the marketing costs of the Board | 14 | 27 | 19 | 20 | 8 | 11 | 12 | 10 | 7 | 8 |
| Few technical staff to liaise with Ministry of Agriculture on crop marketing | 21 | 23 | 19 | 13 | 21 | 14 | 9 | 7 | 5 | 4 |

SURVEY TABLE 76

Difficulties in Board marketing of Pyrethrum

| | Number of Pyrethrum Board respondents who replied | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Undecided | Important | | | | | | | | |
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Shortage of trained management at the Board's headquarters | 26 | 15 | 18 | 12 | 14 | 13 | 19 | 7 | 9 | 3 |
| Insufficient experienced Area managers and Field officers | 22 | 19 | 24 | 18 | 10 | 15 | 8 | 12 | 6 | 2 |
| Weaknesses in Cooperative Primary societies | 21 | 28 | 12 | 23 | 16 | 12 | 10 | 7 | 4 | 3 |
| Political intervention by Government | 23 | 25 | 18 | 15 | 16 | 5 | 6 | 13 | 11 | 4 |
| Finance required to back support prices | 24 | 26 | 20 | 10 | 17 | 12 | 9 | 5 | 7 | 6 |
| Lack of market research | 27 | 18 | 13 | 16 | 15 | 14 | 11 | 9 | 6 | 7 |
| Integrating the grading, processing and packing stages before resale | 19 | 24 | 21 | 12 | 16 | 13 | 9 | 14 | 5 | 3 |
| The need to diversify cash crop varieties | 28 | 19 | 10 | 21 | 11 | 15 | 6 | 13 | 8 | 5 |
| Meeting the marketing costs of the Board | 20 | 24 | 22 | 10 | 18 | 12 | 15 | 9 | 4 | 2 |
| Few technical staff to liaise with Ministry of Agriculture on crop marketing | 25 | 16 | 15 | 20 | 11 | 8 | 12 | 14 | 9 | 6 |

SURVEY TABLE 77

Difficulties in Board marketing of Pyrethrum

| | Number of Pyrethrum Cooperative respondents who replied | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Undecided | Important | | | | | | | | |
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Shortage of trained management at the Board's headquarters | 28 | 17 | 21 | 8 | 14 | 15 | 10 | 9 | 11 | 3 |
| Insufficient experienced Area managers and Field officers | 16 | 30 | 20 | 16 | 17 | 12 | 8 | 7 | 6 | 4 |
| Weaknesses in Cooperative Primary Societies | 19 | 21 | 19 | 18 | 13 | 10 | 13 | 11 | 5 | 7 |
| Political intervention by Government | 20 | 23 | 18 | 15 | 11 | 16 | 7 | 12 | 8 | 6 |
| Finance required to back support prices | 24 | 26 | 25 | 13 | 15 | 10 | 8 | 7 | 5 | 3 |
| Lack of market research | 27 | 18 | 23 | 14 | 11 | 15 | 9 | 6 | 8 | 5 |
| Integrating the grading, processing and packing stages before resale | 23 | 27 | 21 | 15 | 8 | 13 | 10 | 9 | 6 | 4 |
| The need to diversify cash crop varieties | 30 | 18 | 15 | 18 | 14 | 9 | 11 | 8 | 7 | 6 |
| Meeting the marketing costs of the Board | 19 | 28 | 22 | 15 | 17 | 8 | 10 | 6 | 9 | 2 |
| Few technical staff to liaise with Ministry of Agriculture on crop marketing | 25 | 18 | 20 | 17 | 15 | 13 | 8 | 5 | 12 | 3 |

SURVEY TABLE 78

Weaknesses in Maize Cooperatives experienced by Board personnel

| | Number of Maize Board respondents who replied | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Undecided | Important | | | | | | | | |
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Untrained management | 21 | 27 | 19 | 23 | 8 | 13 | 5 | 7 | 11 | 2 |
| Lack of member support | 19 | 26 | 23 | 22 | 10 | 8 | 12 | 5 | 7 | 4 |
| Insufficient capital | 22 | 20 | 24 | 18 | 21 | 7 | 11 | 6 | 4 | 3 |
| Poor marketing services to growers | 18 | 29 | 27 | 20 | 8 | 10 | 7 | 9 | 3 | 5 |
| Late payments to growers | 20 | 28 | 29 | 15 | 14 | 7 | 6 | 8 | 7 | 2 |
| Conflict between members and management | 24 | 26 | 17 | 14 | 10 | 12 | 13 | 11 | 5 | 4 |
| Inability to compete with produce traders | 17 | 30 | 28 | 20 | 8 | 11 | 9 | 6 | 4 | 3 |
| Low quality of produce sold to the Board | 16 | 32 | 26 | 23 | 6 | 9 | 11 | 8 | 3 | 2 |
| Indebtedness to suppliers or Government agencies | 16 | 18 | 23 | 17 | 19 | 10 | 15 | 12 | 2 | 4 |
| Proportion of dormant societies | 19 | 24 | 15 | 18 | 23 | 13 | 7 | 9 | 5 | 3 |

SURVEY TABLE 79

Weaknesses in Maize Cooperatives experienced by Cooperative personnel

| | Number of Maize Cooperative respondents who replied | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Undecided | Important | | | | | | | | |
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Untrained management | 25 | 19 | 25 | 21 | 10 | 13 | 9 | 8 | 2 | 4 |
| Lack of member support | 18 | 29 | 22 | 17 | 12 | 10 | 14 | 6 | 5 | 3 |
| Insufficient capital | 20 | 33 | 15 | 22 | 8 | 13 | 11 | 7 | 2 | 5 |
| Poor marketing services to growers | 16 | 25 | 28 | 18 | 10 | 7 | 12 | 14 | 4 | 2 |
| Late payments to growers | 18 | 29 | 19 | 21 | 12 | 15 | 8 | 4 | 7 | 3 |
| Conflict between members and management | 17 | 21 | 16 | 14 | 22 | 9 | 7 | 12 | 11 | 7 |
| Inability to compete with produce traders | 19 | 28 | 24 | 17 | 15 | 8 | 13 | 7 | 3 | 2 |
| Low quality of produce sold to the Board | 21 | 22 | 17 | 20 | 12 | 16 | 8 | 5 | 9 | 6 |
| Indebtedness to suppliers or Government agencies | 18 | 35 | 13 | 17 | 13 | 15 | 7 | 10 | 5 | 3 |
| Proportion of dormant societies | 22 | 23 | 27 | 15 | 10 | 13 | 6 | 9 | 7 | 4 |

SURVEY TABLE 80

Weaknesses in Cotton Cooperatives experienced by Board personnel

| | Number of Cotton Board respondents who replied | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Undecided | Important | | | | | | | | |
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Untrained management | 16 | 28 | 25 | 19 | 11 | 16 | 6 | 5 | 7 | 3 |
| Lack of member support | 23 | 21 | 24 | 22 | 15 | 10 | 8 | 7 | 4 | 2 |
| Insufficient capital | 22 | 24 | 20 | 17 | 18 | 13 | 9 | 6 | 3 | 4 |
| Poor marketing services to growers | 19 | 27 | 23 | 26 | 15 | 11 | 8 | 10 | 5 | 2 |
| Late payments to growers | 18 | 29 | 25 | 10 | 16 | 7 | 13 | 9 | 6 | 3 |
| Conflict between members and management | 24 | 20 | 18 | 19 | 9 | 13 | 8 | 13 | 10 | 2 |
| Inability to compete with produce traders | 20 | 27 | 21 | 17 | 10 | 12 | 7 | 11 | 6 | 5 |
| Low quality of produce sold to the Board | 17 | 30 | 22 | 20 | 11 | 9 | 10 | 8 | 7 | 2 |
| Indebtedness to suppliers or Government agencies | 26 | 19 | 12 | 24 | 16 | 10 | 14 | 7 | 5 | 3 |
| Proportion of dormant societies | 25 | 18 | 14 | 21 | 15 | 9 | 8 | 10 | 12 | 4 |

SURVEY TABLE 81

Weaknesses in Cotton Cooperatives experienced by Cooperative personnel

| | Number of Cotton Cooperative respondents who replied | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Undecided | Important | | | | | | | | |
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Untrained management | 19 | 27 | 17 | 22 | 12 | 11 | 15 | 7 | 4 | 2 |
| Lack of member support | 24 | 22 | 19 | 15 | 9 | 17 | 8 | 15 | 3 | 4 |
| Insufficient capital | 20 | 25 | 18 | 21 | 14 | 10 | 12 | 5 | 8 | 3 |
| Poor marketing services to growers | 21 | 28 | 11 | 22 | 13 | 9 | 6 | 14 | 7 | 5 |
| Late payments to growers | 18 | 29 | 25 | 15 | 18 | 10 | 8 | 4 | 7 | 2 |
| Conflict between members and management | 24 | 22 | 20 | 18 | 11 | 9 | 12 | 10 | 6 | 4 |
| Inability to compete with produce traders | 25 | 23 | 22 | 19 | 8 | 11 | 13 | 7 | 5 | 3 |
| Low quality of produce sold to the Board | 17 | 28 | 24 | 15 | 10 | 15 | 12 | 9 | 4 | 2 |
| Indebtedness to suppliers or Government agencies | 23 | 30 | 18 | 14 | 15 | 8 | 9 | 7 | 10 | 4 |
| Proportion of dormant societies | 17 | 25 | 19 | 21 | 13 | 11 | 14 | 6 | 8 | 2 |

SURVEY TABLE 82

Weaknesses in Pyrethrum Cooperatives experienced by Board personnel

| | Number of Pyrethrum Board respondents who replied | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Undecided | Important | | | | | | | | |
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Untrained management | 17 | 22 | 26 | 20 | 8 | 17 | 13 | 6 | 4 | 3 |
| Lack of member support | 26 | 23 | 12 | 15 | 18 | 15 | 9 | 7 | 9 | 2 |
| Insufficient capital | 20 | 25 | 22 | 17 | 16 | 8 | 6 | 11 | 7 | 4 |
| Poor marketing services to growers | 24 | 26 | 23 | 13 | 9 | 12 | 14 | 6 | 2 | 7 |
| Late payments to growers | 28 | 19 | 14 | 21 | 8 | 11 | 15 | 9 | 6 | 5 |
| Conflict between members and management | 25 | 20 | 15 | 19 | 10 | 19 | 7 | 11 | 8 | 2 |
| Inability to compete with produce traders | 26 | 15 | 10 | 23 | 20 | 8 | 13 | 12 | 3 | 6 |
| Low quality of produce sold to the Board | 16 | 29 | 26 | 20 | 15 | 7 | 9 | 8 | 4 | 2 |
| Indebtedness to suppliers or Government agencies | 23 | 18 | 22 | 12 | 8 | 18 | 13 | 10 | 7 | 5 |
| Proportion of dormant societies | 29 | 16 | 13 | 19 | 10 | 14 | 12 | 9 | 11 | 3 |

SURVEY TABLE 83

Weaknesses in Pyrethrum Cooperatives experienced by Cooperative personnel

| | Number of Pyrethrum Cooperative respondents who replied | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Undecided | Important | | | | | | | | |
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Untrained management | 24 | 20 | 13 | 23 | 16 | 15 | 9 | 7 | 5 | 4 |
| Lack of member support | 26 | 19 | 22 | 14 | 10 | 17 | 8 | 11 | 3 | 6 |
| Insufficient capital | 23 | 24 | 28 | 17 | 9 | 8 | 12 | 7 | 5 | 3 |
| Poor marketing services to growers | 25 | 20 | 18 | 15 | 12 | 17 | 11 | 8 | 6 | 4 |
| Late payments to growers | 26 | 21 | 13 | 22 | 14 | 10 | 12 | 9 | 4 | 5 |
| Conflict between members and management | 25 | 27 | 22 | 11 | 13 | 14 | 9 | 7 | 6 | 2 |
| Inability to compete with produce traders | 23 | 20 | 24 | 16 | 12 | 17 | 10 | 4 | 7 | 3 |
| Low quality of produce sold to the Board | 19 | 28 | 19 | 15 | 9 | 12 | 8 | 13 | 9 | 4 |
| Indebtedness to suppliers or Government agencies | 34 | 21 | 18 | 13 | 10 | 9 | 10 | 8 | 11 | 2 |
| Proportion of dormant societies | 26 | 17 | 14 | 10 | 19 | 13 | 16 | 13 | 5 | 3 |

SURVEY TABLE 84

**The Maize Board raising the standards of Cooperative marketing services to maize growers**

| | Number of Maize Board respondents who replied | | | | |
|---|---|---|---|---|---|
| | Undecided | Important | | | |
| | 0 | 1 | 2 | 3 | 4 |
| Insisting on higher quality produce | 33 | 41 | 34 | 18 | 10 |
| Helping with training | 32 | 39 | 28 | 29 | 8 |
| Field inspection and extension services | 33 | 36 | 32 | 22 | 13 |
| Granting agencies to Cooperatives on condition of prompt deliveries of produce | 25 | 32 | 37 | 24 | 18 |

SURVEY TABLE 85

**The Maize Board raising the standards of Cooperative marketing services to Maize growers**

| | Number of Maize Cooperative respondents who replied | | | | |
|---|---|---|---|---|---|
| | Undecided | Important | | | |
| | 0 | 1 | 2 | 3 | 4 |
| Insisting on higher quality produce | 35 | 28 | 38 | 21 | 14 |
| Helping with training | 26 | 34 | 29 | 32 | 15 |
| Field inspection and extension services | 30 | 37 | 32 | 19 | 18 |
| Granting agencies to Cooperatives on condition of prompt deliveries of produce | 28 | 44 | 37 | 15 | 12 |

SURVEY TABLE 86

**The Cotton Board raising the standards of Cooperative marketing services to Cotton growers**

| | Number of Cotton Board respondents who replied | | | | |
|---|---|---|---|---|---|
| | Undecided | Important | | | |
| | 0 | 1 | 2 | 3 | 4 |
| Insisting on higher quality produce | 24 | 38 | 40 | 24 | 10 |
| Helping with training | 27 | 32 | 36 | 27 | 14 |
| Field inspection and extension services | 25 | 36 | 30 | 25 | 20 |
| Granting agencies to Cooperatives on condition of prompt deliveries of produce | 35 | 28 | 27 | 29 | 17 |

SURVEY TABLE 87

The Cotton Board raising the standards of Cooperative marketing services to Cotton growers

| | Number of Cotton Cooperative respondents who replied | | | | |
|---|---|---|---|---|---|
| | Undecided | Important | | | |
| | 0 | 1 | 2 | 3 | 4 |
| Insisting on higher quality produce | 22 | 37 | 36 | 24 | 17 |
| Helping with training | 28 | 29 | 30 | 28 | 21 |
| Field inspection and extension services | 26 | 37 | 34 | 26 | 13 |
| Granting agencies to Cooperatives on condition of prompt deliveries of produce | 39 | 36 | 25 | 20 | 16 |

SURVEY TABLE 88

**The Pyrethrum Board raising the standards of Cooperative marketing services to Pyrethrum growers**

| | Number of Pyrethrum Board respondents who replied | | | | |
|---|---|---|---|---|---|
| | Undecided | Important | | | |
| | 0 | 1 | 2 | 3 | 4 |
| Insisting on higher quality produce | 22 | 41 | 36 | 15 | 22 |
| Helping with training | 31 | 39 | 27 | 20 | 19 |
| Field inspection and extension services | 21 | 35 | 38 | 19 | 23 |
| Granting agencies to Cooperatives on condition of prompt deliveries of produce | 38 | 32 | 26 | 24 | 16 |

SURVEY TABLE 89

**The Pyrethrum Board raising the standards of Cooperative marketing services to Pyrethrum growers**

| | Number of Pyrethrum Cooperative respondents who replied | | | | |
|---|---|---|---|---|---|
| | Undecided | Important | | | |
| | 0 | 1 | 2 | 3 | 4 |
| Insisting on higher quality produce | 27 | 41 | 35 | 15 | 18 |
| Helping with training | 22 | 36 | 33 | 24 | 21 |
| Field inspection and extension services | 26 | 37 | 39 | 23 | 11 |
| Granting agencies to Cooperatives on condition of prompt deliveries of produce | 38 | 32 | 29 | 16 | 21 |

SURVEY TABLE 90

Government improving the performance of
Maize Cooperatives

| | Number of Maize Board respondents who replied | | | | | | |
|---|---|---|---|---|---|---|---|
| | Undecided | Important | | | | | |
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| Intensify Cooperative management training | 29 | 34 | 20 | 17 | 12 | 15 | 9 |
| Bond trained Cooperative Secretaries to reduce wastage of skilled staff | 24 | 31 | 26 | 23 | 11 | 14 | 7 |
| Institute centralised accounting | 26 | 28 | 27 | 19 | 16 | 12 | 8 |
| Longer term and more loan facilities | 32 | 25 | 23 | 17 | 13 | 16 | 10 |
| Monopoly purchasing in selected Districts or of selected produce | 33 | 29 | 25 | 17 | 10 | 14 | 8 |
| Require all Cooperative Primary Societies to join District Unions | 26 | 37 | 21 | 22 | 13 | 12 | 5 |

