Jan Hesselberg

The Third World in Transition

The Case of the Peasantry in Botswana

Scandinavian Institute of African Studies, Uppsala

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Jan Hesselberg is professor in Development Geography at the Department of Geography, University of Oslo. His main research interests are production processes in rural areas and levels of living in the Third World. He has conducted field work several times in Botswana and Sri Lanka.

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PREFACE

The objective of the present work is through the case of Botswana to discuss *the creation of poverty in the period of transition from tribal to modern society in the Third World today*. This is done by an analysis focussing at the peasantry. The recently renewed fashion of blaming the *peasants* for lack of improved food production and thus also for poverty at local and national levels is questioned.

In a short note in 1961 Fallers left no doubt that agricultural producers in Africa could and should be called peasants economically, politically and culturally. Peasant communities are more differentiated than tribal societies but less so than modern ones. Peasants constitute then a category of people found in a country where fundamental changes occur leading to a society of a different kind. It is particularly the semi-autonomy of peasants relative to larger systems that is used in the argument of the option thought available to peasants of *withdrawing* from production for markets. The main aspects dealt with in the work are: societal evolution, agrarian transition, inequality and poverty, and rural settlement pattern. These aspects provide together a fairly comprehensive picture of the nature of the transition in which Botswana finds itself.

The data used in the empirical presentation are primarily taken from Letlha-kenq and Tutume, two medium-sized villages in Botswana. Similar studies were carried out in 1976 and 1980 allowing for a time perspective. In addition, information about the country at large is used whenever possible to enhance the strength of the findings.

The theoretical perspective has been treated relatively extensively. It encompasses in a few instances more than the data gathered permit to test. This is deemed useful because of the explorative character of these parts of the work. It is also regarded to be fruitful to include a thorough discussion of

the concept development, of development studies and of development geography. At the present early stage in the evolution of development geography, this part of the work may have some merit *per se*, in addition to explaining the choice of research approach.

Over the years I have had recurrent useful discussions with Gerd Wikan. The arguments forwarded here have also benefitted from her penetrating question-marks. Sylvi Endresen has pointed at several fine nuances of meaning in the manuscript. I am grateful to both of them.

Jan Hesselberg

August, 1984

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PART I

INTRODUCTION

CHAPTER 1

DEVELOPMENT AND GEOGRAPHY

DEVELOPMENT AND RELATED CONCEPTS

Development constitutes a process. The concept is normally used at a fairly general level. It includes a wide variety of changing features. It is in common usage equated with improvements. The word development thus has a positive connotation regardless of how it is defined. To pretend otherwise, as Seers (1972) says, is just to hide one's value judgments. Moreover, it is often difficult to separate the positive from the negative in a process of change. For instance, the building up of formal education is in most cases a good and necessary element for change. In many Third World countries formal education may nonetheless have negative side-effects such as alienation regarding strenuous work in, for instance, agriculture. Due to the arguments above one may opt for adopting a definition of development which is goal-free. Brookfield (1975) takes this stance when he defines development as "the whole process of change brought about by the creation and expansion of an interdependent world system". In analytical work it is, however, necessary to establish a concept with a specified content and regarding the process of development also to give the concept a positive meaning. Since concepts such as change and evolution (which are broader concepts) cannot replace development as a general, descriptive and goal-free concept, it seems essential to refrain from defining development in a detailed manner. *Development* should instead be used, as is usual, to denote a complex process of change that may, although not necessarily in the short-run then later, result in improved levels of living for the world's population at large, that is, the collective betterment of mankind. In thinking about development it is easy to fall prey to the use of a framework of mechanical evolution, of thinking in linear historical sequences leading to a typical modern Western (or Eastern) society. This is not implied in the concept in the present work. In fact, one should strive for an acceptance of multitudinous cultural definitions of the good life. Thus, the concept has a certain amount of vagueness. This is as it should be. The concept should refer to a movement of a society as a whole to a better but undetermined position.

However, this "third option" should imply high economic welfare with low ecological imbalances and a minimum of personal alienation. There may be cases in which beneficial structural changes take place without immediate improvements in material satisfaction. At a later stage such structural changes may prove to be the key to economic and social development. The point is that we do not *a priori* know what brings about development or what the necessary principal structural changes are in concrete empirical situations.

It is common to split the concept development into economic growth and social change which, for instance, UThant (1965) did at the start of the UN's First Development Decade. Social change is a broad concept and difficult to quantify. In view of the above discussion economic and social development will be used as analytical categories. *Economic development* refers to economic growth (increases in GNP) and a more equal distribution of economic means (measured by income and employment). It is important to note that economic growth at the national level does not automatically reduce poverty and inequality or provide sufficient employment, at least not in the short-run. Many scholars confuse the concepts of growth and development. The reason is often, as for instance Sundrum (1983) anticipates, that as soon as attitudes and behaviour of people in their economic activities become more like "economic man", growth becomes automatic and welfare in an encompassing sense ensues. By *social development* is meant improvements regarding such aspects as life expectancy, nutrition and educational standard. In short, social development refers to the realization of the potential of the human personality. This is of course generally accepted. The path to this realization is, however, highly disputed. A pivotal controversy is, for instance, the possible adverse effect of redistribution of income on economic growth. Each path advocated of course contains its own contradictions. Development is generally a result of the interplay of "old" and "new" artifacts, social structures and cultural values. Normally, conflicts arise between the "old" or indigenous and "new" or imported elements. Development accordingly constitutes a dialectical process in a Hegelian sense, that is, a rigorous prediction of societal evolution, as in Marxism, is not included. It is the method that is highlighted, and development in future does not necessarily have to contain similar negative effects everywhere, such

as the creation of an internal "proletariat". If we then are to understand the process of development, we have to look for conflicts and stress created when the "old" and "new" merge without a *priori* knowing the fundamental forces of change in particular places.

Development has by some been substituted with liberation (Goulet 1971), that is, with social justice and basic political freedom. *Liberation* means the removal of an elite by a majority who then assumes control over its own process of change. The most common example is nation-building by the majority in a country. To use liberation instead of development, to talk about strategies for change of political and economic power *rather* than how higher material and social levels are to be achieved, is to adopt a revolutionary in contrast to a reformist attitude. To my mind, liberation is nothing but a necessary prerequisite for development in certain countries, and cannot replace development as a concept of general concern. There are, for instance, few prospects for economic *development* (not to say social development) in South Africa short of a struggle of liberation including violence. After a successful liberation struggle the question arises of what long-run content development should be given. Should the content be limited to economic and social aspects or should also the dimension of control over the forces of change be included? Rodney (1972) includes the latter aspect in his definition of economic development: "A society develops economically as its members increase jointly their capacity for dealing with the environment". Can Third World countries become masters of their own transitions or must they depend on imports of technology and culture from the West (or the East), or let transnational companies dominate their large-scale economic activities? Undoubtedly, economic development can only in exceptional cases, if at all, take place in isolation from other more developed countries. The dependence on technological know-how is, for instance, a common characteristic of Third World countries *in their present strategy for development*. (By strategy is meant a set of internally consistent plans deduced from a general or several part-theories given certain goals.) The question then arises whether the negative effects of the relations Third World countries have with developed countries put a number of poor Third World countries at a dead end. The concept *underdevelopment* denotes usually, in addition to undesirable conditions for work and life, such a situation where economic development is im-

possible due to the characteristics of the relations such countries have with developed countries. This is a relational mode of explanation. Other scholars, who maintain that the developed countries are not *actively* underdeveloping the Third World, argue that *nondevelopment* (or undevelopment) is a better description of most Third World countries. This is a non-relational mode of explanation. It should be underlined that none of the economies in the Third World are stagnant, both quantitative and qualitative changes occur, although often at a relatively low level. Nondevelopment and underdevelopment thus make sense only in comparing levels of development. The choice of words are evidently closely related to views adopted on causes for lack of development, whether the causes are originating mainly internally or externally. (What appears to be internal causes often have an external dimension wholly or in part.) All Third World countries may be said to have been underdeveloped in a historical perspective. However, whoever or whatever is to blame historically for the existing inequality and poverty, the situation today is that an active underdevelopment as the *main* characteristic of the relationships (positive and negative relations will "always" exist) with the developed countries cannot be maintained for all Third World countries. Thus the designation underdeveloped countries is not appropriate for the Third World as a whole. Nonetheless, both underdevelopment and nondevelopment are useful concepts for sub-groups of the Third World category.

The recent economic growth in some Third World countries has made the concept *dependent development* popular. In particularly the "Newly Industrializing Countries" (NICs) economic and social development, if not political development, have occurred to some extent. This development is, however, heavily dependent on foreign inputs of capital both private and governmental. The debt-burden to multilateral development banks (for instance the International Monetary Fund (IMF), the World Bank and private transnational finance institutions) reduce the freedom of choice for these countries regarding national economic policy generally. A question-mark is therefore put, through the use of the label dependent (in contrast to interdependent), on whether their rapid economic development can be sustained.

Spatial development is a major concern in geography. To decide whether a spatial pattern is optimal, is difficult in other but a limited economic sense. Once other criteria are included, it becomes less useful to at-

tempt to establish an optimum pattern. It is thus more relevant to ask if the spatial pattern functions in such a way as to justify the label developed. It is then often easy to see that spatial reorganization is necessary in order to attain economic and social development. Various alternative spatial patterns may thereafter be suggested.

The *choice of a term* to designate the poor and non-modern countries of the world implies a judgement on what the main causes for poverty or non-modernity are. In the 1950s and 1960s backward regions and less developed countries were commonly used. In contrast to these concepts, the concept "proletarian states" was used to point at the relations between nations as the main explanation for poverty and relatively permanent structural imbalances, that is, underdevelopment. In the 1970s underdeveloped countries gained popularity, as did the more optimistic term developing countries. Personally, I prefer poor countries to the former term but since poverty includes both a quantitative position and a structural dimension, neither poor nor underdeveloped are appropriate designations. Since the structural changes that take place in many Third World countries are not conducive of economic and social development, the term developing country is not an appropriate description of reality generally. Myrdal (1968) calls it a diplomatic euphemism. Others may be of another opinion and hence choose this term.

It has been a fashion today to split the Third World into a number of often overlapping categories. Oil-importing/oil-exporting developing countries, low-income/middle-income developing countries, most severely affected countries, least developed countries, non-oil least developed countries, island developing countries, landlocked developing countries, newly industrializing countries and others. (The rest of the world is usually divided into three categories: Industrialized (market) countries, centrally planned economies and capital-surplus oil-exporters.) The more specified and limited categories of Third World countries represent an important reorientation of the development debate because those categories are more empirically relevant than the often extreme generalizations made in the last three decades. Nonetheless, there are some structural characteristics which are common to the Third World. To my mind, it is most adequate to use the term *Third World* and *Third World countries* at the general level because, as has been said above, only some countries are today being actively underdeveloped and

only some are developing both economically and socially. Moreover, the concept Third World escapes an explicit comparison with the developed either capitalist or socialist countries. According to Lacoste (1965), the designation Third World was first used by Sauvy in an analogue with "Tiers Etat" denoting all the disadvantaged groups in France in 1789 that were opposed to the nobility and clergy. The concept Third World is neutral. By using this concept, the scope is open for more complex explanations, and no *a priori* decision is made of the main causes of underdevelopment/nondevelopment at a general level. The First World refers to developed market economies and the Second World to the developed socialist countries. These terms are little used in the literature, and will not be applied here. The last argument for adopting the concept Third World is the implicit notion of (or hope for) a third path, an undetermined but possible path to a "sane society". At least it represents another, undefined option for development thinking and planning.

The Third World is negatively defined "all nations that did not become, during the historical process of the establishment of the present World Order, industrialized and wealthy" (Abdalla 1978). Exploitation and reshaping of the economy and distortion of social, cultural and psychological patterns during the colonial epoch are essential common factors. The category Third World is therefore still useful in spite of the existing heterogeneity regarding, for instance, population size, resource endowment and level of development. This heterogeneity, or rather different combinations of undesirable characteristics, which the Third World countries have, makes a short and positive definition less appropriate. Most countries have all or approximately all of the following characteristics: Insufficient food supply (or a skewed distribution among groups and/or regions), low productivity in agriculture, high population growth, physical and other resources which are unused or used by foreigners, huge unemployment, low degree of industrialization, incomplete market system, unequally developed economic sectors hampering economic circulation, large tertiary sector and social structures contradictory to economic optimisation. The relative importance of these factors will vary from country to country. The main point is the existence of a large number of these (and other) factors at the same time. This was not the case in the developed countries earlier. In view of the above, the following two examples of definitions (somewhat shortened here) clearly become unsatisfactory: A

region is underdeveloped when there are a net flow of capital out from the region, structurally caused unproductivity and increasing poverty (Frank 1967). A country is underdeveloped when it is dominated from outside and when sectors are thereby created which are not linked and have large differences in productivity (Amin 1974).

It is necessary when operationalizing the concept the Third World to rely on measurable aspects. In fact, the GNP together with structural imbalances of a relatively permanent nature give the group of countries included by the United Nations in the category developing countries.

Moreover, since the Third World is not the unit of analysis in the present work, it is in spite of its inadequacies acceptable in certain instances to use the World Bank concept "developing countries", which is adopted in major international statistical publications. The World Bank (1980 a) uses national income per person as the criterion of classification. Low-income (developing) countries (poor Third World countries) are those at or below 300 (1977) US dollars GNP per person. The middle-income developing countries include those countries which have a GNP per person above 300 (1977) US dollars and which are not included in any of the following categories: Industrialized countries, centrally planned economies or capital-surplus oil-exporting countries. The last category includes such countries as Kuwait, Libya, Oman and Saudi-Arabia. The middle-income developing countries comprise also Southern European countries such as Spain and Greece, and Israel and South Africa. These latter countries do not represent Third World countries because they have highly developed and relatively efficiently functioning government administrations. They have lastly no similar colonial experiences as the Third World. The oil-rich countries have such experiences. Furthermore, in these countries wealth and industrial production do not yet coincide. In addition, oil is an exhaustible resource. It is thus possible to argue that the oil-rich countries should, due to structural considerations, be included in the Third World category. The magnitude of their wealth seems, however, to prohibit such a reasoning. China is often not included in statistical publications for lack of data. The reason for arguing that China should be excluded from the Third World category, is that China was never really dominated by a western power. Furthermore, the Chinese culture never collapsed. Its present coherent social structure, well organized economy and equality (although at a relatively low level of living) may make it appro-

priate to include China in the category centrally planned economies, and exclude it from the Third World category. Although the Chinese leadership maintains that the country belongs to the Third World (South, May 1983), this is not a sufficient reason to include it. It should be noted that the category centrally planned economies is rather heterogeneous in that it contains East-European countries and the Soviet Union on the one side and China, Cuba, Vietnam and North-Korea on the other.

In sum, *when I refer to the Third World, I exclude the Southern European countries, Israel, South Africa, China and the capital-surplus oil-exporting countries*. Some of these countries may, however, be included when international statistical data are used. To offset this discrepancy, the category *poor Third World countries* will be preferred whenever possible. The rationale behind the above delimitation of the Third World is two-fold: *First*, poverty and not a relatively low GNP per person is a necessary characteristic of a Third World country. *Second*, underdevelopment in the structural dimension *alone* is not sufficient for a country to be included in the Third World category.

When *poverty* is used here, it implies mass poverty, that is, a relatively large amount of a country's population which is living in either absolute or relative poverty. *Absolute poverty* refers to such aspects as inadequate dietary and health standard; in short, to insufficient provision of basic physical needs. A distinction may also be made between primary and secondary absolute poverty. *Primary (absolute) poverty* refers to lack of enough food to sustain physical fitness for an individual (Rein 1970). *Secondary poverty* exists when the income earned is high enough for physical fitness but is used for other purposes. By *relative poverty* is meant that a part of a country's population has a less than acceptable (related to a national or world standard) satisfaction of basic needs and/or is kept away from political and/or cultural participation. Most often this means a lack of resources necessary to permit participation in diets and activities commonly approved by society. An interesting question, although of only theoretical significance, is whether there is only secondary poverty in the world today or a redistribution of wealth and income would result in global primary poverty. In the super-industrial and post-industrial societies envisaged by Kahn (1976) the whole world will be inhabited by numerous people who are rich (GNP per person above 2 000 (1975) US dollars) and in control of the forces of nature. Economic growth will slow down and eventually stabilize.

100 years later the gap between the 10% richest and 20% poorest countries, now at 100 to 1, will be only 5 to 1. This "economic transition" will be possible with available resources here on earth. Nonetheless, extra-terrestrial activities such as autonomous colonies in space involved in raw material and energy processing will then, Kahn maintains, also exist. In my opinion this is a wrong kind of optimism. Although one should claim that development particularly social development is possible, it ought to be looked upon as a non-ending struggle - development will succeed only if the world realizes that it can fail.

To quantify poverty is difficult. It is virtually impossible to arrive at an objective calculation of absolute poverty. Poverty can be shown to vary in a country for the same year according to acceptable but different operationalizations of the concept. Furthermore, different scholars may find that poverty declines or increases over time in the same country for similar reasons. This has obviously important policy implications. The selection of indicators and choice of methods for measuring absolute or relative poverty or for establishing a composite index, a so-called *poverty* line, cannot be done without value judgement. Moreover, a poverty line will be relative when used in a comparative study. Different studies have, for instance, given that the poverty line in USA is 10 to 17 times that of India (Scott 1981). In a Third World country urban and rural disparities are also important, making the poverty line concept arbitrary to a certain extent. An example provided by Scott clearly shows the difficulty in "drawing a line": In rural West-Pakistan in 1963/64 34% of the population would fall below the poverty line if a Rs 225 income was used for individuals. If the same amount was used but this time measuring expenditure 26% were below the line. By using 2 100 calories as a minimum requirement as much as 80% of the population could be said to be absolutely poor. The conclusion is 1. that it is better to rely on a less general concept than absolute poverty, such as malnourishment, and 2. that it is more useful to operate with a distribution of the population over the income range. The poor would then, for instance, be the 20% with lowest income. In a country without a large portion of the population in wage employment, or otherwise earning money, or without an income policy, it is more in terms with reality to use durable consumer goods (e.g. blanket, torch) in general demand in the area studied to establish the concept of relative poverty. The fundamental point is that poverty denotes not just lack of resources, it refers to lack of resources used (and felt to be rightly used) by the rich.

SOME EMPIRICPL OBSERVATIONS

There is at present a dismal overall situation in the Third World despite the existence of economic growth on average and general improvements on some social indicators. Below this is discussed.

There has even in the poor Third World countries been *economic growth* per person in the period 1960–1980. The average annual growth per person (constant prices) was 1.7% (World Bank 1981 b). Industrial market economies had in comparison a 3.3% growth. *The income gap is thus widening by the rich countries getting richer, and not the poorer getting poorer.* It should be underlined that there are variations inside the group of poor Third World countries. It was in 1970 thought possible for the Third World to achieve an economic growth per person of 3.5–4.5% (Heppling 1971). Moreover, the Pearson report (1969) held that 3.5% economic growth per person or 6% total growth would suffice to create economic development on a sustained basis. The growth that occurred was, as shown above, much lower than expected, and lower than the necessary level for development to speed up. *The income distribution among people in the poor Third World countries has not improved during the 1970s.* The percentage of income received by the lowest 20% was 4.9 in 1970 and 4.1 around 1977 (World Bank 1980 b). These data indicate that there in several Third World countries has been an increasing inequality and thus no *economic development* although economic growth may have taken place. If unemployment is included as an indicator on economic development, the above conclusion is substantiated, the proportion of the economic active population seeking work is increasing. A further important point is that self-employment often yields an inadequate income to meet basic needs for a family. Those who are self-employed may thus want (additional) work without actually seeking it. The estimated figure of underemployment (of the total labour force) in the Third World was as much as 36% in 1975 (Kim and Hanson 1982).

On some of the indicators of *social development* there has been a positive change in the 1970s. Life expectancy is steadily increasing on average in the Third World. The same is the case with the percentage of the population which is literate. If food production per person is used as an indicator for nutritional standard, the picture is not positive (assuming an unchanged distribution). The average index (1969/71 = 100) for 1977–1979 was 97 for the poor Third World countries (India excluded) (World Bank

1981 b). Social development may evidently be said to occur or not occur according to indicators selected. *The conclusion must therefore be that important improvements have taken place in the social dimension in the Third World, but on the whole social development, as economic development, is not found.* It is then not surprising that the number of (absolute) poor is high and increasing. At present about 750 million people are held to be either "destitute" (in acute poverty) or "absolute" poor in the Third World. The figure will increase to 850 millions by the year 2 000 according to the low-growth World Bank scenario which includes "unprecedented economic and social advance in some parts of the world". The poor are barely surviving on incomes judged insufficient to secure the basic necessities of life. (The poverty line used in these calculations are based on real buying power in each country.)

Although there are pockets of poverty in developed countries, this poverty is a result of a skewed distribution of income, that is, there is secondary poverty. In the poor Third World countries there is little to distribute although the inequality of income and assets often is extremely high, that is, primary poverty is found at national level. Although the number of undernourished and hungry in the Third World is not known, estimates put it at 500-600 millions (Brandt 1980). About 8 million children below 5 years of age die every year from diarrhea caught from polluted water. Many further examples could be given. This suffice, however, to point at the bad state of our present world.

DEVELOPMENT STUDIES: CAUSES AND REMEDIES OF INEQUALITY AND POVERTY

After the Second World War the debate concerning poverty and its causes in the Third World steadily increased in popularity. Development was in the beginning seen to be a problem of *Lack of capital and skills*. This was also typical of the 1950s. Galbraith (1979) maintains that what the developed countries could assist the Third World with, were taken to be the causes of poverty. In a long period in the 1950s population pressure on land and food supply were, according to Galbraith, not regarded to be causes of poverty because that would have alienated the catholics of the developed countries for whom family planning was ideologically impossible. The development optimism of the 1950s existed also in the next decade, the First Development

Decade. Nonetheless, it was now recognized by most scholars that economic factors were not the only relevant factors for explaining or eradicating poverty. The "low-equilibrium trap", "cumulative circular causation" or "vicious circle of poverty" became catch words. A large *number of internal factors* (economic, social, psychological, political etc.) were seen to go together to produce a situation where a change had to be initiated in several dimensions in order to bring about progress. Although technology still was held to be the key factor, it was realized that technological adoption was not a sufficient condition for development. The "discovery" of the limited ability of economics to solve the question of poverty in the Third World, resulted in that development studies became popular in many social sciences and in history. Nonetheless, modernization in the sense of westernization (the Western societies were made equal to the state of being modern, Bernstein 1973) continued to be the prevalent goal of development. This ethnocentrism was not widely criticized until the end of the 1960s. The view that development constituted a "total process" emphasized the need to transcend the conventional segregation of economic and non-economic factors. This was the base for the diffusion of the fashion of multidisciplinary research and "General Systems Theory" in the early 1970s. This fashion led to little actual empirical research but resulted in that team work of scholars of several disciplines became more common. In the 1970s particularly history and sociology brought studies of colonialism and neo-colonialism and of class relations to the forefront of development studies. Poverty and (structural) underdevelopment were seen to be closely related to the various *previous and present links between developed countries and the Third World*. During colonialism people were, according to Mabogunje (1980), "... reduced to a state of imitative dependence, a highly degraded state associated not only with an inability to provide themselves adequately with the material means of sustenance but also with the loss of cultural and psychological integrity". The remedy was logically a (selective) delinking from the developed countries. In economics critical voices were heard, for instance, in the attack on the notion of comparative advantage and the doctrine of free trade among countries at different levels of development. As in the two previous decades, the empirical relevance or testing of statements were often inadequate.

Each discipline has a tendency to magnify its own importance. The result in this connection is that core subjects of a discipline are often made into

leading causes of poverty, such as *gemeinschaft-gesellschaft* in sociology, capital-output ratios in economics and absence of national political institutions in political science. Historians made colonialism into the main explanatory factor. Although lack of skills is held by some scholars to be even more essential, historians may say that lack of skills is only a cause in the sense that causes and consequences reinforce each other. The reason for lack of skills may, for instance, be found in the ban on manufacturing which England introduced in many of its colonies. Elites and dominant classes in alliances with "capitalists" in developed countries are seen by many to represent the main post-colonial cause of lack of development in the Third World. A socialist state is thus advocated. Others would argue that socialism in the Third World today would put a heavy claim on the scarcest resource - administrative talent. They therefore argue that entrepreneurs and markets are inevitable in poor Third World countries. Of leading causes related to nature, unfavourable climate, bad soils and malaria are often mentioned. In the psychological dimension "accommodation to poverty", that is, the fact that people often prefer to stay with what they are accustomed to, is held to be a strong explanation for unsuccessful diffusion of innovations. The spatial structure of infrastructure and economic activities which were left when the colonies attained independence, shows a typical pattern of "periphery-centre" direction. The railway lines go from the interior to the coast with few or no lines connecting "periphery" with "periphery". Other centres of economic activities than the plantations or mines from which the railway lines commonly originated are located at points best suited for trade with Europe or for settlement of white people used to a more temperate climate. Locations that would have been sensible in regard to trade and other relations with neighbouring countries have seldom become centres.

The above sketch only reveals the dominant traits of the development literature. The various opinions on causes and remedies of inequality and poverty have existed and continue to exist *in different milieus*. There has been an accumulation of paradigms practiced by different milieus or by individual scholars. The shift of paradigm in fashion is a result of, among other things, the lack of success in the efforts of development in most Third World countries. In a number of countries there has in fact been economic growth not with development but with increasing poverty. Today and surely in the rest of this decade a wide variety of remedies to poverty are and will con-

tinue to be suggested - from extreme isolationistic self-reliance to maximum borrowing of foreign capital from multilateral development banks. Poverty is, however, a many-sided and highly integrated phenomenon. Remedies must therefore also be of such a kind. The one-factor solution does not exist. Some scholars accordingly argue that "investments in the poor" will yield positive results such as higher productivity and production by an appropriate mix of infrastructural provisions. Obviously, *development planning* should in this situation include, as an explicit goal, the "satisfaction of an absolute level of basic needs" (ILO 1976). Development efforts should hence be more directly focussed on the poorest groups of people.

