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THE ROLE OF REGISTRATION OF TITLE IN FRAGMENTATION
AND MULTIPLE OWNERSHIP OF LAND

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THE ROLE OF REGISTRATION OF TITLE IN FRAGMENTATION
AND MULTIPLE OWNERSHIP OF LAND

by

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Introduction and Definitions

1. Much suffering would be avoided if only we could remove the causes of the many debilitating diseases which afflict the human race, but despite all the discoveries of science and new technologies it has not yet always proved possible to do so. We must therefore continue to use resources, which might otherwise be put to more productive purposes, on curing those who contract these diseases and in trying to prevent, or at least minimize the chances of, their recurrence. The conditions known as 'fragmentation' and 'multiple ownership', when they reach severe proportions, can fairly be described as diseases of land tenure. Ideally we should remove the causes of these conditions, but for the present we are often forced to be content with curative and preventive measures only. In this paper I propose to discuss these two conditions under the three headings of Causes, Cures and Prevention. But first I must explain what is meant by these two conditions.

2. We say that an object is fragmented when it is broken into a number of very small pieces, and so the word 'fragmentation', when applied to land, implies the breaking up of a parcel into a number of very small pieces, a process sometimes described as 'minute parcellation', although parcellation is not a word to be found in English dictionaries. Two distinct conditions must be envisaged: "The division of rural property into undersized units unfit for rational exploitation, and the excessive dispersion of the parcels forming parts of one farm." ^{1/} In the former condition each of the undersized units is the property of a separate owner, whereas in the second condition one person owns a number of separate parcels. In order to distinguish between these two distinct conditions I shall follow in this paper the widely accepted terminology used by the United Nations and by many writers on the subject. ^{2/} I shall accordingly use the word 'fragmentation' to describe the latter condition only, that is "the stage in the

^{1/} P. Moral-Lopez and E.H. Jacoby; Principles of Land Consolidation Legislation, FAO, 1961 - p. 4.

^{2/} Progress in Land Reform - Fourth Report: United Nations 1966, p. 165. Use of the words 'subdivision' (morcellement) and 'fragmentation' (parcellement) to distinguish between these two distinct conditions is also recommended by P. Moral-Lopez and E.H. Jacoby: Principles of Land Consolidation Legislation, FAO, 1962 - p. 4 and was adopted by the Arusha Conference on African Land Tenure 1956 and by the Mission on Land Consolidation and Registration in Kenya 1965-1966 (Report s.21). Similar distinguishing terminology is also used in some legislation e.g. Tunisia, which refers to "consolidation of subdivided and dispersed holdings".

evolution of the agricultural holding in which a single farm consists of numerous separate parcels, often scattered over a wide area". ^{3/} I shall use the word 'subdivision' to describe the former condition only, in which "a holding originally operated by one farmer is split into a number of separate holdings operated by different farmers". ^{4/}

4. I emphasized in paragraph 1 that fragmentation can only be regarded as a disease of land tenure when it reaches severe proportions. It is true that fragmentation, that is the dispersion of the parcels forming one farm, almost invariably makes the working of them unnecessarily difficult. It involves waste of time and efforts in travelling from plot to plot, it results in unnecessary roads or lack of them, it creates difficulties in regard to fencing and water supplies and so may inhibit the keeping of cattle; and it makes the use of mechanical equipment difficult, if not impossible. Fragmentation is not, however, always a harmful process, for on occasion it can be justified or even necessitated by agricultural convenience or efficiency. Particularly in mountainous country, where sharp variations in soils or rainfall occur, a farmer may require separate plots on the hills and in the valleys in order to be able to grow different crops. Some degree of fragmentation may provide useful insurance against damage from hail storms. However, we are clearly concerned here only with excessive fragmentation, that is "a degree of fragmentation in which the natural advantages (spreading of risks, possession of a variety of land types, etc.) are outweighed by the disadvantages of lost time, inconvenient field sizes, etc." ^{5/} and with excessive subdivision, that is "the state of affairs in which, as a result of continuous subdivision, many holdings are of size which is thought to be too small when measured by some standard of welfare or productivity." ^{5/}