SURVEY TABLE 91

Government improving the performance of Maize Cooperatives

| | Number of Maize Cooperative respondents who replied | | | | | | |
|---|---|---|---|---|---|---|---|
| | Undecided | Important | | | | | |
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| Intensify Cooperative management training | 24 | 39 | 17 | 25 | 15 | 9 | 7 |
| Bond trained Cooperative secretaries to reduce wastage of skilled staff | 32 | 27 | 23 | 20 | 11 | 14 | 9 |
| Institute centralised accounting | 26 | 35 | 29 | 16 | 13 | 11 | 6 |
| Longer term and more loan facilities | 24 | 33 | 30 | 15 | 12 | 8 | 14 |
| Monopoly purchasing in selected Districts or of selected produce | 21 | 41 | 24 | 27 | 9 | 6 | 8 |
| Require all Cooperative Primary societies to join District Unions | 28 | 34 | 20 | 16 | 18 | 7 | 11 |

SURVEY TABLE 92

Government improving the performance of Cotton Cooperatives

| | Number of Cotton Board respondents who replied | | | | | | |
|---|---|---|---|---|---|---|---|
| | Undecided | Important | | | | | |
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| Intensify Cooperative management training | 30 | 32 | 24 | 19 | 12 | 10 | 9 |
| Bond trained Cooperative secretaries to reduce wastage of skilled staff | 24 | 35 | 23 | 18 | 13 | 10 | 13 |
| Institute centralised accounting | 31 | 28 | 22 | 15 | 19 | 13 | 8 |
| Longer term and more loan facilities | 38 | 25 | 24 | 17 | 10 | 15 | 7 |
| Monopoly purchasing in selected Districts or of selected produce | 33 | 28 | 21 | 19 | 13 | 12 | 10 |
| Require all Cooperative Primary Societies to join District Unions | 21 | 34 | 27 | 20 | 14 | 11 | 9 |

SURVEY TABLE 93

Government improving the performance of Cotton Cooperatives

| | Number of Cotton Cooperative respondents who replied | | | | | | |
|---|---|---|---|---|---|---|---|
| | Undecided | Important | | | | | |
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| Intensify Cooperative management training | 26 | 32 | 19 | 25 | 14 | 12 | 8 |
| Bond trained Cooperative secretaries to reduce wastage of skilled staff | 25 | 30 | 21 | 26 | 18 | 7 | 9 |
| Institute centralised accounting | 34 | 21 | 18 | 16 | 20 | 14 | 13 |
| Longer term and more loan facilities | 24 | 33 | 26 | 17 | 16 | 8 | 12 |
| Monopoly purchasing in selected Districts or of selected produce | 27 | 39 | 25 | 19 | 9 | 11 | 6 |
| Require all Cooperative Primary societies to join District Unions | 30 | 37 | 24 | 15 | 13 | 12 | 5 |

SURVEY TABLE 94

Government improving the performance of Pyrethrum Cooperatives

| | Number of Pyrethrum Board respondents who replied | | | | | | |
|---|---|---|---|---|---|---|---|
| | Undecided | Important | | | | | |
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| Intensify Cooperative management training | 25 | 38 | 21 | 19 | 18 | 9 | 6 |
| Bond trained Cooperative secretaries to reduce wastage of skilled staff | 26 | 37 | 29 | 15 | 10 | 7 | 12 |
| Institute centralised accounting | 28 | 30 | 26 | 16 | 18 | 10 | 8 |
| Longer term and more loan facilities | 27 | 28 | 24 | 18 | 15 | 14 | 10 |
| Monopoly purchasing in selected Districts or of selected produce | 37 | 30 | 21 | 16 | 12 | 11 | 9 |
| Require all Cooperative Primary Societies to join District Unions | 29 | 34 | 27 | 13 | 14 | 12 | 7 |

SURVEY TABLE 95

Government improving the performance of Pyrethrum Cooperatives

| | Number of Pyrethrum Cooperative respondents who replied | | | | | | |
|---|---|---|---|---|---|---|---|
| | Undecided | Important | | | | | |
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| Intensify Cooperative management training | 25 | 35 | 32 | 15 | 12 | 7 | 10 |
| Bond trained Cooperative Secretaries to reduce wastage of skilled staff | 27 | 36 | 23 | 21 | 13 | 9 | 7 |
| Institute centralised accounting | 26 | 30 | 24 | 22 | 16 | 10 | 8 |
| Longer term and more loan facilities | 25 | 32 | 28 | 18 | 15 | 12 | 6 |
| Monopoly purchasing in selected Districts or of selected produce | 29 | 38 | 24 | 12 | 10 | 14 | 9 |
| Require all Cooperative Primary societies to join District Unions | 28 | 32 | 25 | 19 | 11 | 15 | 6 |

SURVEY TABLE 96

Licensing of Board Agents

| | Maize | | Cotton | | Pyrethrum | |
|---|---|---|---|---|---|---|
| | Adequate | Inadequate | Adequate | Inadequate | Adequate | Inadequate |
| Opinions of Board respondents of criteria by which Boards appoint their Agents | 96 | 40 | 72 | 64 | 102 | 34 |
| Opinions of Board respondents of criteria by which Boards withdraw agency licences | 87 | 49 | 54 | 82 | 93 | 43 |
| Opinions of Cooperative respondents of criteria by which Boards appoint their Agents | 45 | 91 | 83 | 53 | 77 | 59 |
| Opinions of Cooperative respondents of criteria by which Boards withdraw agency licences | 71 | 65 | 80 | 56 | 75 | 61 |

SURVEY TABLE 97

Performance of Board Agents

| Have any of the following in your experience proved unsuitable as Agents for the Boards | Board respondents who replied | | | | | |
|---|---|---|---|---|---|---|
| | Maize | | Cotton | | Pyrethrum | |
| | Yes | No | Yes | No | Yes | No |
| Produce traders | 66 | 70 | 58 | 78 | 81 | 55 |
| Licensed Processors | 41 | 95 | 38 | 98 | 33 | 103 |
| Cooperative Societies | 93 | 43 | 91 | 45 | 87 | 49 |
| Registered Board Agents | 47 | 89 | 71 | 65 | 30 | 106 |
| **Have any of the following in your experience proved unsuitable as Agents for the Boards** | **Cooperative respondents who replied** | | | | | |
| | Maize | | Cotton | | Pyrethrum | |
| | Yes | No | Yes | No | Yes | No |
| Produce traders | 95 | 41 | 79 | 57 | 90 | 46 |
| Licensed Processors | 82 | 54 | 77 | 59 | 60 | 76 |
| Cooperative Societies | 39 | 97 | 56 | 80 | 42 | 94 |
| Registered Board Agents | 89 | 47 | 83 | 53 | 48 | 88 |

SURVEY TABLE 98

Deployment of Cooperative Society Secretaries

| Improvements are necessary in the ways Cooperative Society Secretaries are | Board respondents who replied | | | | | |
|---|---|---|---|---|---|---|
| | Maize | | Cotton | | Pyrethrum | |
| | Yes | No | Yes | No | Yes | No |
| Recruited | 80 | 56 | 91 | 45 | 67 | 69 |
| Trained | 85 | 51 | 70 | 66 | 74 | 62 |
| Remunerated | 73 | 63 | 79 | 57 | 86 | 50 |
| Supervised | 92 | 44 | 88 | 48 | 83 | 53 |
| **Improvements are necessary in the ways Cooperative Society Secretaries are** | **Cooperative respondents who replied** | | | | | |
| | Maize | | Cotton | | Pyrethrum | |
| | Yes | No | Yes | No | Yes | No |
| Recruited | 90 | 46 | 79 | 57 | 94 | 42 |
| Trained | 87 | 49 | 82 | 54 | 65 | 71 |
| Remunerated | 103 | 33 | 110 | 26 | 113 | 23 |
| Supervised | 56 | 80 | 40 | 96 | 55 | 81 |

SURVEY TABLE 99

Government policy towards Marketing Boards

| Number of respondents who understand clearly Government policy towards Boards | Maize | Cotton | Pyrethrum |
|---|---|---|---|
| Board | 75 | 82 | 97 |
| Cooperative | 41 | 79 | 66 |
| Number of respondents who do not understand clearly Government policy towards Boards | Maize | Cotton | Pyrethrum |
| Board | 61 | 54 | 39 |
| Cooperative | 95 | 57 | 70 |

SURVEY TABLE 100

Government policy towards Cooperative Societies

| Number of respondents who understand clearly Government policy towards Cooperatives | Maize | Cotton | Pyrethrum |
|---|---|---|---|
| Board | 85 | 83 | 89 |
| Cooperative | 96 | 91 | 101 |
| **Number of respondents who do not understand clearly Government policy towards Cooperatives** | **Maize** | **Cotton** | **Pyrethrum** |
| Board | 51 | 53 | 47 |
| Cooperative | 40 | 45 | 35 |

SURVEY TABLE 101

Contacts among Maize intermediaries in the marketing system

| | Extent of Maize respondents' contact with | | | |
|---|---|---|---|---|
| | Cooperative Officers and Assistants | Board Area Managers | Cooperative Society Secretaries | Registered Board Agents |
| Board respondents with continuing contacts in their District in the marketing of their commodity | 59 | 52 | 70 | 63 |
| Board respondents without these contacts | 77 | 84 | 66 | 73 |
| Cooperative respondents with continuing contacts in their District in the marketing of their commodity | 89 | 57 | 81 | 64 |
| Cooperative respondents without these contacts | 47 | 79 | 55 | 72 |

SURVEY TABLE 102

Contacts among Cotton intermediaries in the marketing system

| | Extent of Cotton respondents' contacts with | | | |
|---|---|---|---|---|
| | Cooperative Officers and Assistants | Board Area Managers | Cooperative Society Secretaries | Registered Board Agents |
| Board respondents with continuing contacts in their District in the marketing of their commodity | 80 | 47 | 78 | 92 |
| Board respondents without these contacts | 56 | 89 | 58 | 44 |
| Cooperative respondents with continuing contacts in their District in the marketing of their commodity | 91 | 42 | 97 | 48 |
| Cooperative respondents without these contacts | 45 | 94 | 39 | 88 |

SURVEY TABLE 103

Contacts among Pyrethrum intermediaries in the marketing system

| | Extent of Pyrethrum respondents' contacts with | | | |
|---|---|---|---|---|
| | Cooperative Officers and Assistants | Board Area Managers | Cooperative Society Secretaries | Registered Board Agents |
| Board respondents with continuing contacts in their District in the marketing of their commodity | 93 | 69 | 101 | 82 |
| Board respondents without these contacts | 43 | 67 | 35 | 54 |
| Cooperative respondents with continuing contacts in their District in the marketing of their commodity | 98 | 29 | 108 | 46 |
| Cooperative respondents without these contacts | 38 | 107 | 28 | 90 |

SURVEY TABLE 104

Derivation of commodities marketed

| Proportions by quantity of produce handled by Boards are increasingly deriving from | Board respondents who replied | | | | | |
|---|---|---|---|---|---|---|
| | Maize | | Cotton | | Pyrethrum | |
| | Yes | No | Yes | No | Yes | No |
| Small-scale growers | 91 | 45 | 94 | 42 | 109 | 24 |
| Large-scale growers | 47 | 89 | 51 | 85 | 36 | 97 |
| Cooperative Societies | 56 | 80 | 53 | 83 | 102 | 34 |
| **Proportions by quantity of produce handled by Cooperatives are increasingly deriving from** | **Cooperative respondents who replied** | | | | | |
| | Maize | | Cotton | | Pyrethrum | |
| | Yes | No | Yes | No | Yes | No |
| Small-scale growers | 111 | 25 | 102 | 34 | 115 | 21 |
| Large-scale growers | 38 | 98 | 35 | 101 | 26 | 110 |

SURVEY TABLE 105

Illegal marketing

| Have any black markets been flourishing recently in or outside your District | Maize | | Cotton | | Pyrethrum | |
|---|---|---|---|---|---|---|
| | Yes | No | Yes | No | Yes | No |
| Board respondents who replied | 89 | 47 | 76 | 60 | 39 | 97 |
| Cooperative respondents who replied | 96 | 40 | 91 | 45 | 30 | 106 |

SURVEY TABLE 106

Marketing Board losses.

| | | Maize Yes | Maize No | Cotton Yes | Cotton No | Pyrethrum Yes | Pyrethrum No |
|---|---|---|---|---|---|---|---|
| Losses incurred by the Boards through low export prices should be recovered by levies imposed on growers and Cooperatives | Board respondents who replied | 48 | 88 | 67 | 69 | 66 | 70 |
| | Cooperative respondents who replied | 41 | 95 | 40 | 96 | 49 | 87 |
| The Marketing Boards ought to make up such trading deficits from their own resources. | Board respondents who replied | 96 | 40 | 89 | 47 | 90 | 46 |
| | Cooperative respondents who replied | 101 | 35 | 98 | 38 | 84 | 52 |

SURVEY TABLE 107

Cooperative Society surpluses

| | Board respondents who replied | | | | | |
|---|---|---|---|---|---|---|
| | Maize | | Cotton | | Pyrethrum | |
| | Yes | No | Yes | No | Yes | No |
| Have Cooperatives been paying back to growers collectively any operating surpluses? | 38 | 98 | 42 | 94 | 71 | 65 |
| | Cooperative respondents who replied | | | | | |
| | Maize | | Cotton | | Pyrethrum | |
| | Yes | No | Yes | No | Yes | No |
| | 55 | 81 | 47 | 89 | 82 | 54 |

| | Board respondents who replied | | | | | |
|---|---|---|---|---|---|---|
| | Maize | | Cotton | | Pyrethrum | |
| | Yes | No | Yes | No | Yes | No |
| Should Cooperatives use any surplus payments due to members to accumulate reserves? | 95 | 41 | 103 | 33 | 91 | 45 |
| | Cooperative respondents who replied | | | | | |
| | Maize | | Cotton | | Pyrethrum | |
| | Yes | No | Yes | No | Yes | No |
| | 90 | 46 | 80 | 56 | 74 | 62 |

SURVEY TABLE 108

Subsidies from Government

| | | Board respondents who replied | | | | | |
|---|---|---|---|---|---|---|---|
| | | Maize | | Cotton | | Pyrethrum | |
| | | Yes | No | Yes | No | Yes | No |
| Is it the Government's responsibility to make subsidies available Where trading losses are incurred by | Cooperative Societies | 45 | 91 | 34 | 102 | 39 | 97 |
| | | Cooperative respondents who replied | | | | | |
| | | Maize | | Cotton | | Pyrethrum | |
| | | Yes | No | Yes | No | Yes | No |
| | Cooperative Societies | 95 | 41 | 47 | 89 | 52 | 84 |
| | | Board respondents who replied | | | | | |
| | | Maize | | Cotton | | Pyrethrum | |
| | | Yes | No | Yes | No | Yes | No |
| | Marketing Boards | 101 | 35 | 98 | 38 | 66 | 70 |
| | | Cooperative respondents who replied | | | | | |
| | | Maize | | Cotton | | Pyrethrum | |
| | | Yes | No | Yes | No | Yes | No |
| | Marketing Boards | 44 | 92 | 90 | 46 | 69 | 67 |

SURVEY TABLE 109

Board and Cooperative marketing policy.

| | Board respondents who replied | | | | | |
|---|---|---|---|---|---|---|
| | Maize | | Cotton | | Pyrethrum | |
| | Important | Unimportant | Important | Unimportant | Important | Unimportant |
| How do you view the role of the Marketing Boards in helping to develop Cooperative marketing? | 91 | 45 | 78 | 58 | 95 | 41 |
| | Cooperative respondents who replied | | | | | |
| | Maize | | Cotton | | Pyrethrum | |
| | Important | Unimportant | Important | Unimportant | Important | Unimportant |
| | 82 | 54 | 89 | 47 | 103 | 33 |
| | Board respondents who replied | | | | | |
| | Maize | | Cotton | | Pyrethrum | |
| | Important | Unimportant | Important | Unimportant | Important | Unimportant |
| Should Cooperative Unions collectively play a major part in the formulation of the marketing strategy of the Boards? | 52 | 84 | 77 | 59 | 40 | 96 |
| | Cooperative respondents who replied | | | | | |
| | Maize | | Cotton | | Pyrethrum | |
| | Important | Unimportant | Important | Unimportant | Important | Unimportant |
| | 108 | 28 | 72 | 64 | 93 | 43 |

SURVEY TABLE 110

## Statutory functions of Boards and Cooperatives

| | | Maize | | Cotton | | Pyrethrum | |
|---|---|---|---|---|---|---|---|
| | | Yes | No | Yes | No | Yes | No |
| Are the Marketing Boards fulfilling all their statutory duties? | Board respondents who replied | 91 | 45 | 82 | 54 | 104 | 32 |
| | Cooperative respondents who replied | 51 | 85 | 79 | 57 | 83 | 53 |
| Are Cooperative Societies meeting the objectives set by Government within the terms of Cooperative legislation? | Board respondents who replied | 37 | 99 | 105 | 31 | 88 | 48 |
| | Cooperative respondents who replied | 87 | 49 | 80 | 56 | 96 | 40 |