McNamara's speech at the World Bank annual meeting in 1973 was seminal in redirecting the attention (at least at the level of rhetoric) to poverty as the essential preoccupation of aid. Economic growth was then accepted not to be a sufficient indicator, in fact, development was no longer thought to follow automatically from economic growth. In addition, it was decided that the smallholder was a legitimate unit to support in order to increase global food production. The lending policy of the World Bank did, however, not change much in the following years. (In the period 1975-1978 only 9.6% of the Bank's loans went to the "least developed countries", while 30.3% was given to the "upper middle-income group" (Laar 1980).) Undoubtedly, both economic growth and redistribution are necessary to solve the problem of poverty. Other scholars maintain that there is no alternative but to rely on the modern sector either the plantation or the export industry sector as the engine of growth and thus development. The urban slums become in this perspective a necessary evil in a period of transition.

The optimism of the 1950s and 1960s and the critical views of the 1970s have been replaced by a widening pessimism in the early 1980s, despite a short-lived fairly general optimism around the turn of the decade based on the high rates of growth achieved by the NICs before their serious balance of payment difficulties became too apparent. No wonder that slogans such as "alternative" or "another development" find ample space in journals. The stagflation of the world economy has made Keynesian economics insufficient. According to Frank's (1967) thesis, there should now be a better

possibility for self-centred economic and social development (as he showed was the case for a short while in Latin America during the depression from 1929 onwards). The common view is, however, that the relatively high degree of interdependence among most countries today, leads to the opposite conclusion, the Third World will be adversely affected by global economic stagnation. Warren (1980) was a representative of the orthodox Marxists maintaining that capitalism is presently developing the Third World and that this development of the productive forces is a necessary stage in the evolution towards a *successful* socialist revolution. The immediate preoccupation of orthodox Marxists is similar to the only preoccupation of conservatives and liberals, that is, the identification of the forces in the market economy and elsewhere that hamper a market economy development. Although a full-fledged market economy development eventually will arrive, the strategy is to assist this process by removing barriers, also barriers which are created by the process itself (figure 1). Neo-Marxists (for instance Amin 1974, 1977, 1980, Wallerstein 1974, 1979) base their writings more on Luxemburg (1913), Lenin (1917) and Baran (1957) than on Marx. They argue that peripheral or dependent capitalism in the Third World has qualitative differences from capitalism in the centre. The existence of poverty in the Third World is an outcome of the peripheral nature of capitalist expansion in most of the Third World and of insufficient socialist mobilization in other Third World countries. In the former case the market forces are not able to eradicate traditional forms or production completely but they are strong enough to transform these forms of production into what may be called a transitory - not completely traditional, not fully modern - form.

Figure 1. The penetration and contradiction of capitalism

Thus, the conditions prevailing in rural areas in the Third World are rather a reflection of the contradictory forces in the expansion of the market economy than the result of a simple diffusion process. The penetration of market forces creates both opportunities for and obstacles to development. The empirical variety of local and regional areas are furthermore of particular importance. However, more so earlier than today. Increased integration has changed the often unique results of the combination of local traditional economy and culture and the penetration of outside forces. Earlier, economic relations were the dominant forces, but now cultural unification of the West and the Third World is also having a tremendous impact on the Third World. The indirect effects on development of these processes are viewed to be one of the primary reasons behind the creation of (mass) poverty in the Third World.

The transitory form of the production structure (and society at large) is thought to be of a relatively permanent character. The concept "*blocked transition*" is applied to this situation. Since the blocked transition has been created by the penetration of global market forces, some scholars in this school of thought maintain that a delinking from at least the world market is a necessary prerequisite for autonomous and self-centred economic and social development.

In my opinion it is important not to use the term capitalism when referring to the market economies existing today. The reason for this is that the already widely underestimated present and potential role of the state in many Third World countries is furthered. The state may, if the positive and negative forces of the present merger of "new" and "old" processes are identified, assist the good and hamper the bad forces and thus create development. Also the term market economy hides the fact that there is a mixed economy in most Third World countries. Countries such as China and Tanzania have private agricultural plots alongside the collective ones. But even the so-called capitalist countries may have state farms and various forms of cooperatives. In reality there are degrees of mixed economy in most countries. Since the term mixed economy accordingly is not adequate, market economies and socialist countries will be used. The reason for heterogeneity in socialist Third World countries may lie in that the socialist form of production is not implemented in all sectors or in

all parts of a country, because of, for instance, lack of political or military strength. Finally, it should be stressed that the problem of development in most Third World countries is specific to each country, that is, in no circumstances will a "selective delinking" or "forced socialization" be sufficient conditions for development. Furthermore, development in the Third World is, on the whole, qualitatively different from the transition from tradition to modernity in Europe. The Third World exists in a fundamentally different world than Europe did during, what Hettne (1982) has called, the original transition.

DEVELOPMENT GEOGRAPHY

Development geography is a subdiscipline which together with similar subdisciplines within economics, social anthropology, sociology, political science etc. are called development studies. *Development* studies may be defined as studies that are dealing with the alleviation of poverty in the Third World and with the reduction of inequality inside the Third World and between the Third World and developed countries. To conduct a geographical study in a Third World country thus does not automatically qualify a scholar for the category development geographer. The aim and often also the approach of the study must be selected in such a way as to allow a discussion of poverty and development related matters in order for the scholar to be included in this category. Development geography is accordingly a subdiscipline of a particular kind because it comprises topics which are studied in various other subdivisions of the discipline. It should be mentioned that it is not possible to formulate development relevant research objectives regarding all the topics studied in geography. No single (sub)discipline holds the key to such a complex problem as the existing global misery. The development geography's point of view highlights some aspects neglected or only rudimentary treated by other social sciences. There is, as mentioned above, a constant risk that a discipline overemphasizes the importance of its own core subject matter. In *development geography* spatial variation has been given a dominant place in the discussion on development. In reality geography as a spatial science is regarded by most other scholars and even some geographers to be of less centrality to the question of development. It is essential to relate spatial variation and spatial flows to the broader structure of society in

order to gain explanatory power. If this is accepted, it becomes a matter of disposition whether economic, social, political and other processes relevant in a particular context should be discussed before or after the treatment of spatial aspects. In the present work the spatial aspects are placed at the end. Geography (geography is used and not human geography to ensure that physical aspects are understood to be of relevance in human geography) may provide data, insights and an understanding valuable to the development debate. The disciplines deemed most useful regarding an understanding of the problem of poverty depend on the aspects of the problem looked at. The relative importance of economics and geography concerning economic development may at first hand be said to favour the former. However, this implies that there is a general agreement on the causes of underdevelopment or nondevelopment. This is not the case. In the present situation of incomplete knowledge, a determining of the relative relevance of different disciplines is not possible to undertake. In particular contexts the aspects thought to be of less relevance may eventually prove to be key factors.

The major source of new ideas and concepts for development geography will, as was the case in the past, probably be development (sub)disciplines in other social sciences. Innovations may, but is less likely to originate in development geography itself because of the rather limited milieu. Another source of novel concepts but particularly of methods of study is other parts of geography. To test the applicability of such innovations in the Third World should be a task for development geography in future. It must not be forgotten that the main theoretical and methodological debate in geography as well as most empirical geographical studies focus on developed countries.

Development geography has contributed little to development theory. This is primarily due to the rather weak tradition of explanation in geography. Both *regional geography*, which was the leading paradigm before and shortly after the Second World War, and the *diffusion studies* of the 1960s (Gould 1964, Soya 1968) were rather descriptions of facts than elucidations of causes. The diffusion paradigm was taken from economics, political science and sociology of the 1950s. This so-called modernization paradigm rests on the notion of dualism, and of development through imitation and integra-

tion with the western world. Development was equated with spatial diffusion of modern elements from growth centres. The diffusion was thought to occur eventually after an original phase of polarization. These studies have been heavily criticized (Brookfield 1973, 1978, Slater 1974, 1977). For instance, the sophisticated modernization surfaces produced by Gould (1970) and Riddell (1970) reveal little about the process of development. (These studies are nonetheless part of development geography because the assumption of the studies is that development is brought about through a "trickling down" of modern, i.e. western techniques, organization and culture, that is, development is regarded primarily to be a process of diffusion.) The diffusion paradigm was not replaced but two other categories of development geographical studies appeared to become more popular in the 1970s. The first was *neo-Marxist dependency studies* (an approach based on a particular theory), the other *multidisciplinary studies* (not necessarily based on any explicit theory). These two categories remained largely at the *programmatic* level. Few studies used explicit Marxist concepts and methods of study. The multidisciplinary studies turned out to become team work consisting of disciplinary specialists rather than one scholar combining concepts from and studying research objects "belonging" to a number of other disciplines. The conclusion that can be drawn is that mainstream geography continued to prevail. This in fact applied also to many of those scholars who used non-traditional geographical concepts. Since the basic approach used was mainstream geography, the use of some "new" concepts became a form of "window-dressing" with certain exceptions. Those adhering to the Marxist category focussed explicitly on spatial structures. This has been called the dialectic development geography approach (De Souza 1982). To those more inclined toward multidisciplinary team work, space seldom became the dependent variable. Poverty and resource use became the foci of study. Space was nonetheless included whenever it was regarded to be of relevance; the spatial point of view was never lost sight of. Browett (1980,1981) maintains that if the neo-Marxist dependency approach is accepted by development geography generally that would imply a repetition of the mistake of the 1960s of adopting the diffusion approach when that approach was being discarded in other social sciences. To Browett there are two paths for development geography in future: The *reformist* path concerned with micro-macro scale dialectics and the (*orthodox*) *Marxist* path, that is, a structural, political economy approach with historical analyses

of the "totality" and of the fundamental processes of change. Of course, dependency theory in its crude (Frankian) form is not tenable. However, to deny the existence of dependency relations between developed countries and transnational companies on the one hand and many Third World countries on the other would be false and imply to "throw out the baby with the bath water".

Since the *raison d'être* of development geography is relevance to major global problems, *geography as a spatial science in a narrow sense* will often be inappropriate. It is important not to limit geography to "a discipline in distance". Geography confined to a spatial science, for instance, in the form of correlations of spatial patterns, is in danger of spatial determinism. This is not to say that *space as the object of research* cannot be of relevance in the Third World. The point is rather that *space as a point of view* on another (the primary) topic is held to be of greater significance to an understanding of poverty. Although a truism, it must not be forgotten that socio-economic processes are not reducible to spatial patterns, and furthermore that people and groups of people are active agents of change. In other words, spatial relationships must be given meaning through other processes in order for geography to become explanatory. "...spatial structures are implicated in social structures and each has to be theorized with the other." (Gregory 1978). Space should be regarded as one of a number of relevant factors, such as the physical environment, that need to be taken into consideration in an analysis of inequality and poverty. This does not, however, mean, as pointed out above, that space is thought to have a crucial explanatory power on inequality and poverty as implied by Soya (1980) in his call for socio-spatial dialectics. I argue accordingly for a pragmatic and broad view of geography, in contrast to a narrow and, according to Johnston (1979), spatial separatist view.

There is only one possible path for a geographical discipline aiming at explanation. This path is *systematic geography*, that is, the selection of one topic for analysis and the study of this topic in several places or through time, thereby enabling generalization. To reach beyond the stage of classification through areal differentiation (Hartshorn 1939, 1959) has proved futile. Regional geography in the sense of a study of the interrelations of features in specific localities (in contrast to regionalism)

has furthermore been fairly widely accepted to be empirical, inductive and inescapably caught in the web of uniqueness. There are of course a number of interesting exceptions to general findings which must and should be studied as unique cases. But for a science generalization is necessary because that is the basis of theory. Without theory we are left with subjectivity, and in the case of regional geography often a form of art. If the above fundamental difference between systematic and regional geography is accepted, the frequently quoted argument of Berry (1964) that geographical studies may be found anywhere in a continuum from many characteristics in one locality to one characteristic in many localities, is misleading. It gives the impression that there is no fundamental difference between systematic and regional geography. The characteristics of a locality, its "total milieu", cannot but be unique and therefore, if that is the purpose of study, there is a fundamental difference between systematic and regional geography. If the purpose is not the character of the locality *per se* but a topic, then the question arises of appropriate approach.

The objective of the present work is to contribute to an enhanced understanding of poverty and the nature of the process of development. This is a complex subjective matter and a choice has been made to analyse this at what could be called middle-level complexity. The study does not purport to be "holistic" in any sense but to include a number of variables that are thought to be of general relevance. A case-study approach was thus regarded to be most appropriate. This type of approach may be a longer route to generalization but its aim is nonetheless the formulation of hypotheses and testing of theory. Studies at "middle-level complexity" are important in order to gain insight into relatively comprehensive processes. This point should be seen in the light of the urgent need for information of development planning institutions.

In conclusion, the distinguishing features of geography, besides the preoccupation with space, is the interest in *resources, the production process and level of living of specific groups of people in particular localities*. I agree with Gregory (1978) that what makes geography different as a social science, is not the falsely stated aim of eventually attaining the grand synthesis of man and nature but "its attempts to operate within specifically regional contexts". Although the overall aim of development geography is description and explanation of uneven spatial de-

velopment, this should not primarily be understood at the level of an individual geographer but at the level of geography.

SOME PROBLEMATIC ASPECTS OF DEVELOPMENT STUDIES

Development geography and other development studies are *problemoriented* and thus said to be inescapably *normative*. This is correct insofar as the meaning of the term normative is that a scholar has to select his topic of research. Then all social science work is normative. Although a theory is used to determine the exact way of posing questions and formulating hypotheses, a scholar selects the topic to which the theory belongs. Since the resources for research are scarce, a limited number of possible scientific jobs, fellowships etc. exist. A scholar's choice of research object will therefore contain a political dimension, his choice will rest on value judgement. This is also the case if he chooses a topic at the research frontier. When the selection of a topic has been made, it is possible also in the social sciences to achieve a high degree of objectivity in data collection, processing and analysis in the sense of intersubjective testability of results. In this respect development studies are no exception. In short, to study "relevant" problems does not give normative theory. Normative theory is produced when an end-state is given and the path to its attainment analyzed. Development studies do not necessarily build normative theories but may discuss research findings in a normative way. One may, however, say that the questions asked are value-determined. The answers obtained are nonetheless objective inside a given frame of reference.

For scholars from developed countries carrying out research in a Third World country, the existing political-economic system may be taken as the *frame of reference*. The government's priority wishes concerning research topics may be chosen and those topics the government is blacklisting may be shunned. The situation may thus arise that the topic a group of scholars hold to be essential regarding development, is not researched upon at all. A scholar unwilling to comply with a government's research priorities, and who is still opting for research on domestic issues in a Third World country, may find his "alibi" in the UN Human Rights Charter. Myrdal (1968) argues that a scholar should not be concerned with tact,

tactics and diplomacy. It is essential that research aims at truth, and the researcher must always ascertain that this is achieved. The honesty of the scholar thus becomes imperative. Tact may nonetheless be necessary if recommendations are to be adopted by a government. The development scholar has a *moral responsibility* to offer recommendations to governments or other relevant parties. This is, however, not unproblematic. It is "easy" to advocate radical solutions or painful reforms for others when seated safe and comfortable in a developed country (Streeten 1974).

Although it is widely accepted that basic knowledge is a common good, that truth cannot be rationalized, and that free research should not be limited by national boundaries, there is a question of adequacy when scholars go to an *alien culture*. Disciplines trying to interpret a limited topic in another culture may encounter problems of understanding and thus draw fallacious conclusions. The common objection to such research is that the concepts, models and highly sophisticated methods the scholars from developed countries often apply in the Third World are utterly inadequate to the realities of this part of the world. The policies recommended will then be inappropriate. Another negative effect is that local scholars often imitate the inadequate models of visiting scholars. In addition to this model and methodological bias, a bias of relevant topics in local research may exist. To counteract biased research, everybody should be free to carry out research in the Third World. In reality some foreign scholars will "always" be found in the Third World. It is therefore "always" a possibility that corrections should be applied by other scholars to the at best partial solutions advocated by the "first" scholars. (Another reason for conducting research in the Third World is that business, cultural and other links always will exist between the Third World and the developed countries. Research on these links and their manifestations in particular countries is thus necessary for the debate in the developed countries on their relations with the Third World generally.) This view is based on the belief that the task of social scientists is to provide policy-makers with a range of possible and necessarily part, often conflicting, interpretations of a society. Collaborative research between scholars from developed countries and scholars from the Third World would provide a solution to the above mentioned problems. Moreover, such a collaboration would increase the potential influence on policy-makers in both parts of the world. In short, development research in the Third World in-

cluding persons from the developed countries should be a form of dialogue, and this dialogue should be looked upon as an important part of the effort towards a peaceful economic and social development of the entire world. It must, however, not be forgotten that the above argument of unfamiliarity with another culture often also applies to "urban" high status Third World scholars when they enter the rural field in their own countries. The freshness of perception achieved when shuttling between cultures is, on the other hand, an important ameliorating point.

For development researchers a contradiction may be found between what they see as being of practical relevance, *the development research frontier* (of their respective disciplines), and the academically relevant, *the institutional research frontier*. This situation exists because development studies only constitute a minor part of the respective disciplines. This has a bearing on the question of employment at universities. There is, however, no alternative in development studies but to choose topics relevant to and placed in a perspective of development in the country in which a study is carried out. Because of the necessary *dedication to the problem of development*, to alleviating poverty and misery in the world, a development researcher's choice of research topic may harbour an element of disqualification regarding an academic career at home (Chambers 1981). Thus, if idealism was relied upon, the number of scholars in this field would be extremely low. Chambers maintains that in order to achieve relevant development research "the system of rewards, prestige and promotion has to change if the majority of those concerned with (rural) development are themselves to change". The important reason for dedication lies in the following quotation from Goulet (1971): "Unless one has psychologically "tuned in" on the wavelength of the poor, he (the scholar) cannot imagine even vicariously what **it** means to be underdeveloped. This is especially true of technicians working abroad; they cannot hope to gain ready acceptance in underdeveloped settings unless they practice voluntary austerity in judicious fashion. ... (This) must be founded on internal detachment from egocentric pursuits and on active respect for others."

CONCLUSION

The typical trait of development studies is that of incomplete knowledge. No general theory of development exists, and if formulated in future, no common acceptance is likely to be found. The urgency of finding a solution to global inequality and (mass) poverty is no less than that of preventing a nuclear holocaust. A *poverty focus* was underlined above as the main characteristic of development studies. Thus certain research topics have to be given priority. A list of priority topics has to be based on development thinking, on the field of development research, and not on convenience, political expediency or career considerations. The list should not be of a narrow kind because of the stated incomplete knowledge. It should furthermore be stressed that development is an open-ended concept, and that ethnocentrism is a constant threat in choice of topic and method of research.

The research approach adopted should be inductive rather than deductive, as expressed by Hydén (1980): "We have reason to initiate an inductive search that will fill the empty spots in our knowledge of development (in Africa) and therefore enrich our models". The *role of development geography* in this perspective should both be to provide a wider variety of data which taken together with studies of the developed countries *disclose and explain regional and global inequalities*, and to highlight the more narrow spatial dimension of the development process. The overriding question is why economic and social development have occurred rapidly in some areas and slowly in others. To limit the development geographical analysis to include only forms of spatial organization (in the extreme case only distance) as valid dimension of explanation, is deemed to make development geography an irrelevant discipline. On the other hand, development is "essentially a socio-spatial process" (Mabogunje 1980), and (geographical) space is a dimension which the development geographer, in contrast to other scholars, is continually looking for, evaluating the importance of and including in his analysis.

Should priority be given to *rural areas*? The reason for giving a positive answer is, in following Lipton (1977), that the most important conflict between groups of people today is between rural and urban groups. Most of the poverty and most of the low-cost sources of potential advance are found

in rural areas, whereas the urban sector contains most of the articulated-ness and power. Furthermore, if it is taken as an assumption that priority in investments should be given to agriculture and not to industry, the attention should be centred on rural poverty.

Is global development possible through a strategy based on an assumption of harmony of interest in the world? The Brandt report (1980) takes harmony as the leading premise. The report states: "The 1980s could witness even greater catastrophes than the 1930s." This is, however, not seen to be inevitable. The world is a unity with problems but the necessary fundamental changes can be to the benefit of all. For instance, a large-scale transfer of resources to the Third World will have a major impact on growth in the whole world economy. The rich does not really have to sacrifice in order to uplift the poor but in the short-run reduce their investments in the developed countries. Goulet (1971) holds a different view: "... inhuman poverty cannot be wiped out unless the world as a whole sets out to eliminate poverty, not to obtain affluence". This classical dilemma of whether to give primacy to economic growth or to poverty eradication regardless of a possible negative impact on economic growth in the long-run lies at the bottom of the discussion of (radical) reforms versus revolution. Although a certain degree of mutual interest exists between the Third World and developed countries, *a conflict model is a better reflection of the real world*. One example is the competition between especially transnational companies which results in that cost considerations through cheap labour become imperative and thus the pressure on poor countries to create an ample supply to attract foreign investments. This is not to deny that large-scale industries have an objective interest in an improved buying power among the world's population at large. A case in point is the mutual interest existing between many large South African companies and anti-apartheid forces. Another example is that the Marxist conclusion that there is a basic solidarity between rich and poor workers nationally as well as internationally is believed to have little explanatory power in the world today. Solidarity between rich workers in the developed countries and poor workers in the Third World is accordingly regarded to be at best a far-sighted option, and thus a general agreement on an "international welfare ideology" is not thought to be plausible in the foreseeable future.

There is a common agreement that global interdependence regarding raw materials, technology and capital has reached such a high level that it is impossible to envisage the development of any Third World country through a strategy of isolation. Furthermore, the developed countries are technologically more advanced and will "always" be so if market forces are left to operate unchecked. The direction of technological change will therefore be determined by the developed countries. The relations between the Third World and the developed countries which represent conflicts of interest should therefore be solved by Third World unity in global negotiations with the general aim of achieving a global vision which is essential to solve a global crisis. The viewpoint adopted here is that substantial and to some degree autonomous development is possible in the Third World within the present world system and within the finite resources of the world. This is so not least, as also underlined by Chisholm (1982), because of the decline in population growth in the last few years. The total eradication of poverty and the reduction of inequality foretold by Kahn (1976) are, however, not thought to be plausible in a world where competition and conflicts between groups of people and nations are the basic characteristics. The vision of hope must nonetheless never be lost.

CHAPTER 2

RESEARCH OBJECTIVES

Botswana is an example of a Third World country in transition. The case of the peasantry is used to analyze this transition. The point of departure is the recently renewed scholarly interest in peasants as constituting a separate and crucial category of agricultural producers for agricultural development. This debate is here called the peasant controversy. Inequality and poverty among agricultural producers are often accompanying phenomena of transitions. Poverty constitutes the pivotal issue and the *raison d'être* of this work. Poverty alleviation through agricultural development is thus the logically next step to be covered. In Botswana the rural settlement pattern is of particular interest regarding agricultural development because of a tradition of village-based agricultural producers. Finally, the concepts used in official statistical publications on agriculture may not be fully adequate to reflect the present agrarian realities in Botswana. Thus, a comment on these concepts will be included.

The peasant controversy

The main objective is to question the recent but widely held view that peasants in Africa have a certain amount of freedom to pursue values that differ from those common in developed countries. By peasant is generally understood a cultivator, or sometimes also a herdsman, who takes part in market exchange on either the sales or input side but who has not become a farmer, or a rancher, using modern techniques of production. By their behaviour peasants are said to hold back the general development of nation-states because they do not produce an adequate surplus for the growing urban centres. The main reason why the peasants are able to withstand the pressure from the so-called penetration of the market economy (or from socialist planning) is held to be their control over land. Herein lies also partly the explanation for the difference between the African and the Asian and Latin American peasants. In the two latter areas landlordism prevails to a much larger extent. *The key to development thus lies with*

the peasants, their economy and culture. A particular emphasis is placed on socio-psychological aspects of the peasants and their communities.

An alternative way of looking at the general lack of agricultural development in the Third World is *to focus on the conditions and forces that determine the work and life of the peasants.* This implies, among other things, an analysis of the nature of the penetration of the market economy in concrete empirical situations. The assumption is then that peasants, as most other people in the world today, are on a constant outlook for ways in which to improve their level of living, and therefore they will improve their agricultural production if that helps them in obtaining a better life. A discussion of development efforts will accordingly revolve around the negative and positive effects of the extension and intensification of market relations (i.e. the expansion of the market economy) or the diffusion of socialist planning and the environment in a wide sense under which the peasants exist. These contrasting viewpoints are the essence of what will be called the *peasant controversy*.

The main point of what may be called the "uncaptured peasantry" thesis is that peasants are not wholly "captured" by the market economy, they have an "exit option". In addition to their participation in the market economy, peasants to some degree still have an economic circulation pattern characterized by redistribution and reciprocity. It is therefore in this line of thinking held to be possible to describe the peasants as having a specific mode of production (Chayanov 1925, Barlett 1980, Hyđén 1980, Rudengren 1981, Skarstein 1981). The peasant mode of production is blocking a real capitalist transition in the Third World. It is equally relevant to say "blocking a socialist revolution". Thus, in this literature much of the blame for lack of development in general is put on the peasants. Colburn (1982) even goes as far as to say that "the way peasants respond to economic and political alternatives is more than ever before influencing national and *world politics*." (Underlined here.) By using traditional, and accordingly well-known practices of cultivation and animal husbandry, the peasants, it is maintained, have a certain degree of security of satisfaction of basic needs. When they need clothes, tea and a little of other relatively cheap consumer goods, they will sell their surplus at the market. National planners accordingly do not get sufficient predictability on which to make their plans. The less than optimal production is also in macro-economic terms a drain on foreign exchange because of, for instance, the

need to import food. If the weather or other factors make **it** too labourous to achieve a marketable surplus, the peasants will not do **it**. Instead they will pursue the strategy of limiting their consumption. This is the typical reaction of the peasants to the basic dilemma of all cultivators who are linked in some way to the world market and its unequally spiralling prices - either they have to produce more for sale or consume less of goods bought.