5. The remedy both for excessive subdivision and for fragmentation is 'consolidation'. The dictionary definition of 'to consolidate' is 'to make solid; to form into a compact mass; to unite into one'; and the word 'consolidation', when used in connection with land reform, describes the process of re-apportionment of holdings in land units of economic size and shape. Where holdings are fragmented, this process consists of aggregating the separate parcels forming parts of one farm and redistributing the land so that the farm, instead of being dispersed, consists of one or two larger and more viable units of land. But where holdings are excessively subdivided (but not dispersed) there will be as many land owners as there are pieces of land; the redistribution of the land in larger units will therefore inevitably mean that some persons must give up their land and find alternative sources of livelihood. I use the word 'consolidation' to describe the cure for both

^{3/} Sir Bernard Binns: Consolidation of Fragmented Agricultural Holdings - FAO, 1950 (with the word 'separate' substituted for the less familiar word 'discrete').

^{4/} Report of the Conference of African Land Tenure in East and Central Africa (Supplement to the Journal of Africa Administration - 1966) p.12.

^{5/} Progress in Land Reform - Fourth Report: United Nations, 1966 - p. 166.

excessive subdivision and fragmentation, because I believe that this is the generally accepted use of the word, particularly in European countries. It should, however, be noted that the United Nations suggest the use of different terms to distinguish between the cure for excessive subdivision and the cure for fragmentation; "Progress in Land Reform - Fourth Report" uses 'consolidation of holdings' to refer to the cure for fragmentation, but adopts the term 'enlargement of holdings' to refer to "the amalgamation of holdings or the addition of newly reclaimed land in order to remedy excessive subdivision". 5/

6. So far I have discussed only circumstances in which land is broken into a number of small and separate pieces. There are other circumstances in which the negotiability and use of a piece of land, although not physically divided on the ground, may nevertheless be adversely affected because it is owned by a number of co-owners. "The incidence of minute parcellation falls under two headings which should not be confused as they require different methods of adjustment; they can be conveniently termed: (i) multiplicity of owners, and (ii) multiplicity of parcels". 6/ Fragmentation of agricultural land is a condition in which one farmer owns several separate pieces of land, whereas multiple ownership is a condition in which one piece of land is owned by several persons in undivided shares. (In English law such persons are termed 'tenants in common', although tenancy in common at law was abolished in England by the Law of Property Act 1925. Tenancy in common, where land is held in undivided shares which may vary in size, should be distinguished from the 'joint tenancy' of English law where land is jointly owned by several persons without any indication of the share of each. The principal feature of this tenure is that on the death of one of the joint tenants his rights accrue to the others who survive him, whereas the share of a tenant in common goes to his heirs.)

7. Multiple ownership can be a harmful condition in as much as it hinders and will eventually destroy negotiability of the land and in so doing can frequently affect the proper use of it. In some respects multiple ownership might be described as a disease of registration, for it is the fact of recording the undivided shares on the register, so giving them permanence, that prevents the negotiability of the land and thereby defeats one of the principal aims of registration. As in the case of fragmentation, multiple ownership is a harmful condition only when it reaches severe proportions. In many parts of Africa where family ownership of land is recognized there may be no concept of or necessity for dealings in the land; and even where such a concept or necessity exists, no unsurmountable difficulties need arise if the co-owners are few in number. But where co-owners are numerous and their shares consequently small, particularly if the proprietary unit of lands is itself already small, the shares of the co-owners will be unrealistic in terms of economic benefit and their existence will be an encumbrance to the proper use of the land.

5/ Progress in Land Reform - Fourth Report: United Nations 1966, p. 166.

6/ Sir Ernest Dowson and V.L.O. Sheppard: Land Registration 1952, p. 65. (There is of course, no 'minute parcellation' where the holding is truly held by a number of co-owners in undivided shares and there is no actual subdivision on the ground).