SURVEY TABLE 111

<u>Boards buying direct from Cooperatives</u>

| Would joint marketing by Boards and Cooperatives be furthered by the Boards doing away with Registered Agents and buying direct from Cooperatives? | Maize | | Cotton | | Pyrethrum | |
|---|---|---|---|---|---|---|
| | Yes | No | Yes | No | Yes | No |
| Board respondents who replied | 52 | 84 | 43 | 93 | 104 | 32 |
| Cooperative respondents who replied | 98 | 38 | 77 | 59 | 109 | 27 |

SURVEY TABLE 112

**Opinions of Maize respondents who consider that Board and Cooperative marketing of Maize should be developed jointly**

| | Maize Board respondents who replied Important to Questionnaire Columns 172 and 173 | | Maize Cooperative respondents who replied Important to Questionnaire Columns 252 and 253 | |
|---|---|---|---|---|
| | Yes | No | Yes | No |
| The Board is fulfilling all its statutory duties | 21 | 31 | 37 | 45 |
| Cooperatives are meeting objectives set by Government within the terms of Cooperative legislation | 17 | 35 | 40 | 42 |
| Joint marketing by Board and Cooperatives would be furthered by the Board doing away with Registered Agents and buying direct from Cooperative Societies | 29 | 23 | 47 | 35 |

SURVEY TABLE 113

**Opinions of Cotton respondents who consider that Board and Cooperative marketing of Cotton should be developed jointly**

| | Cotton Board respondents who replied Important to Questionnaire Columns 172 and 173 | | Cotton Cooperative respondents who replied Important to Questionnaire Column 252 and 253 | |
|---|---|---|---|---|
| | Yes | No | Yes | No |
| The Board is fulfilling all its statutory duties | 31 | 46 | 34 | 38 |
| Cooperatives are meeting objectives set by Government within the terms of Cooperative legislation | 23 | 54 | 31 | 41 |
| Joint marketing by Board and Cooperatives would be furthered by the Board doing away with Registered Agents and buying direct from Cooperative Societies | 49 | 28 | 57 | 15 |

SURVEY TABLE 114

**Opinions of Pyrethrum respondents who consider that Board and Cooperative marketing of Pyrethrum should be developed jointly**

| | Pyrethrum Board respondents who replied Important to Questionnaire Columns 172 and 173 | | Pyrethrum Cooperative respondents who replied Important to Questionnaire Columns 252 and 253 | |
|---|---|---|---|---|
| | Yes | No | Yes | No |
| The Board is fulfilling all its statutory duties | 15 | 25 | 44 | 49 |
| Cooperatives are meeting objectives set by Government within the terms of Cooperative legislation | 10 | 30 | 38 | 55 |
| Joint marketing by Board and Cooperatives would be furthered by the Board doing away with Registered Agents and buying direct from Cooperative Societies | 29 | 11 | 61 | 32 |

## Section 2

## APPENDICES TO THE SURVEY

### APPENDIX A

English Questionnaire No.1 on Maize, Cotton and Pyrethrum in Kenya. Administered to small-scale growers about Cooperative Societies and Statutory Marketing Boards.

Reply Column

(1) Card 1 Code 0

(2)

| | |
|---|---|
| Maize Code | 0 |
| Cotton | 1 |
| Pyrethrum | 2 |

(3)

| Maize | | Cotton | | Pyrethrum | |
|---|---|---|---|---|---|
| Bungoma | Code 0 | Siaya | Code 4 | Kisii | Code 8 |
| Trans Nzoia | 1 | Busia | 5 | Nyandarua | 9 |
| Kakamega | 2 | Kisumu | 6 | Nakuru | X |
| Nandi | 3 | South Nyanza | 7 | Fort Hall | Y |

(4) Do you belong to a Cooperative Society at present?

Code No 0 Yes 1

(5) Have you ever been a member of one?

Code No 0 Yes 1

(6) Have you ever belonged to one and left?

Code No 0 Yes 1

Reasons for never having joined or joining and leaving a Cooperative. Select any of the following answers which you consider to be the most important and rank them in order of preference.

If undecided Code 0; code those of importance in order 1, 2, 3, 4, 5.

(7) Deductions from the prices paid for your produce.

| Reply | Column | |
|---|---|---|
| ☐ | (8) | Higher prices in selling independently. |
| ☐ | (9) | No confidence in the ways the affairs of the Society were managed. |
| ☐ | (10) | Member subscriptions too high. |
| ☐ | (11) | Being owed money by a Society. |

What principal services do you think Cooperatives offer their members?

Select any of the following answers which you consider to be the most important and rank them in order of preference.

If undecided Code 0; code those of importance in order 1, 2, 3, 4, 5, 6, 7, 8, 9.

| Reply | Column | |
|---|---|---|
| ☐ | (12) | Advance crop payments. |
| ☐ | (13) | Access to wide markets. |
| ☐ | (14) | Loans for development. |
| ☐ | (15) | Advice on growing methods. |
| ☐ | (16) | Convenient buying points. |
| ☐ | (17) | Guaranteed purchases of produce. |
| ☐ | (18) | Seeds, pesticides, fertilisers and implements at cost. |
| ☐ | (19) | Collection, transport and storage services. |

| Reply | Column | |
|---|---|---|
| ☐ | (20) | Mechanised ploughing of one's land. |

What advantages do you consider that growers not members of Cooperatives have over those who are?

Select any of the following answers which you consider to be the most important and rank them in order of preference.

If undecided Code 0; code those of importance in order 1, 2, 3, 4, 5, 6.

| | | |
|---|---|---|
| ☐ | (21) | Freedom to sell where they can obtain the best price. |
| ☐ | (22) | No member subscriptions to pay. |
| ☐ | (23) | Freedom to grow and market any type of crops. |
| ☐ | (24) | Quicker realisation of full cash price for produce. |
| ☐ | (25) | Freedom to manage their own affairs. |
| ☐ | (26) | Direct access to Board Agents. |

Whether or not you belong to a Cooperative Society, what in general do you consider to be their main operational weaknesses?

Select any of the following answers which you consider to be the most important and rank them in order of preference.

If undecided Code 0; code those of importance in order 1, 2, 3, 4, 5, 6, 7.

| | | |
|---|---|---|
| ☐ | (27) | Poor or untrained management. |
| ☐ | (28) | Shortage of ready cash. |
| ☐ | (29) | Delays in payments to growers. |

| Reply | Column | |
|---|---|---|
| ☐ | (30) | Dealing in too many other crops. |
| ☐ | (31) | Prices inferior to those of produce traders. |
| ☐ | (32) | Lack of member support and interest. |
| ☐ | (33) | Inability to give help or advice to producers in crop marketing. |
| ☐ | (34) | Are the growers you know in your locality interested in being members of Cooperatives?<br>Code Not interested 0<br>Interested 1 |
| ☐ | (35) | Approximately what proportion of them have joined a Cooperative?<br>Code Few 0<br>Most 1 |
| ☐ | (36) | Are members of a Cooperative satisfied with its marketing services?<br>Code No 0<br>Yes 1 |
| ☐ | (37) | Do you market all your produce through Cooperative Societies?<br>Code No 0<br>Yes 1 |
| | | Who else do you sell directly to? |
| ☐ | (38) | Produce traders Code No 0<br>Yes 1 |
| ☐ | (39) | Board Agents Code No 0<br>Yes 1 |

| Reply | Column | |
|---|---|---|
| | | Has the proportion by quantity of the produce you sell to Cooperatives been |
| ☐ | (40) | Declining? Code No 0<br>Yes 1 |
| ☐ | (41) | Increasing? Code No 0<br>Yes 1 |
| | | Do buyers other than Cooperative Societies offer you |
| ☐ | (42) | Higher prices? Code No 0<br>Yes 1 |
| ☐ | (43) | More services? Code No 0<br>Yes 1 |
| | | Of those Cooperative Societies in your particular locality |
| ☐ | (44) | How often do they hold meetings?<br>Code Not Regularly 0<br>Regularly 1 |
| ☐ | (45) | Do you normally attend them?<br>Code No 0<br>Yes 1 |
| ☐ | (46) | Are they usually well supported by other members?<br>Code No 0<br>Yes 1 |
| | | Do the topics of discussion chiefly concern |
| ☐ | (47) | The day to day problems of the growers?<br>Code No 0<br>Yes 1 |
| ☐ | (48) | The affairs of the Cooperative management?<br>Code No 0<br>Yes 1 |

| Reply | Column | |
|---|---|---|
| ☐ | (49) | The direction of policy within the Cooperative?<br>Code No 0<br>Yes 1 |
| ☐ | (50) | Arrears of subscriptions?<br>Code No 0<br>Yes 1 |
| ☐ | (51) | Late or insufficient payments to producer members?<br>Code No 0<br>Yes 1 |
| | | Are those who manage Cooperative Societies |
| ☐ | (52) | Looking after your interests as a grower?<br>Code No 0<br>Yes 1 |
| ☐ | (53) | Competent in their jobs?<br>Code No 0<br>Yes 1 |
| ☐ | (54) | Honest in their handling of Cooperative finances?<br>Code No 0<br>Yes 1 |
| ☐ | (55) | Do you as an individual member consider that you have any say in the affairs of your Cooperative?<br>Code No 0<br>Yes 1 |
| ☐ | (56) | Do you think that the Boards' Field Officers could help more to improve Cooperatives' services to you and other growers?<br>Code No 0<br>Yes 1 |
| | | Is there enough working contact between |
| ☐ | (57) | You as a grower and Cooperative Assistants?<br>Code No 0<br>Yes 1 |

| Reply | Column | |
|---|---|---|
| ☐ | (58) | Cooperative Assistants and the field staff of the Boards?<br>Code No 0<br>Yes 1 |
| ☐ | (59) | Could Cooperative staff do more to explain to growers the purposes and functions of Cooperative Societies?<br>Code No 0<br>Yes 1 |
| ☐ | (60) | Are the Cooperatives in your area successfully competing with produce traders for growers' produce?<br>Code No 0<br>Yes 1 |
| | | How do the following provided for you by Cooperatives compare with those offered by produce traders? |
| ☐ | (61) | Transport facilities<br>Code Not well 0<br>Well 1 |
| ☐ | (62) | Collection<br>Code Not Well 0<br>Well 1 |
| ☐ | (63) | Payments<br>Code Not Well 0<br>Well 1 |
| ☐ | (64) | Price<br>Code Not Well 0<br>Well 1 |
| ☐ | (65) | Buying points<br>Code Not Well 0<br>Well 1 |
| | | In your opinion have Cooperatives in your area been working better as |
| ☐ | (66) | Multi-crop Societies?<br>Code No 0<br>Yes 1 |

| Reply | Column | | |
|---|---|---|---|
| | (67) | Single crop Societies? | Code No 0<br>Yes 1 |
| | (68) | Have you had experience of both types? | Code No 0<br>Yes 1 |
| | | Should Cooperatives have monopolies in the buying from small-scale growers | |
| | (69) | Of selected produce? | Code No 0<br>Yes 1 |
| | (70) | In certain districts? | Code No 0<br>Yes 1 |
| | | Should such monopolies apply to | |
| | (71) | Maize? | Code No 0<br>Yes 1 |
| | (72) | Cotton? | Code No 0<br>Yes 1 |
| | (73) | Pyrethrum? | Code No 0<br>Yes 1 |
| | (74) | Do you wish to continue to sell to produce traders as well as to Cooperatives? | Code No 0<br>Yes 1 |
| | (75) | Should growers be free to choose whether or not they join active Cooperative Societies? | Code No 0<br>Yes 1 |
| | (76) | Should growers be obliged to join and sell their produce through Cooperatives? | Code No 0<br>Yes 1 |

| Reply | Column | |
|---|---|---|
| | (77) | Are Cooperatives in your area dealing in other more profitable cash crops?<br>Code No 0<br>Yes 1 |
| | (78) | Do they handle other low profit and subsistence crops?<br>Code No 0<br>Yes 1 |
| | (79) | Do produce traders do more business in your area in high profit produce than Cooperatives?<br>Code No 0<br>Yes 1 |
| | (80) | Do you consider that it is the responsibility of Government to see that Cooperative Societies improve their services to growers?<br>Code No 0<br>Yes 1 |

| Reply | Column | |
|---|---|---|
| ☐ | (81) | Card 2 Code 1 |
| ☐ | (82) | Maize Code 0<br>Cotton 1<br>Pyrethrum 2 |
| ☐ | (83) | see table below |

| Maize | | Cotton | | Pyrethrum | |
|---|---|---|---|---|---|
| Bungoma | Code 0 | Siaya | Code 4 | Kisii | Code 8 |
| Trans Nzoia | 1 | Busia | 5 | Nyandarua | 9 |
| Kakamega | 2 | Kisumu | 6 | Nakuru | X |
| Nandi | 3 | South Nyanza | 7 | Fort Hall | Y |

| Reply | Column | |
|---|---|---|
| ☐ | (84) | Do you market your produce directly to a Marketing Board?<br>Code No 0<br>Yes 1<br><br>Who else do you have to sell to? |
| ☐ | (85) | Board Agents? Code No 0<br>Yes 1 |
| ☐ | (86) | Cooperative Societies?<br>Code No 0<br>Yes 1 |
| ☐ | (87) | Produce traders? Code No 0<br>Yes 1 |
| ☐ | (88) | In your locality does the amount of produce you market determine whether or not you sell directly to the Boards?<br>Code No 0<br>Yes 1 |
| ☐ | (89) | Is this a satisfactory arrangement for you as a grower?<br>Code No 0<br>Yes 1 |

Do the Boards you sell to undertake any of these services for you?

Select up to nine of the following answers which you consider to be the most important and rank them in order of preference.

If undecided Code 0; code those of importance in order 1, 2, 3, 4, 5, 6, 7, 8, 9.

| Reply | Column | |
|---|---|---|
| | (90) | Price guarantees in advance. |
| | (91) | Forward buying. |
| | (92) | Selling your surpluses overseas. |
| | (93) | Market research. |
| | (94) | Guaranteeing a market for you. |
| | (95) | Registering Agents to buy your produce. |
| | (96) | Protecting your market by controlling entry. |
| | (97) | Sorting, grading and packing your produce. |
| | (98) | Licensing growers. |
| | (99) | Buying all the quality produce you can grow. |
| | (100) | Stockholding. |
| | (101) | Ensuring stable incomes for you and other producers. |
| | (102) | Operating cesses or levies for its services to you. |

| Reply | Column | |
|---|---|---|
| ☐ | (103) | Granting monopoly trading rights. |
| ☐ | (104) | Processing your produce locally. |
| ☐ | (105) | Acceptance of minimum quantities which you can deliver direct to Board depots. |
| | | Have any of the Boards you deal with |
| ☐ | (106) | Sent round field research or extension teams to your locality?<br>Code No 0<br>Yes 1 |
| ☐ | (107) | Applied quotas to your produce by quality or quantity?<br>Code No 0<br>Yes 1 |
| ☐ | (108) | Promoted the marketing of new and hybrid crops?<br>Code No 0<br>Yes 1 |
| ☐ | (109) | Are you selling any of your produce direct to produce traders?<br>Code No 0<br>Yes 1 |
| ☐ | (110) | Do you obtain any credit from traders or Agents?<br>Code No 0<br>Yes 1 |
| ☐ | (111) | Does the amount of your produce by quantity sold to them exceed that sold to Board Agents?<br>Code No 0<br>Yes 1 |
| | | How do the following offered to you by Board Agents compare with what you can obtain from produce traders? |
| ☐ | (112) | Number of buying points<br>Code Fewer 0<br>More 1 |

| Reply | Column | |
|---|---|---|
| | (113) | Payment for small quantities<br>Code Lower 0<br>Higher 1 |
| | (114) | Do you consider that the Boards take enough interest in your work?<br>Code No 0<br>Yes 1 |
| | (115) | Do you have to be a member of a Cooperative before you are allowed to sell direct to the Boards?<br>Code No 0<br>Yes 1 |
| | (116) | Do the Boards maintain adequate supervision of their Agents who buy from you?<br>Code No 0<br>Yes 1 |
| | (117) | Have the Boards tried to explain to you what they are there for, and how they work?<br>Code No 0<br>Yes 1 |
| | (118) | Do you know what levies the Boards raise on your produce?<br>Code No 0<br>Yes 1 |
| | (119) | Does your local authority or County Council impose a cess on your produce?<br>Code No 0<br>Yes 1 |
| | | Do you understand |
| | (120) | How these levies are used?<br>Code No 0<br>Yes 1 |
| | (121) | How such levies are raised?<br>Code No 0<br>Yes 1 |

| Reply | Column | |
|---|---|---|
| ☐ | (122) | Why they are operated?<br>Code No 0<br>Yes 1 |
| ☐ | (123) | Do you favour the system of fixing producer prices in advance?<br>Code No 0<br>Yes 1 |
| | | Would you prefer prices guaranteed to producers by the Boards to be |
| ☐ | (124) | Guaranteed minimum prices<br>Code No 0<br>Yes 1 |
| ☐ | (125) | Guaranteed price ranges<br>Code No 0<br>Yes 1 |
| ☐ | (126) | Fixed prices only<br>Code No 0<br>Yes 1 |
| ☐ | (127) | Have there been any variations between the prices announced to you for your produce and the prices subsequently obtained from the Boards?<br>Code No 0<br>Yes 1 |
| ☐ | (128) | Would you prefer support prices to be operated only in times of overproduction or continuously?<br>Code Overproduction 0<br>Continuously 1 |
| ☐ | (129) | Have there been any occasions in the past when you could have obtained higher prices for your produce than those offered by the Boards?<br>Code No 0<br>Yes 1 |
| ☐ | (130) | Have you any difficulties meeting the quality standards required to obtain the Boards' best prices?<br>Code No 0<br>Yes 1 |

| Reply | Column | |
|---|---|---|
| ☐ | (131) | Do the Boards offer price differentials for lower qualities of produce?<br>Code No. 0<br>Yes 1 |
| ☐ | (132) | Should they do so?<br>Code No 0<br>Yes 1 |

In what ways do you consider that the services of the Marketing Boards to you and other growers could be improved?