Although there is little disagreement on most of the consequences of the existence of a peasantry, the fundamental question is whether the peasants really want to be peasants. **It** is obvious that "accomodation to poverty", the fact that most peasants are used to a simple existence, represents an element of inertia, and is in itself an obstacle to change. They may also in some instances turn away from improvements because of cultural values prescribing subsistence (satisfier) production or leisure as more valuable than money obtained through a market. Such causes cannot, however, be taken to form a complete explanation for the lack of a general commercialization of agriculture in the Third World. In my opinion **it** is more likely that peasants, as most other people, will "attempt to improve their long-run security by moving to a position with higher incomes with less variance." (Popkin 1980). This is probably especially true in contemporary societies where other people's "good life" is easily observable for most people.

Peasants who turn away from market sales, is accordingly doing so because the conditions under which production for sale is undertaken, are not favourable. Peasants are undoubtedly forced to participate in market sales at least once in a while because that is the only option available today to improve their income. The peasant is in fact continuously pressed, if he or she wants to be an agricultural producer in future, by the contradiction between maintaining security of livelihood in the short-run and achieving an improved level of living and thus higher security in the long-run. The situation in many places today is that the peasants are unable to satisfy their food requirements from own so-called subsistence production. This has been said to be a normal state of affairs in a society in rapid transition where especially agricultural structures are of a pre-market (or pre-socialist) kind (Wilkinson 1973). The relatively long duration of the stagnation in the production at most farms in the Third World may, however, make **it** relevant to regard **it** as a relatively permanent phenomenon (although **it** will disappear in the end). **It** should be expected in a situation like this that peasants choose a variety of adaptations involving

agriculture and non-agricultural means of obtaining a satisfactory degree of probability of future prospects for a better life. The main alternatives are urban migration, continued agricultural production either by remaining a peasant or by becoming a farmer and combination of work or trade with agriculture either as an individual or based on the household as the economic unit.

The peasant controversy is a worthwhile topic for development geography to take up because more theoretical and empirical work is needed for a better understanding of the *interplay between peasants and markets*. Although the peasant concept has been theoretically debated in anthropology since the mid-fifties, it has been widely used but close to entirely applied as a descriptive concept in other disciplines. On the empirical side, a good reason for looking into the peasant concept is that according to conventional definitions, peasants constitute the majority of the world's population, and are becoming more numerous. Moreover, an analysis of the peasant controversy allows a discussion of some of the key questions in the development debate, both theoretical and practical questions.

Inequality and poverty

Botswana is at the moment changing rapidly in many ways. As in other societies during the fundamental transition from a traditional agrarian society to a modern market economy based on wage labour, inequality and poverty is probably also created in Botswana (figure 2). *The fundamental question asked is why more and more people are dropping out of agricultural pursuits in a situation with ample access to suitable land and little or no alternative employment.* Existing opportunities for wage employment do not suffice for more than part of those who leave or are forced out of agriculture. Although the high rate of population growth may be an important reason for lack of employment opportunities, and thus of poverty, it is not the only reason. *The study is then concerned with the connection between increased national and international integration, on the one hand, and changes in the distribution of the benefits of economic growth, that is, the pattern of level of living, on the other.* This necessitates an approach where the peasant category is split into a number of household ca-

Figure 2. Model of the present work.

Note. The arrows show hypothetical directions of causal Links. The point is to distinguish between direct and indirect causes of inequality and poverty. By a direct cause is understood that inequality and/or poverty is created (and recreated) directly, for instance, from societal evolution rather than indirectly from societal evolution via conditions for agriculture (i.e. the agrarian transition).

teyories based on income and income sources. A possible process of economic growth with increasing inequality will thus be illuminated. Obviously, a historical perspective revealing the roots of the present inequality and the mechanisms behind, must also be included.

The mechanisms behind inequality and poverty may be determined both through a world system or by an actor type of approach. The *world system approach* (Wallerstein 1974, 1979, Hollist and Rosenau 1981, Hopkins and Wallerstein 1982) entails an analysis of the internal logic of the development of capitalist relations. This is a relatively deductive approach at a high level of abstraction. The *actor approach* is usually more inductive. It may, for instance, consist of an analysis of the aggregated behaviour of different categories of agricultural producers. In this kind of approach a decision is not normally taken a *priori* concerning which of the mechanisms influencing people's behaviour that were the most determining ones, as would be

the case in the former approach. An approach more similar to the actor approach has been chosen since one aim is to provide information useful for planning purposes. This approach allows for more detailed empirical coverage of several aspects. It is furthermore not at the same high level of abstraction as the world system approach which, for instance, gives the market a too deterministic role and almost ignores the production process. In short, this choice implies giving priority to empirical detail on agriculture and related matters in Botswana. In this way Botswana becomes an example of a society in transition. The world system perspective will, however, not be left out completely. In certain parts of the argument such a perspective is essential for an improved understanding.

Agricultural development

Many scholars have been preoccupied with the stagnation or lack of development of agricultural productivity in the Third World. This is also the case in Botswana in recent years. One may ask why the penetration of the market economy has not led to a dynamic expansion (with the promise of high welfare in future) in the Third World generally, as was the case in the developed countries. The role of agricultural commercialization in the overall process of national development has also been analysed intensively. Why then add more to this topic? First, the discussion of agricultural stagnation and the role of agriculture in development generally are not the primary objective presently. Second, part of the *raison d'être* of development studies, and thus of development geography, is as stressed above, to use any data collected *also* with the view of improving the situation studied. Hereby is not implied a kind of action research but that the logical conclusions regarding *planned change* are drawn from the analysis undertaken. The value premises which such a stance entails, will be made explicit in due course. A last point which needs to be stressed is that although much has been written about agricultural development, the status and role of women have largely been ignored. This must be rectified to provide a sound basis of systematic knowledge for planned change. This is particularly true in Botswana where women play a significant role in crop cultivation. In the discussion of planned change in Botswana the pivotal question is whether "small is possible", and to what extent arrangements can be envisaged regarding support to those who choose

to rely on a combination of income sources. Is there any place for the smallholder or peasant in a strategy for overall national agricultural development?

Rural settlement pattern

The agrarian system and the present agricultural changes have a bearing on the *rural settlement pattern*, that is, where the cultivators live. The traditional village pattern is, if not the exclusive, still the dominant form of settlement found in most of Botswana. The pattern is under conflicting stress from the well-known forces of basic service provision versus modern family farm development. The need for the peasant to stay close to his or her field in order to enable an easier transformation to modern agriculture, pulls the cultivator away from the village, whereas the costs to the government of providing water, education and health make a concentration of such infrastructure to villages necessary. It then follows that government plans in this respect usually are contradictory, leaving peasants and modern agricultural producers with the dilemma of where to have their main homestead.

Appropriate concepts for official statistical use

At the Sociology Unit in the Ministry of Agriculture in Botswana work is now carried out to find sensible operationalizations of the concepts "traditional" and "commercial" farmer. At present all farms besides the freehold farms are treated as traditional. This is fallacious. The data I have collected may contribute to the debate on the most *appropriate definitions for statistical purposes of the various types of cultivators and herdsmen found in Botswana today.*

PART II

THEORETICAL PERSPECTIVE

CHAPTER 3

PEASANT AND RELATED CONCEPTS

In this chapter definitions of the peasant concept, peasant studies and characteristics of peasant production are included. The point is to determine the content of and delimit the peasant concept in relation to other types of producers and production.

The concept peasant (or peasantry) has been widely used. It is, however, often applied without a definition or specification of content. Thus, in the literature one finds peasant used in a variety of contexts. This may be explained by the fact that the concept has emerged from empirical generalizations. It is accordingly mainly used descriptively (Shanin 1971, 1974, Silverman 1979, Boesen 1980). Even in the Encyclopedia of the Social Sciences (1968) peasants are not defined in a strict sense but the main characteristics given in various works relied upon. The theoretical significance of the concept is thus little explored. Some Marxists are of the opinion that the concept is of no use in this respect (Friedmann 1980, Patnaik 1981). Others are sceptical only of the more encompassing concepts such as peasant economy and peasant society. As an example, Shenton and Lennihan (1982) did not find in a study on Northern Nigeria a peasant economy following its own laws of development. Roseberry (1978) doubts whether it is useful to arrive at a general peasant concept with a high degree of specification. Few go as far as, for instance, Barlett (1980) who states explicitly that she will use peasant interchangeable with farmer. According to normal usage today, the peasant concept should be reserved for cultivators and herdsmen. The concept has been used also for fishermen and artisans (Firth 1946, Hunter and Wilten 1976, Hashim 1980). By including a group such as fishermen, the result is to limit its content to a kind of economic behaviour. To add to the confusion of the meaning of the concept, a vast number of different terms with often similar content are used: Semi-subsistent cultivators, traditional peasants, near-landless peasants, land-short peasants, rural peasants, peasant-farmers, lumpenpeasantry, disguised proletariat, semi-proletarians, emergent farmers and smallholders.

Different disciplines and different scholars have given the peasant concept different contents by emphasizing various aspects of it. In anthropology cultural and social aspects dominated earlier, whereas the interest has turned to the economic dimension lately. In sociology and political science the peasantry as a class and the relationship between peasants and the state have been the main themes. In geography the concept has neither been much discussed nor adequately defined, although it has been rather frequently used. It may be concluded that *various social sciences will probably give the peasant concept different specified content. They ought then to use other terms or specify the term.* An example of such a specified term, applied here in the discussion on Botswana, is multiactive peasant-cultivator (appendix 1). The task now seem to be to decide on a minimum of common elements to put into the definition of peasant in order to distinguish peasants from traditional agriculturalists on the one hand and modern agricultural producers on the other. The common understanding is that peasants represent a transitory phenomenon in this dimension. The transition will be elaborated upon in the next chapter. Here the concept will be touched upon in relation to the notions of traditional agriculturalist and modern agricultural producer.

DEFINITIONS OF PEASANT

According to Shanin (1966).

"The peasantry consists of small agricultural producers who with the help of simple equipment and the labour of their families, produce mainly for their own consumption and for fulfilment of obligations to the holders of political and economic power".

Saul and Woods (1971) define peasants as:

"those whose ultimate security and subsistence lies in their having certain rights in land and in the labour of family members on the land, but who are involved, through rights and obligations, in a wider economic system which includes the participation of non-peasants".

Key characteristics of peasants are the use of simple technology and family labour; some degree of household control of land; a satisfier ra-

ther than maximizer attitude towards production (but implying some participation in markets); and obligations in form of rent, interest or tax to powerholders outside the household. Landless agricultural labourers (in the sense of not owning or not having access to land) are not peasants. The characteristics above will be further elaborated upon in a separate paragraph below. A major problem regarding analytical use of the peasant concept is that some of the characteristics attributed to peasants also pertain to traditional agriculturalists and other to modern agricultural producers. Hence, it is *essential to relate the position of peasants to other groups, that is, to their position in the larger socio-economic structure.*

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Traditional agriculturalists existed before the market economy became widespread. When trade made sales of surplus production possible at local or external markets against payment in money (if not undertaken by all), the concept peasant should be used because the cultivators and herdsmen then had an option to participate in a market. The peasants are accordingly different from traditional agriculturalists in that they take part at least occasionally in a market economy, in sales or purchase of inputs to agriculture involving areas outside their local home area. However, traditional agriculturalists also undertook exchange not only as barter but first through various means of general exchange and later with more modern forms of money. This exchange was in some instances systematic as in the symbiotic relations between nomads and sedentary traditional cultivators in, for instance, East Africa. It is then necessary *by market economy also to imply more modern forms of exchange, particularly that labour has a money price.* It would be possible to talk about traditional agriculturalists today if the term was limited to agricultural practices and sales. In a more encompassing sense there would be few if any traditional agriculturalists anywhere in the world now. An example, which substantiates this view, is the necessity to buy goods like tea, salt and sugar at the shop. Another example of the problem of a narrow definition is the oscillation between different forms of production found among cultivators today. Furthermore, a cultivator may produce a surplus one year because of a specific target he wants to achieve, such as a bicycle, or bad weather may leave him just enough to feed his family. In view of the present objective it is essential to include the type of the larger society in the specification of the category of cultivators and herdsmen. *Tradi-*

ional agriculturalists can thus only be said to exist in a society which do not harbour modern neither capitalist nor socialist relations of production. By society is meant a political-administrative unit such as nation-states today and colonies, kingdoms and tribal territories earlier.

The usual distinction between peasant and *modern agricultural producer* is the ratio of subsistence to commodity production. Sale is the common aspect used in operationalizing the concepts. A peasant is thus a cultivator or herdsman who sells less than 50% of his production. If nothing at all is sold, the production is called pure subsistence (Wharton 1970). *If, on the other hand, 50% or more is sold, the production is commercial and the cultivator is called farmer and the herdsman rancher.* Such ratios can be established also, for instance, for use of hired to family labour and use of modern to traditional equipment and methods. Such economic characteristics may be adequate to distinguish groups which have different cultural, psychological or social attributes. (The definition used in the present work on Botswana is given in chapter 6.) Since a more comprehensive theoretical definition is necessary for the present purpose, it will be useful to explore the peasant concept further.

PEASANT STUDIES

The use of peasant as a term originated in Europe and was frequently applied particularly to the situation in Eastern Europe and Russia (Klein 1980). Various disciplines used the term in the 19. century, but definitions were seldom given. The term was evidently not intended to be used as an analytical category by most scholars. Few sociologists have "elevated the peasantry from the footnote to the page" (Shanin 1966). In history and anthropology it was and is commonly used. Kroeber (1948) made peasant into a concept for anthropology with his catchy phrase: "peasants constitute part-societies with part-cultures". Redfield (1953, 1956) established peasant as an analytical category - a human type, and thus a subject matter for study in its own right. He was preoccupied with the cultural aspects of "peasant societies". In his definition he includes that peasants are agricultural producers who control their land and cultivate it as part of a traditional way of life. Later authors in this school

of thought have continued to use cultural specific characteristics as fundamental criteria of peasants (Silverman 1979). Wolf (1955) stands as the main early contributor towards a theoretical-economic treatment of the peasants. He focused on the relations of the local production arrangements with the larger processes of colonialism and market economy development that shaped the local situation. The characteristics of a region were found in the interplay among aspects such as labour force, resources and capital within particular political-historic contexts. The point of departure in the studies was, however, still the peasant communities having specific "cultures", although these "cultures" were not entirely a result of surviving traditional values but also a creation of outside forces. In 1966 Wolf moved the emphasis from colonialism to the role of the state indetermining the "peasant way of life". This, if not a complete shift, also implied a change from economic to political factors.

These two scholars are representative for a number of other authors who more or less justifiably can be put in two different schools of peasant studies. The major difference between the schools, besides the different focus of study, is that the former allows little latitude to individual action. The behaviour of peasants are thus explained by cultural continuity. This links up with the viewpoint of the "uncaptured peasantry" thesis. The latter school, on the other hand, contains in essence the arguments stressed by more Marxist oriented scholars, as in the case of the debate on articulation of modes of production. In orthodox Marxism the peasantry did not exist as a theoretical economic category (Ennew et al. 1977). The category has, however, been used by Marxist authors, first as a distinct form of economy and now also as a separate mode of production following its own laws of development (see below). Common for the two schools is the conception of peasants as a category of cultivators and herders who are neither traditional agriculturalists nor modern agricultural producers. Such a negative definition allows for a diversity of peasantries. To make a positive *general* definition is, however, as mentioned, held to be difficult and less fruitful.

Lenin and Chayanov were beside Kautsky the most outstanding authors on the agrarian question in Russia. The different views of Lenin and Chayanov are illustrative of the Marxist versus the populist stance. One

of *Lenin's* points, according to Ennew et al. (1977), was that the Russian peasants at the end of the 19. century were increasingly subordinated to capitalist relations of production, *while* they themselves were not "capitalists" (i.e. farmers). Wage labour was neither commonly used in Russian agriculture at that time, nor in the beginning of this century. However, manufacturing, trade and services related to agriculture were increasingly employing people and adhering to the profit motive as the driving force of economic change. Lenin managed by his dynamic and comprehensive analysis to reveal how rural Russia was changing and poverty created. *Chayanov* (1925) in his more limited study of the family-labour farm showed how peasants were committed to a satisfier type of production. When prices on agricultural products increased, they reduced their output. Furthermore, he found that variations in output at a given price were mainly related to the family life-cycle, families with children in working age had the highest output. Chayanov treated the peasants as socio-economic homogeneous (Heynig 1982). This contrasts with Lenin's emphasis on a differentiation among the peasants which eventually would lead to "capitalist farmers" and a proletariat. (To Marx the peasants were doomed because of their lack of centralized social structure which could stand against the penetration of the market economy.) According to Chayanov, it would be possible to talk of a distinct peasant form of economic behaviour. But to say that there is a "peasant mode of production" implies a reduction of the content of the concept "mode of production". "Mode of production" should be reserved for broader social relations of production, of systematic connections between labour processes and the ways in which the result of production is distributed. According to Lenin's perspective, it is impossible to establish a *general* "peasant mode of production". The focal point is thus that the penetration of the market economy resulted in *a Variety of forms of economic production* due to the different nature of the original economy in different places. They may, however, all be termed peasant. The concept articulation, used by some scholars today, means that traditional or so-called primitive societies ("pre-capitalist modes of production") and the market economy produce *several* specific types of societies ("social formations") when they merge (Rey 1975). The interesting topic of research is the empirical manifestations of this fusion of different "modes of production" in the Third World because it takes a variety of forms and does not seem to result in a near exclusive market economy now or in the foreseeable future. In addition, this combination of dif-

ferent "sub-societies" hamper economic circulation. To search for a general "peasant mode of production" is futile and should be replaced by research on the conditions and mechanisms which create impoverished peasants. This cannot be done through studying the peasantry as an aggregate of individual production units (Patnaik 1982). The mechanisms of change will then not be discovered. It is thus necessary to transcend the neo-populist conception of a homogeneous peasantry, and look for differences and conflicts internal to the peasantry. *The word peasant is then used as a descriptive term comprising a wide variety of Land tenure, Labour relations, production and marketing arrangements.* Ennew et al. (1977) are quite explicit on this: "Typologies have been formulated in terms of level of technology, cultural features, the existence of specific forms of exchange, agricultural practices and so on, all of which develop descriptive categories which are analytically useless. ...".

Peasant as a descriptive concept is, however, useful to distinguish, at a general level, the groups of cultivators and herdsmen which are neither traditional agriculturalists nor modern agricultural producers. Thus, it will be necessary in specific analyses to establish concepts at a lower level of generality. Friedmann (1980) holds the same opinion: "The term "peasant" must give way to analytical specification of forms of production based on internal characteristics of the unit (studied) and external characteristics of the social formation". In other words, *the peasant concept does not refer to a unique set of productive relations.* A great number of productive arrangements may exist and need to have nothing more in common than limitations in the operation of the market principle. The chief unifying and distinguishing characteristic of peasants is *partial integration* into the market economy. No *specific* level of integration is included in the definition. A great variability of degrees of integration may therefore be the outcome. This variability prohibits *a priori* formulations about conditions of peasant production. Thus a pure deductive approach cannot be used at present. The concept should accordingly be replaced by an analytical specification of the internal characteristics of the units of production and the external characteristics of the "social formation" existing in particular regions or national territories.

In view of the above discussion *a peasant will be defined as a cultivator or herdsman who carry out a non-traditional and non-modern production and who lives in a society with a developed market, be it capitalist or socialist.* This delimitation of the peasant concept is necessary to allow for a distinction between peasants and traditional agriculturalists. Peasants are struggling in a different world than the traditional agriculturalists. However, state-like organizations and appropriation of surplus by an elite have existed for a long time. Thus the distinction above enables a formulation of a separate traditional agriculturalist category denoting a more developed method of acquiring food than undertaken by hunter-gatherers. As will be seen in the case of Botswana, the different tribes occupying the territory in the 18. and 19. centuries, had centralized organizations of authority and systematic ways of reproducing inequality between chiefs and their kin and the commoners and slaves. It would be meaningless to say that cultivators at that time were peasants although barter and sale of especially cattle to other tribes further east were common.

According to the above definition, peasants can be found in Europe from the sixteenth century onwards because then market economy forms of production were created in commerce, industry *and* agriculture (Wallerstein 1979). In the literature on European agriculture in the period from about the middle of the last century to the Second World War, the concept peasant was frequently used. The work on particularly Eastern European agriculture in the beginning of this century is consistent with the proposed definition. The above discussion of where the boundary between traditional agriculturalists and peasants should be drawn, is not the primary concern presently. The aim of research is the establishment of concepts which enable an uncovering of the general mechanisms and processes of stagnation and poverty in the contemporary world. Then less abstract concepts are necessary.

CHARACTERISTICS OF PEASANT PRODUCTION

Peasants have, as mentioned, a number of characteristics in common with traditional agriculturalists. The household is the unit of operation. Labour is controlled by the family. The *aim of production* is rather

use-value than exchange-value. The major part of the labour time is used to secure subsistence and not with a view of profit and reinvestment. The household is both a production and consumption unit. The amount of products exchanged varies mainly with the weather. The production can be characterized rather as a "way of life" than an enterprise. This is not to say that a surplus does not exist. To produce a replacement and ceremonial fund (Wolf 1966) were earlier common and normally achieved. By replacement fund is meant the production of surplus enough to enable an accumulation to replace necessary tools and to pay workers in kind or with money when, for instance, clearing new fields. Accumulation is also necessary to cover expenditures at initiations, marriage and other kinds of ceremonies. Accumulation was not long ago mainly achieved through the principles of reciprocity and redistribution (Polanyi 1957). (Herdsman can in addition accumulate through herd expansion.) Sale to markets has nearly everywhere replaced these principles as determining economic factors. This does not imply that the peasants and traditional agriculturalists earlier lived in self-contained communities.

Another important characteristic of traditional agriculturalists and peasants is *risk aversion*, that is, they will minimize risk and maximize security. The reason why peasants do not accept modern technology implying debt, and new unfamiliar methods of production is mainly that they depend on the outcome for their survival. In the words of Stavenhagen (1977): "The peasant household's margins of manoeuvre are slim, and the risks loom large." *Security* for the peasants (and traditional agriculturalists) consists in the maintenance of social links with relatives and neighbours able to help in times of need. Peasants focus rather on avoiding reductions in production than on improving the productivity. Popkin (1980) calls this concern with subsistence and security for the safety-first principle. The peasants are, however, always looking for ways to improve their level of living. To find such ways is difficult when the existing livelihood is so precarious. Thus, when discussing planned change of peasant agriculture, it is of utmost importance to find ways and means in which the risk of production can be reduced in the short as *well as* in the long run. The peasants used to increase their security in the long-run by exchanging labour and distributing food to kin and neighbours in time of surplus. (Complex interaction

with mutual obligations generally took and still take place only among a small number of households because of the need to remember the different obligations in a situation with lack of written records.) The same can be said when a peasant tries to keep children in the fields instead of using machinery. Children normally represent the only available old-age pension. However, peasants will take opportunities arising outside the established means of security if that improves the long-run security by moving them to a position with higher income. Such opportunities seldom existed for traditional agriculturalists but have been available to peasants. It is accordingly fallacious to say that peasants have no interest in market production when their subsistence is secured. Moreover, internal forces exist in most villages which conflict with the well-known levelling mechanism which results in opposition to innovations. The passive connotation of "penetration", used in this text, implies that the initiative for change is thought to come from powerful outsiders. This is the normal empirical fact. The stratification regarding wealth and political position, which existed even in pre-market villages, gave, however, strength to the initiative side of the normal conflict existing in small societies.

The *technology of production* used by traditional agriculturalists and peasants *may* be similar. The plough which has completely replaced the hoe and digging stick many places, as for instance in most of Southern Africa, represents a major shift in technology. Thus when cultivators adopted the plough, they were no longer traditional cultivators. Peasant cultivators may, however, still use a hoe. A plough used with animal draught-power will be regarded as intermediate technology. *Intermediate technology (or the non-use of modern agricultural inputs) is one of the main characteristics distinguishing peasants from modern agricultural producers.* It is important that the introduction of modern technology among smallholders only recently has become a general concern. Previously such innovations were reserved for plantations, estates and large farms. Technological innovations are not accepted in isolation from factors such as land tenure, social organization and economic means. Innovations which are economic rational, have therefore often been rejected by peasants not because of irrational behaviour, as some scholars maintain, but because they do not fit easily with the above mentioned factors. Those cultivators who nonetheless manage to move from the pea-

sant-cultivator to farmer category must also surmount socio-economic and cultural obstacles to innovation. The main problem of research in respect of planned change in agriculture is accordingly to decide whether the obstacles belong primarily to the economic or the cultural sphere. The cultural obstacles are obviously more difficult for outside institutions to influence than the socio-economic ones.

Peasants are said to carry out "simple commodity production" (Bernstein 1979, Friedmann 1980), that is, products are sold at markets but wage labour is not a general commodity. This conceptualization does not create difficulties in historical analyses where the market economy is little developed at the national level. In studies comprising also the contemporary world, it becomes problematic because labour, land and capital cannot be characterized by immobility in the larger economy although the factor mobility may be relatively low at the local level. The competition for labour, land and capital which exists among peasants and between peasant production and various other sectors of the economy leads to a differentiation among the peasants, and thus to a possible creation of modern agricultural producers and increased productivity of agricultural production. A peasant may hire labour and take loans. When this is done with a profit motive, with the intention of increasing the output *and* reinvest in further increases, the cultivators and herdsmen should be called modern agricultural producers. The theoretically interesting point here is that *in this process the peasants replace dependence on kin and neighbours with a dependence on an external market and on modern institutions*. For example, labour is becoming nearly exclusively mobilized through the market and not by the domestic group.