Causes of excessive Subdivision. Fragmentation and Multiple Ownership

8. "The principal cause of fragmentation is undoubtedly the cumulative effect of the law of succession over successive generations. Indeed minute fragmentation is seldom to be seen in countries in which the primogenital law of succession obtains". 7/

In some parts of Africa the disruptive effect of the law of succession is obviously aggravated by the existence of polygamy. 8/ However, although the law of succession is the principal and direct cause of subdivision and fragmentation, it should not be thought that a change in social attitudes to inheritance of land alone will solve the problem. There are other causes, economic in nature, which are perhaps more fundamental, for instance the increasing density of population in localized areas, which leads to competition for scarce land and is aggravated by the absence of alternative employment in industry, the social status conferred by ownership of land (wherever situated and however small in extent) and the importance of land as a form of insurance against misfortune or old age. In some countries there are also historical reasons for fragmentation; the pattern of original settlement of new areas by clan groups, and the custom whereby a man can claim some land in each of areas settled at various times by his clan ancestors often results in a particularly vicious form of fragmentation, for in such circumstances fragments can be separated by many miles. 9/

9. Ideally, problems of subdivision and fragmentation should be tackled not only by curative measures such as consolidation or by preventive measures such as the control of dealings (including the transmission to heirs on the death of a landowner), but also by an attack on the basic causes of the Malady. But this is a council of perfection. The abolition of private ownership of land and collectivization of agriculture, as practiced in countries of the Eastern bloc, certainly put an end to subdivision and fragmentation and eliminated their causes, but in countries which cleave to principles of private ownership (whether on a communal or individual basis) change in attitudes to land holding and customs of succession will occur only slowly. West Germany, France, Italy and several other highly developed countries in Europe are currently engaged in large-scale consolidation projects, but opportunities for employment off the land are still scarce in Africa where industrial development is in its infancy. Population is also increasing rapidly, and it must be admitted that there is at present little prospect of remedying the conditions which cause excessive subdivision and fragmentation.

7/ Sir Ernest Dowson and V.L.O. Sheppard: Land Registration - 1952, p. 64.

8/ Diagrammatic examples of the effect of the law of succession on subdivision and fragmentation of land (particularly in polygamous societies) are given in J.H. Byagagaire and J.C.D. Lawrance: The Effect of Customs of Inheritance on the Subdivision and Fragmentation of Land in South Kigezi (Land Tenure in Uganda - 1957) and in L.T. Chubb: Ibo Land Tenure - 1961.

9/ J.C.D. Lawrance: Fragmentation of Agricultural Land in Uganda - 1963.

10. The law of succession is also the principle cause of harmful multiple ownership and the problem is therefore experienced especially in countries in which succession is governed by Islamic law, which gives all the children, and failing children, the relations of the deceased landowner a fixed share in the inheritance. In the course of a few generations these shares are divided many times and come to be expressed in fantastic fractions with denominators of a million or more; I am told of one instance in which a denominator of over twenty figures occurred. But the problem is of course, by no means confined to countries applying the Islamic law of succession. It is, however, aggravated by the existence of a land register, as I have already pointed out in paragraph 7, for the register records these ever diminishing and futile shares which might otherwise be forgotten.

11. There must be a change in the law and practice in regard to inheritance of land if the cause of multiple ownership is to be eliminated. The attitude of society to this problem will eventually change, as they have in many European countries, but it would be unrealistic to believe that legislative provisions to limit the number of co-owners or to declare the minimum size of individual share that they can hold would at present succeed in removing the cause of excessive multiple ownership in Africa. Kenya legislation, for instance, provides that not more than five co-owners may be registered as proprietors of one parcel. ^{10/} These registered co-owners are legally empowered to deal in the land, but in practice they are not able to do so, for while old attitudes to inheritance of land prevail and while alternative employment off the land is not available, additional members of the family will continue to claim their undivided share too. Although the law does not recognize their rights, the force of kinship ties and custom at present ensures that they are accepted. Thus although the register contains the names of only five co-owners, the evil of multiple ownership - destruction of negotiability of the land - persists.

Cures for excessive Subdivision, Fragmentation and Multiple Ownership

12. Although reliable statistical data on the extent of excessive subdivision and fragmentation is largely lacking in Africa, it cannot be seriously doubted that both problems exist in some areas of nearly all countries. Few Governments have, however, yet taken vigorous steps to deal with either problem. Even in Kenya, where in the last fifteen years the problem of fragmentation has been tackled on a massive scale with spectacular results, no serious effort has been made to remedy uneconomic subdivision. In Kiambu District, for instance, in the short space of two and a half years some 420,000 fragments were re-grouped in 50,000 farms, and in Nyeri District approximately 250,000 fragments were consolidated into 43,000 farms in three years. ^{11/} But most of these consolidated farms were smaller than the area deemed to be the minimum necessary for economic exploitation; in fact, half the farms in Nyeri were less than three acres (1.2 hectares) in extent.