Select up to nine of the following answers which you consider to be the most important and rank them in order of preference.

If undecided Code 0; code those of importance in order 1, 2, 3, 4, 5, 6, 7, 8, 9.

| | | |
|---|---|---|
| ☐ | (133) | More buying points |
| ☐ | (134) | Quicker payments. |
| ☐ | (135) | More advice and assistance in the field. |
| ☐ | (136) | Higher support prices. |
| ☐ | (137) | Research services. |
| ☐ | (138) | Lower levies on produce. |
| ☐ | (139) | Increasing local processing facilities. |
| ☐ | (140) | Extending agencies to Cooperatives. |
| ☐ | (141) | Financial assistance to growers. |

| Reply | Column | |
|---|---|---|
| ☐ | (142) | Provision of seeds, fertilisers and sacks. |
| ☐ | (143) | Announcement of buying prices during the planting season. |
| ☐ | (144) | Do the Boards you sell to carry out all the processing of your produce themselves?<br>Code No 0<br>Yes 1 |
| ☐ | (145) | Is any of the processing done independantly by private concerns such as millers and ginners?<br>Code No 0<br>Yes 1 |
| ☐ | (146) | Do the Boards control the prices at which these processors buy your produce?<br>Code No 0<br>Yes 1 |
| ☐ | (147) | Should some of the increased revenue deriving from the sale of processed products be paid to the growers?<br>Code No 0<br>Yes 1 |

If you have any specific complaints against the Boards, are they concerned with

Low prices paid by the Boards for growers' produce because of deductions from prices, to producers of

| | | | |
|---|---|---|---|
| ☐ | (148) | Maize? | Code No 0 Yes 1 |
| ☐ | (149) | Cotton? | Code No 0 Yes 1 |
| ☐ | (150) | Pyrethrum? | Code No 0 Yes 1 |

Heavy expenses incurred by the Boards but borne mostly by the producers of

| Reply | Column | | |
|---|---|---|---|
| | (151) | Maize? | Code No 0 Yes 1 |
| | (152) | Cotton? | Code No 0 Yes 1 |
| | (153) | Pyrethrum? | Code No 0 Yes 1 |

Are you satisfied with way pay-outs are made to producers by the Boards

| | | | |
|---|---|---|---|
| | (154) | When the Boards' resale prices exceed the buying prices guaranteed to producers? | Code No 0<br>Yes 1 |
| | (155) | When the resale prices obtained by the Boards are less than prices paid to producers? | Code No 0<br>Yes 1 |

When the Boards earn surpluses in their current trading operations, ought such surpluses to be

| | | | |
|---|---|---|---|
| | (156) | Utilised in providing improved services to growers? | Code No 0<br>Yes 1 |
| | (157) | Paid out directly to growers in the year in which they are earned? | Code No 0<br>Yes 1 |

Do you see Cooperative Societies being able to take over more of the marketing services to growers at present provided by

| | | | |
|---|---|---|---|
| | (158) | Board Agents? | Code No 0 Yes 1 |
| | (159) | Produce traders? | Code No 0 Yes 1 |
| | (160) | Licensed Processors? | Code No 0 Yes 1 |

APPENDIX B

Swahili Questionnaire No.1 juu ya Mahindi, Pamba na Pereto nchini ya Kenya. Majibu ya Wakulima wenye mashamba madogo ya kuhusu Vyama vya Ushirika na Halmasharui za Mazao.

Column (1) CARD 1
Column (2) ZAO
Column (3) WILAYA

Column

(4) Wewe ni mwanachama wa Chama cha Ushirika sasa hivi?

Ndiyo/Siyo

(5) Wewe ulikuwa mwanachama wa Chama cho chote siku nyingine zilizopita?

Ndiyo/Siyo

(6) Ikiwa wewe ulikuwa mwanachama wakati ule, ulitoka kwenye Chama cho chote usiwe mwanachama tena?

Ndiyo/Siyo

Sababu zako za kuwa mwanachama na kutoka, au kutokuwa mwanachama wa Chama cho chote.

Chagua majibu yo yote yafuatayo na uyapange mojamoja kwa utaratibu na kufuatana na umuhimu wake.

(7) Upungufu wa bei ya mazao yako kwa ajili ya kodi unazotozwa.

(8) Kupata bei za juu nje ya Chama cha Ushirika.

(9) Wewe hutosheki uendeshaji wa Chama.

(10) Ada Kali sana za kuingilia kuwa mwanachama.

(11) Bado hujapokea malipo yote yako yanayodaiwa kutoka kwa Chama chako.

Unaonaje wanachama wenyewe wanaweza kupata vitu gani kutoka Chama chao?

Chagua majibu yo yote yafuatayo na uyapange mojamoja kwa utaratibu na kufuatana na umuhimu wake.

(12) Wanapata fedha mapema kwa mazao.

Column

(13) Kuuza masokoni ya nje.

(14) Mikopo kwa maendeleo ya kilimo.

(15) Mawaidha juu ya ukulima bora.

(16) Mahali pazuri pa kununulia.

(17) Ununuzi wa lazima wa mazao yako.

(18) Mbegu, dawa, mbolea na vifaa kwa bei rahisi.

(19) Utumishi wa kupeleka, kuhamisha na kuweka kwenya ghala mazao ya wanachama.

(20) Mashine ya kuchimba shamba.

Kama wewe si mwanachama, una faida gani zaidi wale wanachama wa Vyama vya Ushirika?

Chagua majibu yo yote yafuatayo na uyapange mojamoja kwa utaratibu na kufuatana no umuhimu wake.

(21) Uhuru wa kuuza mazao mahali po pote penye bei nzuri.

(22) Hakuna michango ya kulipa.

(23) Uhuru wa kupanda na kuuza cho chote unachopenda.

(24) Unapata fedha upesi mara unapouza mazao.

(25) Uhuru wa kupanga mipango yako.

(26) Kuwauzia moja moja Wanunuzi wa Halmashauri za Mazao.

Ikiwa wewe ni mwanachama au si mwanachama, unafikirije juu ya udhaifu wa Vyama hivi?

Chagua majibu yo yote yafuatayo na uyapange mojamoja kwa utaratibu na kufuatana na umuhimu wake.

(27) Uendeshaji mbaya au viongozi wasiofundishwa.

(28) Uhaba wa fedha.

(29) Macheleweshi Katika malipo kwa wakulima.

(30) Ushughulishaji wa mazao mengi mengineyo.

(31) Bei ndogo za mazao juliko zile za wanunuzi wa reja reja.

(32) Ukosefu wa wanachama wanaosaidia.

Column

(33) Hakuna mafundisho ya uuzaji wa mazao.

(34) Namna gani wakulima wa sehemu yako wanavutwa kuwa wanachama wa Vyama hivyo?

Wanavutika/Hawavutiki

(35) Kwa kukisia ni sehemu gani ya wakulima walio wanachama wa Vyama vya Ushirika?

Wengi/Wachache

(36) Wanachama wenyewe wanaona sifu sana juu ya utumishi wa uuzaji wa Chama chao?

Ndiyo/Siyo

(37) Unauza mazao yako yote kupitia Vyama vya Ushirika?

Ndiyo/Siyo

Unamwuzia nani mwingine?

(38) Wanunuzi wa reja reja.

Ndiyo/Siyo

(39) Wanunuzi wa Halmashauri

Ndiyo/Siyo

Sehemu gani kama magunia ya mazao unayouzia Vyama hivyo inakuwa

(40) Imepungua Ndiyo/Siyo

(41) Imeongezeka Ndiyo/Siyo

Wanunuzi nje ya Vyama vya Ushirika Wanaweza kukuletea vitu ambavyo Vyama havitoi?

(42) Bei nzuri zaidi Ndiyo/Siyo

(43) Utumishi bora Ndiyo/Siyo

Kwenye hivi Vyama vya Ushirika ulivyo mwanachama

(44) Wanafanya mkutano mara ngapi?

Mara nyingi/Pengine

(45) Kwa kawaida unahudhuria?

Ndiyo/Siyo

(46) Wanachama wengine wanahudhuria kila mara?

Ndiyo/Siyo

Mazungumzo yanayofanywa huko yanuhusu hasa

(47) Mashauri ya wakulima ya kila siku

Ndiyo/Siyo

Column

(48) Mashughuliko ya viongozi wa Chama

Ndiyo/Siyo

(49) Uendeshaji wa Chama Chenyewe

Ndiyo/Siyo

(50) Michango inayokosea

Ndiyo/Siyo

(51) Ucheleweshaji au ukosefu wa malipo kwa wakulima walio wanachama

Ndiyo/Siyo

Viongozi hawa wa Vyama vya Ushirika

(52) Wanashughulikia mambo yako ya ukulima?

Ndiyo/Siyo

(53) Wana ufundi kwenye kazi zao?

Ndiyo/Siyo

(54) Wanatunza mapato na matumizi ya pesa ya Vyama kwa usalama?

Ndiyo/Siyo

(55) Unaonaje wewe kama mwanachama binafsi maoni yako yanachukua uzito wo wote katika mazungumzo ya viongozi wa Chama?

Ndiyo/Siyo

(56) Kwa upande wako mabwana shamba wa Halmashauri hizi wangeweza kuinua utumishi wa Vyama vya Ushirika kwa wewe na wakulima wengineo?

Ndiyo/Siyo

Kuna muungano wa kazi wa kutosha kati ya

(57) Wewe kama mkulima na waisidizi wa Idara ya Vyama vya Ushirika?

Ndiyo/Siyo

(58) Wasaidizi hao na mabwana wa shamba wa Halmashauri?

Ndiyo/Siyo

(59) Wafanya kazi kwenye Vyama vya Ushirika wanaweza kujitahidi zaidi jutoa maelezo mengi juu ya kazi za Vyama hivyo na maana yao?

Ndiyo/Siyo

(60) Vyama vya Ushirika vilivyo sehemu yako vinashindana sana na wanunuzi wa nje kupata mazao ya wakulima?

Ndiyo/Siyo

Vyama hivyo vinakutolea vitu hivi vifuatavyo vizuri zaidi kuliko wanunuzi wa reja reja?

Column

| | | |
|---|---|---|
| (61) | Usafirishaji | Vizuri/Si vizuri |
| (62) | Ukusanyaji | Vizuri/Si vizuri |
| (63) | Malipo | Vizuri/Si vizuri |
| (64) | Bei | Vizuri/Si vizuri |
| (65) | Mahali pa kununulia | Vizuri/Si vizuri |

Kwa kufikiria Vyama vya Ushirika katika sehemu yako vimekuwa vinafanya kazi yao na bidii hasa wakati vinapokuwa

| | | |
|---|---|---|
| (66) | Vinauza mazao mengi | Ndiyo/Siyo |
| (67) | Vinauza zao moja tu | Ndiyo/Siyo |

(68) Wewe umeshughulika kama mwanachama wa Chama cha kuuza mazao mengi na Chama cha kuuza zao moja tu?
Ndiyo/Siyo

Vyama vya Ushirika Vipewe madaraka ya pekee ya kununua kutoka kwa wakulima wenye mashamba madogo?

| | | |
|---|---|---|
| (69) | Mazao fulani fulani | Ndiyo/Siyo |
| (70) | Kwenye wilaya fulani | Ndiyo/Siyo |

Madaraka hayo yahusu

| | | |
|---|---|---|
| (71) | Mahindi | Ndiyo/Siyo |
| (72) | Pamba | Ndiyo/Siyo |
| (73) | Pereto | Ndiyo/Siyo |

(74) Unataka kuendelea kuwauzia wanunuzi wa nje pamoja na Vyama vya Ushirika?
Ndiyo/Siyo

(75) Wakulima wana haki kuingia kuwa wanachama au kutokuwa wanachama kwa hiari yao?
Ndiyo/Siyo

(76) Ni lazima wakulima waingizwe kwa nguvu na kuuza mazao yao kupitia Vyama hivi?
Ndiyo/Siyo

(77) Vyama vya Ushirika Kwenye sehemu yako vinafanya vizuri zaidi kwa mazao mengine yanayoleta faida kubwa?
Ndiyo/Siyo

(78) Vyama hushughulikia zaidi mazao mengine ambayo hayaleti faida kubwa?
Ndiyo/Siyo

(79) Wanunuzi wa kawaida wanashughulikia zaidi kuliko Vyama vya Ushirika kwenye sehemu yako biashara ya mazao ya faida kubwa?
Ndiyo/Siyo

Column

(80) Unafikiri kuwa ni kazi ya Serikali kuhimiza Vyama vya Ushirika viongeze utumishi wao kwa wakulima?

Ndiyo/Siyo

Column (81) CARD 2
Column (82) ZAO
Column (83) WILAYA

Column

(84) Unauza mazao yako kwenye Halmashauri ya Mazao moja moja?
Ndiyo/Siyo

Unawauzia wanunuzi wengine?

(85) Wanunuzi wa nje wa Halmashauri
Ndiyo/Siyo

(86) Vyama vya Ushirika Ndiyo/Siyo

(87) Wanunuzi wa reja reja Ndiyo/Siyo

(88) Katika sehemu yako kiasi cha mazao unayouza hupimwa kila wakati kuthibitisha kama wewe unapaswa kuuza kwenye Halmashauri moja moja?
Ndiyo/Siyo

(89) Unatosheka mpango huo huo kama mkulima?
Ndiyo/Siyo

Halmashauri unazozishughulikia zinakutolea utumishi gani?

Chagua majibu yo yote yafuatayo mpaka tisa tu na uyapange moja moja kwa utaratibu na kufuatana na umuhimu wake

(90) Uhakikishaji wa bei mara kwa mara.

(91) Ununuaji wa mara moja.

(92) Uuzaji wa mazao yako wa ngambo.

(93) Upelelezi wa masoko.

(94) Uhakikishaji wa masoko.

(95) Kuwakadiri na liseni Wanunuzi wa nje ili kununua mazao yako.

(96) Ulindaji wa masoko ya nyumbani na kuzuia wakulima wengi kabisa.

(97) Kazi ya kupima, kusafisha na kufunga mazao.

(98) Kuruhusu wakulima na liseni.

(99) Kununua mazao yote unayopanda.

(100) Uwekaji kwenye ghala.

(101) Kutokubadilisha faida ya pesa inayopatwa na wewe na wakulima wengine mara kwa mara.

Column

(102) Kukutoza kodi fulani kwa utumishi.

(103) Kutoa haki ya pekee ya kununulia.

(104) Kupitisha mazao yako kwenye mashine katika sehemu yako.

(105) Kupokea magunia yako yote yanayotosha kuwa kiasi kinachoweka moja moja kwenye ghala za Halmashauri.

Halmashauri hizo unazouzia

(106) Zimewatumia watu wote kufanya uchunguzi kuhusu majaribio ya kilimo katika sehemu yako?

Ndiyo/Siyo

(107) Zimekuwekea kima cho chote kwenye mazao yako kuhusu ubora au kiasi?

Ndiyo/Siyo

(108) Zimejaribu kusisitiza uuzaji wa mazao au mbegu mpya?

Ndiyo/Siyo

(109) Unauza moja wapo ya mazao yako kupitia kwa wanunuzi wa nje?

Ndiyo/Siyo

(110) Unapata milopo yo yote kutoka kwa Wanunuzi wa nje au kwa Halmashauri?

Ndiyo/Siyo

(111) Kwa kukisia kiasi kama magunia cha mazao yako yanayopitia wanunuzi hao ni zaidi kuliko yale magunia yanayopitia Wanunuzi wa Halmashauri?

Ndiyo/Siyo

Namna gani ukilinganisha utumishi wa Wanunuzi wa Halmashauri na wa wanunuzi wengine ufuatao

(112) Mahali pa kununulia Pengi/Chache

(113) Ulipaji kwa magunia chache

Wa juu/Wa chini

(114) Unafikirije Halmashauri hizi zinakupendeza wewe kwenye kazi yako?

Ndiyo/Siyo

(115) Wewe huwezi kuruhusiwa kuuzia Halmashauri zo zote moja moja usipo mwanachama?

Ndiyo/Siyo

(116) Halmas auri za Mazao zinachungulia na bidii kazi ya Wanunuzi wao?

Ndiyo/Siyo

(117) Halmashauri hizi zinakueleza wewe kwa nini ziko, na zinafanya kazi namna gani?