An alternative process of creation of modern agricultural producers is found in China. Chinese cultivators organized in what formerly was called People's Communes must be said to be fully integrated into the national strategy for agricultural development and in the socialist market. Moreover, the household is not the unit of production. Their production is strongly influenced by outside demand, and the aim is maximization of production, just to mention a few aspects in order to show that "People's Communes" are more similar to private enterprises than to peasant production. Thus, such cultivators should be called farmers.

To identify the boundary between peasants and modern agricultural producers may often be difficult in practice. There is also an inherent danger of teleology in the above way of identifying traditional agriculturalists, peasants and modern agricultural producers. It is therefore necessary to underline that no automatic or eventual outcome of the process of change is implied, such as that all peasant-cultivators will become farmers.

CONCLUSION

Most authors dealing with peasants on a conceptual and theoretical level emphasize that peasants are ruled by other social classes and subjected to state-power. They have to render part of their surplus-value or surplus-labour to landlords, moneylenders or the state. Earlier when agriculture was the dominant economic occupation and only few other opportunities existed for investment, part of the capital appropriated by non-cultivators was normally channelled back to agricultural production. *Today investments are often made not in agriculture but in agricultural trade, transport, shops, bars and higher education of children.* such types of investments will eventually contribute to a limitation of further such investments if an adequate investment in agricultural production is not forthcoming. This seems to be a rather common problem in many Third World countries today. It is therefore essential for the state to find methods of acquiring the surplus generated by the peasants and to increase the surplus of those peasants who are more easily controlled in order to allow for state supported reinvestments in agriculture. One method for the state to achieve a higher degree of control over agriculture is to make land into a commodity (or turn it into state land). Rent is then much easier to obtain. By modernizing agricultural production, the state gets an income from taxes on inputs and from personal tax of modern agricultural producers. Peasants in contrast seldom pay any tax and use few inputs. If peasants have obligations to landlords, as in the case of sharecroppers in Asia and Latin America, the state may eventually get part of the produced surplus. In Africa where communal land is available in many places, peasants are said to be relatively free to avoid the pressures of the market and/or the state. Traditional agriculturalists were in comparison often bound by the political power of chiefs to give tribute to

them. And modern agricultural producers are subordinated to the rapidly increasing prices on expensive inputs. The basis of the thesis of the "uncaptured peasantry" rests on this perceived relative freedom of the peasants to pursue aims of their own, to avoid the laws of the market economy (or state planning). The reasoning above is based upon the assumption that peasants want to pursue a subsistence production rather than to participate in market relations when they have security in land. In contrast, the argument made in this work is that *the Limited peasant participation in agricultural production for markets, is mainly explained by unfavourable conditions for such production*. Thus, peasants exist today not because they prefer to be peasants but because they are forced to for lack of adequate alternatives.

CHAPTER 4

SOCIETAL EVOLUTION AND AGRARIAN TRANSITION

Pioneer scholars such as Weber, Durkheim, Marx and Lenin have analysed the evolution from traditional to modern society. Below the intention is limited to a discussion of the fact that elements of traditional societies still may be found in the contemporary Third World. The mechanisms of societal evolution and agrarian transition will not be treated exhaustively, only the main points will be included.

SOCIETAL EVOLUTION

There are no *traditional societies* in Africa today (Amin 1972). However, *traditional forms of production* are often strengthened when the integration with the market economy, foreign or domestic, increases. The process of change in the Third World is regarded by many to be a dynamic process of disintegration or dissolution of the traditional society rather than a building of a modern one. Certain aspects of traditional forms are kept intact, *their functionality is, however, distorted*. At the same time the market economy is not fully developed. This has led Amin (1976) to call such societies for peripheral. Unilinear evolution - the conventional perspective in which specific cases of change are placed - is regarded by an increasing number of scholars not to provide adequate explanation regarding most of the Third World. Undoubtedly, many of the characteristics of a society in transition from tradition to modernity found in the developed countries earlier, are also present in the Third World. Nonetheless, in the latter the magnitude on some fundamental characteristics, for instance, unemployment and poverty in relation to national wealth, is different. Simply to infer from similar characteristics to a necessary development path, is inadequate. Obviously, a prediction of change in future always rests on qualified belief, on whether those characteristics that differ or the different order of magnitude on some characteristics are determining the further evolution in the Third World resulting in blocked

transition. On the other hand, the case may be that the market economy will wipe out all remnants of the traditional society in the short-run, and leave no options open for indigenous paths of evolution. The point here is not to assess the relative probability of these two contrasting views. It is rather to conclude both that change as well as reproduction of existing characteristics at a number of levels in the Third World and that the prediction of the outcome of this complex period of transition in the short-run are not a simple matter of drawing analogies from neither market economies nor socialist countries. The view held by some that the market economy has not penetrated rural life in Africa and that the African peasants in general are "independent of any larger system" (Rudengren 1981), has no basis in empirical fact. All groups of people, however remote they live from large centres of economic activities, are either directly or indirectly to some degree influenced by the larger national economic system, and thus linked to the world market.

The many cases of spectacular growth in peasant production in the Third World resulting from new outside markets and improved transportation facilities (Myint 1970), support the assumption that peasants are *not* having "limited wants". When the universal attitude is rather taken to be a want of material betterment, it becomes necessary to analyse the macro system, its changes and local manifestations rather than the peasant mentality or culture. Hence, a presentation of three determining mechanisms of change - the tendency in a market economy of a necessary continuous extension and intensification of market relations; the conflict between internal and external capital; and lastly the existence of different "pressure groups" - is included in the following. The *first* determining mechanism of change is the contradiction in the market economy itself: As competition is a main characteristic of the market economy, there will always exist a pressure to expand the market (by creating new products, enlarging the market share or find/create new markets). On the cost side of the balance sheet, companies and individual entrepreneurs will try to find cheap labour. By completely transforming traditional societies into effective markets, wages have to be increased which limits or eradicates the supply of cheap labour. An empirical resolution of this contradiction has in many places of the Third World been to produce mainly for export to the developed countries. The wages paid to workers may thus be no higher than for their *individual* survival and fitness as workers. The prerequisite for

such a development is that the supply of labour is greater than the demand - which is the typical Third World reality today as well as earlier. In the early phases of market economy penetration a labour supply was usually created by coercion. This was not necessary everywhere in Africa (Hinderink and Sterkenburg 1979). In Ghana, for instance, Howard (1980) maintains that the traditional cultivators became peasant-cultivators through a response to economic opportunities and imperatives only. The mechanism used by colonial powers to create a labour supply was the introduction of taxes which had to be paid by everyone, and in money. Traditional cultivators then had to sell surplus products (which often meant cultivating new crops) or their labour. Labour migration in Southern Africa and elsewhere was originally initiated in this way. Later, market forces together with population growth were enough to secure a flow of labour to the growing plantations, mining and urban centres. No doubt, people had got used to a few consumer goods and agricultural equipment which could no longer be made locally. The demand for traditional products disappeared, and the knowledge of the production process of such products was gradually lost. An outstanding feature of people's adaptation to wage employment was their continuation with agricultural production as well. Either the worker came home in the agricultural season, that is, he became a peasant-worker, or other members of the household carried out the agricultural tasks, in this case the *household* is of the peasant-worker type. The low wages received in the modern sector of the economy which seldom enabled the worker to sustain the family on the wage alone, had the effect that urbanization did not increase much in this period. Later wages increased, if not much in real terms, then relatively to the income generating possibilities in agriculture. Migration to towns now became a preference for many. To abandon agricultural production could, however, not be done on a large scale because, among other things, job security was low and old age pensions non-existent. Today a substantial number of people in the Third World have got permanent jobs and high salaries. They may thus sever their links to rural resources. Nonetheless, a large number of people do not see such prospects for themselves, and try to become involved in a multitude of economic sectors, often leaving wife and children to look after basic food production.

Spatially, economic activities of a non-primary kind will "always" be concentrated because of the logic of the economy of scale. The places where

concentrations are located can most often be explained by initial advantages such as available energy (coal, rivers) or a central situation in the transportation network at the beginning of industrialization. It is worth mentioning the truism that the initial advantage of an early industrialization, is a major explanation of the relatively modest industrial development in many Third World countries. This is never questioned. The question is why the market economy has not been able to bring about a rapid industrial expansion in the Third World. No doubt, one reason is the fact that market economy expansion is uneven economically, socially and spatially. Inside the Third World spatial variation in resource endowment exercised an important influence over the uneven course of early market economy penetration. An example is climate favourable to European settlers (e.g. the Nairobi area). The *second* determining mechanism, which helps to explain the present structurally distorted economy in many Third World countries, is the conflict between internal (local or regional) and external (national or international) owners or controllers of capital. The internal owners of capital, mostly traders, moneylenders or landlords (merchant capital in Marxist terms) do not usually invest money (nearly) solely for maximization of profit. They will be preoccupied with controlling the sources of profit, e.g. the peasants and artisans. External controllers of capital (industrial capital in Marxist terminology) are interested in investment in production. Merchant capital is generally an agent of stagnation, whereas industrial capital is one of change. Poor people must continue to be poor for merchant capital to be maintained. This is not the case with industrial capital. The conflict between merchant and industrial capital offers a better explanation as to why the market economy has not already submerged traditional forms of production than to say that peasants want a life of low material satisfaction, that they are not interested in increased incomes. The outcome of the conflicting interests gives quite different combinations (articulations) of *forms of production*. Such combinations will be termed *socio-economic formations*. On a more encompassing level of aspects of society, it is common to use the concepts "mode of production" and "social formation" for forms of production and socio-economic formation respectively.

Amin (1980) recognizes only 5 types of "*modes of production*" (primitive, tributary, slave-based, small-scale trade and capitalist). This reduces the usefulness of the concept by establishing it at a high level of ab-

straction. The oversimplification and limitation of the concept are revealed when confronted with specific "social formations" (Klein 1980). Some scholars have expanded the number of "modes of production" (colonial, Eanaji 1972; lineage, Rey 1975; Feudal and pastoral, Cliffe 1977. 1978; lineage - tributary, Dejean 1980; peasant, Hyden 1980). This does not seem a fruitful direction in which to proceed. In certain types of analyses, for instance, in studies of social classes and class conflicts, the generality of the 5 types of modes of production is required.

"Social formation" refers to a combination of "modes of production" existing at a given place at a specific point in time. A "social formation" has a specific history, culture, economy and political organization. No typology of "social formations" is worked out. The concept can, however, be said to have heuristic value. The articulation of "modes of production" has been criticized of functionalism (Crush 1981). However, not all aspects of traditional societies remaining today are thought to be replaced by market forces based in dominant outside centres. The point is that the explanation for the continued existence of traditional forms of production is seen rather to lie in the operation of the world market (Hesselberg 1981 a) than in either countervailing forces in the traditional forms of production or in habits people are accustomed to. It is also quite clear that traditional forms of production are not just passively transformed by external forces. They have an active influence on the process of change. But it is fallacious to maintain that they are independent of or dominant vis-à-vis the market economy. It must be stressed that the market economy in the Third World was brought in from the outside and is thus linked to dominant foreign centres. In Europe and Japan, for instance, internal factors determined the transition from feudalism to capitalism. This is a fundamental difference.

The *third* of the determining mechanisms of change (or stagnation), to be mentioned, which follows from the above, is that although classes are formed, quite a substantial number of people regard themselves to belong to different "pressure groups". "Pressure group" will be used instead of class, because it is at a relatively less general level, and thus allows for more empirical detail of study. An example of this mechanism is a worker in town with a wife in rural production. He will, for instance, be ambivalent towards higher prices on food. He may also find it difficult to accept substantial

risers in wages if that implies less subsidies on agricultural inputs. In the same way the traditional elite with large landholdings cultivated by tenants may, when they have the political power, not react as one group regarding the question of agricultural technology. Some will favour a rapid change and an increased degree of national food production, whereas others will try to keep the old society from changing because a change would deprive them of their source of profit. The result is likely to be a society consisting of various forms of production among sectors and internal to a sector.

What then do form of production and socio-economic formation refer to?

Form of production includes the following three dimensions: The *level of technology* in a wide sense (simple, intermediate, advanced); the *relation between Land, Labour and capital* (individual, collective and other types of ownership of production factors and patterns of surplus appropriation); and *the aim of production* (consumption mainly, consumption and reinvestment of approximately equal value and reinvestment mainly). Forms of production can be established for all kinds of production sectors and be found at different times in different areas. A formulation of a typology of forms of production generally will not be made. It is important, however, to be aware of the risk of expanding the number of forms of production which in the end would give only unique cases.

Socio-economic formation must be located in time and space. It contains the combination of forms of production prevailing in a society. The point in using the concept socio-economic formation is that it provides an opportunity to study a society more in its totality. Such a study may give a specific understanding grasped at one moment in a society's evolution, and thereby enable a better prediction of the further development of this society as a whole. The reason for not using the term "social formation" is that this concept is composed of "modes of production". To avoid conceptual confusion, socio-economic formation is therefore used when referring to compositions of forms of production.

AGRARIAN TRANSITION

In traditional societies the decisive factor regarding rural people's level of living was the relationship between people and nature. This may be called an "*ecological situation*". In modern societies exchange between

people holds the main explanation for inequality. This may be labelled an *"economic situation"*. The process of agrarian change from the former to the latter situation is called agrarian transition. During the agrarian transition agriculture may be said to be transforming in a more fundamental way than the changes occurring in either the ecological or economic situations. In the agrarian transition there is a mix of these two situations, not primarily the one or the other. The content of this mix may of course vary from place to place.

Before colonialism, hunting for slaves by Europeans, Arabs and Africans themselves was not disruptive to the well established and often highly organized societies and trade routes in Africa. Barber (1960) may stand as an example of the well-established myth that:

"Before the coming of the Europeans, it was generally the case in the Rhodesia that the economic life of the African peoples was based on self-contained agricultural and pastoral systems." This view has been adequately countered by, for instance, Rodney (1972) and Arrighi (1973). In other parts of the world colonialism had the same impact as slave-hunting in Africa. In short, the economy in particular and society in general in the now Third World became "outward oriented", and the interaction and integration between neighbouring areas declined or were stopped altogether. At the time the market economy had expanded to become the main organizing principle of large parts of the economies in the Third World, even village-based societies became fragmented. Economic relationships became individualized and a labour supply was created for further market economy expansion.

It is a myth that traditional agriculture was inefficient. In Southern Africa, for instance, large ploughed fields in European settlement areas had a lower productivity of a unit of land (land productivity) than hoe cultivation of selected soils (Palmer and Parsons 1977). Although colonialism paved the way for today's poverty in the Third World, economic opportunities were simultaneously created, for instance, through agricultural innovations both regarding types of crops and practices of cultivation. Such innovations have nonetheless not become universally adopted. If Boserup's thesis (1965) of population pressure as the cause of agricultural change on a large scale is correct, Africa with its low population density in most places might have to wait a long time for change to take place.

At the beginning of national economic development low cost of land, sparse settlement and relatively high prices for capital goods led to an extensive

form of farm operation. After the industrial revolution wages increased far more than other inputs (Andreae 1981). This led to a capital intensive production in the developed countries. Industrial growth may not have the same effect in populous Third World countries today. The direction of the agrarian transition has in fact proved to be multitudinous. There are a number of different agricultural structures in the world, and hence different possible paths for Third World countries to follow. Nonetheless, one may make a dichotomy on a general level between *the Kulak (or American) path* (Roxborough 1979) and *the peasant path*. The former leads through the formation of state or private farms to increased *labour* productivity due to rises in inputs of machinery and energy. The latter may, if not always, result in higher *land* productivity. In cases where new land is available for cultivation, land productivity seldom improves much. When land is in short supply, a process of involution (Geertz 1963) often takes place. Involution refers to that more and more people work on the same land without any change in the technology of operation. The total production increases in places where soils and water are favourable. The relative increases will be gradually smaller. The production in the early phases of this process may be large enough to allow quite substantial sales. Later higher percentages of the harvests have to be used for consumption. The result is a typical peasant form of production. The significance of a stagnant or only slowly increasing productivity per worker is, among other things, that few opportunities will exist for local entrepreneurship based on agriculture. Thus a dynamic capital accumulation at the village level is limited.

The unilinear perspective on agricultural change usually implies that in *the transition period* between fairly specialized traditional agriculture and highly specialized commercial farming, agricultural production is mixed. A number of crops are grown on each holding, food crops as well as cash crops, and in addition livestock is often kept ("simple animal husbandry", according to Todaro 1981). National economic improvements and population growth stimulate in this phase both intensification and diversification. The increasing food demand in urban centres makes land more expensive, paving the way for private landholdings where land is not already a commodity. When land becomes a commodity, the labour which is applied to a unit of land usually increases. Some labour-saving equipment may be adopted, and crop rotation becomes normal. When the use of inputs bought from outside increa-

ses, *it* becomes important to spread the risk of failure by growing a variety of crops. Thus, if the peasant-cultivators have access to credit, fertilizers and other essential inputs and to markets, and have a feeling that they will benefit from improved productivity, they will gradually specialize and become farmers. As Todaro states, evidence from many Third World countries shows that under *proper* conditions small cultivators are responsive: "Lack of innovation in agriculture ... is usually due not to poor motivation or fear of change *per se* but to inadequate or unprofitable opportunities."

In a "mature" industrial market economy diversification is thus replaced by specialization at the farm level. The family farm have an area only large enough fully to mechanize the cultivation of one or two crops. In fact, the special knowledge involved makes *it* difficult for a farmer to have a thorough insight into more than a few crops. In collective forms of agricultural production a continuous modernization takes place because of economy of scale. In the transition from labour to capital intensive agriculture labour considerations accordingly force an elimination of diversification and a switch from a joint to a specialized operation. In addition, risk is more and more reduced through insurance arrangements.

The critique of the above model of agricultural change is that *it* is too limited. *It* depicts past change in agricultural production correctly but *it does not include the important fact that many agricultural producers combine agriculture with work in other sectors. To fully understand agricultural change or stagnation, it is essential to broaden the analysis to cover other aspects of reality as well.* The contention here is that an improvement in agriculture reaching the majority of the peasants in the Third World, necessitates an identification of the forces that "perpetuate" the transitory stage. Below some of the aspects and forces are touched upon.

Mechanisms of agrarian transition

Land tenure and *debt burden* are often mentioned as reasons for non-improvement of productivity in a situation where all necessary inputs are available and an effective demand for the output exists. The landlord may take a

large part of the output and/or the moneylender/trader the profit. In most of Africa there are no big landlords and the cultivation is not highly capitalized. This mechanism of stagnation is therefore less prevalent in Africa in contrast to Asia and Latin America.

The mechanism that should be underlined is rather the *price squeeze*, the fact that agricultural production for sale now is linked in one way or another to the world market. Prices on inputs such as equipment, fertilizer etc. tend to increase at a higher rate than prices on agricultural output. In addition, Third World governments are less inclined than governments in developed countries to subsidize agriculture. The result is that a unit of output buys less and less inputs. The peasants are often also compelled to sell their products just after harvest when prices are relatively low, and to buy "back" food later when prices are high. Furthermore, the manufactured goods which peasants (and modern agricultural producers) have become accustomed to, become relatively more expensive than the products they sell. This is enhanced by the replacement of village crafts by imported goods. Thus, the necessary continuous productivity increase in agriculture becomes relatively high, squeezing some peasants out of production and others back to subsistence agriculture, and forcing farmers to increase their production by "grabbing" land and steadily raising the machine intensity of operation and/or the use of fertilizers. In many Third World countries the gap between peasant agricultural technology and the technological level of modern agriculture is vast. In the developed countries the modernization of agriculture was more linked to a gradual modernization of other sectors and countries. Agricultural development in the Third World, on the other hand, meets competition from a highly organized agriculture, often marketing the products through transnational companies. Transnational companies may, however, also induce agricultural development in the Third World through, for instance, contract farming. This may improve the income of the peasants (and modern agricultural producers) but seldom solve the problems of national food shortage. Furthermore, such companies are not able to invalidate the price squeeze. The conclusion is that the lower capacity to obtain an "acceptable" level of satisfaction of goods from outside, compels many to migrate to urban centres in order to secure part of their livelihood. The effect of this has in many places been a shortage of labour at ploughing and harvesting time. This again leads to disinvestment in peasant agriculture. Today the deterioration of the productivity in agriculture is both a cause and an effect of migration. At the origin of migration it was most often a cause only.

Why are not all peasants squeezed out of agriculture? There are forces pressing towards the creation of farmers, on the one hand, and workers, traders etc., on the other. However, dountervailing forces exist, such as opportunities although limited for cash crop production and casual and low-paid work particularly in urban centres. A survival is thus possible on a small holding and with low productivity if the household is used as the unit of livelihood. To combine income sources is becoming increasingly common in Latin America (Brignol and Crispi 1982). This process is called semi-proletarianization in the Latin American debate. Harris (1978) reports that one-third of the agricultural producers in Mexico have non-agricultural incomes as well. In Cajamarean (Peru) 55% of the peasant households had at least one member who participated in the labour market (Deere and Janvry 1981). In Sri Lanka there is evidence of a more classical agrarian transition: It has become more common for larger cultivators (those with 20-40 decars of wet paddy land) to have non-agricultural incomes (Wickramasekara 1983). At the other end, many poorer peasants rent or lease out their small plots and become wage workers (daily paid) on the larger cultivators land. It has obviously become more rewarding for the "small peasants" to work for money on other people's land than cultivating their own plots mainly for consumption. In 1975 five days of this kind of work gave a bushel of paddy, whereas the equivalent amount could be obtained for only 2.3 days' work in 1982. In developed countries "part-time farming" has become a general phenomenon (Buttel 1982). An example from Central Kenya (Freeman and Norcliffe 1984) illustrates the process mentioned above: 42% of those operating non-agricultural enterprises also owned a smallholding. Interestingly, a significant proportion of Kenya's "smallholders" have used profits from agriculture to launch a variety of enterprises. This may be a leading reason why, according to Cliffe (1977), the limited cash cropping in Eastern Africa during and shortly after the colonial period tended to create some "rich" peasants rather than farmers. *Today it seems that agribusiness and casual wage employment strengthen rather than weaken small family based cultivation. This is contrary to what is prescribed by the unilinear model of agricultural development, mentioned above.*

Drought is a mechanism of agrarian change which is of particular relevance to Africa. A much wider interest than has been shown in the literature so far, ought to be paid to this factor. In the extreme case when drought leads to famine, peasant resistance to change has been demonstrated to break down

(Klein 1980). Due to internal differentiation of the peasant category, a drought may affect well-off agricultural producers to a lesser degree than poor ones. The poor may be compelled to leave agriculture because the system of redistribution inside kin groups has lost much of its former matter of course. In fact, even to share resources in time of crisis is no longer a certainty in the contemporary more individualized society in rural areas of the Third World. The well-off may experience a loss of investable capital and/or they may due to the experiences of recurrent droughts become less willing to take the risk of adopting less well-known practices of cultivation.

The *exhaustion of the soil* may in some cases be a factor squeezing peasants out of agriculture, especially if still more distant land is the only alternative. To some extent drought contains an element of fallow because the crops are not using much, if any, of the soil nutrients. On the other hand, the soil does not regain any of its fertility. The point is that with recurrent droughts (and bad harvests generally), the length of the time cultivation is possible on one plot is longer than it would otherwise have been. Bernstein (1979) includes the exhaustion of the soil and the price squeeze in his concept "simple reproduction squeeze". The generality of the deteriorating terms of exchange for peasant agriculture and the particularity of the shortened fallow period make it inadequate to combine both in a single concept. Bernstein is, however, correct when he says that: "The low level of development of the productive forces in peasant agriculture means that the household is extremely vulnerable to failure in any of its material elements of production".

PEASANT DIFFERENTIATION

The differentiation of the peasantry consists of two related dimensions: The rich - poor and the multiactivity dimensions.

The rich - poor dimension

Socio-economic stratification among peasants becomes more marked and takes on new forms when market relations expand. Chiefs and merchants seize then the opportunity to increase their assets. They develop land and practice

various forms of lending. In short, they are able to accumulate capital. In several places quite a number of people gradually or more rapidly (because of special circumstances for instance severe drought) lose their land or cattle and become labourers. Most of the agricultural producers, however, remain more or less as before regarding subsistence. The process of transition thus both creates an income and wealth stratification among peasants and results in that many peasants are not able to feed themselves from own production, and hence are forced to become either combined peasant-workers or landless labourers.

There are accordingly different *strata* among the peasants when referring to income and wealth, that is, level of living. This stratification implies, among other things, a range of privilege and deprivation. Few would say that peasants can belong to different social classes because they, according to the definition, control some of their means of livelihood. There is even a debate as to whether peasants should be treated as a class in a materialist sense at all. In political analyses, particularly discussions of the revolutionary potential among peasants (Wolf 1969), it is useful to look upon peasants as constituting a class by itself, if not for itself. To regard peasants today as "a sack of potatoes" (Marx 1850) is far from the truth.

It is common to distinguish between poor, middle and rich peasants. *Poor peasants* are unable to reproduce themselves through household production in agriculture, and must sell part of their labour on a regular basis (Bernstein 1979). *Middle peasants* are able to reproduce themselves through family labour on agricultural production alone. Still, they often choose to combine several income sources, sometimes to the neglect of agricultural production. In the case of peasant-worker households, women are often pure peasant-cultivators and men workers. It is quite common that sons and daughters work in urban centres and send money home. *Rich peasants* are able to accumulate wealth. Rich pure peasants will seldom be found today because most of them will have invested in shops, bars or other types of trade. The return on such investments are usually better than investments in agriculture. They become peasant-traders. The above socio-economic stratification is with minor variations common in most empirical analyses of peasant differentiation (for instance Bundy 1979, Howard 1980, Deere and Janvry 1981, Mishra 1982, Brass 1983).