^{10/} Kenya Registered Land Act 1963, Section 101.

^{11/} M.P.R. Sorrenson: Land Reform in the Kikuyu Country - 1967, pp. 145 and 160 (quoting from official reports).

13. Not that this fact is in any way surprising, for consolidation of un-economic holdings into larger units will, as explained in paragraph 5, involve expropriation of the land of some of the present occupiers, and Governments are not always equipped to provide the opportunities for alternative employment or to face the social and political issues involved. Nevertheless, it is necessary to draw attention in this Seminar to this problem of excessive subdivision and to underline the eventual need to undertake consolidation involving enlargement of holdings as well as re-grouping of fragments. Consolidation of the former type is a feature of many of the programmes now being carried out in Europe. African countries have, generally speaking, one great advantage over European countries in the extent of unutilized land available to them. Admittedly the problems of resettlement of farmers displaced from sub-economic holdings on this unutilized land are considerable and in many cases beyond the present resources of Governments. Nevertheless, there will come a time when the cost to the economy of excessive subdivision of land is infinitely greater than the cost of consolidation and resettlement of displaced farmers.

14. The subject of this Seminar is registration of title, and registration is certainly of immense importance in the process of consolidation and control of dealings after consolidation. With the exception of Kenya, it will rarely be the case in Africa that a systematic register of title covering a substantial part of the country is in existence before consolidation takes place. If it were, the register would usually reveal details of plot sizes and ownership and thus provide the reliable statistics, which are usually unavailable without a laborious survey in each area, of the extent of subdivision and fragmentation and the speed at which the problem is growing. The prior existence of a register would also greatly simplify the process of consolidation, as it does in some European countries, for it would dispense with the lengthy and costly process of ascertaining the ownership and area of each fragment before the process of re-apportionment starts. Controls on the subdivision of land can be more effectively enforced through the machinery of a register than in any other way.

15. However, where land is still held under customary tenure it will be necessary in the process of consolidation to establish the ownership and area of each fragment before re-apportioning holdings and laying them out on the ground. It would obviously be wasteful in the extreme if the information thus obtained regarding ownership and boundaries of the consolidated holdings was not at the same time utilized to start a register of title, particularly as the machinery of the register would provide the only effective method of controlling subdivision and eventual re-fragmentation of these holdings.

16. During the 1950's there was evolved in Kenya a procedure for combining in one operation adjudication of existing rights, some planning of the area, consolidation of the existing rights and registration of the consolidated holdings. ^{12/} In the following six paragraphs I describe this procedure and comment on three important features of it. This procedure has been proved in practice and will be of great significance in other countries in Africa facing similar problems.

^{12/} This process, which by then had been in use for about five years, was regulated by Part II of the Native Lands Registration Ordinance 1959, later re-enacted as the Land Adjudication Act 1963 and now entitled the Land Consolidation Act.

17. Proceedings begin in the usual way of adjudication. An area is declared by the Minister and an adjudication officer appointed. He divides the area into adjudication sections and appoints for each section a committee of persons resident in the section. (In practice he holds an election for the purpose, although this is not required by law). At the same time he gives notice of intention to adjudicate existing rights and fixes a period in which all persons claiming rights must present their claims.

18. When the work starts on the ground landowners indicate the boundaries of each fragment of land which they claim within the adjudication section. These fragments are then roughly measured, a sketch is drawn of each and its area is computed by breaking the fragment down into a number of triangles or rectangles. No great accuracy can be claimed for this process, which is referred to as 'fragment gathering', but it is adequate for the purpose. Each owner's fragments are listed with their area under his name in a 'fragment register'. Fragments are not, however, plotted on a map. There were nearly half a million fragments in one district alone (Miambu) and the expense of producing a map of fragments at an appropriate scale would have been unjustified, particularly as the position of each fragment was not, of course, tied to control and they would in any case have no significance after consolidation.