Ndiyo/Siyo

Column

(118) Unaelewa juu ya kodi gani zinazotozwa na Halmashauri hizi kwenye mazao yako?

Ndiyo/Siyo

(119) Kodi zozote kwenye mazao yako zinatozwa na County Council au Hazina ya wilaya yako?

Ndiyo/Siyo

Unafahamu maswali yafuatayo

(120) Kodi hizo jinsi inavyotumiwa"

Ndiyo/Siyo

(121) Jinsi zinavyokusanywa? Ndiyo/Siyo

(122) Sababu zao za kutozwa?

Ndiyo/Siyo

(123) Unatosheka mpango huu wa kuweka bei kabla?

Ndiyo/Siyo

Ungependelea bei zinazohakikishwa na Halmashauri za Mazao ziwe

(124) Bei za chini zisizopunguzwa

Ndiyo/Siyo

(125) Bei fulani zinazokadiriliwa

Ndiyo/Siyo

(126) Bei ambazo hazibadilikibadiliki

Ndiyo/Siyo

(127) Umetambua tofauti zo zote kati ya bei zilizotangazwa na Halmashauri, na bei ulizopata wewe baadaye kwa mazao yako?

Ndiyo/Siyo

(128) Unataka bei hizo za Halmashauri ziwekwe mara unapotokea wingi wa mazao tu au daima?

Wingi/Daima?

(129) Wakati ulipopita ungepata bei kubwa kwenye soko kuliko zile bei zilizokuwa zina wekwa na Halmashauri?

Ndiyo/Siyo

(130) Una taabu yo yote kupata mahitaji yanayofanya upate bei za juu zinazotakiwa na Halmashauri?

Ndiyo/Siyo

(131) Halmashauri ziko tayari kutoa bei kwa mazao ya hali ya chini?

Ndiyo/Siyo

Column

(132) Ingepaswa? Ndiyo/Siyo

Kwa namna gani unafikiria utumishi wa Halmashauri hizi kwa wewe na wakulima wengineo ungewezwa kuongezwa.

Chagua majibu yo yote yafuatayo mpaka tisa tu na uyapange moja moja kwa utaratibu na kufuatana na uhimu wake.

(133) Ununuzi zaidi.

(134) Ulipaji wa upesi.

(135) Mashauri mazuri na utumishi bora mashambani.

(136) Bei nafuu zaidi.

(137) Vifaa zaidi kwa upelelezi.

(138) Upungufu wa kodi.

(139) Kuendesha kazi ya kupitishia mazao kwenye mashine nchini.

(140) Kuruhusu Vyama vya Ushirika kuwa wanunuzi wa Halmashauri.

(141) Msaada wa fedha kwa wakulima.

(142) Kutoa mbegu, mbolea na magunia.

(143) Kutangaza bei za kununulia wakati wa kupanda mazao.

(144) Halmashauri unazouzia zinapanga zenyewe mazao yako kuyapitisha kwenye mashine?

Ndiyo/Siyo

(145) Kazi hiyo kupitisha mazao kwenye mashine inafanywa nje ya Halmashauri na wasimamizi wa kinu cha kusaga mahindi na kuchambulia pamba?

Ndiyo/Siyo

(146) Bei unazopata kutoka kwa wafundi wa viwanda hao hao zinawekwa na Halmashauri za mazao?

Ndiyo/Siyo

(147) Ni lazima baadhi ya faida inayopatikana baada ya kuuza mazao hayo yaliyopitia kwenye mashine iende kwa wakulima?

Ndiyo/Siyo

Kama una malalamiko mazito yo yote juu ya Halmashauri, yanahusu

upungufu wa bei wanazopata wakulima kutoka kwa Halmashauri kwa ajili ya kodi fulani kwenye

| Reply | Column | |
|---|---|---|
| | | Do you consider that in any of the following three crop varieties, joint marketing by Boards and Cooperatives would be furthered by the Boards doing away with Agents and buying direct from Cooperatives? |
| ☐ | (231) | Maize? Code No 0 / Yes 1 |
| ☐ | (232) | Cotton? Code No 0 / Yes 1 |
| ☐ | (233) | Pyrethrum? Code No 0 / Yes 1 |
| ☐ | (234) | Have any "black markets" been flourishing recently in or outside your District? Code No 0 / Yes 1 |
| ☐ | (235) | Should losses incurred by the Boards through low export prices be recovered by levies imposed on growers and Cooperatives? Code No 0 / Yes 1 |
| ☐ | (236) | Ought the Boards themselves to make up such deficits? Code No 0 / Yes 1 |
| ☐ | (237) | Have Cooperatives been paying back to growers collectively any operating surpluses? Code No 0 / Yes 1 |
| ☐ | (238) | Should Cooperatives reduce such pay-outs to members to accumulate reserves? Code No 0 / Yes 1 |
| | | Is it the Government's job to make subsidies available where trading losses are incurred by |
| ☐ | (239) | Cooperatives? Code No 0 / Yes 1 |
| ☐ | (240) | Boards? Code No 0 / Yes 1 |

APPENDIX C

English Questionnaire No.2 on Maize, Cotton and Pyrethrum in Kenya. Administered to Board Area Managers, Field Officers and Registered Agents about Statutory Marketing Boards and Cooperative Societies.

| Reply | Column | |
|---|---|---|
| | (161) | Board personnel Code 2 |
| | (162) | Maize Code 0<br>Cotton 1<br>Pyrethrum 2 |

(163)

| Maize | | Cotton | | Pyrethrum | |
|---|---|---|---|---|---|
| Bungoma | Code 0 | Siaya | Code 4 | Kisii | Code 8 |
| Trans Nzoia | 1 | Busia | 5 | Nyandarua | 9 |
| Kakamega | 2 | Kisumu | 6 | Nakuru | X |
| Nandi | 3 | South Nyanza | 7 | Fort Hall | Y |

(164) Is the delivery of produce by Primary Cooperatives and its collection by Boards working well in your District?

Code No 0 Yes 1

(165) Is the marketing of this produce by Boards and Cooperative Unions outside your District satisfactory?

Code No 0 Yes 1

In what ways might their joint marketing be improved? Select any of the following answers which you consider to be the most important and rank them in order of preference.

If undecided Code 0; code those of importance in order 1, 2, 3, 4, 5, 6.

(166) More Cooperatives appointed as Board Agents.

(167) Regular contacts at District level between Cooperative Assistants and Board Agents.

| Reply | Column | |
|---|---|---|
| | (168) | Joint working groups to investigate marketing problems by commodity or area. |
| | (169) | Granting monopoly buying rights to Cooperatives to resell to Boards. |
| | (170) | Greater involvement by the Boards in maintaining higher standards of service by Cooperatives. |
| | (171) | Parity of terms, payment and agency services. |
| | (172) | How do you view the role of the Marketing Boards in helping to develop Cooperative marketing?<br>Code Unimportant 0<br>Important 1 |
| | (173) | Should Cooperative Unions collectively play a major part in the formulation of the marketing strategy of the Boards?<br>Code Unimportant 0<br>Important 1 |

What problems do you see in the furtherance of the Boards' marketing programmes, and in the carrying out of their statutory responsibilities?

Select up to nine of the following answers which you consider to be the most important and rank them in order of preference.

If undecided Code 0; code those of importance in order 1, 2, 3, 4, 5, 6, 7, 8, 9.

| Reply | Column | |
|---|---|---|
| | (174) | Shortage of trained management within the Boards' headquarters. |
| | (175) | Insufficient experienced Area Managers and Field Officers. |
| | (176) | Weaknesses in Cooperative Primary Societies. |

| Reply | Column | |
|---|---|---|
| ☐ | (177) | Political intervention by Government. |
| ☐ | (178) | Finance required to back support prices. |
| ☐ | (179) | Lack of market research. |
| ☐ | (180) | Integrating the grading, processing and packing stages before resale. |
| ☐ | (181) | The need to diversify cash crop varieties. |
| ☐ | (182) | Meeting the marketing costs of the Boards. |
| ☐ | (183) | Few technical staff to liaise with Ministry of Agriculture on crop marketing. |

What would you say are the main weaknesses of Cooperative Societies?

Select up to nine of the following answers which you consider to be the most important and rank them in order of preference.

If undecided Code 0; code those of importance in order 1, 2, 3, 4, 5, 6, 7, 8, 9.

| | | |
|---|---|---|
| ☐ | (184) | Untrained management. |
| ☐ | (185) | Lack of member support. |
| ☐ | (186) | Insufficient capital. |
| ☐ | (187) | Poor marketing services to growers. |
| ☐ | (188) | Late payments to growers. |
| ☐ | (189) | Conflict between members and management. |
| ☐ | (190) | Inability to compete with produce traders. |

| Reply | Column | |
|---|---|---|
| ☐ | (191) | Low quality of produce sold to Boards. |
| ☐ | (192) | Indebtedness to suppliers or Government agencies. |
| ☐ | (193) | Proportion of dormant societies. |

In what ways could the Boards help Cooperatives to raise the standards of their marketing services to growers?

Select any of the following answers which you consider to be the most important and rank them in order of preference.

If undecided Code 0; code those of importance in order 1, 2, 3, 4.

| | | |
|---|---|---|
| ☐ | (194) | Insisting on higher quality produce. |
| ☐ | (195) | Helping with management training. |
| ☐ | (196) | Field inspection and extension services. |
| ☐ | (197) | Granting agencies to Cooperatives on condition of prompt deliveries of produce. |

How could Government improve the performance of Cooperatives?

Select any of the following answers which you consider to be the most important and rank them in order of preference.

If undecided Code 0; code those of importance in order 1, 2, 3, 4, 5, 6.

| | | |
|---|---|---|
| ☐ | (198) | Intensify Cooperative training. |
| ☐ | (199) | Bond trained Cooperative Secretaries to reduce wastage of skilled manpower. |
| ☐ | (200) | Institute centralised accounting. |
| ☐ | (201) | Longer term and more loan facilities. |

| Reply | Column | |
|---|---|---|
| ☐ | (202) | Monopoly purchasing in selected districts or of selected produce. |
| ☐ | (203) | Require all Cooperative Primary Societies to amalgamate into District Unions. |
| ☐ | (204) | Should Cooperatives have greater autonomy in the marketing of their produce?<br>Code No 0<br>Yes 1 |
| ☐ | (205) | Would they be able to undertake it in your commodity/district?<br>Code No 0<br>Yes 1 |
| ☐ | (206) | Are the criteria adequate by which the Boards Appoint Agents?<br>Code No 0<br>Yes 1 |
| ☐ | (207) | Withdraw agency licences?<br>Code No 0<br>Yes 1 |
| | | Have any of the following in your experience proved unsuitable as Agents? |
| ☐ | (208) | Produce traders?<br>Code No 0<br>Yes 1 |
| ☐ | (209) | Licensed Processors?<br>Code No 0<br>Yes 1 |
| ☐ | (210) | Cooperative Societies?<br>Code No 0<br>Yes 1 |
| ☐ | (211) | Registered Board Agents?<br>Code No 0<br>Yes 1 |

| Reply | Column | |
|---|---|---|
| | (212) | Do you understand clearly Government policy towards Boards?<br>Code No 0<br>Yes 1 |
| | (213) | Are they fulfilling all their statutory duties?<br>Code No 0<br>Yes 1 |
| | (214) | Do you understand clearly Government policy towards Cooperatives?<br>Code No 0<br>Yes 1 |
| | (215) | Are they meeting the objectives set by Government within the terms of Cooperative legislation?<br>Code No 0<br>Yes 1 |
| | (216) | Ought Cooperatives to continue to market their produce only to Boards?<br>Code No 0<br>Yes 1 |
| | (217) | Should Boards require growers to join a Cooperative if they wish to grow certain crops?<br>Code No 0<br>Yes 1 |
| | (218) | Should Cooperatives sell direct to produce traders and other buyers?<br>Code No 0<br>Yes 1 |
| | (219) | Should Boards go on buying from small-scale growers or traders in areas where there are Cooperatives dealing in the same produce?<br>Code No 0<br>Yes 1 |
| | | Do you think improvements necessary in the ways Secretaries of Cooperative Societies are |
| | (220) | Recruited? Code No 0 Yes 1 |

| Reply | Column | | |
|---|---|---|---|
| | (221) | Trained? | Code No 0 Yes 1 |
| | (222) | Remunerated? | Code No 0 Yes 1 |
| | (223) | Supervised? | Code No 0 Yes 1 |

Have you continuing contacts, where applicable, with the following in your District in the marketing of your commodity?

| Reply | Column | | |
|---|---|---|---|
| | (224) | Cooperative Officers and Assistants? | Code No 0<br>Yes 1 |
| | (225) | Board Area Managers? | Code No 0<br>Yes 1 |
| | (226) | Cooperative Society Secretaries? | Code No 0<br>Yes 1 |
| | (227) | Registered Board Agents? | Code No 0<br>Yes 1 |

Are the proportions by quantity of the produce collected by the Boards in your District increasingly deriving from

| Reply | Column | | |
|---|---|---|---|
| | (228) | Small-scale growers | Code No 0<br>Yes 1 |
| | (229) | Large-scale growers | Code No 0<br>Yes 1 |
| | (230) | Cooperatives? | Code No 0<br>Yes 1 |

| Reply | Column | |
|---|---|---|
| | | Do you consider that in any of the following three crop varieties, joint marketing by Boards and Cooperatives would be furthered by the Boards doing away with Agents and buying direct from Cooperatives? |
| [ ] | (231) | Maize? Code No 0 / Yes 1 |
| [ ] | (232) | Cotton? Code No 0 / Yes 1 |
| [ ] | (233) | Pyrethrum? Code No 0 / Yes 1 |
| [ ] | (234) | Have any "black markets" been flourishing recently in or outside your District? Code No 0 / Yes 1 |
| [ ] | (235) | Should losses incurred by the Boards through low export prices be recovered by levies imposed on growers and Cooperatives? Code No 0 / Yes 1 |
| [ ] | (236) | Ought the Boards themselves to make up such deficits? Code No 0 / Yes 1 |
| [ ] | (237) | Have Cooperatives been paying back to growers collectively any operating surpluses? Code No 0 / Yes 1 |
| [ ] | (238) | Should Cooperatives reduce such pay-outs to members to accumulate reserves? Code No 0 / Yes 1 |
| | | Is it the Government's job to make subsidies available where trading losses are incurred by |
| [ ] | (239) | Cooperatives? Code No 0 / Yes 1 |
| [ ] | (240) | Boards? Code No 0 / Yes 1 |

APPENDIX D

Swahili Questionnaire No.2 juu ya Mahindi, Pamba na Pereto nchini ya Kenya.

Majibu ya Menega, Mabwana Shamba na Wanunuzi wa Halmashauri za Mazao kuhusu Vyama vya Ushirika na Halmashauri za Mazao.

Column (161) WATU WA HALMASHAURI
Column (162) ZAO
Column (163) WILAYA

Column

(164) Utoleaji wa mazao na Vyama vya Ushirika na unusanyaji wake na Halmashauri za Mazao unafanywa visuri katika wilaya yako?

Ndiyo/Siyo

(165) Uuzaji wa mazao na Majamii ya Ushirika na Halmashauri za Mazao unafanywa vizuri pamoja nje ya wilaya yako?

Ndiyo/Siyo

Kwa njia ganimuungano wa kazi zao zingeweza kufanywa kuwa nzuri?

Chagua majibu yo yote yafuatayo na uyapange moja moja kwa utaratibu na kufuatana na umuhimu wake.

(166) Vyama vya Ushirika vingi vichaguliwe kuwa Wanunuzi wa Halmashauri za Mazao.

(167) Makutano ya mara kwa mara kwenye wilaya kati ya viongozi wa Vyama hivi na wa Halmashauri hizi.

(168) Kufanya kazi kwa pamoja hivi ili kutafuta shida zinazokabidhi zao au wilaya.

(169) Kuruhusu Vyama vya Ushirika tu vinunue mazao na kuuzia Halmashauri za Mazao.

(170) Halmashauri hizo ziangalie zaidi kuwa Vyama vya Ushirika vinafanya bidii ya kuleta hali bora zaidi.

(171) Kusawazisha mambo yote yanayohusu kanuni, malipo na utumishi.

(172) Unaonaje kazi ya Halmashauri za Mazao kusaidia kuendeleza ununuzi katika Vyama vya Ushirika?

Jambo la maana/Si jambo sana

(173) Ni muhimu gani unaweza kutoa kwa Vyama vya Ushirika vyote pamoja katika uuzaji kwenye Halmashauri zenyewe?

Jambo la maana/Si jambo sana

Oolumn

Ni taabu gani unaziona katika mipango ya uuzaji kwenye Halmashauri za Mazao, na ni hatua gani zinachukuliwa kutokana na madaraka yao?

Chagua majibu yo yote yafuatayo mpaka tisa tu na uyapange moja moja kwa utaratibu na kufuatana na umuhimu wake.

(174) Uhaba wa viongozi bora katika ofisi za Halmashauri.

(175) Uhaba wa maofisa nchnin wanaojua kazi sana.

(176) Udhaifu kwenye Vyama vya Ushirika.

(177) Uingiliaji wa Serikali.

(178) Fedha zinazotakiwa kusaidia bei.