The multiactive dimension

In most of Africa the process of socio-economic stratification of the peasantry is still going on. In Asia this process has through shrinking holdings and the mechanisms described above, already forced many peasants to sell their land and become tenants. Furthermore, the production has often fallen below the former subsistence floor at the household level. Poverty has become a way of life. In Latin America the typical situation is that by being forced to take particularly consumption loans from money-lenders and traders with interest rates from 50 to 200% a year, many peasants have become landless agricultural labourers. A number of these labourers have even settled in urban centres. An example is the cane cutters in Peru (Scott 1976). According to Todaro (1981), peasants have no sources of external income; they are trapped in chronic poverty from which no escape is possible short of major rural reconstruction. Although Africa has a lower population size relative to land and other resources than Asia and Latin America, there is evidence of the same process. However, more typical in Africa is probably the increasing number of people who combine own cultivation with wage work in agriculture or other sectors. The statement by Todaro is evidently fallacious regarding Asia and Latin America, as shown previously, and becoming more and more so in the case of Africa.

The process dealt with above has been labelled differently in the literature. In the modernization tradition, the typical words used are *commercialization* and *commoditization*. Among more radical scholars, the terms often applied are *proletarianization*, *marginalization* and *pauperization*. The two latter words refer to the following process: The market economy opens up opportunities for sale of products. This influences people's wants. Sooner or later sale of own products is not sufficient to satisfy the acquired wants, and sale of labour becomes a necessity. Difficulties in obtaining regular work particularly in rural areas lead eventually to sale or abandonment of the land owned. This leaves many nearly without any means of livelihood. The expansion of the market economy has, according to Stavenhagen (1977), become an obstacle to "authentic development for millions of peasants in the Third World" through its entailing growing economic and social inequality. In one sense development and underdevelopment are taking place simultaneously. Which of these processes that will be the strongest in the short, medium and long run, remains a matter of qualified belief. At the moment both can be proved.

The ongoing process of differentiation and polarization creates also other categories than farmers and "proletarians", such as traders and shopowners. Furthermore, a most significant characteristic of the process is that quite a large group manages to remain as agricultural producer households by obtaining casual wage work, that is they become multiactive peasant households. By multiactivity (FAO 1982a uses the term pluriactivity) is not to be understood the many different activities households undertake for direct consumption. By activities for direct consumption is meant work performed and goods produced that are neither sold nor bartered but used by the household itself. "Part-time farming", a commonly used term, is not suitable in analyses of Third World agriculture because the definition is often referring to the individual level. *The point here is to highlight the multitudinous income-sources type of economy at household level.* Analyses should today be turned towards the *multiactive peasants* and those who drop out of agriculture. *Drop-out* encompasses all groups that leave agriculture, not only those who are left without any property, means of production and employment, *the destitutes*. "Semi-proletarian" is not used as a term because that would necessitate data on the relative magnitudes of the various income sources the agricultural producers have. No such data are available. To be labelled a "semi-proletarian", the agricultural producer must have wage income as the principal base of reproduction. Furthermore, the term "proletarian" is not adequate because many of those who leave agriculture accumulate capital in urban centres. In addition to multiactive peasants and the drop-outs, slowly changing pure peasant-cultivators and pure peasant-herdsmen may still be found in most Third World countries. *An essential feature in the Third World is that there is often a drop-out of agriculture without a simultaneous expansion of commercialized farming in the same country.* This development is different from the enclosure of the commons in England. However, the growing urban centres will secure a home market for peasants for "at least a generation." (Shanin 1974). Nonetheless, they will unavoidably disappear because "the destructive force of capitalism would far outweigh any conserving tendencies." (Warren 1980). The above viewpoint is challenged here. The huge and increasing number of unemployed people in the Third World together with the strong force behind more automation in industry and services (e.g. chip technology) will render few options of food security but own production for a portion of the earth's inhabitants also in (if not the day after tomorrow) tomorrow's economic world order.

The differentiation among peasants is not a smooth and continuous process. Periods of reduced inequality and times with little or no change in categories of agricultural producers may be found. Nonetheless, when change first have occurred in traditional societies with some degree of ecological equilibrium, there is a tendency towards differentiation. This is universal. The outcome is generally the following categories of people in rural areas: Workers, peasants, farmers, traders and destitutes. The *worker* category consists of permanently and casually employed people and of labour migrants and shuttlers. A *Labour migrant* is here defined as a person who is employed or self-employed in another national territory than where his closest family is living and who provides wholly or in part for the up-keep of this family. A *shuttler* is a person who is employed or self-employed outside the home area but not in another nation. The person has to come back home not every day but at least once every sixth month. As the labour migrant, the shuttler must contribute to the household economy in the home area (Wikan 1981).

The peasant category consists of *pure peasants* (those who are occupied with agriculture only) and *multiactive peasants* (those who have other sources of livelihood in addition to own agricultural production). The same applies to the farmer category. *Destitute* refers to those who do not regularly find seasonal work in agriculture but still eke out a meager existence in rural areas. These concepts can be used at the individual as well as the household level. It is surprising on the background of the commonness of multiactivity in the Third World that so little scholarly work has been directed explicitly to this phenomenon. An example of this inadequate conceptualization of agrarian realities is a recent reader edited by Harriss (1982). Multiactivity is never mentioned in this book on peasants and agrarian change. The research interest in the multiactive peasant category for agrarian policy-making in particular and development strategy in general lies first and foremost in the fact that this category of peasants constitute a large proportion of the world's food producers. They are neither fully workers, specialized cultivators nor destitutes.

It may be concluded that the traditional agriculturalist - modern agricultural producer dimension does not reveal one of the most fundamental economic and developmental aspects of societal evolution at the level of development of the productive forces dealt with here. A large proportion of the people in the Third World cannot live adequately and with a certain minimum

of security in the short or the long run by individual efforts alone. This group must rely on other people as well, and hence the household becomes the relevant economic unit of analysis in such cases. This sub-subsistence nature of peasant production is common in Africa (Kohnert 1979, 1982). It is also often mentioned in studies on Asia (Baharuddin 1979) and Latin America (Durstun 1982).

The variety of forms of production of a socio-economic formation in a society in transition is often reflected in the relative distribution of types of work (figure 3). The figure is not included as a hypothesis to be tested but as a perspective in which the empirical findings can be viewed. The figure shows that the typical pre-colonial and pre-market society consisted of a majority of traditional cultivators, some artisans and people of other occupations and "chiefs" and their kin. When market sales of products and in addition either land or labour became common, peasant-cultivators constituted the majority. In a third stage (A), the present one in many Third World countries, peasant-cultivators, multiactive peasant-cultivators, farmers and a few multiactive farmers exist. The category "other" consists mostly of the tertiary sector in the Third World. This does not imply that it is useful to term such countries "peasant states", as Spittler (1983) does, because the dominant forces of change does not probably lie with the peasantry but in the formal sector of the economy and the attention this sector receives from the political elite. In a fourth stage agricultural producers constitute a small proportion of the total number employed or self-employed. In this stage multiactive farmers are about equally numerous as pure farmers. (The relative magnitudes will of course vary among countries.) This is the typical situation in the developed countries today.

Multiactivity in developed countries

The price squeeze is operative also in developed countries. Quite a number of modern agricultural producers have been forced by a declining level of living to take part-time or full-time employment in other sectors, mostly in urban centres. Weekend and holiday farming are therefore phenomena on the increase (Strode 1982). It is difficult to compare the figures for different countries because the definitions of "part-time farming" differ. In the USA 12% of "farm operators" worked 100 days or more in "off-farm" acti-

Figure 3. Model of Societal Evolution and Agrarian Transition.
Relative number of persons in different categories of "work-position" and cultivators.

Figure 3. Model of Societal Evolution and Agrarian Transition.
Relative number of persons in different categories of "work-position" and of cultivators.

vities in 1929. The figure for 1978 was 44% (Buttel 1982). The aim of the farmers is no longer to supplement farm incomes. Instead, it is common for "part-time farmers" to work full-time off the farm. Now more than half of the agricultural households with a market production have non-agricultural incomes superior to their agricultural incomes. In Europe the "worker-peasant" is a dominant characteristic of the agrarian structure (Goodman and Redclift 1981). (The peasant concept has also been frequently used in the debate on agricultural development in Turkey. Seddon and Margulies 1983.) In Cyprus 51% of the farmers have jobs outside agriculture (FAO 1982 a). In Norway the husband and wife are included in the definition of "part-time farming". In 1979 56% of the farms had less than half of the income from the farm (Symes 1982). Even the larger farms now turn into the category where farming is "not the most important source of income". Common income sources with which farming is combined in Norway are: Wage employment, tourism and social security payments. In Japan a household definition including sons, daughters and grandparents staying at home is used. The high figures for "part-time farming" in Japan is also a consequence of the existing small farm structure. In the 1930s approximately 50% of the farm families in Japan had some non-agricultural employment, 25% derived more income from employment than from agriculture (Johnson 1974). In 1950 50% of the farms had more income from other sources. The figure in 1980 was 87% (Kada 1982). Enyedi (1982) calculates the magnitude of "part-time farming" in Hungary in another way. The proportion of gross agricultural production in 1980 provided by "part-time farming" was 34%. The experiences in developed countries can generally be explained by the increasing difficulties farmers see in realizing an "adequate" income from farming. In the Third World it is for many a question of bare survival. Neither the wage obtained in town, nor the output of the farm suffice to reproduce the family.

The rich - poor dimension and multiactivity

The relative numbers of rich and poor cultivators (in a relative sense) vary through the transition from traditional cultivator to farmer (figure 4). (The figure is included for the sake of perspective only.) Among the traditional cultivators, there are, due to principles of equality, few if any really poor cultivators. When peasant-cultivators are the nearly exclusive category of cultivators, both the relative numbers of rich and poor culti-

vators rise. This inequality increases when it becomes possible to obtain wage employment and sale of cash crops becomes more common. The competition for factors of production sharpens in this period. In the situation where the number of pure peasant-cultivators declines and combination of cultivation with non-agricultural jobs is becoming more normal, the relative number of rich cultivators increases, whereas the number of poor ones declines. This constitutes, however, a short period before rich peasant-cultivators become farmers and "land grabbing" occurs leaving less land or less easily accessible land to the remaining middle peasant-cultivators and smallholder farmers. The pure farmers suddenly find themselves heavily caught in the price squeeze, and hence the number of rich pure cultivators is reduced. The same situation will exist when multiactive peasant-cultivators are turned into multiactive farmers. When work in non-agricultural sectors is common, the number of poor cultivators is very low. (This situation is normally accompanied with government subsidies to retain a certain amount of national food production.) The number of rich pure farmers contracts and probably stabilizes at a point approximately corresponding to the number of pure cultivators who have acquired large landholdings. The figure is limited to a marked economy type of society.

CONCLUSION

The two dominant processes of change are the expansion of the market economy and population growth. They are interconnected, as are the other processes included in figure 5. Numerous factors with variable weights and in changing combinations are involved in these processes. The historical specificity of a social phenomenon must therefore be established, that is, the constituent elements and the relations between them must be identified. In social science this implies drawing analytical boundaries, of selecting elements. The unit of study does not give itself *per se* as is often the case in natural science. Herein lies a value judgement in social science.

The changes occurring regarding land, agriculture and people, explained at length in the previous chapters, are summarized in the figure. The figure should not be read in a teleological way. As has been underlined before, no historical necessity is involved in a shift from one category to the other. A society may be "permanently" at the middle (peasant) stage in these dimensions. There is, however, most probably an irreversibility concerning the

Figure 4. Model of differentiation among cultivators.
Relative number of cultivators with different levels of living.

Figure 5. Model of Agrarian Transition.

shift from the traditional to the peasant stage. This is not the case for the shift from the peasant to the modern form of production. It is quite conceivable that farmers may become peasants. The figure depicts the general and common experience of those countries that have developed a modern agricultural sector. Such countries may in times of high unemployment or specific fashions witness a migration of people to marginal areas, and thus a relative increase in the category multiactive peasants.

Earlier in this and previous chapters several mechanisms of poverty creation have been touched upon. In figure 6 some of the leading causes of poverty are shown. Although some factors have been included that have not been discussed earlier, the figure does not pretend to be exhaustive. Generally, poverty is created both by societal processes which are not related to agriculture and by processes directly connected to agrarian changes. In the latter case the price squeeze is the main mechanism regarding Africa. In Asia, Latin America and parts of Africa lack of suitable land for the peasants is another important mechanism. To understand today's poverty in the Third World, it is furthermore essential to be aware of the initial inequality which existed in most traditional societies. The penetration of the market economy has in most cases "built on" and widened this initial inequality through its own uneven development. The market economy expansion as an overall process works through a number of less encompassing processes of which some of the most important and relevant in the present context are included. Drought represents furthermore an element of particular importance in many African countries. Drought creates poverty directly by killing cattle and forcing people to abandon agriculture, and results indirectly in wider differentiation through the lesser ability of middle peasants (than rich peasants) to withstand minor droughts.

mass poverty creati

CHAPTER 5

AGRICULTURAL DEVELOPMENT AND RURAL SETTLEMENT PATTERN

This chapter consists of two parts evident from the title of the chapter. In the first part, the agricultural production trends primarily in Africa are given together with potentials. Reasons offered by scholars for lack of agricultural development are then discussed. The cases of the Ivory Coast and Tanzania are used to illuminate the range of presently adopted agrarian policies. Thereafter some viewpoints on strategies for agricultural development are albeit briefly outlined. In the second part, changes in rural settlement patterns are elaborated upon.

AGRICULTURAL DEVELOPMENT

The Third World can double its agricultural production before year 2 000 without any new startling technological breakthrough (FAO 1981 a). This would, however, not end hunger unless the distribution becomes more equal. A faint hope. Similarly, the "overproduction" of cereals in particularly the USA (in 1982 estimated to be 125 million tons, after exports. Afterposten 8. August 1982), cannot help Third World countries unable to pay. There is evidently no other option available to most Third World countries than to improve their own agricultural production. To envisage a grand international scheme of food distribution would moreover create a dangerous basic food dependence which few, if any, governments would accept. Except for natural catastrophes, the food supply ought mainly to be self-produced at a national level. International trade in food products will still be essential to allow for further development of the comparative advantage regarding *types* of agricultural products as well as to supply those countries which do not have the physical resources to produce the major part of their own requirements.

Africa is today the only larger area with an average decline in food production per person (~ 0.9% annual average in the 1970s, World Bank 1981 a). In the 1960s food production in Sub-Saharan Africa increased with 2% (annual

average). In the 1970s the figure was 1.5%. Both figures are well below the growth of population (FAO 1981 a). This decline is caused both by lower land and labour productivity (Mkandawire 1983). According to Holmberg (1982), Sub-Saharan Africa may become one of the big tragedies of the 20. century. The global agricultural output has in contrast increased tremendously since 1950. The food output at least doubled between 1950 and 1980 (Grigg 1983) (the world population in comparison increased with 85% in the same period). The agricultural growth was mainly due to an intensification of production and not primarily to an extension in area cultivated. In the period 1950-71 food prices were fairly stable. According to Brown (1983), the Soviet wheat purchases in 1972 ended this good period. The idling of crop land in the USA increased the prices further, as did the higher oil prices from 1973 onwards. The outcome was and is a declining global food security, famine in India and Africa and a worsening soil erosion in many Third World countries. The need to produce more food in the Third World generally is well documented. FAO (1981 a) estimates that in 86 Third World countries 435 million people (1974-76 average) were undernourished. If the trend continues, there will be 510 millions in 1990 (90 Third World countries included) and 590 in year 2 000. Imports of food, which in the 1970s increased with 9% annually on average for Sub-Saharan Africa, has become a heavy constraint on the ability to import technology necessary to improve the productivity of production processes. To become more self-sufficient in basic foodstuff through a "smallholder" strategy was then expectedly made a prime objective in the OAU's "Lagos Plan of Action" (1981). FAO reckons that Africa needs to double its food production during the 1980s to have enough to feed itself. Viewed against the potential, that is, land availability and yields obtained elsewhere, this should not be too difficult. For instance, the maize yield average for the Third World (1974-76 average) was 1.4 tons/ha, whereas the figure for the developed countries was 4.3. In a moderately positive scenario the Third World will in year 2 000 have an average yield of 2.0 tons/ha. The figure for sorghum are 0.8, 2.0 and 1.2 respectively. In Africa the agricultural production could at least be 100 times more than presently (Economist 10/9-83). The irrigation potential in Africa is, for instance, 290 million hectares (including double cropping). Today only 9 million hectares are irrigated (Revelle 1983). More important, however, is Revelle's estimate that even with a low level of input in agriculture, Africa could feed 1.5 billion people, a population figure probably reached in 2 025. (With

a high level of input the figure would be 10 billion people.) Evidently, the physical resources for adequate food production are not lacking in Africa. It should be mentioned that large areas of Africa are not suitable for wheat production, but for the more drought resistant sorghum and millet. This may prove a problem in future because the gap between local production and the ability of governments to import food is often closed by food aid, that is, wheat and maize produced in the USA. In Botswana sorghum porridge is giving way to white bread (and to a lesser extent to rice). This change is worrisome and probably irreversible as long as people have a choice. In Tanzania an official report (Structural Adjustment Programme 1981) states that the need for imported food has contributed to the substitution as well as increased preference for maize, wheat and rice in place of traditional lower cost staples. Abalu (1982) says that there is a general trend of increasing preference by African consumers for wheat and rice. The lesson to learn regarding food aid is that it should be connected to supporting improvements in local food production. This has been recognized by EEC at least at the level of rhetoric (Clay 1983).

The reasons for the bad performance of agriculture in Africa at present and in the last decade are many and vary in detail from country to country. The key factor(s) also differs with local circumstances. Among scholars and international organizations there seems to exist an agreement on several explanatory factors. Below the main reasons are given why, as Lipton (1983) puts it: "... Africa has now overtaken South Asia in the grisly race for the title of hungriest region." Thereafter the suggested solutions are discussed.

At the general level Lipton maintains that the consistent neglect by governments of the agricultural sector, inhibited them from meeting the oil crisis with adequate policy responses. Janvry (1977) and Lele (1983), among others, underline that fundamental attitudes and group interests at *national level* are the main obstacles for improvements in agriculture in Africa. Bates (1983) says it as strongly as this: "Agricultural policy can thus be viewed as a by-product of governments' efforts to maintain peaceful political relations with urban political forces." The World Bank (1981 a) and the Brandt reports (1980, 1983) stress population growth, the physical environment, global "stagflation" after 1974 and a persistent bias against agriculture in prices, taxes and exchange-rate policies. For instance, the terms

of trade for farmers in developed countries are twice as advantageous than in the Third World on average (Janvry 1980). Moreover, real prices paid for most African producers' crops fell during the period 1970 - 1982 (Green 1983). In Tanzania, for instance, producer prices for export crops are lower in the early 1980s in real terms than in the beginning of the 1970s. According to Abalu (1982): "Quite often, existing input and output prices are such that profit maximizing behaviour would be expected to lead to rejection of recommended (agricultural) practices." In particular, the prices offered by parastatal marketing boards in Africa are too low (Economist 10/9-83). In addition to the reasons given above, many scholars mention political instabilities and wars (Hinderink and Sterkenburg 1983). The normal land tenure system in Africa is regarded to be a problem in a different way than in other regions of the world. The widespread existence of commonage is said to hinder banks to give loans to cultivators without cattle as security. Cooperatives for inputs and marketing, which were important in the agrarian transition of the now developed countries, seem to be unable in most Third World countries to surmount the two fundamental difficulties of untimely inputs and delayed payments. Although, as mentioned, the combination of causes differ from country to country, the outcome is often the familiar process of reduced fertility of the soil and hence declining output. An example of this process is Russia. In the beginning of this century the Russian peasants' response to market and population pressure was mainly to reduce the area and duration of fallow (Pallot 1984). Without a change to a use of fertilizers or manure food production inevitably goes down.

Examples of agrarian policies: The Ivory Coast and Tanzania compared

A comparison of the Ivory Coast and Tanzania provides a useful illustration of the arguments above.

THE IVORY COAST

The Ivory Coast is often labelled the country with an agricultural export success. Manufacturing of agricultural goods accounts for more than half of the value added and a still higher proportion of manufactured exports (Lee

1980). The government has through an agrarian policy of private producers and private local traders but an official centralized marketing board for export crops encouraged production of cocoa and coffee. The producer prices have been well below world market prices for these products. The important point is, however, that the producer prices have steadily increased over the last 20 years. Moreover, they have kept pace with inflation on basic consumer goods. Land was traditionally communal but acquired gradually a value beyond the mere provision of subsistence, and it came to be viewed as private property. Land was also available for those who wanted to start agricultural production on a smallholder scale. The main government efforts besides fixing the producer prices and organizing the export marketing are cash bonuses for high quality products and subsidies on inputs. Labour is easily available from neighbouring countries at the peak season. The small peasant-cultivators and farmers, who produce nearly all the cocoa and coffee in the Ivory Coast, have, however, not improved their level of living. The government has appropriated a high percentage of the benefits from the export growth. According to Hecht (1983), the producers have become a lower middle-class segment of society, valued highly as the motor of the Ivorian "miracle". Most other African countries have also taxed their peasants heavily for capital accumulation and reinvestment elsewhere in the economy. Almost all these countries have ended up in "crippling" the agricultural sector. The main reason for this difference lies probably in the continued expectation of an improved level of living that existed among peasant-cultivators and farmers in the Ivory Coast. This was achieved by identifying the "right" balance between taxes, subsidies and producer prices. This strategy has, however, not primarily led to increased productivity through new technology in production but through more peasant-cultivators cultivating more land.

TANZANIA

The Ujamaa policy, that is pooled agricultural labour on socialist principles located in villages, lasted in practice only about 5 years. The Tanzanian government's commitment to the policy was never very strong (Payer 1983). However, 13 million people were moved, mostly by force during the first half of the 1970s. As described elsewhere in this work, agricultural production in Tanzania suffered. In the strategy of "development villages" adopted in 1975 peasant-cultivators were allowed to have small private plots

for their own consumption and sale. Due to inadequate agrarian policies and marketing systems, agricultural production for exports and home consumption in Tanzania is still today a major unresolved problem, and poverty is pervasive in rural areas. Bernstein (1981) remarks that the fast expansion of the state (and the subsequent need to finance it) led to an attempt not only to monopolize the agricultural output of the peasants through parastatal boards but also to an "attempt to control the conditions of existence and uses of peasant labour itself". Kjærby (1983) reports that there is an increasing interest in animal traction among peasant-cultivators in Tanzania. This shows a willingness to change. The government has, however, neglected also this side of peasant agricultural development. Instead funds have been concentrated on state farms which are demanding on foreign exchange, for instance, regarding tractors. Most of the state farms run, according to Kjærby, at an economic loss. In fact, the export volume of agricultural products have declined in absolute terms. To sum up, peasants in Tanzania have been moved to new and often unknown areas regarding local weather and soils. There they have been told to grow specific crops for exports. They have also been "starved" of financial resources (Hanak (1983)). Most authors writing on Tanzanian affairs agree that the dismal agricultural performance is caused mainly by a decline in prices in real terms of agricultural products (relative to producer inputs and consumer goods purchased by the peasants). It should therefore not surprise anyone that the peasant-cultivators have given priority to growing their own food. They have been able to do so through the part control they still have over land.

Viewpoints on strategies for agricultural development

The agricultural work force in Africa will grow with at least 1.3% a year in the rest of this century. The figure for the whole Third World is 1.1% (FAO 1981 a). It is then reason to maintain that machinery ought to be introduced in such a way that it adds to employment. In addition to improved methods of cultivation, adequate prices are necessary to reach higher labour productivity. In the absence of expected higher incomes, peasant-cultivators will not make an extra effort, bear additional risks and be prepared to save and invest more. In market economies where land is still communally held, it is difficult to obtain credit but for

those with other means of wealth (e.g. cattle). The government must in such cases devise combined credit and insurance schemes. Although government planning is necessary to bring about agricultural development in most places, no government can achieve economic optimization on every farm. This depends on the cultivators. In, for instance, the context of India Nair (1979) favours negative incentives because the rationality of cultivators varies enormously. The high number of bundles of individual (or household) satisfactions makes a predictability of administrative efforts extremely difficult. In the Third World generally the conventional economic concept of utility has limited empirical relevance. In full-fledged market economies the profit motive secures predictability. The option available to Third World governments regarding optimal use of agricultural resources is, according to Nair, to make **it** uneconomic not to sow on time, not to dig wells, not to use fertilizers etc. If the cultivators are not maximizing yields, they would lose the possession of the land. Such a harsh method would be political suicide in a democracy. Moreover, **it** would deprive a huge number of people of their only means of livelihood. The method may, however, be successful in increasing national agricultural output. In fact, **it** is nothing but an extreme form of the price squeeze.

China, Japan and Taiwan are important examples of the peasant path to agricultural development. They have through a relatively low cost type of system, but with high labour input, reached high levels of both land and labour productivity. In these countries *the smallholder strategy did not have to compete with large internal commercial farms, neither private nor collective ones*. The success of a peasant path to agricultural development rests, in my opinion, on the question of appropriate agrarian policies and on political will. In some countries where neither the market mechanism nor government efforts are able to "capture" the peasant-cultivators fully, transnational agribusiness is asked to organize "peasant-plantations" (i.e. contract farming in specific areas). The aim of private companies is, however, to extract surplus in the short-run rather than to build a strong and modern either private or collective farm structure. Government planning is thus a must for independent agricultural development in the long-run.