19. Claims in respect of each fragment are determined by the committee. If it is unable to reach a decision on any particular claim it refers the case to an arbitration board, which is appointed by the Minister for each administrative district. It should be noted that only the committee may refer cases to the arbitration board; the parties have no such right. A 'record of existing rights' is compiled from the decisions of the committee or arbitration board and a period allowed for objections. The procedure for hearing these objections is somewhat complicated, but the final decision lies with the adjudication officer, though no provision is made for him to intervene unless an objection has been made; the adjudication officer is thus merely the appellate authority in the process. When the objection period has expired and all objections have been determined the record of existing rights is declared to be final and the consolidation stage starts.

20. The Survey of Kenya will have determined the total area comprised within the perimeter of the adjudication section and this is compared with the total area of measured fragments and any other land comprised in the section. The total area under each landowner's name in the fragment register is then adjusted by multiplying it by a 'reconciliation factor', which is obtained by dividing the total area of the adjudication section determined by the Survey of Kenya by the total area of the measured fragments and any other land comprised in the section. Variations of up to 5 per cent between the section area and the total area of fragments are accepted. The committee next performs a planning function by deciding what land in the section is required for the needs of the community for such purposes as schools, dispensaries, village sites or new roads. The total area so required is divided by the total area of the section determined by the Survey of Kenya and each owner's entitlement is multiplied by the resulting fraction. This deduction is known as the 'percentage cut' and this method of providing land for public purposes has the advantage of distributing the burden among all landowners in the section.

21. The committee then allocates land to each landowner in a single piece (or occasionally in two pieces) equivalent in area to the total of his fragments after adjustment by the way of the reconciliation factor and after deduction of the percentage cut. In so doing the committee performs another planning function, for in allocating the consolidated holding consideration will be given to the lie of the land and access to roads and water supplies. Every effort is made to include in the new holding as many as possible of the substantial improvements which existed in the owner's former fragments, but where an improvement cannot be included arrangements must be made with the incoming owner by way of compensation or an arrangement enabling the outgoing owner to harvest his former tree crops until his new tree crops are in bearing.

22. A 'demarcation plan' is then prepared. This is not, of course, the 'demarcation map' of orthodox systematic adjudication, but is in reality an 'allocation plan'. It shows what each landowner is intended to receive, not what he actually had, when the area was declared for adjudication. The consolidation holdings are set out from this plan and demarcated on the ground. The 'adjudication register' is then prepared containing details of each landowner's new holding by reference to the demarcation plan, and a further period is allowed for objections. These are heard by the adjudication officer sitting with the committee and his decision is final. The arbitration board is not involved at this stage. When the objection period has elapsed and all objections have been determined, the adjudication register becomes final and it is from this register that the Land Registrar prepares the registers of title under the Registered Land Act.

23. There are several features of this process which merit further discussion, but I must limit myself to three. The first of these three points concerns the merits of systematic over sporadic consolidation; the second concerns the role of committees in consolidation, and the third the basis of consolidation. It will be obvious from the description in the preceding paragraphs that the Kenya process provides only for a systematic consolidation of all land within a given area. Although no Government can hope to embark on a programme of systematic consolidation without the co-operation of the majority of the landowners affected by it, systematic consolidation will always involve an element of compulsion on the minority. Even those who appreciate the ultimate benefits of consolidation will resent the enormous upheaval which the process involves and the loss of a particular piece of land for which they possess strong sentiments. I am told that some farmers in Denmark hanged themselves rather than submit to the process when consolidation was first introduced there at the beginning of the nineteenth century. Sporadic consolidation on the other hand can be undertaken on a voluntary basis, and it is not surprising that some Governments, faced with the possibility of resistance and even violence on the part of farmers, have accepted the arguments that the only practicable course is by voluntary application or that fragmented land should be registered in the hope that registration will lead to consolidation through the normal market in land. 13/

13/ The latter argument was advanced by the East Africa Royal Commission 1953-1955, Report, p. 323.