(179) Ukosefu wa mapelelezo ya masoko.

(180) Uchanganyaji wa kazi ya kuchagua, na kuweka kwenye mashine, pamoja na kufunga kabla ya kuuza nje.

(181) Mahitaji ya kutosha mazao ya aina nyingi yenye fedha nyingi.

(182) Kuweka akiba kwa gharama za uuzaji za Halmashauri zenyewe.

(183) Uhaba wa mafundi wanaosililizana na Idara ya Ukulima katika mipango ya muhimu ya kuuza mazao.

Kwa upande wako kuna udhaifu gani katika Vyama vya Ushirika?

Chagua majibu yo yote yafuatayo mpaka tisa tu na uyapange moja moja kwa utaratibu na kufuatana na umuhimu wake.

(184) Utawala usiotosheka.

(185) Ukosefu wa msaada wa wanachama.

(186) Uhaba wa fedha.

(187) Utumishi mbaya kwa wakulima.

(188) Ucheleweshi wa malipo kwa wakulima.

(189) Kutoeleana kati ya wanachama na viongozi.

(190) Kushindwa kushindana na wanunuzi wa nje.

(191) Hali ya chini ya mazao yanayouzwa kwenye Halmashauri.

(192) Madeni katika watoaji wa nje au wa serikali waletao msaada.

(193) Baadhi ya Vyama vya Ushirika vinavyolala.

Kwa njia gani Halmashauri za Mazao zinwaweza kusaidia kuinua utumishi mzuri wa uuzaji wa Vyama vya Ushirika?

Chagua majibu yo yote yafuatayo na uyapange moja moja kwa utaratibu na kufuatana na umuhimu wake.

Column

(194) Kusisitiza kwenye mazao bora.

(195) Kusaidia kufundisha viongozi wao.

(196) Utumishi wa kupeleleza na kuweka majaribio mashambani.

(197) Kuviruhusu Vyama vya Ushirika kuwa wanunuzi ikiwa uwekaji wa mara moja wa mazao.

Namna gani Serikali inaweza kuendesha utumishi wa Vyama vya Ushirika kuwa mzuri?

Chagua majibu yo yote yafuatayo na uyapange moja moja kwa utaratibu na kufuatana na umuhimu wake.

(198) Kuongeza majundisho zaidi kwa Vyama vya Ushirika.

(199) Kuwaingiza viongozi wa Vyama hivi waliofundishwa na serikali katika dhamana ya muda wa miaka kwenye Kazi zao, wasitoke kupata kazi ingineyo.

(200) Kutawala mambo yote ya fedha.

(201) Misaada kwa njia ya milopo mingi na ya muda mrefu zaidi.

(202) Haki ya pekee ya ununuzi kwenye wilaya fulani au kwenye mazao fulani fulani.

(203) Kulazimisha Vyama vya Ushirika vyote viingie kwenye Majamii ya Wilaya.

(204) Vyama vya Ushirika viwe na utawala zaidi kwenye kuuza mazao yao?

Ndiyo/Siyo

(205) Vyama vyenyewe vingekuwa na uwezo huo huo?

Ndiyo/Siyo

Njia Halmashauri za Mazao zinavyo panga wanunuzi wao zinatosheleza katika

(206) Kuchagua Wanunuzi hao? Ndiyo/Siyo

(207) Kufuta liseni zao? Ndiyo/Siyo

Umeona ukosefu au ubaya wo wote kwenye kazi ya hawa wafuatao wakinunua mazao?

(208) Wanunuzi wa nje Ndiyo/Siyo

(209) Mafundi wa viwanda Ndiyo/Siyo

(210) Vyama vya Ushirika Ndiyo/Siyo

Column

(211) Wanunuzi wa Halmashauri Ndiyo/Siyo

(212) Unaelewaje siasa ya Serikali katika Halmashauri za Mazao?

Ndiyo/Siyo

(213) Halmashauri hizo zinatimiza majibu yao yote vizuri?

Ndiyo/Siyo

(214) Unaelewaje siasa ya Serikali katika Vyama vya Ushirika?

Ndiyo/Siyo

(215) Vyama hivyo vinatimiza majibu yao yaliowekwa na Serikali na kufuata sheria inayohusu Vyama hivi?

Ndiyo/Siyo

(216) Ni lazima Vyama vya Ushirika Viendelee kuuza mazao yao kwenye Halmashauri za mazao tu?

Ndiyo/Siyo

(217) Halmashauri hizo zinwalazimishe wakulima wote watakao kupanda mazao fulani waingie kwenye Chama cha Ushirika?

Ndiyo/Siyo

(218) Vyama vya Ushirika viruhusiwe kuwauzia moja wafanya biashara na wanunuzi wa nje?

Ndiyo/Siyo

(219) Halmashauri zenyewe ziendelee kununua mazao kutoka kwa wakulima binafsi au wanunuzi sehemu Vyama vya Ushirika vinaposhughulika mazao hayo hayo?

Ndiyo/Siyo

Unafikirije kuchukua hatua za kuendesha namna viongozi wa Vyama ya Ushirika

(220) Wanachaguliwa Ndiyo/Siyo

(221) Wanafundishwa Ndiyo/Siyo

(222) Wanalipwa Ndiyo/Siyo

(223) Wanasimamiwa Ndiyo/Siyo

Una masikilizano yafaayo kwenye sehemu yako na katika uuzaji wa zao lako na watu wafuatno?

(224) Maofisa na Wasaidizi wa Idara ya Vyama Vya Ushirika

Ndiyo/Siyo

(225) Menega wa Halmashauri za Mazao

Ndiyo/Siyo

Column

(226) Menega wa Vyama vya Ushirika
Ndiyo/Siyo

(227) Wanunuzi wa Halmashauri za Mazao
8 Ndiyo/Siyo

Ni kiasi gani kama magunia ya mazao yanayopitia kwenye Halmashauri za Mazao katika wilaya yako, yanazidi kutoka kwa

(228) Wakulima wenye mashamba madogo
Ndiyo/Siyo

(229) Wakulima wenye mashamba makubwa
Ndiyo/Siyo

(230) Vyama vya Ushirika Ndiyo/Siyo

Mawaidha yako ni nini juu ya muungano wa kazi za Vyama hivi na Halmashauri hizi, maana kazi hizo hizo za kuuza zingekuwa bora zaidi kama Halmashauri za Mazao zitafuta Wanunuzi wote wa nje na kununua moja moja kutoka kwa Vyama vya Ushirika tu, kwenye mazao yafuatayo?

(231) Mahindi Ndiyo/Siyo

(232) Pamba Ndiyo/Siyo

(233) Pereto Ndiyo/Siyo

(234) "Masoko ya magendo" yoyote yamesitawi ndani au nje ya Wilaya yako siku hizi?
Ndiyo/Siyo

(235) Hasara zinaweza kutokea kwenye Halmashauri kwa ajili ya bei za chini wakati wa kuuza kwenye masoko ya dunia; hasara hizo zisawazishwe kabisa na kodi zinazolipwa na wakulima na Vyama vya Ushirika?
Ndiyo/Siyo

(236) Halmashauri za Mazao zisawazishe zenyewe hasara hizo hizo?
Ndiyo/Siyo

(237) Vyama vya Ushirika vimekuwa vinawapa wakulima faida yo yote inayotokana kwa kazi zao?
Ndiyo/Siyo

(238) Vyama hivyo vipunguze malipo hayo hayo ili kuweka akiba?
Ndiyo/Siyo

Kwa kiasi gani Serikali inapaswa kutoa fedha wakati hasara hizo hizo zinatokea kwenye kazi ya

(239) Vyama vya Ushirika Ndiyo/Siyo

(240) Halmashauri za Mazao Ndiyo/Siyo

APPENDIX E

**English Questionnaire No.3 on Maize, Cotton and Pyrethrum in Kenya. Administered to Cooperative Officers and Assistants, and Cooperative Secretaries about Statutory Marketing Boards and Cooperative Societies.**

| Reply | Column | |
|---|---|---|
| ☐ | (241) | Cooperative personnel Code 3 |
| ☐ | (242) | Maize Code 0<br>Cotton 1<br>Pyrethrum 2 |
| ☐ | (243) | see table below |

| Maize | | Cotton | | Pyrethrum | |
|---|---|---|---|---|---|
| Bungoma | Code 0 | Siaya | Code 4 | Kisii | Code 8 |
| Trans Nzoia | 1 | Busia | 5 | Nyandarua | 9 |
| Kakamega | 2 | Kisumu | 6 | Nakuru | X |
| Nandi | 3 | South Nyanza | 7 | Fort Hall | Y |

☐ (244) Is the delivery of produce by Primary Cooperatives and its collection by Boards working well in your District?

Code No 0 Yes 1

☐ (245) Is the marketing of this produce by Boards and Cooperative Unions outside your District satisfactory?

Code No 0 Yes 1

In what ways might their joint marketing be improved? Select any of the following answers which you consider to be the most important and rank them in order of preference.

If undecided Code 0; code those of importance in order 1, 2, 3, 4, 5, 6.

☐ (246) More Cooperatives appointed as Board Agents.

☐ (247) Regular contacts at District level between Cooperative Assistants and Board Agents.

☐ (248) Joint working groups to investigate marketing problems by commodity or area.

| Reply | Column | |
|---|---|---|
| ☐ | (249) | Granting monopoly buying rights to Cooperatives to resell to Boards. |
| ☐ | (250) | Greater involvement by the Boards in maintaining higher standards of service by Cooperatives. |
| ☐ | (251) | Parity of terms, payment and agency services. |
| ☐ | (252) | How do you view the role of the Marketing Boards in helping to develop Cooperative marketing? Code Unimportant 0, Important 1 |
| ☐ | (253) | Should Cooperative Unions collectively play a major part in the formulation of the marketing strategy of the Boards? Code Unimportant 0, Important 1 |

What problems do you see in the furtherance of the Boards' marketing programmes, and in the carrying out of their statutory responsibilities?

Select up to nine of the following answers which you consider to be the most important and rank them in order of preference.

If undecided Code 0; code those of importance in order 1, 2, 3, 4, 5, 6, 7, 8, 9.

| | | |
|---|---|---|
| ☐ | (254) | Shortage of trained management within the Boards' headquarters. |
| ☐ | (255) | Insufficient experienced Area Managers and Field Officers. |
| ☐ | (256) | Weaknesses in Cooperative Primary Societies. |
| ☐ | (257) | Political intervention by Government. |
| ☐ | (258) | Finance required to back support prices. |
| ☐ | (259) | Lack of market research. |

| Reply | Column | |
|---|---|---|
| ☐ | (260) | Integrating the grading, processing and packing stages before resale. |
| ☐ | (261) | The need to diversify cash crop varieties. |
| ☐ | (262) | Meeting the marketing costs of the Boards. |
| ☐ | (263) | Few technical staff to liaise with Ministry of Agriculture on crop marketing. |

What would you say are the main weaknesses of Cooperative Societies?

Select up to nine of the following answers which you consider to be the most important and rank them in order of preference.

If undecided Code 0; code those of importance in order 1, 2, 3, 4, 5, 6, 7, 8, 9.

| Reply | Column | |
|---|---|---|
| ☐ | (264) | Untrained management. |
| ☐ | (265) | Lack of member support. |
| ☐ | (266) | Insufficient capital. |
| ☐ | (267) | Poor marketing services to growers. |
| ☐ | (268) | Late payments to growers. |
| ☐ | (269) | Conflict between members and management. |
| ☐ | (270) | Inability to compete with produce traders. |
| ☐ | (271) | Low quality of produce sold to Boards. |
| ☐ | (272) | Indebtedness to suppliers or Government agencies. |
| ☐ | (273) | Proportion of dormant societies. |

| Reply | Column | |
|---|---|---|
| | | In what ways could the Boards help Cooperatives to raise the standards of their marketing services to growers? |
| | | Select any of the following answers which you consider to be the most important and rank them in order of preference. |
| | | If undecided Code 0: code those of importance in order 1, 2, 3, 4. |
| ☐ | (274) | Insisting on higher quality produce. |
| ☐ | (275) | Helping with management training. |
| ☐ | (276) | Field inspection and extension services. |
| ☐ | (277) | Granting agencies to Cooperatives on condition of prompt deliveries of produce. |
| | | How could Government improve the performance of Cooperatives? |
| | | Select any of the following answers which you consider to be the most important and rank them in order of preference. |
| | | If undecided Code 0; code those of importance in order 1, 2, 3, 4, 5, 6. |
| ☐ | (278) | Intensify Cooperative training. |
| ☐ | (279) | Bond trained Cooperative Secretaries to reduce wastage of skilled manpower. |
| ☐ | (280) | Institute centralised accounting. |
| ☐ | (281) | Longer term and more loan facilities. |
| ☐ | (282) | Monopoly purchasing in selected districts or of selected produce. |
| ☐ | (283) | Require all Cooperative Primary Societies to amalgamate into District Unions. |

| Reply | Column | |
|---|---|---|
| | (284) | Should Cooperatives have greater autonomy in the marketing of their produce?<br>Code No 0<br>Yes 1 |
| | (285) | Would they be able to undertake it in your commodity/district?<br>Code No 0<br>Yes 1 |
| | | Are the criteria adequate by which the Boards |
| | (286) | Appoint Agents?<br>Code No 0<br>Yes 1 |
| | (287) | Withdraw agency licences?<br>Code No 0<br>Yes 1 |
| | | Have any of the following in your experience proved unsuitable as Agents? |
| | (288) | Produce traders?<br>Code No 0<br>Yes 1 |
| | (289) | Licensed processors?<br>Code No 0<br>Yes 1 |
| | (290) | Cooperative Societies?<br>Code No 0<br>Yes 1 |
| | (291) | Registered Board Agents?<br>Code No 0<br>Yes 1 |
| | (292) | Do you understand clearly Government policy towards Boards?<br>Code No 0<br>Yes 1 |

| Reply | Column | |
|---|---|---|
| ☐ | (293) | Are they fulfilling all their statutory duties?<br>Code No 0<br>Yes 1 |
| ☐ | (294) | Do you understand clearly Government policy towards Cooperatives?<br>Code No 0<br>Yes 1 |
| ☐ | (295) | Are they meeting the objectives set by Government within the terms of Cooperative legislation?<br>Code No 0<br>Yes 1 |
| ☐ | (296) | Ought Cooperatives to continue to market their produce only to Boards?<br>Code No 0<br>Yes 1 |
| ☐ | (297) | Should Boards require growers to join a Cooperative if they wish to grow certain crops?<br>Code No 0<br>Yes 1 |
| ☐ | (298) | Should Cooperatives sell direct to produce traders and other buyers?<br>Code No 0<br>Yes 1 |
| ☐ | (299) | Should Boards go on buying from small-scale growers or traders in areas where there are Cooperatives dealing in the same produce?<br>Code No 0<br>Yes 1 |
| | | Do you think improvements necessary in the ways Secretaries of Cooperative Societies are |
| ☐ | (300) | Recruited? Code No 0 Yes 1 |
| ☐ | (301) | Trained? Code No 0 Yes 1 |

| Reply | Column | |
|---|---|---|
| ☐ | (302) | Remunerated? Code No 0 Yes 1 |
| ☐ | (303) | Supervised? Code No 0 Yes 1 |
| | | Have you continuing contacts, where applicable, with the following in your District in the marketing of your commodity? |
| ☐ | (304) | Cooperative Officers and Assistants? Code No 0 Yes 1 |
| ☐ | (305) | Board Area Managers? Code No 0 Yes 1 |
| ☐ | (306) | Cooperative Society Secretaries? Code No 0 Yes 1 |
| ☐ | (307) | Registered Board Agents? Code No 0 Yes 1 |
| | | Are the proportions by quantity of the produce collected by the Boards in your District increasingly deriving from |
| ☐ | (308) | Small-scale growers? Code No 0 Yes 1 |
| ☐ | (309) | Large-scale growers? Code No 0 Yes 1 |
| ☐ | (310) | Cooperatives? Code No 0 Yes 1 |

Do you consider that in any of the following three crop varieties, joint marketing by Boards and Cooperatives would be furthered by the Boards doing away with Agents and buying direct from Cooperatives?

| Reply | Column | | |
|---|---|---|---|
| | (311) | Maize? | Code No 0<br>Yes 1 |
| | (312) | Cotton? | Code No 0<br>Yes 1 |
| | (313) | Pyrethrum? | Code No 0<br>Yes 1 |
| | (314) | Have any "black markets" been flourishing recently in or outside your District? | Code No 0<br>Yes 1 |
| | (315) | Should losses incurred by the Boards through low export prices be recovered by levies imposed on growers and Cooperatives? | Code No 0<br>Yes 1 |
| | (316) | Ought the Boards themselves to make up such deficits? | Code No 0<br>Yes 1 |
| | (317) | Have Cooperatives been paying back to growers collectively any operating surpluses? | Code No 0<br>Yes 1 |
| | (318) | Should Cooperatives reduce such pay-outs to members to accumulate reserves? | Code No 0<br>Yes 1 |
| | | Is it the Government's job to make subsidies available where trading losses are incurred by | |
| | (319) | Cooperatives? | Code No 0<br>Yes 1 |
| | (320) | Boards? | Code No 0<br>Yes 1 |

APPENDIX F

Swahili Questionnaire No.3 juu ya Mahindi, Pamba
na Pereto nchini ya kenya.