If neither a form of collective and/or state farm structure nor a contract farming strategy but a peasant path to gradually more modern agriculture is pursued, it is essential to plan on a thorough understanding of existing realities of peasant production in specific empirical settings.

Generally, two leading factors should be analyzed: First, the fact that the farms in many Third World countries are often not self-sufficient units. The basic economic unit is the household, and its members are compelled to include non-agricultural sources of income in order to survive at the accustomed level of need satisfaction. Casual and part-time jobs provide in many instances funds for investment in agriculture. Agricultural development planners should thus realize the importance in that urban workers have holidays in peak agricultural seasons. *Second*, the peasants do not constitute a homogeneous group. The specifics of the process of peasant differentiation in an area are therefore essential inputs in the planning process.

In *conclusion*, the fundamental problem in agricultural development is that change is necessary on many aspects in and outside of the agricultural sector at the same time. Capital investments alone are, for instance, not sufficient for agricultural improvement. In addition, methods of cultivation must be altered, new crops introduced, marketing facilities expanded and a supply industry established. Moreover, the "packaged" technology (Pearse 1980) must be fitted to a particular environment, it must be of agronomic suitability as well as in harmony with economic circumstances. There does not seem to be any leading factor which can pull the rest of the necessary aspects in a positive direction. Thus a certain degree of balanced growth is needed. This implies planning. The role of the state is accordingly of prime importance. Obviously, the "packaged" technology approach cannot be applied in a situation with small landholdings, low surplus and high risks. Without state-subsidies, equity with urban industrial wages will remain a remote dream for peasant-cultivators and farmers alike. The choice of agrarian policy is of course largely a value judgement that depends on which group(s) the political elite wishes or is bound to favour. The socio-economic stratification and process of dissolution (drop-out from agriculture) existing in rural areas are essential starting points in the specification of target groups - to plan from the populist notion of a homogeneous peasantry should, as mentioned, be abandoned.

RURAL SETTLEMENT PATTERN

In developed countries urbanization was a result of a successful agrarian transition and of industrialization. In most Third World countries the degree and rate of urbanization are comparably low. Still urban migration may be substantial. The large population and its rapid increase in rural areas explain this. However, in some places in Africa the rate of urbanization is high. The reason is the original low percentage of people living in administratively defined towns. Thus, in the Third World an absolute decline of population in rural areas is only found in exceptional cases. Basic service provision does therefore not stand at a jeopardy, as it does in some peripheral areas of developed countries. Nonetheless, government services viewed to be essential aspects of a welfare state may also in the Third World reduce the rate of outmigration, and in some cases stabilize the population of, for instance, a service-centre and its hinterland. The settlement pattern in rural areas in the period of agrarian transition may take different forms according to prior pattern and governmental regulations.

In figure 7 the main features of the rural settlement pattern in situations with different categories of cultivators are presented. As a starting point, three different rural settlement patterns - dispersed, small villages and large villages - have been included. In most cases a combination of at least two of these categories may have existed. The intention is, however, for heuristic purposes to depict the main patterns only.

Traditional agriculturalists, when sedentary, lived in small groupings of closely related kin as well as sometimes in larger villages, but then with the fields in the vicinity. The lack of adequate transport facilities made closeness to fields and livestock essential. When peasant production became more common, closeness to markets took on importance as well. The somewhat improved means of transportation (sledge, wagon) made a choice between village and fields possible. Fields could now lie at a distance from the village. In the words of Chisholm (1962): "The substitution of relatively intensive labour systems of agriculture for the (existing) extensive types would be prohibitively expensive were the peasantry to continue living in the agrotowns, far from their lands." Only when intensification of agricultural production made it possible to put earlier unproductive time to productive use, the time lost in travelling between home and field became an essential point.

Figure 7. Model of shifts in rural settlement patterns.

<u>Traditional cultivators</u>	<u>Peasant-cultivators</u>	<u>Multiactive peasant-cultivators</u>	<u>Farmers</u>	<u>Multiactive farmers</u>
1. Large villages	Large villages with satellites	Hierarchy of villages	Dispersed settlements	Dispersed ² settlements
2. Small villages	Small villages	Hierarchy of villages	Dispersed settlements	Dispersed ² settlements
3. Dispersed settlements ¹	Dispersed settlements and villages	Villages	Dispersed settlements	Dispersed ² settlements

¹ Including groupings of 5-15 closely related kin households. No division of labour.

² Some multiactive farmers will live in villages.

Figure 8. Model of migration of cultivators.

<u>Traditional cultivators</u>	<u>Peasant-cultivators</u>	<u>Multiactive peasant-cultivators</u>	<u>Farmers</u>	<u>Multiactive farmers</u>
1. Large villages	Small migration from large villages	No migration	Medium migration from large villages	No migration
2. Small villages	No migration	small migration to large villages	Large migration from villages	Small migration up the village/urban hierarchy
3. Dispersed settlements	Small migration to villages	Large migration to villages	No migration	Small migration to villages and urban centres

Note. The tables should only be read horisontally.

Regarding European agriculture, according to Chisholm, farms 3 kilometres or more away from the village became occupied, whereas farms closer to the village continued to be operated from the village. Thus a central village with a number of outlying farmsteads became the typical pattern. Furthermore, in those countries in which economic growth created enough jobs and population increase slowed down, a contraction in the overall rural settlement pattern occurred. Marginal areas cropped earlier were converted back to pastures, and agricultural production increased through higher productivity in the more fertile areas. It may be concluded that in a commercial individual farm form of agrarian structure the large village soon became uneconomic in most places. In Europe some governments consciously created a more dispersed pattern, while this was not necessary in other countries lacking a village tradition. In collective agrarian structures villages of a relatively small size have been the chosen pattern (e.g. China, Tanzania). For Southern Africa it is of particular importance that the spontaneous tendency of some peasants was to settle at their fields when political constraints on the settlement pattern were removed. The dilemma with dispersed farms, as mentioned earlier, is that while the cost of running the farms may be reduced, the cost of providing infrastructure increases. This dilemma constitutes a source of conflicts between peasant-cultivators and governments.

In figure 8 various hypothesized directions of migration - village to field areas and vice versa - corresponding to different categories of cultivators, can be seen. By migration is here implied a change of main place of living for a household. Obviously, there will in most cases exist migration in both directions and between a variety of classes of villages and towns. The figure does not pretend to be exhaustive but to point at the likely main directions of migration. As for the previous similar figures, a comprehensive test of the hypotheses inherent in the figure will not be undertaken. The main reason for the formation of villages in earlier times was the want of control by leading groups. In general the spatial landscape will be dominated with the interest of the dominant elite (Johnson 1974). Badly distributed villages make economic development difficult when the market economy "needs" a hierarchy of market places and urban centres. The marketing hinterlands are often too small to sustain but small enterprises. To choose certain villages as the core of "functional areas" should accordingly be the strategy of infrastructure provision (Hansen 1977). At the stage when the

welfare state has been established (the dominant elite is not any longer consisting solely of the economic elite but the majority of the population can forward demands indirectly through the ballot), villages which in a pure economic sense would not receive infrastructure, may nonetheless obtain it. Furthermore, the fashion of national self-sufficiency in food makes for investments *also* in relatively small holdings, thus representing a force towards a more dispersed settlement. A special feature in many Third World countries today is that development aid entailing pressure exerted on Third World governments by developed countries, tends to create a situation resembling the welfare state regarding infrastructure. One may therefore say that such countries have "jumped" over the stage of more pure market economy domination, because, among other things, infrastructure is provided to a set of villages that have not been "made into a hierarchy" by the market economy to a degree comparable with the developed countries when those countries were building their basic modern infrastructure. A larger number of villages are then "maintained" than would otherwise have been necessary in a more gradually developed case.

In the debate on rural Britain, for instance, there is now a fashion swinging away from the notion of key settlements to village clusters (or other kinds of dispersed forms of rural settlement) in order to maintain the viability of small-scale rural communities (Cloe 1982). The reason for this fashion can be found in the failure of growth impulses to "trickle out" from key settlements to their respective hinterlands.

The implications of a specification of the peasant concept for the space economy generally and the rural settlement pattern particularly are important. Some likely viewpoints regarding the latter are included below: Peasant-cultivators may prefer to stay close to their fields. It is particularly advantageous for these peasant-cultivators who carry out mixed farming (both crop cultivation and animal husbandry) to live at the fields because then they will normally be close to the grazing areas as well. This is not of equal importance to peasant-herdsmen who may afford to hire herders. (Ranchers will usually live in larger villages or urban centres.) For the multiactive peasant-cultivators a village location may be preferred in order to be closer to non-agricultural work opportunities. Multiactive peasant-cultivator households with labour migrants or shuttlers probably prefer a village location because it enables those staying elsewhere to come home more

often. The village represents in such cases a "compromise" location among the resources the households exploit.

Decisive government strategies may influence the above inferences. Modernization of agriculture can, for instance, take place simultaneously with villagization, e.g. the Kibbutz in Israel and the former People's Communes in China. Failing such a specific agricultural policy, a country may give support to multiactive peasant-cultivators in order to try to improve their productivity and provide the field areas with infrastructure pulling the peasants out of the villages and service centres. The basic dilemma of the space economy at the present stage of development in most of the Third World is that those primary services people want - water, education and health - cannot be provided economically but to certain points in space. One of the main differences between the now industrialized world before and the Third World regarding a solution of this dilemma, is the problem of geographical mobility in rural areas. Rural roads connecting field areas with markets are commonly lacking. The number of tractors (for transport) and vehicles are low and the "effective distance" between fields and social services (and markets) remains long. The overall economic difficulties experienced by most Third World countries make a fairly balanced growth of infrastructure and other sectors of the economy unlikely. Furthermore, the "one farm one lorry" situation seems to be far away in most Third World countries. In Africa this is a major problem of agricultural development in a private initiative type of society. This will have a bearing on the creation of poverty and also influence the settlement pattern.

In *conclusion*, the aims of spatial planning in the present context are increased agricultural production and the alleviation of poverty. The spatial distribution of people and economic activities is not the focus or end-product of the analysis but constitutes rather an input into the discussion of poverty creation and of planned change towards a more productive and equal society. This approach represents a departure from the traditional geographical approach which emphasizes the forms of things rather than their formation. Formation refers to the social dynamics through which forms are created, changed or maintained (Santos 1977).

CHAPTER 6

THE PEASANT CONCEPT, QUESTIONS AND HYPOTHESES

This chapter includes the definition of peasant adopted and the questions and hypotheses relevant for the various aspects of this work.

THE PEASANT CONCEPT

In the literature on peasants it is, as mentioned, seldom discussed or explicitly stated how to operationalize the concept. This applies particularly to the anthropological and/or Marxist literature. This is unfortunate because the empirical validity of the theoretical definitions offered are thus not assessed. In order to distinguish peasants from modern agricultural producers easily observable criteria should be used. The *aim of production* measured by market sales and the *technology of production* represent such criteria. It is furthermore essential that the criteria adopted are judged qualitatively in each empirical setting regarding the correspondence with the theoretical definition.

In table 1 the criteria used here in the case of Botswana are given regarding cultivators. Since the number of pure herdsmen is low in Botswana and the definition of different categories of herdsmen does not have the same general interest as that of cultivators, the criterion used regarding herdsmen is only included in the empirical part. A farmer is a cultivator who gets a modern score on at least one of the criteria in the table either under the aim or technology dimension of production. If the score is intermediate on any of the criteria and none modern, the cultivator is a peasant-cultivator. The cultivator is a traditional peasant-cultivator when the score is traditional on all the criteria. In a pre-market socio-economic formation the term used is traditional cultivator.

Table 1. Categories of aim and technology of production.

Form of production	Traditional	Peasant	Modern
Aim	Consumption mainly	Consumption/ investment	Investment mainly
	No sale at market for money	1-49% sold of total production at market for money	≥50% sold of total production at market for money
Technology	Simple	Intermediate	Advanced
	Hoe	Plough, animal draught-power	Mechanical draught-power
	Compost	Fertilizers non-regularly	Fertilizers regularly
	Traditional varieties	Improved farmer varieties	High yielding varieties

Note. To qualify as modern form of production on sale, the minimum amount harvested must be enough to support the household with crops throughout the year.

The *boundary between traditional cultivator and peasant-cultivator* is identified at the level of socio-economic formation, that is, in relation to the market economy penetration of pre-market socio-economic formations. But when do market relations become more dominant than traditional relations of production? Since quantitative data are impossible to obtain regarding, for instance, percentage of households that sell at markets and buy from shops, the "date" a society moves from the pre-market socio-economic formation including both traditional and modern forms of production must be established qualitatively. The identification of the "date" must refer to the existence of markets and of profit as a motive of production in one or more sectors of the economy and sale of labour against payment in money. One should dis-

tinguish between a socio-economic formation where only goods are exchanged and one in which also labour and land are objects of economic transactions. In a transitory socio-economic formation one or more factors of production may not be freely exchangeable (for instance land) but some (usually labour) are. It is in such "combined" situations that peasant-cultivators are found. The "date" when traditional cultivators become peasant-cultivators is the moment the economy change character and either labour or land become an object of exchange, or when labour and land are subsumed by modern socialist principles. The *boundary between peasant-cultivator and farmer* is here defined at the level of form of production. An agricultural producer will move from the peasant-cultivator to the farmer category when either the aim of production changes from consumption and reinvestment in production of approximately equal value to reinvestment mainly, or from intermediate to advanced technology, or both. Examples: A cultivator who *owns* a tractor is placed in the farmer category, although he or she is not selling any surplus at the time of data collection. A peasant-cultivator may invest some of the surplus in improved cultivation. However, when 50% or more of the production is used for investment, the cultivator would be a farmer, although the technology used is simple or intermediate.

Although a cultivator sells most of the harvest, the money obtained may not be invested in agriculture but in other more remunerative sectors. However, if a sustained sale of 50% or more of the harvest is to be achieved, reinvestment in agriculture must occur. It is therefore acceptable to use sales as an indicator on reinvestment when the harvest is not an exceptional bumper crop due to specially favourable weather. This latter point may easily be checked.

The relations between labour, land and capital have not been included in the definition. The reason is the want of concepts that may be used for different conditions of land tenure. Individual ownership, various tenant arrangements and collective agriculture should all be possible to study with the above proposed concepts. The market economy (and in a few cases modern socialist principles) has been able to penetrate agriculture while often preserving existing property forms. This point was observed also by Marx, who underlined that the market economy was the leading force of change. Today internal factors which may vary from society to society are given due recognition as forces of change and preservation. Concepts able to encompass

the above mentioned variety of land tenure are thus needed to identify general mechanisms of change. It is essential to identify how modern forms of agriculture are brought about either by the market economy or by socialist planning. When studying agrarian transitions, it is impossible to conceive of a modern agricultural producer in a market economy context only at the moment the so-called *real* subsumption of labour by capital is achieved because that would imply an extreme situation where only a rural capitalist class and a rural proletariat of agricultural wage labourers completely separated from ownership of land and capital existed. The typical European family farm, either of the pure or multiactive type must be said to be modern. The peasant concept would lose analytical meaning if European medium and small machine intensive farms were to be labelled peasant farms. This conceptualization is different from that adopted by Goodman and Redclift (1981) who maintain that peasants are found in "backward regions" in Europe today. I disagree with this broadening of the content of the term. A similar view is, for instance, held by Buch-Hansen (1984).

Hired labour is not used in the definitions of the concepts because in many cases even poor peasant-cultivators have to hire assistance for certain agricultural tasks. This is mainly due to insufficient male labour in rural areas during agricultural peak seasons. Hired labour would thus not be a good indicator in distinguishing peasant-cultivators from farmers. Traditional cultivators do not per definition hire labour against money.

When the above defined categories of agricultural producers are used at the household level, it may, for instance, either imply that the man in the household is a multiactive peasant-cultivator or that the man is a worker and the women a pure peasant-cultivator. It is thus *essential to make an analysis at both the household and individual level*. There may also be cases where the father is a pure peasant-cultivator and the son/daughter a worker. If the son/daughter sends money or goods home regularly, the household falls into the multiactive peasant-cultivator category. A problem of categorization exists when a person or household falls into different categories over a period of years. The present data do not suffice to undertake a complete analysis of the work history of households. The point in time method will accordingly constitute the main perspective, and the oscillation between economic sectors of individuals, which is of interest, cannot be treated comprehensively.

QUESTIONS AND HYPOTHESES

Agrarian transition

The main expected elements of the agrarian transition in the context of Botswana are summarized below:

Land	- Both communal and private/state land exist at the national level (figure 5). Agricultural producers may use both types of rights in land.
Inputs	- The method of cultivation/herding is labour intensive. Few other inputs than labour and animal draught-power are used by the majority. A minority carry out machine intensive production.
Types of crops/animals	- The production is mainly diversified at the farm level, that is, several types of crops are used and different animals kept.
Output	- Land productivity is low on average. Some agricultural producers have substantially higher than normal yields. The yields still vary substantially from year to year according to weather conditions. Sales are undertaken. Local sales are important, while sales to the national market are less so. Exports may exist.

In the agrarian transition peasants constitute at least the majority of the agricultural producers. Some modern agricultural producers may be found, and multiactivity may exist. There is also a process of socio-economic stratification. Some find it hard to continue with agriculture, and at a certain stage in the agrarian transition drop-out will occur.

No attempt will be made to place Botswana in an early, middle or late phase of the agrarian transition. *The objective is to determine whether agriculture in Botswana can be said to be well into such a transition. Then all of the following points must be confirmed:*

1. Risk aversion is still an essential characteristic. This is measured by frequency of credit and loans taken for agricultural purposes and by degree of farm level diversification of production.
2. The form of production is slowly modernizing. This is measured by the relative number of tractors used for land preparation. (Yields could not be used because time-series data for the study villages are not available.)
3. Multiactivity is on the increase among the agricultural producers.
4. Drop-out from agricultural pursuits is becoming more common.

Inequality and poverty

The rich - poor dimension can be determined on any level of wealth. In the study villages the households were divided into 3 level of living groups. This kind of stratification is essential to identify different adaptations regarding the environment, production processes and migration. The method used to establish an index and the groups is described in Hesselberg (1982 a, 1984). The method has proved to be useful also in the author's work on Sri Lanka. Here it suffices to mention that only material indicators, that is durable consumer goods in general demand in the local areas, have been used. To stress material needs is justified in this society at the present level of development and in view of the research objectives. The categories established enable a comparison of level of living in space and over time. Nationally, income distribution and ownership of cattle give useful insights. Rather than passing a judgement on "acceptable" degree of inequality, the interest lies in identifying changes through time. Observed changes in inequality and poverty provide objective information because they take the first study in 1976 as the point of departure, no subjective standard is then necessary. Changes in the index-values of level of living will both show an overall improvement or decline and a widening or narrowing gap. As mentioned previously, there is a certain amount of arbitrariness in selecting cut-off points when defining those who are poor. There is no objective way in which to decide what an acceptable national or international standard satisfaction of basic needs and cultural wants should be. "Absolute poverty" in the sense of basic physical needs will accordingly not be measured. Some people in the study villages are undoubtedly at times "absolute

poor". Generally, people have a house, they have clothes and get sufficient quantities of food but seldom an adequate variety every day. In Botswana at large the number of "absolute poor" is, if not overwhelming, probably substantial. No data exist on this point. Due to this lack of data, a category of *destitute households* has been established. By destitute households is implied households without any visible source of income and households with especially low remunerative income sources. The point is to identify those households that are really poor by most standards of measurement. In addition, regarding the study villages blankets have been chosen as an indicator for, if not "absolute poverty", then a very basic need. Those households with below one blanket per member staying at home is said to be *basically poor*. *Relative poverty* refers to a given but not minimum requirement standard of needs satisfaction. In the study villages this standard has been taken to be the poorest of the three level of living groups. Those falling into this group are living under trying conditions and labour hard to satisfy their needs for food, clothes and shelter. They seldom or never have anything to spare. Accordingly, whenever the concept poor household is used in this report, it refers to all the households in level of living group three.

The following observations are expected:

1. Basic and relative poverty exist and are increasing also relatively.
2. Inequality is becoming more pronounced.
3. Inequality is a by-product of increased economic activities at the level of development of the productive forces presently found in Botswana.

The following two hypotheses will be tested:

1. Poverty is primarily created *indirectly* from societal evolution via the agrarian transition (see figure 2).
2. Poverty stems only to a minor degree *directly* both from societal evolution and from conditions for agriculture.

Rural settlement pattern

The interest here is to identify whether a shift in preference of place of stay is occurring. Do the societal evolution and agrarian transition result in net migration to the fields or the villages? The hypothesis is that there

are migration flows in both directions but that the net effect is in favour of the villages.

CONCLUSION

From the findings on the above questions and hypotheses **it** should be possible to assess the relative merits of the two opposing views on the relationship between peasants and the larger society, the peasant controversy. **It** should be underlined that this assessment is carried out in a country with a market economy. The question asked is whether the general market penetration in Botswana has only led to a part-dissolution of the traditional form of agricultural production without showing signs of transcending **it** totally. And furthermore that such a possible stagnation in the agrarian transition is primarily explained by societal evolution and not by inherent characteristics of peasants and their local communities.

PART III

BOTSWANA

Area: 581 730 km.² Highland plateau of mean altitude 1000 metres above sea level.

Population: 941 027 de facto, 1981 census. Rate of population growth 3.2%, questimate.

Constitution: Parliamentary democracy. British Protectorate from 1885 to 1966.

Government: Botswana Democratic Party. Social democratic, i.e. with mixed economy.

Economy: Main sectors - mining and cattle. GDP per person \$ 874 (1980). 20% of the GDP accrue to foreigners.

Employment: Formal 19% of the labour force (1980). Self-employed in agriculture 52% of the labour force. The balance work as casual labourers both in urban and rural areas. Many of them are unemployed for shorter or longer periods.

Language: Setswana. Parliamentary language is English.

Map 2. Population distribution, 1981 census. Source: Central Statistics Office, 1983.

Map 3. Land use. Source; Jones, 1981.

Map 4. Rainfall and main areas of arable agriculture. Source: Cooke, 1982.

Map 5. Vegetation zones. Source: Ministry of Finance and Development Planning, 1980.

All maps are drawn on the basis of maps and data in the above cited sources.

CHAPTER 7

APPROACH AND DATA

In this chapter the approach adopted and method of field work used are discussed. A brief presentation of the study villages is then provided. Finally, a note on the peasant and related concepts found in the literature on Botswana is included. This last point is placed here because it amply demonstrates the need to arrive at common concepts for scholarly usage.

The approach

Few, if any, African countries have adequate data to permit a rigorous, quantitative analysis of the dimensions and trends in rural poverty. Moreover, data that may exist seldom include the poorest groups. In the late 1960s and 1970s merely to learn sophisticated statistical methods allowed scholars to participate in the quantitative revolution. Now it is also necessary to apply such methods to relevant research objectives. Then the relevance of the methods is often lost. For instance, the diffusion approach, in which sophisticated quantitative methods are used, cannot explain why peasant-cultivators may have "objective" reasons *not* to change their systems of cultivation under the present conditions. It is irrelevant to know the communication channels through which news about innovations can most efficiently be spread, when the environment under which peasant-cultivators strive for a living do not allow them to adopt new systems of production. In short, in development studies it is generally more important to analyse interaction than diffusion.

To me, a study containing a deductive core together with a wider inductive-statistical approach based on case studies is deemed rather more fruitful as a pragmatic approach to improve rural levels of living by seeking the fundamental combinations of causes of poverty. The "village study" approach is useful in this respect. It is applied here because it provides statements of the characteristics of specific situations of dependency. To ge-

neralize from a number of village studies, is not acceptable. There is little difference between the random selection of two or twelve villages among typical ones for the area in question. Twelve villages would not give a higher degree of generality, of statistical significance of findings because of the low absolute number. One will thus normally be able to find some support and some invalidation without any criteria to judge the overall prevalence of validation of the dependency argument. Casley and Lury (1981) illustrate this point with an example from India: By taking a random sample of 194 individually studied villages, as much as 33% were found to be sited on main roads. An estimate of the proportion of villages on main roads would certainly be below 10%. The ideal statistical procedure would have been to choose a sample from an exhaustive inventory of recorded villages. Such inventories do not exist. Another example of the problem of generalization this time internal to a village is provided in table 2. The table is based on few respondents. There seems to be no need for a large sample regarding the question of rainfall through the agricultural season (October - May). However, it is impossible to judge whether this is in fact correct at large in this area before a thorough familiarization with the area has been achieved. If there is no time for such a familiarization, a large sample is a must to secure a degree of probability that the findings correspond to reality. To generalize to other areas, is of course not feasible. At the other end, it is an error of method to apply the findings for an area to an individual field. This is amply demonstrated in the table by bags harvested of sorghum and maize for 5 peasant-cultivators between 1976 and 1980. No pattern is evident but a great variation from year to year in total production. (The "bad" rainfall year 1977/78 gave fairly good returns although the rainfall in both October and November was only 5 mm. The other years had more ample rainfall in the two first months of the agricultural season. Much rainfall may not be ideal. A multiactive peasant-cultivator stressed this: "Not much rainfall but a little each week-end is the best".) To generalize about rainfall and yields from available statistics and a few respondents easy to come in contact with is evidently not acceptable. Undoubtedly, village studies are good avenues to hypothesis formulation. Specialized research may then seek to generalize selected hypotheses through more extensive surveys.

The preoccupation of most dependency theorists with exchange relations have here been substituted with a focus on the production process. The approach

Table 2. Rainfall and yield. Letlhakeng.

A. Rainfall generally for field areas around Letlhakeng, as perceived by a few randomly selected peasant-cultivators in each area.