24. The fact remains, however, that voluntary and sporadic consolidation is a slow process and many countries (e.g. Belgium and various States in India), which formerly adopted the voluntary principle, have now turned to compulsion although it should be emphasized that the consent of the majority of landowners is usually a prerequisite. Sporadic consolidation has other grave disadvantages; adjudication of existing rights over fragments is required, if a register of title does not already exist, whether consolidation is carried out on a sporadic or on a systematic basis; but sporadic adjudication, whether for grant of title or as a prelude to consolidation, is an unsatisfactory process which has been described by Mr. V.L.O. Sheppard as "vicious in principle, as it means that each holding is given isolated consideration when it happens to come up for registration instead of the conflicting claims of neighbours all being threshed out at the same time. Unco-ordinated work of this character is considerably less worthy of confidence, as well as being slower and more expensive than investigation and settlement of boundaries and titles systematically conducted district by district." Moreover, although some degree of consolidation is possible through mutual exchanges - the earliest consolidation in Kenya was effected in this way through the enterprise of a prominent chief - there are limits to what can be achieved; the successful consolidation of a few sporadic holdings within an area will certainly make the eventual consolidation of the remainder more difficult and may even make it impossible. Sporadic consolidation makes the overall planning of the area and the provision of land for public purposes immeasurably more difficult.

25. The second feature of the Kenya procedure, which I wish to draw to your attention, is the extent to which the legislation gives executive functions to local committees, not only in the adjudication of rights over fragments during the fragment gathering stage, but also in the planning and re-appointment of holdings during the consolidation stage. I have already emphasized the importance of majority support for consolidation measures, and the association of local committees, comprising recognized traditional land authorities, with the execution of the consolidation programme at all stages is obviously one way of ensuring this support. However, the fact that the use of committees in consolidation has proved successful in Kenya should not blind us to certain dangers or defects of the system. The Kenya Government itself has always been alive to the possibility of corruption, particularly on the part of committees. For this reason committees consist of not less than twenty five persons and elaborate precautions are taken in assigning members of arbitration boards for any particular hearing. The danger is always present, but it can be fairly claimed that these precautions have on the whole been successful, (although I refer in the next paragraph to a serious failure due to corruption on the part of the committees' technical staff). Committees drawn from the predominant tribe of the locality have naturally tended to disregard rights established by members of other tribes, and in so doing have ignored the cardinal principle of adjudication that it must recognize and confirm rights which actually exist. Committees which are almost invariably composed of landowners, have also tended to ignore rights which do not amount to full ownership, but which under the law still require recognition and registration. The setting apart of land for future needs of the community and the re-allocation of consolidated holdings are tasks which demand knowledge and skill which the average committee member is unlikely to possess.

26. In fact, although under the Kenya law committees are made responsible for the executive functions of re-planning and re-allocation as well as of adjudication, committees are almost by definition incapable of executive functions and in Kenya, as elsewhere, their performance in large measure turns on the capability of the officers who serve them. It was failure in supporting staff which vitiated five years' work in one district (Muranga) where certain persons 'bought' additional fragments from the measurers, that is they bribed the measurers to include fictitious fragments in the lists so that they received more land on re-allocation than was their just entitlement. This involved enactment of a special law and the whole consolidation process had to be repeated over a large part (87,093 hectares) of the District. The committees, as such, cannot really be blamed for this disaster, which was due to lax supervision and dishonesty in subordinate staff. It does, however, call in question the wisdom of giving committees executive functions, which they cannot in practice exercise. Committees are by no means always given such executive functions in consolidation. In Malawi, for instance, where re-allocation of land is as drastic as in Kenya, committees only adjudicate when specific points are referred to them.

27. Despite these shortcomings, it is unlikely that consolidation would have been possible in Kenya if the 'traditional guardians' of the land had not been closely associated with it through the committee system. In fact, wherever land to be consolidated is held under customary tenure, as it has so far in Kenya, there is probably no satisfactory alternative, for if all executive functions were entrusted wholly to Government officials the process might well founder on the suspicion and antagonism of landowners. However, it is perhaps of interest to note that where land records already exist before consolidation, use has been made of co-operative societies. "The formation of a compulsory co-operative as part of machinery of consolidation schemes has been a feature of such schemes in several European countries, but the outstanding example of consolidation by voluntary co-operatives alone was in undivided India". ^{14/} Such societies were formed only when a substantial proportion of the landowners in a village had agreed to offer their land for re-distribution; members undertook to accept the consolidation plan approved by two thirds of their number. The elected committee of the consolidation co-operative was not, of course, concerned with adjudication of existing rights because these were already known and recorded; it approved the valuation of fragments and the re-allocation of land; the technical work involved was carried out, as in Kenya, by officials of the Government.