Majibu ya Maofisa na Wasaidizi wa Idara ya Vyama vya
Ushirika na Viongozi wa Vyama hivyo kuhusu Vyama vya
Ushirika na Halmashauri za Mazao.

Column (241) WATU WA USHIRIKA
Column (242) ZAO
Column (243) WILAYA

Column

(244) Utoleaji wa mazao na Vyama vya ushirika na unusanyaji wake na Halmashauri za Mazao unafanywa vizuri katika wilaya yako?

Ndiyo/Siyo

(245) Uuzaji wa mazao na Majamii ya Ushirika na Halmashauri za Mazao unafanywa vizuri pamoja nje ya wilaya yako?

Ndiyo/Siyo

Kwa njia gani muungano wa kazi zao zingeweza kufanywa kuwa nzuri?

Chagua majibu yo yote yafuatayo na uyapange moja moja kwa utaratibu na kufuatana na umuhimu wake.

(246) Vyama vya Ushirika vingi vichaguliwe kuwa Wanunuzi wa Halmashauri za Mazao.

(247) Makutano ya mara kwa mara kwenye wilaya kati ya viongozi wa Vyama hivi na wa Halmashauri hizi.

(248) Kufanya kazi kwa pamoja hivi ili kutafuta shida zinazokabidhi zao au wilaya.

(249) Kuruhusu Vyama vya Ushirika tu vinunue mazao na kuuzia Halmashauri za Mazao.

(250) Halmashauri hizo ziangalie zaidi kuwa Vyama vya Ushirika vinafanya bidii ya kuleta hali bora zaidi.

(251) Kusawazisha mambo yote yanayohusu kanuni, malipo na utumishi.

(252) Unaonaje kazi ya Halmashauri za Mazao kusaidia kuendeleza ununuzi katika Vyama vya Ushirika?

Jambo la maana/Si jambo sana

Column

(253) Ni muhimu gani unaweza kutoa kwa Vyama vya Ushirika vyote pamoja katika uuzaji kwenye Halmashauri zenyewe?

Jambo la maana/Si jambo sana

Ni taabu gani unaziona katika mipango ya uuzaji kwenye Halmashauri za Mazao, na ni hatua gani zinachukuliwa kutokana na madaraka yao?

Chagua majibu yo yote yafuatayo mpaka tisa tu na uyapange moja moja kwa utaratibu na kufuatana na umuhimu wake.

(254) Uhaba wa viongozi bora katika ofisi za Halmashauri.

(255) Uhaba wa maofisa nchini wanaojua kazi sana.

(256) Udhaifu kwenye Vyama vya Ushirika.

(257) Uingiliaji wa Serikali.

(258) Fedha zinazotakiwa kusaidia bei.

(259) Ukosefu wa mapelelezo ya masoko.

(260) Uchanganyaji wa kazi ya kuchagua, na kuweka kwenye mashine, pamoja na kufunga kabla ya kuuza nje.

(261) Mahitaji ya kutosha mazao ya aina nyingi yenye fedha nyingi.

(262) Kuweka akiba kwa gharama za uuzaji za Halmashauri zenyewe.

(263) Uhaba wa mafundi wanaosikilizana na Idara ya Ukulima katika mipango ya muhimu ya kuuza mazao.

Kwa upande wako kuna udhaifu gani katika Vyama vya Ushirika?

Chagua majibu yo yote yafuatayo mpaka tisa tu na uyapange moja moja kwa utaratibu na kufuatana na umuhimu wake.

(264) Utawala usiotosheka.

(265) Ukosefu wa msaada wa wanachama.

(266) Uhaba wa fedha.

(267) Utumishi mbaya kwa wakulima.

(268) Ucheleweshi wa malipo kwa wakulima.

(269) Kutoeleana kati ya wanachama na viongozi.

(270) Kushindwa kushindana na wanunuzi wa nje.

(271) Hali ya chini ya mazao yanayouzwa kwenye Halmashauri.

Column

(272) Madeni katika watoaji wa nje au wa serikali waletao msaada.

(273) Baadhi ya Vyama vya Ushirika vinavyolala.

Kwa njia gani Halmashauri za Mazao zinwaweza kusaidia kuinua utumishi mzuri wa uuzaji wa Vyama vya Ushirika?

Chagua majibu yo yote yafuatayo na uyapange moja moja kwa utaratibu na kufuatana na umuhimu wake.

(274) Kusisitiza kwenye mazao bora.

(275) Kusaidia kufundisha viongozi wao.

(276) Utumishi wa kupeleleza na kuweka majaribio mashambani.

(277) Kuviruhusu Vyama vya Ushirika kuwa wanunuzi ikiwa uwekaji wa mara moja wa mazao.

Namna gani Serikali inaweza kuendesha utumishi wa Vyama vya Ushirika kuwa mzuri?

Chagua majibu yo yote yafuatayo na uyapange moja moja kwa utaratibu na kufuatana na umuhimu wake.

(278) Kuongeza mafundisho zaidi kwa Vyama vya Ushirika.

(279) Kuwaingiza viongozi wa Vyama hivi waliofundishwa na serikali katika dhamana ya muda wa miaka kwenye kazi zao, wasitoke kupata kazi ingineyo.

(280) Kutawala mambo yote ya fedha.

(281) Misaada kwa njia ya mikopo mingi na ya muda mrefu zaidi.

(282) Haki ya pekee ya ununuzi kewnye wilaya fulani au kwenye mazao fulani fulani.

(283) Kulazimisha Vyama vya Ushirika vyote viingie kwenye Majamii ya Wilaya.

(284) Vyama mya Ushirika viwe na utawala zaidi kwenye kuuza mazao yao?

Ndiyo/Siyo

(285) Vyama vyenyewe vingekuwa na uwezo huo huo?

Ndiyo/Siyo

Njia Halmashauri za Mazao zinavyo panga wanunuzi wao zinatosheleza katika

(286) Kuchagua Wanunuzi hao? Ndiyo/Siyo

(287) Kufuta liseni zao? Ndiyo/Siyo

Column

Umeona ukosefu au ubaya wo wote kwenye kazi ya hawa wafuatao wakinunua mazao?

(288) Wanunuai wa nje Ndiyo/Siyo

(289) Mafundi wa viwanda Ndiyo/Siyo

(290) Vyama vya Ushirika Ndiyo/Siyo

(291) Wanunuzi wa Halmashauri Ndiyo/Siyo

(292) Unaelewaje siasa ya Serikali katika Halmashauri za Mazao?

Ndiyo/Siyo

(293) Halmashauri hizo zinatimiza majibu yao yote vizuri?

Nidyo/Siyo

(294) Unaelweaje siasa ya Serikali katika Vyama vya Ushirika?

Nidyo/Siyo

(295) Vyama hivyo vinatimiza majibu yao yaliowekwa na Serikali na kufuata sheria inayohusu Vyama hivi?

Ndiyo/Siyo

(296) Ni lazima Vyama vya Ushirika viendelee kuuza mazao yao kwenye Halmashauri za Mazao tu?

Ndiyo/Siyo

(297) Halmashauri hizo zinwalazimishe wakulima wote watakao kupanda mazao fulani waingie kwenye Chama cha Ushirika?

Ndiyo/Siyo

(298) Vyama vya Ushirika viruhusiwe kuwauzia moja wafanya biashara na wanunuzi wa nje?

Ndiyo/Siyo

(299) Halmashauri zenyewe ziendelee kununua mazao kutoka kwa wakulima binafsi au wanunuzi sehemu Vyama vya Ushirika vinaposhughulika mazao hayo hayo?

Ndiyo/Siyo

Unafikirije kuchukua hatua za kuendesha namna viongozi wa Vyama ya Ushirika

(300) Wanachaguliwa Ndiyo/Siyo

Column

(301) Wanafundishwa Ndiyo/Siyo

(302) Wanalipwa Ndiyo/Siyo

(303) Wanasimamiwa Ndiyo/Siyo

Una masikilizano yafaayo kwenye··sehemu yako na katika uuzaji wa zao lako na watu wafuatao?

(304) Maofisa na Wasaidizi wa Idara ya Vyama Vya Ushirika
Ndiyo/Siyo

(305) Menega wa Halmashauri za Mazao
Ndiyo/Siyo

(306) Menega wa Vyama vya Ushirika
Ndiyo/Siyo

(307) Wanunuzi wa Halmashauri za Mazao
Ndiyo/Siyo

Ni kiasi gani kama magunia ya mazao yanayopitia kwenye Halmashauri za Mazao katika wilaya yako, yanazidi kutoka kwa

(308) Wakulima wenye mashamba madogo
Ndiyo/Siyo

(309) Wakulima wenye mashamba makubwa
Ndiyo/Siyo

(310) Vyama vya Ushirika Ndiyo/Siyo

Mawaidha yako ni nini juu ya muungano wa kazi za Vyama hivi na Halmashauri hizi, maana kazi hizo hizo za kuuza zingekuwa bora zaidi kama Halmashauri za Mazao zitafuta Wanunuzi wote wa nje na kununua moja moja kutoka kwa Vyama vya Ushirika tu, kwenye mazao yafuatayo?

Ndiyo/Siyo

(311) Mahindi Ndiyo/Siyo

(312) Pamba Ndiyo/Siyo

(313) Pereto Ndiyo/Siyo

(314) "Masoko ya magendo" yoyote yamesitawi ndani au nje ya Wilaya yako siku hizi?
Ndiyo/Siyo

(315) Hasara zinaweza kutokea kwenye Halmashauri kwa ajili ya bei za chini wakati wa kuuza kwenye masoko ya dunia; hasara hizo zisawazishwe kabisa na kodi zinazolipwa na wakulima na Vyama vya Ushirika?

Ndiyo/Siyo

(316) Halmashauri za Mazao zisawazishe zenyewe hasara hizo hizo?

Ndiyo/Siyo

(317) Vyama vya Ushirika vimekuwa vinawapa wakulima faida yo yote inayotokana kwa kazi zao?

Ndiyo/Siyo

(318) Vyama hivyo vipunguze malipo hayo hayo ili kuweka akiba?

Ndiyo/Siyo

Kwa kiasi gani Serikali inapaswa kutoa fedha wakati hasara hizo hizo zinatokea kwenye kazi ya

(319) Vyama vya Ushirika Ndiyo/Siyo

(320) Halmashauri za Mazao Ndiyo/Siyo

APPENDIX G

## Districts, Divisions, Locations and Sub-Locations of the Survey.

MAIZE

| Province | District | Divisions | Number of Locations | Number of Sub-Locations |
|---|---|---|---|---|
| Western | Bungoma | Kavujai | 5 | 25 |
| | | Naitiri/Ndalu | | 9 |
| | | Kimilili | 4 | 21 |
| Rift Valley | Trans Nzoia | | 4 | 3 |
| Western | Kakamega | Vihiga | 19 | 159 |
| | | Central | | |
| | | Lurambi | | |
| | | Mumias | | |
| | | Lugari | | |
| Rift Valley | | Mosop North | 9 | 61 |
| | | Aldai South | | |

COTTON

| Province | District | Divisions | Number of Locations | Number of Sub-Locations |
|---|---|---|---|---|
| Nyanza | Siaya | Yala | 12 | 124 |
| | | Boro | | |
| | | Bondo | | |
| | | Ukwala | | |
| Western | Busia | Northern | 6 | 47 |
| | | Central | | |
| | | Southern | | |
| Nyanza | Kisumu | Nyando | 8 | 75 |
| | | Kisumu | | |
| | | Maseno | | |
| | | Muhoroni | | |
| Nyanza | South8 Nyanza | Migori | 25 | 152 |
| | | Western/Lambwe | | |
| | | Central | | |
| | | Eastern/Kendu | | |
| | | Eastern | | |

PYRETHRUM

| Province | District | Divisions | Number of Locations | Number of Sub-Locations |
|---|---|---|---|---|
| Nyanza | Kisii | North Kisii | 13 | 69 |

PYRETHRUM

| Province | District | Divisions | Number of Locations | Number of Sub-Locations |
|---|---|---|---|---|
| | | South Kisii | | |
| Central | Nyandarua | Kinangop | 10 | 43 |
| | | Ol Kalou | | |
| | | Northern | | |
| Rift Valley | Nakuru | Nakuru Town | 12 | |
| | | Molo | | |
| | | Naivasha | | |
| Central | Fort Hall | Kakamega | 20 | 106 |
| | | Kiharu | | |
| | | Kandara | | |
| | | Kigumo | | |

APPENDIX H

## Enumerators' Notes and Instructions.

1. There are THREE Questionnaires in English and Swahili. Questionnaire No.1 is in 2 parts (on 2 cards) to be administered to small-scale growers. Questionnaire Nos. 2 and 3 are identical in content but administered to different respondents: No.2 to Board personnel; No.3 to Cooperative personnel.

2. All Questionnaires must be returned to me after the interviewing whether or not they have been completed.

3. The questions should be asked in English or Swahili, whichever is necessary to obtain the maximum understanding and cooperation of respondents. The written Questionnaires can be shown to respondents if it helps them to understand particular questions.

4. Before interviewing, ensure that all Columns numbered 1 have been pre-coded to indicate whether it is Questionnaire 1, Card 1 or Card 2; Questionniare 2 or Questionnaire 3. Crop and District Codes should also be entered carefully, depending on where you are interviewing.

5. You must record respondents' answers in the boxes against the appropriate Column numbers. The answers themselves should be coded as directed in the body of the Questionnaires.

6. There are TWO types of answers, (i) Yes/no and simple alternative replies, and (ii) multiple choice responses in which respondents' preferences are to be indicated numerically.

7. Multiple choice responses are those where a respondent is asked which of several different answers to a question he considers to be the most important. These should be coded in order of importance 1,2,3,4, 5,6,7,8,9 (depending upon the number of answers allowed): 1 = most important; 2 = next most important..............9 = least important. Those answers which he is undecided about must be coded 0 and NOT left blank.

8. Questionnaire 1 is for maize, OR cotton OR pyrethrum growers, and you should visit all Locations of your District. You must interview growers who are not members of Cooperatives as well as those who are,

unless instructed otherwise.

9. Questions in the following Columns of Questionnaire 1 should be addressed to members of Cooperatives ONLY: 36, 40 and 41, 44, 45, 46, 47, 48, 49, 50 and 51, and 55.

10. Questions in the following Columns of Questionnaire 1 should be addressed to growers who are NOT Cooperative members: 7, 8, 9, 10 and 11, and 34.

11. Questionnaire 2 is for Board Area Managers, Registered Board Agents, and Board Field Officers; Questionnaire 3 is for Cooperative Society Secretaries, Cooperative Officers and Assistants, and Secretaries of District Cooperative Unions.

12. You have been assigned a particular number of Questionnaires; complete these and these only.

APPENDIX I

## Enumerator's Introductory Letter

Ref. ....................

Date ....................

Faculty of Commerce,
University College,
P.O. Box 30197,
Nairobi.

The District Commissioner,
...............District,
...............Province.

Dear Sir,

The bearer of this letter, Mr. ................, a registered full-time student in the Faculty of Commerce, is assisting in a research project which has been approved by the Kenya Government, and by the Senate of the University of East Africa.

He is to undertake interviewing in your District of small-scale growers, Board Agents and Area Managers, and Cooperative Society Secretaries and Cooperative Officers.

I shall be obliged if you will give him every assistance, and if in any doubt, contact the undersigned.

Yours faithfully,

E.P. Hibbert,
Dept. of Business Administration.