Field area	1975/76	1976/77	1977/78	1978/79	1979/80
Bolotho	G	M	B	M	G
Gantsweng	G	M	B	M	G
Sesung	G	M	B	M	G
Kgesakwe	G	M	B	G	G
Maratswane	G	M	B	G	G
Mmone	G	M	B	G	G
Ditshegwane	G	G	B	G	G
Metsibotloko	G	G	B	G	G
Mean	G	M/G	B	G/M	G
Rainfall ¹ mm	570	650	503	306	510
Rainfall from October to March	442	528	482	278	458

Note. G = good, M = middle, B = bad

¹Letlhakeng village (from October to September).

B. Number of bags harvested by 5 randomly selected peasant-cultivators in Letlhakeng.

Peasant-cultivator	1975/76	1976/77	1977/78	1978/79	1979/80
A	10 s 17 m	NA	10 s 5 m	3 s 2 m	6 s 2 m
B	13 s 13 m	20 s 10 m	10 s 3 m	Little	15 s 4 m
C	2 s 13 m	3 s 2 m	3 s 1 m	4 s 4 m	2 s 1 m
D	20 s 4 m	Little	10 s -	9 s 1 m	35 s 2 m
E	28 s 1 m	5 s 3 m	7 s 10 m	7 s -	1 s -

Note. s = sorghum, m = maize A bag equals 90 kilos

may be described as "bottom-up", that is, looking at the world capital accumulation process from the vantage point of selected villages and emphasizing the constraints "outside" forces have on these villages. It is thus possible to contribute bits of knowledge that may be used by planners and politicians. Moreover, by placing this particular study within a wider explanatory framework, it is possible to weigh alternative development strategies. Although the influence of such information may be negligent, and is probably most often nil, there exists a potential use of all that is published. This is obvious but still important to repeat, and it should lead to great care to secure reliability, validity and honest analysis, that is, scientific integrity. The researcher must continually ask himself to whom he feels bound by solidarity. Is the field work mainly carried out as a way of "mining" data to promote a professional career at home? There is, however, also a danger regarding research objectives and questions to use in "over-identifying" with the poor respondents. This may reduce the objectivity of observation. The intensive nature of a village study enables the use of both objective methods of measurement and detailed probing of attitudes and background. This is why this method was chosen to attack the research objective at hand. Furthermore, the integrative nature and often invisibility of rural poverty favour an in-depth study. A village study is also flexible and thus suitable in early stages of inquiry. The question of objectivity in research is primarily related to the theoretical framework, or lack of frame, in which the collected data are placed. The choice of variables will always rest on and picture certain assumptions, that is, values enter the research process. The question to put to oneself is thus: What kind of knowledge is needed for development in Botswana? Then the appropriate method of study may be decided upon. Since practical applicability is a chosen value, social research in the Third World should give this priority. This is of course the ultimate goal of all scientific endeavour. In the Third World the immediate needs press for a stronger priority among types of research. Basic research will most often rightly lose in this competition. The point must be to achieve a combination. Here basic questions are asked at the same time as the collected material in a mainly descriptive form has been given to planning authorities. In an inductive-statistical approach the study variables are not predetermined by a rigid general theory established on data for other places and historical periods. The theoretical foundation of studies using the **inductive-statistical approach** is thus often eclectic. A combination of approaches is preferred here because of the present limited knowledge of rural Botswana.

To achieve an in-depth understanding of a village society, sufficient time is necessary. Of course, to learn about a village society is like peeling the layers of an endless onion, there is always more to discover. It was decided to settle for what may be termed an *"intermediate long" field work with repeated visits*. This type of field work lies between the "quick and dirty" (a couple of weeks) and the "anthropological field work" (a year or more). In each study village 2 months were spent. A return-visit was made after 2 years and a similar study conducted after 4 years. Relatively intimate local knowledge was thus achieved over time as well as planning relevance in the short-run. Aid agencies, in need of quick answers, usually argue that it is possible to learn much about a village society in two weeks. This is correct but viewed from a wrong angle. A person from outside may learn a lot about a village society in a short time, but he will know very little of what there is to learn (not to speak of understanding). "Quick and dirty" is a telling label which I prefer to the more neutral "rapid rural appraisal". The comprehensive knowledge and understanding most anthropologists reach in their studies are often difficult to apply in planning. First, the information becomes detailed and is seldom directly applicable for planning purposes. Second, the time it takes to collect, analyze and publish the data reduces the relevance of the information in a changing world.

It is also in village studies important to use a sample. The non-sample survey errors are likely to be greater than sampled ones because of possible systematic leave-outs of respondents. The samples taken in Lethlakeng and Tutume are given in table 3. Since no inventory of households exists, no

Table 3. Number of interviewed household.

	1976				1980			
	1	2	3	Total	1	2	3	Total
Lethlakeng	11	46	24	81	22	74	64	160
Tutume	13	51	4	68	39	106	15	160
Total	24	97	28	149	61	180	79	320

Note. 1 - 3 denote level of living groups.

Group 1 is the richest and group 3 the poorest.

prior stratification of households was possible. In Letlhakeng airphotos for 1975 were used as a base and all compounds mapped. New compounds were added and those no longer in use dropped. The resulting map of Letlhakeng was divided into sub-areas and an equal sample of compounds selected at random for each sub-area. This procedure was adopted to secure a similar sample from all over the village. In Tutume no suitable airphotos existed. The following procedure, which proved to be reliable and quick to undertake, was used: The village was divided into sub-areas around each path in the Mopane forest. The compounds selected were every 7. and every 3. for 1976 and 1980 respectively. It was thus possible to walk from randomly chosen points all over the village, and map and interview at the same time. Those compounds in which nobody was at home, were revisited. Very few households had eventually to be dropped. The interviews were made during the agricultural off-season, thus most of the village population were present also during day-time.

In addition to the above described village studies, a limited survey was made at the field areas "belonging" to the two villages at the end of 1980 and beginning of 1981 in order to identify changes in the rural settlement pattern. Since there was no significant migration from Letlhakeng to settle permanently at the fields, there was no sense in conducting a systematic survey. The field areas were nonetheless visited and the headmen and people talked with. In the village, those households that had come there since the 1976-study, were interviewed mainly about the reasons for their migration. In Tutume both the village and the field areas were studied with a formal questionnaire. In the village a random sample of 35 households (29% of the universe) were interviewed. At the fields 77 households were included. Since the figure for the total number of households at the fields is not available, the proportion (estimated to be 20%) of interviewed households cannot be determined exactly.

Since no socio-economic data exist for the households beforehand, it is impossible to test the representativeness of the sample on general characteristics. Wikan (1981) provides an example which indicates that the data are representative: The number of labour migrants in Letlhakeng based on the sample in 1980 is not statistically significant different from the number arrived at by asking every headman in the village's sub-areas. Moreover, by

living inside peasant-cultivators' compounds in adobe houses, we found the villagers to be homogeneous in most aspects of culture and behaviour. They were sufficiently homogeneous on other than the analytical variables, e.g. sources of income, level of living and sex composition for the present study to work satisfactorily. Furthermore, the rather homogeneous culture among the major tribes in Botswana together with the monotonous physical features and broadly similar climate throughout most of the country make for a fairly high degree of confidence when generalizing from village studies on many questions. However, as pointed out above, some questions may not be easily generalized *and* the degree of confidence cannot be decided. What these questions are may not always be easy to determine. It is thus essential when data are presented from the study villages also to provide national statistical data, where they exist, and to rely on other case studies and more limited surveys. This has been done here.

The questionnaire

The questionnaire should not be longer than allowing most interviews to last between 3/4 to 1 1/4 hour. My experience shows this to be preferable. The formal questionnaire was systematic and written after a short pilot survey. It consists mostly of open-ended questions. To predetermine the range of possible answers is difficult in an alien setting, and may impose meaning upon the raw data because the categories used then may be based on professional experiences gathered elsewhere. Although it is impossible to make a questionnaire completely without preconceptions, the researcher should be open-minded about what to observe and what to take as relevant. He must be open to information other than that which is sought. To be involved in practical problems (as a side effort) as well as more pure research facilitate such an openness. One should always be ready for the unexpected. Awareness is, for instance, needed to see the capabilities of the rural poor. The existence of such capabilities leads to an emphasis in research on constraints to development in the rural poor's environment. In order to include the practical dimension, a socio-economic evaluation of the impact of rural roads built by NORAD to the study villages was included. This was also done of a moral conviction that to "mine" for data in the Third World for professional merit alone, is unacceptable.

On some of the questions in the questionnaire patterns of answers soon became evident. The time in interviewing thus went down due to the possibility of precoding on these questions. However, the options of answers were never given to the respondents. It proved useful during the pilot survey when the questionnaire was formulated, to ask oneself the following three questions: Will the respondent understand the question? Will the respondent know the answer? Will the respondent reveal the correct answer? It then became quite clear that only relatively simple matters well within the capability of most respondents to answer could be included. Herein lies the major shortcoming of the questionnaire type of inquiry. To reach a more thorough understanding, other forms of inquiry (e.g. informal discussions) were used. The total amount of material collected thus span wider than that used in this work. To publish all the material one has is tempting. The excuse for doing so can be that it might be useful for somebody, somewhere, sometime. This is, however, not a sufficient reason, and one should always expect to gather more data than is immediately necessary for statistical computation. This is of course essential in a village study, but may apply also to more extensive surveys.

The village study approach contains a problem in that the lack of prior information on the households and the relatively broad scope of the research give various types of households, for instance, regarding sources of livelihood. The number of units obtained on every variable then often becomes less than the (total) sample. An example is that part of the households in Letlhakeng did not cultivate crops. The sample on technical aspects of crop cultivation became correspondingly less. Although this reduction in sample size on particular variables will have a similar drop in the universe, the total number of respondents may become "too" low, that is, the error of estimation soon becomes large. This may be solved by adding more of those households that cultivate crops. This, however, increases the total number of interviewed households. Time and money available did not allow me to adopt such a procedure. Instead the range of types of households were limited by including only permanent village dwellers. This implied that government officials (e.g. teachers, policemen, tax collectors) stationed in the village for a certain period, were excluded. These officials lived in separate government quarters and were thus easily identified.

The questionnaire was discussed with scholars in Botswana. This was useful, although they have some of the same disadvantages as expatriate researchers, such as being trained in western scientific tradition and being urban biased. The ideal would be to conduct joint research with somebody who had grown up in a similar rural area as the one to be studied. Then he would not be part of a local socio-political group with its vested interests in the study area. Such a person is seldom available.

The interview

It is important when conducting a village study to approach the village in a correct way. In Botswana this meant visiting the District Office in another village first. With a letter of introduction, the Chief in the study village was contacted. He arranged an open "kgotla"-meeting where we explained to the villagers the reason for our stay there. It may prove time-consuming to be accepted in a village. In our case, it was helpful that we also carried out a consultancy for NORAD. To be identified with NORAD contributed, in my opinion, to that the data can be said to be reliable because the villagers had an *a priori* positive attitude towards us. This, however, did not turn into a subservient behaviour, as is substantiated by the change to a less positive opinion on the usefulness of the rural roads (table 4).

Table 4. Respondents' perceived advantage of the new rural road according to level of living. 1976 and 1980. Percent.

Level of living	1976				1980			
	Advantage	No advantage	Don't know	Total	advantage	No advantage	Don't know	Total
LETLHAKENG								
1	100	0	0	100	49	46	5	100
2	61	30	9	100	20	64	16	100
3	33	54	13	100	6	80	14	100
Total	58	33	9	100	19	68	14	101
TUTUME								
1	54	8	39	101	66	15	18	99
2	49	14	37	100	50	28	22	100
3	25	25	50	100	27	40	33	100
Total	49	13	38	100	52	26	22	100

We also held meetings in each of the sub-areas of the village. There headmen had personal authority, although the new constitution left them little formal power. To be white in rural Botswana did not constitute a problem, rather on the contrary.

To conduct household surveys in the Third World is strenuous. Considerable physical stamina is required. For instance, to mail questionnaires is impossible. Furthermore, to let assistants gather your data reduces the reliability and your own overview of nuances. Moreover, it is necessary continually to review, check and cross-check the material. Although the same questions are repeated day after day for months, an at times boring routine, to be patient and constantly alert is necessary to judge the seriousness of the respondent and to create a good mood during the interview. It is much easier to clear inconsistencies and contradictions while an interview is conducted than the day after. The researcher should emulate the detective, he must be a keen observer of the respondent and his surrounding and have a fine ear for nuances in the respondent's replies. The personal observations possible during interviews, which we conducted seated on the ground by the respondents house, are valuable when the reliability of the findings later is to be assessed. We were accordingly present at every interview. The interviews were, in addition to the author, in 1976 conducted by Reidar Dale and Jarle Hårstad and in 1980 by Gerd Wikan. It is normally necessary to rely on an interpreter in the "intermediate long" type of field work advocated here. Much may be achieved by way of contact with people through a good natured and able interpreter. It is furthermore fairly simple by repeated discussions to find the right way to formulate questions in order to catch the intended meaning. This also helps to scrutinize the research in general. Because of the relatively limited time for field work, efficiency is required. One must therefore seek to achieve a balance between efficiency and detail of observation, and not let the correct need for a relatively large sample result in less reliable data.

The heads of the households were interviewed. When the husband was away in a "husband and wife" household, the wife was interviewed. The husband was then mainly either in South Africa as a labour migrant, in towns in Botswana as a shuttler or looking after cattle.

In Botswana it proved to be no systematic differences regarding the response and replies according to the sex of respondents. Also, the sex of the researcher did not produce different results. This may not be the case in other countries. There are two problems usually pointed at regarding answers given: First, the answers are culturally prescribed and thus not always in accordance with reality. Second, the answers are those the respondents perceive to be expected by the researcher. The repeated visits to the villages and discussions with local researchers leave the impression that the type of questions and information sought in this study did not engender such reactions.

The disposition of the questionnaire should be made in such a way that not only cross-checking of the data is possible but also that an amicable atmosphere is created. We placed a question about number of blankets (an indicator on level of living) towards the end of the questionnaire. When the respondents at that stage became tired and bored, this gave new enthusiasm and made the finish comfortable. In many cases it was possible to discuss general as well as specific matters related to the household after the formal interview. Often the interviews were made with other people present. On the whole, this improved rather than reduced the reliability. It may be necessary in studies with certain intimate questions to ascertain privacy while interviewing. We always stressed the anonymity of the data before asking any questions. Although this principle was accepted after careful explanation, it is difficult to know the proportion of respondents really believing in it. In studies asking for income and other assets this is problematic. We felt it on the question of number of cattle owned, where we often had to labour hard to obtain an approximate figure. It must be remembered here that the researcher should not be deceived by an apparent lack of curiosity on the part of the respondents. Misgivings may exist that will lead to falsification or concealment of certain information. One should be aware of this "courtesy bias". The individuality of most often relatively small kin groups in Botswana, which is a typical cultural trait, left us free to go about our own work. After some time we learned through closer friendships established in the villages that people generally accepted us, among other things, because we were the first outsiders who asked what they thought about their own and their village's problems and how they best could be solved.

In Botswana, as probably everywhere else, politeness and humility are the key to mutually beneficial relations. To take great care in greetings is, for

instance, essential. The researcher's goodwill must be abundantly clear. But on no account must he imply that he is able to provide or promise assistance directly. Instead I organized practical assistance from voluntary aid agencies to the *villages* visited after the field work ended.

Initiative for practical work was taken in two different ways after the first and last field work: Reports were written about possible efforts in the villages (Dale and Hesselberg 1977). The reports were sent to NORAD and various authorities in Botswana. The other way to contribute directly to poverty alleviation was through discussions on concrete projects to find the priority of the Village Development Committee and of certain disadvantaged groups. I arranged for funds to Women Societies. It is essential that these groups are assisted according to their own priorities. It does neither take much courage nor hard work to conduct this kind of activities. Usually the villagers are split in socio-political factions, and they have little power in society at large, few resources and a low ability of written articulation. The researcher may often be the only person with relatively intimate knowledge of the village society and of efforts with a potential of success. Should he then maintain a "pure research" standard so that he is not influencing the reality he is studying?

Anti-social behaviour of a researcher may have serious consequences not only for himself and his research in progress but for later research by others. Not to behave anti-social may not be as easy as it looks at first hand. Beer drinking, as an example, is a tradition in Botswana. To accept and join in beer parties is one way to be accepted and achieve informal contact. However, to attend bars and to drink imported beer may have the opposite effect vis-à-vis parts of the village society. The different opinions prevalent in most villages make it hard (often impossible) to behave "correct" in everybody's eyes. The "demonstration effect" a foreign white researcher has in a medium sized village in Africa can be strong. At least, one should always regard it to exist. The best way to tackle this problem is to try to be as unimportant as possible. Walk don't drive, visit the poorest and women, don't socialize with the elite (it may be important to visit them early), eat local food (porridge in Botswana), talk with people after dark, listen and don't try to be wiser, ask people about their problems, abandon or reduce to a minimum the consumption of products not in local general demand. It is probably a faint hope that our presence in the villages did not have a "de-

monstration effect" of white, western materialism. The point must be to diminish this effect as much as possible.

The village study approach, I maintain, is a rewarding mode of research. By being relatively limited to a small area and well defined population, it is easier to avoid the danger of misinterpretation. To be a committed foreigner helps to see a village society with fresh eyes and uncommitted loyalties but with a positive bias towards poorer groups.

The analytical unit: the household

Since the household is the primary economic unit in rural Botswana, this unit was chosen as the analytical unit in the present work. A household consists of a person or group of persons who claim to belong to a single compound and who use part of the available resources in common. They are in addition answerable to the same head. Unmarried members staying elsewhere are included when the respondents include them, and when they send or bring money and/or goods to the rural home. It is usual to return home for shorter or longer visits. Because of the tradition of labour migration in Botswana, this way of defining a household is essential. It may be maintained that the usefulness of the household as an analytical unit, may decline as the population moves into towns and/or becomes more reliant on wages in the informal (urban) sector. This is not generally correct in the study of farm populations. The high proportion of multiactive farmers in developed countries substantiates this. There may, however, exist a period in which farming is the only occupation for most households, as indicated in figure 3. The development of agriculture in some developed countries show that this may happen. Other experiences tell that the combinations necessary for multiactive peasant-cultivators, are soon forced on farmers by the price-squeeze and the want of a comparable level of living with urban populations.

The study villages

The choice of Letlhakeng and Tutume as study villages rests on a discussion between the government of Botswana, NORAD and ourselves. NORAD wanted some of a limited number of rural roads built evaluated as to their impact on pro-

duction and income in the villages which became linked to main roads. The government had preferences for certain roads to be studied, but accepted our argument for a typical village in the central (Letlhakeng) and one in the northern part (Tutume) of the country. Due to lack of data, it was not *a priori* possible to substantiate whether the villages in fact were typical. Government officials maintained that the villages were typical of medium-sized villages in Botswana as a whole, and my later experiences agree with this view. Moreover, both villages are situated approximately 100 kilometres from a large town. The rural road to Letlhakeng was finished in late 1975 and the road to Tutume a year later. On certain aspects, such as soil fertility and ethnic composition, the villages represent their respective areas of Botswana. With the money and time available two villages proved the most we could cover.

LETLHAKENG

Letlhakeng is situated a 1 3/4 hours drive northwest of Gaborone. The village lies in a fossil river valley where the water table is somewhat higher than usual in this part of the country. Water is the most important factor of location together with a central situation in the western part of Kweneng District. The area has fairly good grazing for cattle relative to its location in the transitional zone between the more humid eastern part of the country and the Kalahari semi-desert proper. To the south of the village the fossil river valley narrows, and here one finds a large number of old water holes. To the north the landscape widens, and there, just at the edge of the built-up area, lies an area with suitable soils for crops. This area is not used at present because of the great number of cattle and smallstock moving around. There is a relatively large area suitable for crops stretching north-south about 5 kilometres west of the village. In addition, crop cultivation and cattle grazing are found in many smaller places around Letlhakeng. The most common type of soil in the Letlhakeng area is Kalahari sands and gravels. Most of the parent materials of these soils are of windblown origin. They are generally infertile with a very low humus content. This is partly due to climate, that is rapid decomposition of organic matter, but also a result of farming practices, mainly overgrazing and bush fires. The best soils occur in the bottom of fossil river valleys and other depressions where nutrients are washed down from the sides and accumulated. Average rainfall in the area

LETLHAKENG VILLAGE

Compound	7 School
— Road	8 Kgotla (Tribal Authority)
1 Post office	9 Church
2 Police station	10 Water tower
3 Shop	11 Clinic
4 Bottle store	12 Office for the recruitment of mine labourers
5 Sports ground	13 Government offices
6 Cooperative	

Map 7

amounts to about 450 mm per year (table 2). This suffice for the cultivation of the drought resistant sorghum, maize and millet and for various kinds of beans. Due to the convectional nature of rainfall, fields even in the same area may receive very unequal amounts during a season. The natural vegetation of the area is a dry bush savanna. The ground vegetation consists of various grasses. They form a continuous cover in the fossil river valleys, where the groundwater is near the surface, but are elsewhere more sparse.

The de jure village population was in 1980 3 231, and consisted of 497 households according to the delimitation of the village used in the survey. The 1981 census may have applied another boundary. 54 government officials and their dependants not living permanently in the village are not included in the above figures. The population consists mainly of Bakwena, a Tswana tribe, and Bakgalagadi ("peoples of the Kalahari"). In normal rainfall years Letlhakeng is adequately supplied with clean water from boreholes. There are several water taps around in the village. The village has a clinic and other services (appendix 2). There exists no manufacturing or other secondary economic activities but one or two individuals casually knitting or sewing clothes for sale.

TUTUME

Tutume is situated on an undulating plain with occasional rock outcrops forming small hills 1 1/2 hours drive northwest of Francistown, the major town of northern Botswana. Tutume comprises scattered compounds on both sides of the road and sand river Tutume for a length of 10 kilometres. Since it is usual to call Tutume a village, this term will be applied although the dwelling houses are spread out over a relatively large area. The village came into being by coercion on the part of the Ngwato Chief Tsekedi Khama in the early 1940s. Perennial drinking water is found in the riverbed. Now boreholes are also used. Taps are located along the road. Grazing is poor around the village. The soils, mostly of the Ferruginous Tropical type are fairly good (Venema 1980), and crop cultivation is carried out almost all around the village outside the nearest vicinity. Rainfall is slightly higher than in Letlhakeng, about 500 mm per year. The natural ve-

Map 8

MAIN FIELD AREAS AROUND TUTUME

getation is a dry tree (Mopane) savanna. Ground vegetation varies from rich to totally absent but is generally sparse.

The de jure population of Tutume in 1980 was 3 884 in 498 households. 250 government officials and dependants are in this case excluded. The major part of the population are Bakalanga. Their language is different from Setswana. Bakalanga are also found in Zimbabwe. Most of the Bakalanqa in Tutume also speak Setswana. The tradition of schooling is relatively long among the Bakalanga. Secondary economic activities are also in Tutume close to non-existent. There is, however, a secondary school centre which includes a "Brigade" with sections for mechanics, house building, carpentry, sewing and vegetable gardening. All of these sections sell products to the general public. Labour migration to South Africa is a tradition also in Tutume. Today an increasing number obtain work in urban centres in Botswana. The better educated people from Tutume obtain work more easily than those from Letlhakeng who continue to rely on mine work in South Africa. In short, the greater variety of crops planted, better yields on staple food and higher levels of education in Tutume than Letlhakeng explain the somewhat higher level of living found in that village.

A NOTE ON PEASANT AND RELATED CONCEPTS IN THE LITERATURE ON BOTSWANA

Table 5 shows explicit definitions or for some the main characteristics of types of agricultural producers according to a rich - poor dimension found to be used by individual scholars in Botswana. To apply a differentiation of agricultural producers is not usual in the literature. There are also variations in the content of the categories adopted. Only regarding cattle ownership, there seems to be an agreement on cut-off points. The term peasant is used by the researchers included in the table, except by Opschoor. These scholars attach their analyses to the peasant studies tradition, although none of them do this by adopting concepts denoting the difference between peasants and farmers. For people at the poor end of the dimension, Cooper (1980) makes the term "lumpen peasantry" when referring to those who "seldom work own land", that is, those who are workers, agricultural labourers or who rely on gifts and gathering. Comaroff (1980), in his analysis of the Barolong area, shows clearly how the expansion of a minority of farmers ("large farmers") is detrimental to peasant production. In this process of polarization agricultural labourers ("non-farming labour"), sharecroppers

and poor peasant-cultivators are created. The mechanisms are primarily increasing land prices in this area of de facto leasehold (land is hired out mostly to whites - it cannot be sold) and drought resulting in a need for money. Only in this area of Botswana we may thus find a process of peasantization, that is, many farmers (who use small tractors and market a relatively large share of their production) become peasant-cultivators or pure multi-active peasant-cultivators (i.e. they depend on agricultural wage work in addition to own agricultural production). Such a peasantization process has not taken place elsewhere in the country in recent times because the majority of the agricultural producers never have been farmers. The point made by Parson (1981) that "small and medium-scale farmers" (50-75 cows) would through a loss of 25-50%, due to drought, be thrust back into the "peasantariat", is thus not applicable. The "farmers", he refers to, show the main characteristics of peasant-cultivators, and ought already to belong to this category.

Comaroff calls the socio-economic formation he finds in Barolong, for a "peasant-capitalist formation". The evolution in this part of Botswana (map 10) partly depends upon the articulation of "capitalists" and peasant-cultivators, who have themselves reinforced each others existence within the local area. To explain why Barolong is different from the rest of Botswana including the freehold farms, Comaroff points at a long tradition of commercial behaviour in Barolong and to dispersed farms of less size than freehold farms. (There are no villages in Barolong.) In conclusion, Comaroff shows how the agrarian transition has taken place in Barolong during the last 20 years, leading to what he calls internal underdevelopment locally and the establishment of a small group of farmers with underutilized land. Due to this, land productivity on average has gone down in recent years. Also Cooper maintains that Botswana is in a genuine transition period in which the earlier "peasant extended - household mode of production" is combined with tractors hired for ploughing, hiring of agricultural labourers and syndicates owning boreholes for cattle watering.