28. The third feature of the Kenya process on which I wish to comment concerns the basis of consolidation. In Kenya each landowner obtains a consolidated holding equal in area to the total area of his fragments (adjusted by the reconciliation factor and percentage cut). No account is taken of the relative values of the various fragments, which can, of course, vary considerably, particularly in mountainous terrain. Equal area is the crudest possible basis of consolidation and it is obvious that in areas of variable soil fertility injustice must be done to some of the farmers involved, however conscientiously the committees carry out their task of re-allocation. "As remembrement is, in theory, an operation of exchange, the ideal new allotment should give to each owner:

^{14/} Margaret Digby: Co-operative and Land Use, FAO - 1957, p. 92.

- (a) Land of the same value as he owned formerly, and
- (b) Land of the same category, quality and area as his former holding". ^{15/}

A professional valuation of each fragment is clearly out of question, but a simple system of comparative valuation for consolidation is operated by village committees in India, which is well within the capability of committees in Africa. This system is briefly as follows: ^{16/} The committee agrees upon what is the most productive fragment of land in the consolidation area, regardless of its size, and accords it the highest valuation rating, say 10. During the fragment gathering stage the committee accords each fragment a comparative valuation of 10 or some lesser figure, regardless of its size. The fragment register could then indicate in respect of each owner both area and valuation of each fragment, and his entitlement is calculated by multiplying the valuation figure by the area figure. During the re-allocation stage the committee ensures that each landowner receives his entitlement in terms of valuation and area combined, although his holding will usually be larger or smaller than the total area of his former fragments.

29. Nor is any provision made in Kenya legislation for classification of land into different categories. Consolidation sections there are usually small in size and it can fairly be argued that this is unnecessary. Nevertheless, in at least one district (Baringo) the difference between high and low rainfall land within one section is so marked that the authorities have been obliged in effect to introduce a system of classification administratively whereby landowners are given two consolidated holdings, one in each zone, equal in area to the fragments held by them in that particular zone.

30. The harmful effect of multiple ownership - the fact that it destroys the negotiability of land - can be cured either by the sale of the shares of the various co-owners of one parcel of land to one of their number or by the vesting of the shares in one or more trustees with powers to deal on behalf of all the co-owners. Either procedure will restore the negotiability and credit worthiness of the land and facilitate its proper use, but there are obvious difficulties in obtaining the voluntary agreement of the co-owners, particularly when ownership of a share, however small, conveys some social prestige. In some countries co-owners are sufficiently aware of the disadvantage of multiple ownership to apply these remedies themselves without intervention by the Government; or often, as for example in the Sudan, one of the co-owners looks after the property and divides the proceeds among the other co-owners; in working practice he is the trustee although he is not legally entitled to deal with the land on the register. But in other countries it may be necessary to resort to some degree of compulsion.

^{15/} Sir Ernest Dowson and V.L.O. Sheppard: Land Registration - 1952, p. 67. The authors are here using the French word 'remembrement' for 'consolidation'.

^{16/} This system is described in more detail in Consolidation of Holdings - Government of India: Planning Commission, 1957, pp. 27-32 and in Report of the Mission on Land Consolidation and Registration in Kenya, 1965-1966 (Lawrance Mission Report - 1967) s. 134.

In any case, legislation will usually be required to define the powers and liabilities of trustees and to provide procedures for determination of disputes between trustees and owners of shares.

Prevention of excessive Subdivision, Fragmentation and Multiple Ownership

31. When excessive subdivision or fragmentation have been cured by consolidation prudent Governments will wish to introduce legislative controls to prevent a recrudescence of the problems with consequent waste of effort and money. These preventive measures consist of controls on the normal process of subdivision, particularly on the death of a landowner, through the machinery of the land register. The law stipulates a minimum area which may be registered as a separate parcel, and makes subdivision below this minimum void.