APPENDIX J

## Details of Student Enumerators.

MAIZE

| District | Code | Students | Year |
|---|---|---|---|
| Bungoma | 0 | B.E. Amata | 1 |
| | | J.W. Wasike | 2 |
| | | F.J. Situma | 1 |
| | | R.C.B. Wesonga | 2 |
| | | M.M. Kiguseki | 2 |
| | | J.K. Mwangi | 2 |
| Trans Nzoia | 1 | J.J. Omuse | 1 |
| | | J.E.M. Alela | 1 |
| | | M.N.E. Mutongi | 1 |
| | | J.N. Miraze | 1 |
| | | W.C. Malle | 2 |
| | | M.H.W. Hiuhu | 1 |
| Kakamega | 2 | F.W.J. Ndombi | 2 |
| | | E.M. Shivachi | 2 |
| | | J.M. Ayuya | 3 |
| | | H.C. Wamubeyi | 2 |
| | | A. Okumbe | 2 |
| | | C.A.K. Gulavi | 2 |
| Nandi | 3 | W.K. Kenduiwa | 2 |
| | | P.M.K. Cheremgoi- Yebei | 2 |
| | | N.D. Bulimu | 1 |
| | | S.W. Mwenyi Nalyanya | 1 |
| | | F.W. Ngari | 1 |

COTTON

| District | Code | Students | Year |
|---|---|---|---|
| Siaya | 4 | P.W. Acholla | 1 |
| | | M.L. Agik | 3 |
| | | A.C. Okoko | 2 |
| | | F.S. Originjo D'awuor | 1 |
| | | J.H.R. Othieno | 1 |
| | | P.D. Kamau | 2 |

| District | Code | Students | Year |
|---|---|---|---|
| Busia | 5 | J.B.O. Wabwire | 1 |
| | | J.P. Odiwor | 1 |
| | | J.J. Wafula | 1 |
| | | A.K.O. Ettyanga | 1 |
| | | J. Aura | 1 |
| Kisumu | 6 | H. Owiti | 1 |
| | | S.O. Atuta | 1 |
| | | A.F. Jaffer | 3 |
| | | S.M. Mwathi | 1 |
| | | S.J.W. Wanjohi | 3 |
| South Nyanza | 7 | A. Mogambi | 1 |
| | | C.A.O. Okoth | 1 |
| | | P. Aludo | 1 |
| | | B. Congo | 1 |
| | | E. Ayiemba | 1 |
| | | D.N. Otieno | 2 |
| PYRETHRUM | | | |
| Kisii | 8 | E.R.O. Nyaribo | 2 |
| | | A.N. Moseti | 1 |
| | | J.N.O. Angwenyi | 1 |
| | | J.G.J. Mainye | 1 |
| | | S.N. Arasa | 2 |
| Nyandarua | 9 | Khirrecu Lawrence | 2 |
| | | J.A. Mwangi | 3 |
| | | P.M. Wainaina | 2 |
| | | P.C. Manyuira | 2 |
| | | J.M. Cucu | 1 |
| | | J.K. Njenga | 2 |
| Nakuru | X | P.N. Karanja | 1 |
| | | B.N. Karure | 2 |
| | | P. Munyao | 2 |
| | | S.D. Makeri | 3 |
| | | C.J. Kanyua | 2 |

| District | Code | Students | Year |
|---|---|---|---|
| Fort Hall | Y | F.N. Kibera | 2 |
| | | J.M. Karanja | 2 |
| | | J. Mbuthia | 1 |
| | | I.N. Kariuki | 1 |
| | | Mwangi M. Jimnah | 1 |
| | | A.M. Waituika | 2 |
| | | T.K. Theuri | 3 |

APPENDIX K

Distribution of Maize growers in the Kavujai and Kimilili Divisions of Bungoma District

Kavujai Division:

| Location | Sub-Location | Number of Villages | Number of Maize growers |
|---|---|---|---|
| North Malakisi | North Wamono | 5 | 264 |
| East of Bukusu | North Nalondo | 24 | 958 |
| East Bukusu | North Kandoni | 14 | 465 |
| West Bukusu | East Siboti | 17 | 512 |
| North Malakisi | North Namwela | 6 | 212 |
| West Bukusu | West Siboti | 10 | 254 |
| South Malakisi | South Namwela | 6 | 251 |
| South Malakisi | Mwalie | 15 | 356 |
| West Bukusu | South Myanga | 13 | 388 |
| East Bukusu | South Kanduyi | 13 | 649 |
| South Malakisi | South Kulisiru | 8 | 224 |
| West Bukusu | Khasoko | 9 | 366 |
| West Bukusu | South Mateka | 15 | 852 |
| North Malakisi | West Sasuri | 13 | 552 |
| West Bukusu | North Myanga | 15 | 601 |
| South Malakisi | North Kulisiru | 14 | 313 |
| North Malakisi | Changara | 9 | 284 |
| South Malakisi | Central Namwela | 10 | 434 |
| East Bukusu | West Sangalo | 9 | 436 |
| North Malakisi | South Wamono | 10 | 532 |
| North Bukusu | South Nalondo | 14 | 978 |
| East Bukusu | East Sangalo | 11 | 711 |
| East Bukusu | North Sangalo | 15 | 562 |
| West Bukusu | North Mateka | 11 | 717 |
| North Malakisi | East Sasuri | 7 | 340 |
| | Total | 293 | 12,211 |

Kimilili Division:

| | | | |
|---|---|---|---|
| Ndivisi | Mukuselwa | 25 | 1,050 |
| Elgon | Kaptama | 22 | 782 |
| Kimilili | Kamukuywa | 29 | 1,418 |
| Kimilili | Kimilili | 24 | 1,140 |

Kimilili Division (cont'd)

| Location | Sub-Location | Number of Villages | Number of Maize growers |
|---|---|---|---|
| Ndivisi | Ndivisi | 4 | 1,050 |
| Ndivisi | Mihuu | 16 | 987 |
| Bololi | Misikhu | 16 | 875 |
| Bololi | Bokoli | 25 | 1,540 |
| Bololi | Kituni | 16 | 1,085 |
| Elgon | Chemoge | 18 | 842 |
| Elgon | Kapsokwoni | 20 | 751 |
| Ndivisi | Muchi | 22 | 1,791 |
| Ndivisi | Khalumuli | 18 | 1,302 |
| Kimilili | Sikhendu | 24 | 1,157 |
| Kimilili | Kibengei | 24 | 1,720 |
| Bololi | Chwele | 24 | 1,282 |
| Bololi | Mukuyuni | 18 | 1,719 |
| Elgon | Nomorio | 20 | 1,203 |
| Elgon | Kakateny | 16 | 732 |
| Elgon | Chepkitale | 4 | 31 |
| | Total | 385 | 22,582 |

APPENDIX L

## Distribution of Registered Marketing Board Agents in Kakamega District.

| Market | Number of Board Agents | Locations | Board Depots |
|---|---|---|---|
| Kiringili | 4 | Bunyore/Maragoli | Yala |
| Shibinga | 6 | Bunyore | Yala |
| Ebukambuli | 5 | Kisa | Yala |
| Ebushiratsi | 5 | Bunyore | Yala |
| Magada | 2 | Maragoli/Bunyore | Yala |
| Luanda | 5 | Bunyore | Yala |
| Bukua | 2 | Bunyore | Yala |
| Luanda Township | 3 | Bunyore | Yala |
| Khwiseto | 11 | Kisa | Yala |
| Manyulia | 6 | Kisa | Yala |
| Mwichio | 1 | Bunyore | Yala |
| Dudi | 2 | Kisa | Yala |
| Ikolimani | 1 | Kisa | Yala |
| Mahanga | 1 | South Maragoli | Yala |
| Emwatsi | 1 | Bunyore | Yala |
| Eshibanga | 2 | Kisa | Yala |
| Musaba | 1 | Kisa | Yala |
| Emasatsi | 1 | Kisa | Yala |
| Butere | 4 | Marama | Butere |
| Butere Township | 4 | Marama | Butere |
| Sabatia | 2 | Marama | Butere |
| Lunza | 8 | Marama | Butere |
| Bukura | 6 | Butsotso | Butere |
| Shikulu | 3 | Idakho | Butere |
| Isulu | 9 | Idakho | Butere |
| Mumias | 5 | South Wanga | Butere |
| Manyoni | 1 | North Wanga | Butere |
| Eshianda | 6 | East Wanga | Butere |
| Malaha | 5 | Bunyala/East Wanga | Butere |
| Isongo | 5 | East Wanga/Butsotso | Butere |
| Shimanyiro | 1 | Butsotso/Idakao | Butere |
| Ikoli | 3 | South Kabras | Broderick Falls |

| Market | Number of Board Agents | Locations | Board Depots |
|---|---|---|---|
| Kakunga | 3 | South Kabras | Broderick Falls |
| Kambiri | 1 | South Kabras | Broderick Falls |
| Lurale | 2 | North Kabras | Broderick Falls |
| Shipala | 2 | South Kabras | Broderick Falls |
| Igina | 1 | Isukha | Broderick Falls |
| Mukhonje | 3 | Isukha | Broderick Falls |
| Khayega | 4 | Isukha | Kisumu |
| Murhanda | 2 | Isukha | Kisumu |
| Shakhungu | 1 | Isukha | Kisumu |
| Musaa | 3 | Isukha | Kisumu |
| Cheptechi | 1 | Triki | Kisumu |
| Madala | 1 | Isukha | Kisumu |
| Kakamega | 17 | Isukha | Kisumu |
| Shinyalu | 10 | Isukha | Kisumu |
| Birembe | 3 | Isukha | Kisumu |
| Kiborani | 1 | Isukha | Kisumu |
| Mpaka | 3 | Butsotso | Kisumu |
| Lidambitsa | 3 | Idakho | Kisumu |
| Shisaina | 1 | Isukha | Kisumu |
| Mugomati | 1 | North Maragoli | Kisumu |
| Shisejeri | 3 | Idakho | Kisumu |
| Charakali | 1 | North Maragoli | Kisumu |
| Mudete | 1 | North Maragoli | Kisumu |
| Mago | 3 | North Maragoli | Kisumu |
| Musasa | 2 | Tiriki | Kisumu |
| Gisambai | 1 | Tiriki | Kisumu |
| Serem | 3 | Nyangori/Tiriki | Kisumu |
| Kimu | 1 | Tiriki | Kisumu |
| Mbale | 5 | South Maragoli | Kisumu |
| Lunyerere | 2 | North Maragoli | Kisumu |
| Majengo | 1 | South Maragoli | Kisumu |
| Banja | 1 | Tiriki | Kisumu |
| Sabatia | 1 | North Maragoli | Kisumu |
| Bukuga | 2 | South Maragoli | Kisumu |
| Ilwunza | 1 | North Maragoli | Kisumu |
| Chama Koko | 1 | Tiriki | Kisumu |
| Magada | 1 | South Maragoli | Kisumu |
| Gambogi | 1 | Tiriki | Kisumu |

| Market | Number of Board Agents | Locations | Board Depots |
|---|---|---|---|
| Magakho | 1 | Bunyore | Kisumu |
| Manyata | 1 | South Maragoli | Kisumu |
| Mutsulyu | 1 | North Maragoli | Kisumu |
| Likhobelo | 1 | Isukha | Kisumu |
| Ingotse | 5 | Butsotso | Bungoma |
| Lutaso | 8 | Bunyala | Bungoma |
| Shibuli | 1 | Butsotso | Butere |
| Bulanda | 1 | Marama | Butere |
| Koyonzo | 4 | North Wanga | Butere |
| Munami | 4 | North Wanga | Butere |
| Mirere | 2 | North Wanga | Butere |
| Luanda | 1 | North Wanga | Butere |
| Kholera | 1 | North Wanga | Butere |
| Khaunga | 3 | East Wanga/ Bunyala | Butere |
| Single | 1 | Bunyala | Butere |
| Imanga | 1 | South Wanga | Butere |
| Musanda | 1 | South Wanga | Butere |
| Muregu | 1 | Marama/South Wanga | Butere |
| Lwesero | 2 | Butsotso | Butere |
| Malinya | 1 | Idakho | Butere |
| Isukhu | 1 | Marama | Butere |
| Maraba | 1 | East Wanga | Butere |
| Shikunga | 1 | Marama | Butere |
| Muregu | 7 | Bunyala | Broderick Falls |
| Lumani | 6 | South Kabras | Broderick Falls |
| Ngavira | 2 | South Kabras | Broderick Falls |
| Lukume | 6 | Butsotso/South Kabras | Broderick Falls |
| Chemuche | 2 | South Kabras | Broderick Falls |
| Shibanga | 1 | South Kabras | Broderick Falls |
| Lupao | 6 | North Kabras | Broderick Falls |
| Luandeti | 10 | North Kabras | Broderick Falls |
| Matete | 3 | North Kabras | Broderick Falls |
| Matsakha | 4 | North Kabras | Broderick Falls |
| Nambirima | 9 | North Kabras | Broderick Falls |
| Silungai | 1 | North Kabras | Broderick Falls |
| Mahanga | 5 | North Kabras | Broderick Falls |

| Markets | Number of Board Agents | Locations | Board Depots |
|---|---|---|---|
| Kimoi | 2 | North Kabras | Broderick Falls |
| Mukangu | 4 | North Kabras | Broderick Falls |
| Samitsi | 5 | South Kabras | Broderick Falls |
| Siandiche | 2 | North Kabras | Broderick Falls |
| Mushire | 1 | Butsotso | Broderick Falls |
| Sikhutse | 3 | South Kabras | Broderick Falls |
| Chimangeti | 4 | South Kabras | Broderick Falls |
| Malaba | 4 | South Kabras | Broderick Falls |
| Mukhalanya | 2 | North Kabras | Broderick Falls |
| Chekulo | 2 | North Kabras | Broderick Falls |
| Butali | 4 | North Kabras | Broderick Falls |
| Chesero | 1 | South Kabras | Broderick Falls |
| Musambaa | 3 | North Wanga | Bungoma |
| Nambacha | 9 | Bunyala | Bungoma |
| Ingungu | 1 | Butsotso | Bungoma |
| Uchangu | 1 | Bunyala | Bungoma |
| Busangabia | 1 | Bunyala | Bungoma |
| Kharanda | 3 | Bunyala | Bungoma |
| Nzoia | 10 | Bunyala | Bungoma |
| Sikokhe | 3 | Bunyala | Bungoma |
| Ulekhelo | 4 | Bunyala | Bungoma |
| Namamal | 1 | Bunyala | Bungoma |
| Namakoye | 4 | Bunyala | Bungoma |
| Bushiri | 2 | Butsotso | Bungoma |
| Buhui | 3 | North Wanga | Bungoma |
| Mushire | 1 | Butsotso | Bungoma |
| Nabakholo | 1 | Bunyala | Bungoma |
| Total | 403 | | |

APPENDIX M

## Cotton Cooperative Societies in Busia District

| | |
|---|---|
| Luanda | Olima |
| Namasali | Bukiri |
| Matayos | Bwiri |
| Busia | Amukura |
| Adungosi | Bugengi |
| Nambare | Bulwani |
| Lukolis | Malaba |
| Malakisi | Angurai |
| Jairos | Bunyala |
| Bumudondo | Mulembo |
| Bumutiru | Apokor |
| | Namwitsula |

APPENDIX N

Pyrethrum Cooperative Societies in Nyandarua District.

| | | |
|---|---|---|
| Bamboo Forest | Kanugia | Peji |
| South Kinangop | Mawingo | Tulago |
| North Kinangop | Nandarisi | Kitiri |
| West Kinangop | Kahuru | Karati |
| East Kinangop | Mkungi | Mamui |
| Ol Aragwai | Muruaki | Mjabini |
| Ol Kalou West | Malewa | Njoya |
| Ol Kalou North | Silanga | Passenja |
| Ol Kalou East | Wanjohi | Nyairoko |
| Ol Kalou South | Kipipiri | Sabugo |
| Central Kinangop | Matindiri | Shamata |
| Ol Kalou Central | Melangine | Ngorika |
| Upper Gilgil | Oraimutia | Lesirko |
| Lower Gilgil | Ndaragwa | Mukeu |
| Gilgil West | Ol Joro Orok West | Simbara |
| Gilgil Central | Ol Joro Orok North | Ol Joro Orok East |
| Gilgil East | Ol Joro Orok South | Ol Joro Orok Central |

APPENDIX O

Sample Size for Specified Confidence Limits and Precision

$2\sigma$ Confidence Interval

($\pi = 0.5$)[a]

| Size of Population (N) | Sample Size (n) for Precision (e) of | | | | | |
|---|---|---|---|---|---|---|
| | ±1% | ±2% | ±3% | ±4% | ±5% | ±10% |
| 500 | b | b | b | b | 222 | 83 |
| 1,000 | b | b | b | 385 | 286 | 91 |
| 1,500 | b | b | 638 | 441 | 316 | 94 |
| 2,000 | b | b | 714 | 476 | 333 | 95 |
| 2,500 | b | 1,250 | 769 | 500 | 345 | 96 |
| 3,000 | b | 1,364 | 811 | 517 | 353 | 97 |
| 3,500 | b | 1,458 | 843 | 530 | 359 | 97 |
| 4,000 | b | 1,538 | 870 | 541 | 364 | 98 |
| 4,500 | b | 1,607 | 891 | 549 | 367 | 98 |
| 5,000 | b | 1,667 | 909 | 556 | 370 | 98 |
| 6,000 | b | 1,765 | 938 | 566 | 375 | 98 |
| 7,000 | b | 1,842 | 959 | 574 | 378 | 99 |
| 8,000 | b | 1,905 | 976 | 580 | 381 | 99 |
| 9,000 | b | 1,957 | 989 | 584 | 383 | 99 |
| 10,000 | 5,000 | 2,000 | 1,000 | 588 | 385 | 99 |
| 15,000 | 6,000 | 2,143 | 1,034 | 600 | 390 | 99 |
| 20,000 | 6,667 | 2,222 | 1,053 | 606 | 392 | 100 |
| 25,000 | 7,143 | 2,273 | 1,064 | 610 | 394 | 100 |
| 50,000 | 8,333 | 2,381 | 1,087 | 617 | 397 | 100 |
| 100,000 | 9,091 | 2,439 | 1,099 | 621 | 398 | 100 |
| $\rightarrow \infty$ | 10,000 | 2,500 | 1,111 | 625 | 400 | 100 |

a Formula for sample size when population proportion is $\pi$ is

$$n_o = \frac{z^2 \pi (1-\pi) N}{z^2 \pi (1-\pi) + Ne^2}$$

This table assumes $\pi = 0.5$, and $z = 2$.

b In these cases the assumption of normal approximation is poor, and the formula does not apply.