32. In practice it is patently unrealistic to lay down in the law one particular minimum registrable area applicable to all holdings within a country or even within a single registration section. What constitutes an 'economic minimum' will depend on many variable factors including soil fertility, rainfall, the labour and equipment available in the family, and, most important, the precise use to which the land is to be put. Indeed, the concept of an 'economic minimum' and the basis on which it should be determined are frequently challenged. ^{17/} Nevertheless, an attempt must be made to control subdivision if the expenditure on consolidation is to be justified and the evils of excessive subdivision and fragmentation checked in the future. The difficulty is best met by legislation requiring consent to all dealings in land; this consent should be given by local boards constituted for the purpose and no dealing should be registrable without it. Land control boards should act in stated principles, but will be able in each particular case to take into account factors such as those mentioned above. ^{18/}

33. Similar control measures, operated through the machinery of the land register, are also required to prevent recrudescence of the evils of multiple ownership. These measures consist of legislation stipulating a minimum registrable share (expressed as a maximum denominator) or a maximum registrable number of co-owners. The particular difficulty mentioned in the previous paragraph does not normally arise in control of undivided shares and it is usually possible to declare a minimum share or a maximum number of co-owners which is applicable throughout the country. Kenya legislation, for example, while making it possible for the Minister to prescribe different figures for the maximum registrable number of co-owners or the minimum registrable share in any particular section, stipulates that meanwhile a maximum figure of five co-owners shall be applicable to the whole country. ^{19/} If on the death of a landowner the number of heirs is in excess of five

^{17/} The arguments are set out in Report of the Mission on Land Consolidation in Kenya 1965-1966, Sections 288-291.

^{18/} Such procedures are contained in the Kenya Land Control Act 1967 and the Malawi Land Control Act 1967. It should be noted that control legislation of this kind is needed not only to prevent harmful subdivision but also to protect unsophisticated land owners in the early days of ownership.

^{19/} Kenya Registered Land Act 1963, Section 101.

and the land is incapable of partition, the courts must approve arrangements whereby those heirs who cannot be registered as co-owners are compensated by those who can. It should be noted that those whose names are registered as co-owners do not hold the land in trust for their relatives whose names are not registered. The approach in Nigeria (Lagos) and Malawi, where family land is registered, is somewhat different. The Nigerian Act permits the names of up to ten family representatives, who are in effect trustees, to appear on the register and they may deal in the land. 20/ Malawi has, however, adopted a system of a single trustee for family land by providing that the head of family alone may be registered as proprietor "as family representative" and that he may deal in the land on behalf of and for the collective benefit of the family. 21/

34. Experience in Kenya over the last eleven years has shown that simple land control measures of this kind can be operated without difficulty. It would, however, be rash to claim that such measures are in present circumstances really effective in preventing harmful subdivision and multiple ownership. They act as a useful check, but the ugly fact is that until satisfactory alternative employment of the land is available for those persons whose share in the land, whether divided or undivided, is unregistrable, they have no alternative but to stay on the land and to try to eke a livelihood from it. The situation poses a dilemma; if the control procedures are operated efficiently, excessive subdivision will nominally have been prevented; I say 'nominally' because in fact the land will probably continue to be subdivided on the ground, and so the register will inevitably cease to represent the true proprietary position. There is evidence that this is already the case in Kenya. If, however, the control procedures are not operated efficiently and land control boards allow subdivision which ought to be refused, the register will continue to show the true proprietary position, but the land will inevitably be subdivided and probably fragmented to a dangerous extent.

35. I am sorry to have to end on this despondent note. Opportunity for wage employment will eventually come; in the meantime these preventive measures should not be abandoned merely because they are not wholly effective, any more than we can afford to abandon preventive measures against human or animal diseases for the same reason. For instance we know the cause of malaria, but it has not yet generally proved possible to eradicate mosquitos; we therefore accept the need to cure infected persons and to take all possible measures to control disease by the use of prophylactic medicines, nets or protective clothing, or by spraying houses with insecticide. So too in the case of a dangerous degree of subdivision, fragmentation or multiple ownership; we cannot yet eradicate the cause, so we must be prepared to cure the conditions when they occur and do what we can to prevent them from re-occurring. Our efforts may be only partially successful, but consolidation does not lose its value merely because it has to be renewed after the lapse of years.

20/ Nigeria (Lagos) Registered Land Act 1965, ss 12 and 124.

21/ Malawi Registered Land Act 1967, s. 121.