For the firsttime in 1980 agricultural statistics published by the Ministry of Agriculture categorized agricultural producers as either "traditional" or "commercial". The definitions of these two categories rely only indirectly on the form of production pursued. "Commercial farmer" refers to those who cultivate or graze their animals on so-called titled land (4.7% of Botswana). "Titled land includes clear title, long term leases etc.

Map 10

Categories of land tenure

Table 5. Various categories of agricultural producers used by individual researchers in Botswana.

Cliffe/Moorsom	Comaroff	Cooper	Opschoor
Cattle ranchers:	Large farmers:	Very rich peasantry (emergent capitalist farmers):	Upper stratum:
100+ cattle	Own a tractor 100+ bags of crops harvested in normal years: Hire labour always Rent out implements regularly	100+ cattle 100+ bags of crops harvested Hire labour always Lower level rich peasantry: 41-100 cattle 15+ bags of crops harvested Hire labour regularly	40+ cattle and/or 2+ bags of crops harvested per household member and/or worker earning P50+
Middle peasants:	Middle-range farmers:	Middle peasantry:	Middle stratum:
Ready access to a plough and to draught-oxen Crops for sale - "fair proportion of output"	Own a small tractor or hire Crops for sale	21-40 cattle 11-15 bags of crops harvested Household and relatives as labour Enough crops for consumption (A small minority)	1-40 cattle Cannot survive on cultivation alone
Poor peasants:	Small farmers:	Poor peasantry:	Lower stratum:
0-19 cattle 1-19 bags of crops harvested Crops cultivated for consumption	Have few implements Only small amounts of crops for sale	0-20 cattle 1-10 bags of crops harvested Household and relatives as labour Not enough crops for consumption (An overwhelming majority)	No cattle Cannot survive on agriculture alone

Source: Cliffe and Moorsom 1979, Comaroff 1980, Cooper 1980, Opschoor 1981 a.

Thus, commercial farming includes, but is not limited to, freehold farms." (Litschauer and Kelly 1981). Title implies here that the land is privately owned, although not necessarily by the user. The point of importance is that "commercial farmers" (or just farmers in my terminology) who live in tribal areas are treated as "traditional". This fault is still not noticeable from average figures (see for instance table 25 on cattle off-take rates). Nonetheless, the fault will probably be more and more so in future.

Both the various definitions used by individual scholars and the categories used by the Ministry of Agriculture have shortcomings. New definitions are needed. Although Cooper (1982) mentions that two-thirds of the rural households have a worker, he does not include this aspect in his categorization of agricultural producers. To maintain, as Parson (1980), that the urban "working class" has few links with the "peasantariat", is just not correct. Furthermore, one cannot infer directly from cattle ownership, bags harvested or income from employment to the correct level in the rich - poor dimension a household belongs to. It is thus essential to categorize the households according to combinations of income sources and level of living calculated from such aspects as ownership of durable consumer goods.

CHAPTER 8

SOCIETAL EVOLUTION

This chapter provides background information organized historically to convey an understanding of the agrarian structure, inequality and poverty found in Botswana today. In other words, the topics treated are placed in their socio-economic context by highlighting some key factors of change. The approximate time period when the majority of the agricultural producers no longer ought to be called traditional agriculturalists but peasants will be established.

Economic growth

Botswana has now passed the limit of the low-income and become a middle-income market economy according to the categories established by the World Bank. The discovery of commercially viable diamond mines in the early 1970s raised the GDP per person at the end of the decade to \$874 of which about 20% accrue to foreigners (table 6). At Independence in 1966 the figure was \$80, in 1970 \$160 and in 1976 \$410 (the last is the cut-off point between low and middle income countries, 1980 dollars) (Seidman 1981, Colclough and Fallon 1983). The marketing difficulty for diamonds experienced from 1981, however, shows the vulnerability of a Third World country that rely on one or just a few major export commodities (table 7). The export commodity concentration (the three principal commodities as percentage of total export earnings) was around 90% during the 1970s.

The evolution of the present production structure

The Tswana societies that evolved at the eastern fringes of the semi-arid Kalahari region in the 18. and 19. centuries, were highly organized, largely self-sufficient and reasonably prosperous. The hierarchical structure of authority with a chief and his lineage at the top institutionalized inequality of wealth which, however, was somewhat ameliorated by redistribution in times

Table 6. Annual growth in GDP per person. Constant prices. Percent.

1960 - 1970	6	average
1968 - 1974	17	average
1974/75	2.8	
1975/76	13.6	
1976/77	- 4.0	
1977/78	3.3	
1978/79	18.4	
1979/80	13.5	
1974 - 1980	13	average
1980/81	- 3.7	
1981/82	- 8.8	

Note. The way of writing a financial year is 1974/75. This is used throughout the text and implies the period of one year only.

Source: Calculated from Ministry of Finance and Development Planning, Budget Speeches 1982 and 1983.
Central Statistics Office, National accounts 1978/79.
World Bank, World tables 1980 and Development report 1981.

Table 7. Export composition. Current prices.

	Pula millions					Percent		
	1973	1976	1979	1980	1981	1973	1980	1981
Diamonds	20.0	37.5	189.6	237.7	149.8	34	61	42
Copper and nickel		51.8	62.7	81.0	83.4		21	23
Meat and hides	32.5	46.3	75.0	31.3	68.0	55	8	19
Others	6.6	17.6	38.8	41.2	55.0	11	11	15
Total	59.1	153.2	366.1	391.2	356.2	100	101	99

Note. Pl = \$1.394 (1970), 1.150 (1976), 1.347 (1980), 0.889 (1982)

Source: Calculated from Central Statistics Office, Bulletin vol. 6, No. 3 1981 and vol. 7, No. 2 1982.

of needs. The cattle wealth and stores of sorghum and millet accumulated by the chiefs were partly redistributed to "ordinary" members of the respective tribes when drought or other natural disasters hit. In good years the members gave tribute to the chiefs in the form of crops, cattle and labour. In addition, cattle taken in war and all stray cattle belonged to the chief of the area where the cattle were found. Another mechanism of security for the traditional agriculturalists, besides the system of redistribution, was the placing of cattle with relatives living in other often nearby areas ("mafisa"). Illnesses on cattle often occurred in rather limited areas. This system of cattle distribution is common for semi-arid Africa. Similarly, in crop cultivation mutual help was a rule and gave a certain degree of security of livelihood.

There are four key factors which destroyed the fairly developed and secure state of the various Tswana tribes in the British Protectorate Bechuanaland established in 1885 after pressure exerted on England by Tswana chiefs who wanted protection against Boer (and British) settlers to the south and east. *First*, the ox-drawn iron plough was already in use in some tribes by 1880 (Schapera 1970). The adoption of ploughs were relatively rapid and successful at that time. (Even without extension service and marketing organizations people saw clear advantages. Lightfoot 1982). Khama III, for instance, invested heavily in ploughs in the period 1887 - 1896 (Palmer and Parsons 1977). The productivity of crop production improved, as did the need to change fields more often. This made the distance between fields and village increasingly longer, eventually necessitating resettlement of sub-groups of the large tribal villages. The iron ploughs came in the beginning from Sweden and America. Today it is made in South Africa. It represented (and represents) a heavy investment for most agricultural producers, an investment which could not be met through sale of crops. Some households managed to acquire a plough through sale of cattle, other households had to sell their labour to plantation owners and mining companies in South Africa. *Second*, the British administration of the Protectorate introduced the so-called Hut Tax in 1899 to raise revenue for the colonial administration (as was common in British colonies). This tax had to be paid in money. The chiefs were given the authority to collect the tax (an aspect of the British "Indirect rule"), taking a 10% commission. The chiefs were accordingly interested in encouraging labour migration, which although at a modest size already existed to European plantations in South Africa in the 1850s. For many agricultural producers

there was no other option but to turn to wage labour in South Africa. The Protectorate thus became to a large extent a "labour reserve" for capital accumulation of white groups in South Africa (Leepile 1981). *It is then at the end of the 19th century more appropriate to speak of peasants than traditional agriculturalists. The market economy had penetrated the life and work of most peasant-cultivators in the Protectorate in the sense that they to some degree became "dependent" on the market for their livelihood and participation in society.* The socio-economic formation accordingly changed from "tribal" to "labour reserve". *Third,* the discovery of diamonds at Kimberley in 1870 and particularly the gold mining in the Johannesburg area (Witwatersrand) from 1885 onwards resulted in a rapid urban growth in South Africa. Sale of cattle became an alternative for some of the agricultural producers. This alternative was closed by South Africa in 1924. The gold prices on the world market improved, and thus the need for labour increased. This is said to be the reason for the regulation that only oxen at or above 500 kilos and cows at or above 375 kilos live weight at Johannesburg were allowed to be imported to South Africa (Colclough and McCarthy 1980). The result was that only a few white ranchers occupying the best land in the Protectorate close to the border with South Africa, were able to sell. Most peasant households then had to send a member to South Africa on 9 or 12 months contract in the gold mines to obtain money for tax and other purposes (Kowet 1978). Thus, labour migration to South Africa became a "way of life" for a large part of the households in Botswana. These households should then be called multiactive peasant households. In the 1940-1976 period about one-fourth of the adult population (above 15 years) was absent at any one time. In 1978 54% of the male population of 35-54 years had experiences from work in South Africa. The figure for the age group 15-34 was 42% (National Migration Study, NMS, 1982). 91% of the male Batswana being abroad at the time of the 1981 census were in South Africa. 66% of these 32 376 persons worked in the mines (Central Statistics Office 1983 a). Regarding female Batswana 68% were in South Africa and 25% of the 9 344 persons worked in domestic service. *Fourth,* at Independence Botswana had been through 6 years of drought which killed one-third (about 400 000) of the national cattle herd and made more than 100 000 persons dependent on food relief which came mostly from England. (England then provided 40% of the government's current expenditures.) Borehole techniques for drinking water provision and cattle watering had existed for some time. Now there was an enormously increased activity of

"generously subsidised" (Colclough and Fallon 1983) drilling west of the populated eastern part of the country. The big cattle owners took their herds to the little used pastures where water was not available prior to the drilling. Water is traditionally privately owned in Botswana, whereas land is mostly communal. The rule that drilling was prohibited closer than 8 kilometres from an existing borehole, gave the owners of boreholes in many cases a de facto exclusive right to large grazing areas. This "land grab" was stopped by the government in 1975 when a general ban on new boreholes was introduced. By this time, however, the polarization between a few big cattle owners and many small owners and cattleless households had become pronounced. Many households with 10 to 15 cattle lost all their animals in the drought. Thus the degree of inequality increased rapidly. The traditional system of redistribution of cattle ownership through "mafisa" (with payments in calves) had become less and less common. The poor could then not pull themselves up by hard work. Today the "entry ticket" to the cattle sector is out of reach for the poor, according to a report submitted by the Presidential Commission on Economic Opportunities (1982). Since few households could (and can) subsist adequately on crop cultivation on communal land alone, labour migration continued to be essential for a large part of the households in Botswana also after Independence. In a number of other respects Botswana was (and is) dependent on South Africa. For instance, the currency was the South African Rand until 1976. This left little influence of the Government of Botswana on fiscal matters, price policies, foreign exchange etc. It is maintained (Colclough and McCarthy 1980, Makgetla 1982), that most of the capital gained in Botswana was channelled through the two only banks in the country, Standard and Barclays, to South Africa in this period. This reflects the low level of productive activities in Botswana besides cattle and crops.

After the mid-1970s it is no longer appropriate to categorize Botswana as a "labour reserve". I disagree here with Cliffe and Moorsom (1979) who maintain that Botswana still is a "labour reservoir" for South Africa and with Cooper (1980) who argues that from 1976 there has been a rapid dissolution of the "labour reserve" mode of production. The socio-economic formation consisted after the mid-1970s of an increasing number of workers in government administration, in modern mining (in Botswana) and in activities catering to these two sectors (table 8). Moreover, some modern light consumer goods industries were established (tables 9 and 10). Many business

Table 8. Formal employment.¹ Thousand.

	Agricultural labourers	Mining	Manufacturing	Central and local government	Other	Total (1)	South African mines (2)	Percent (2) of (1)
1973	4.6	3.5	2.9	11.8	24.2	47.0	28.4	60
1974	4.5	4.1	3.3	12.9	26.8	51.6	27.1	53
1975	4.3	4.5	3.9	14.9	29.7	57.3	33.3	58
1976	4.0	5.5	4.3	16.7	28.9	59.4	40.4	68
1977	4.3	5.5	4.2	18.8	29.9	62.7	38.3	61
1978	5.2	4.7	4.4	20.9	34.2	69.4	23.2	33
1979	4.3	6.3	5.5	22.8	36.7	75.6	19.5	26
1980	4.3	7.2	5.6	23.4	42.9	83.4	20.5	25
1981	4.0	8.1	6.4	25.8	53.1	97.4	18.0	18

¹ Non-citizens are included.

Note. Agricultural labourers included in the statistics in Botswana comprise only those working on freehold farms. Lucas (1981) has calculated on the basis of Rural Income Distribution data that farm work for wages constituted 15% of all wage work in 1975. If Lucas includes employment of Botswana in South Africa, the informal employment in agriculture would comprise 9 200 persons. Informal employment outside agriculture is estimated to be around 12 000 persons in 1978 in the 6 major towns (domestic servants included) (Lipton 1978).

Source. Calculated from Ministry of Agriculture, Agricultural statistics 1980, 1981.
Central Statistics Office, Bulletin 1980, 1981, 1982.

Table 9. Types of manufacturing. Percent of gross output.

	1973/74	1976/77	1979/80	1980/81
Botswana Meat commission	69	60	40	41
Other modern enterprises	16	28	46	46
Other	14	12	14	13
Total	99	100	100	100

Source: Calculated from Central Statistics Office, National accounts 1978/79 and 1980/81

Table 10. Distribution of value added. Selected sectors. Percent of GDP.

	1973/74	1980/81
Agriculture	33.7	10.6
Mining	8.7	36.8
Manufacturing	5.5	3.8

Source: Calculated from Central Statistics Office, Country profile 1982.

companies are majority foreign owned. These companies account today for more than half of all production (Presidential Commission on Economic Opportunities 1982). Migration to urban centres in Botswana has thus increased rapidly during the last few years (Bryant et al. 1978, Bell 1980). In agriculture the tractor was introduced and commercialization increased, in particular in the Barolong area. However, the majority of the population continued to be peasant-cultivators. In 1966 8% of the labour force (15-64 years) had formal employment in Botswana. The figure was 19% in 1980. Likewise, 75 and 61% respectively depended on agriculture.

Table 11. Employment in Botswana. 1981 census.
(12 years of age or more). Percent.

Family agriculture	25
Formally employed	22
Self-employed	2
Casually employed	1
Actively seeking work	6
Economically inactive	45
<hr/>	
Total	101
<hr/>	
Population	568 704

Source: Central Statistics Office 1983 a.

Table 11 appears to include a drastic reduction in the agricultural population in Botswana in relative terms, only one-fourth was engaged in family agriculture. Obviously, there is here a problem of categorization of both multiactive peasants and women in households with pure peasant-cultivator husbands. However, fewer people even in absolute terms were *solely* dependent on agriculture in 1980 than in 1966 (Presidential Commission on Economic Opportunities 1982). This does not imply that the absolute number of households occupied with agriculture decreased. On the contrary, the number of so-called traditional farms has doubled since Independence and increased as much as from 80 000 to 84 200 from 1980 to 1981 (Ministry of Agriculture 1981 a). (To qualify as a farm a household must obtain at least 100 points in the new system adopted by the Ministry of Agriculture. This system is made to exclude households with a few small-stock, chicken etc. For instance, to have a few goats only gives 30 points.) The production structure thus became clearly dualistic with a small urban sector and a large mainly traditional sector. Also in crop cultivation labour had now got a money price. Hence, it is impossible to speak about traditional agriculture. Land is nonetheless still communal, except for the private so-called freehold farms which were not nationalized at Independence,

The aim of the government regarding production was capital accumulation in the modern sector. The rural sector generally was expected to keep its main characteristics - "cattle as wealth", sub-subsistence crop cultivation, labour migration and now also shuttling to towns in Botswana. This mix of productive sectors with fundamentally different characteristics and the fact that also the agrarian sector internally got the "modern" trait - wage labour, make the term "transitory socio-economic formation" applicable in an economic sense.

Peasant-cultivators are thus found both in the "labour reserve" and in the "transitory socio-economic formation". In the latter a market economy also exists in Botswana because there is at least one productive sub-sector where the profit motive is dominant and labour paid with money is found. Furthermore, there are some limitations of the market principle. For instance, no efficient national market for local agricultural products exists. The major market for excess crops is local households or "outside traders" (from South Africa) visiting the villages irregularly. Botswana has no tradition of market places. Cooperatives and state institutions (such as the Botswana Agricultural Marketing Board, BAMB, established in 1974) are new and not used by many peasant-cultivators. No landlords or moneylender class have existed or exist in Botswana. The "outside traders" often sold back grains with a good profit to the agricultural producers in the months just before the next harvest was ripe (Best 1970). Thus surplus value was also in this way appropriated from the peasant-cultivators. Cattle were earlier mainly sold to "outside traders", but usually only when the peasants needed money for food or other necessities. The type of economy can accordingly be categorized as dominated by merchant compared to industrial capital. The latter type was found in the slowly growing modern urban sector. In conclusion, the peasants may be said to have been only partially hut inextricably integrated into the market economy. On the purchase side, they had no other option but to buy South African goods in the mostly Indian and European run shops. Local crafts were close to non-existent. They had been wiped out in the 19. century by the wagon trade bringing the (gradually) high status European goods. Best (1970) reports that Botswana at the end of the 1960s was "100 percent dependent on South Africa, Rhodesia, and other external sources for her manufactured consumer goods".

The *structural heterogeneity of forms of production* discussed above includes the essence of the "transitory socio-economic formation". The lack of domestic linkages cut the stimulating effect of the externally-oriented sectors on the rest of the economy to almost nil (Makgatla 1982). The regional disparities reflecting the various forms of production constitute mainly an urban-rural dichotomy. The regional disparities internal to the rural sector may be explained by settlement of white peasant-cultivators and farmers before and under the period of foreign administration of the territory. Both the heterogeneity of forms of production and the regional disparities make diffusion of growth impulses difficult. State intervention in the market thus becomes essential to attain the requisite changes in the structure of the economy. Capital, which must be transferred between sectors to achieve structural change, was not lacking in the 1976 - 1980 period. Both the government and the banks enjoyed relatively large liquid reserves, due primarily to diamond sales. Undoubtedly, Botswana is in an "economic transition" implying rapid but fluctuating economic growth with numerous technological bottlenecks.

Other aspects of societal evolution

The *political party* that came to power at Independence, was led by the Chief Seretse Khama of the largest tribe, Ngwato. Khama had experiences from many years of study and living in England. This is a main explanation for the establishment of a democratic government which has been stable up to now. Most Members of Parliament were recruited from chiefly affiliation, and thus represent the large cattle owners (Parson 1977). This historical fact has important bearings on the lack of development of, for instance, crop cultivation in the 1970s.

The type of government administration established at Independence incorporated aspects of tribal rule. The chieftaincy thus survived both at local and national levels (Gillett 1975, Picard 1979). The authority of chiefs and headmen is, however, fast eroding in most parts of the country today. This has, among other things, led to an increasing adoption of South African, that is western social norms.

The government's general strategy of development is: 1. to achieve rapid and large returns from capital intensive investments in mining and 2. to reinvest the returns so as to improve the level of living of those who do not benefit directly from mining sector expansion. The reinvestment should first and foremost be in physical and social infrastructure. The National Development Plan V (NDP V) also observes that productive work in rural areas now is a must. This has led to development programmes, such as the Arable Lands Development Programme (ALDEP) (pilot schemes were started in 1979) and the Financial Assistance Policy (FAP) (implemented from 1982). In practice, however, the same overall magnitudes in the investment pattern exist as before. Only one-third of the government development expenditures is taking place in the rural areas where four-fifths of the Batswana live. Little of the enhanced revenues from the mining sector have furthermore *directly* benefitted the rural population (Colclough and Fallon 1983). One may therefore expect urban migration to continue at its present high rate. Moreover, the cattle sector will continue to dominate the rural economy. This trend will be reinforced if the recommendation of the Presidential Commission on Economic Opportunities (1982) of allowing a larger share of the national resources to be controlled and developed by the private sector, is accepted. Today new "*pressure groups*" are emerging which possibly will put an end to Botswana's past stable parliamentary democracy. The most prominent group is the somewhat educated, relatively highly paid young urban skilled workers and professionals. The main disadvantaged but not altogether unorganized group consists of female households. By female household is meant both female headed households (households without any male member above 15 years) and absent worker female households (the male member(s) above 15 years is working elsewhere). (A similar definition has, for instance, been used by Narayan-Parker, 1982, whereas the same terms have been defined differently in other literature on Botswana.) There never was a major *de facto* landless class in Botswana. This is now emerging (Chapter 10).

Important changes are also taking place in the *socio-cultural dimension*. For instance, in some districts half of the women above 18 years are unmarried mothers (SIDA 1982). The 1971 census showed that 23% of all mothers were unmarried (Syson 1973). The 1981 census reveals that 26% of never married women (12 years or older) had one or two children and 18% had three or more children (Central Statistics Office 1983 a). 72% of the female households in urban centres had one or more children staying with relatives in rural areas. This implies rapid socio-cultural change in a society where marriage used to be culturally prescribed. This process can also be seen

12. Ownership of cars and lorries.
1976 and 1980. Number.

Lethakeng		1976		1980	
		2 persons had 2 cars		1 person had 4 cars	
		2 persons had 1 car		2 persons had 3 cars	
				3 persons had 2 cars	
				9 persons had 1 car	
Total		5 cars		3 cars	
Tutume		1976		1980	
		2 persons had 2 cars		3 persons had 3 cars	
		9 persons had 1 car		6 persons had 2 cars	
				40 persons had 1 car	
Total		13 cars		61 cars	

Note. Official vehicles as well as bicycles owned by government officials not living permanently in the villages are not included.
Nationally, motor vehicle registrations increased by 45% from 1966 to 1980 from 12 397 to 29 701. Tractors and motorcycles are excluded (Central Statistics Office, Transportation Statistics 1980).

Table 13. Destination of travel. Lethakeng and Tutume.
1976 and 1980. Percent.

Lethakeng		1976		1980	
Molepolole		38		45	
Villages around Lethakeng		38		21	
Gaborone		22		17	
Other places in Botswana		2		13	
Other countries				4	
Total		100		100	
Tutume		1976		1980	
Francistown		46		72	
Other places in Botswana		29		13	
Villages around Tutume		17		7	
Gaborone		8		4	
Other countries				4	
Total		100		100	

Note. Destinations of travel of members in the households in the two study villages.
The average daily traffic doubled between Molepolole and Lethakeng and trebled between Sebina and Tutume in the 1976-1980 period.

in the difference in rate of marriage between urban centres and rural areas: 53% of women (20 years or older) in urban centres are or has been married, whereas the figure for rural areas is 69%. Female households constitute 36% of the households in rural Botswana. At national level, 8% are female headed and 10% absent worker female households. In the sample used by **NBS** (1982) 18% of the households were "female headed" but had a male member of 19 years or above. (The study was carried out during 1978/79.) Female households have an income per adult member 25% less than "male households" on average. Even more important is their relatively more limited opportunity to build assets on their own (Kossoudji and Mueller 1983). *It may be concluded that Botswana can be characterized as having a "transitory socio-economic formation" also in a social sense.*

The *production factor mobility*, which is high in the modern urban sector, is low at the local rural level. Nonetheless, most medium-sized villages (population 500 - 5 000) have quite a range of modern services such as education, health and water. The lack of local productive activities is a noticeable contrast. Moreover, the geographical mobility is increasing and becoming more hierarchical (tables 12 and 13).

Conclusion

The future prospects for national economic growth and job creation is briefly commented upon below. A general industrialization of Botswana will probably take a long time. One reason is that Botswana is a member of the Southern African Customs Union Agreement (SACUA). This gives South African companies, which mass produce goods with high technology and cheap (apartheid) labour, free access to the country's market. Another is the limited internal market (Hesselberg 1979). Furthermore, most of the urban industries in Botswana are, as mentioned, foreign owned. The government has accordingly little control over and possibility for accelerating industrialization. The official strategy is then understandably to rely on modern high technology, capital intensive mining (NDP V). The prospects seem to be fairly good in this respect. Particularly the vast coal reserves in the eastern part of the country, which Shell may exploit by building a trans-Kalahari railway, is expected to give numerous spin-offs and thereby jobs. In the last 5 years approximately 5 000 new formal sector jobs have been created a year (Presidential Commission on Economic Opportunities 1982). The la-

bour force increases with about 12 000 persons a year. Lipton estimated in 1978 that to obtain full employment in 1988 35 - 36 000 new jobs had to be created each year. Included in the calculation was an expected reduction in labour migration to the South African mines, evident from table 3. Undoubtedly, *the formal sector cannot provide enough jobs, and there will in future be a massive gap between those wanting work and the available employment.* Today 51 000 (9% of the labour force defined as everybody above 15 years, NMS 1982) are unemployed and actively seeking work. The picture given above remains grim although Gwebu (1982) estimates that the informal sector grows relatively faster than the formal one and that the number of Batswana working in South Africa generally has only declined from 46 000 in 1971 to 42 015 in 1981. The government now also pledges that profits from the large-scale mining operations are to be transferred to the rural small-scale industrial sector and to agriculture. Up to now most of Botswana's Development Budget has gone to physical and social infrastructure. In a scenario of regional economic coordination through the Southern African Development Cooperation Conference (SADCC) (Nsekela 1981) Botswana is still mainly envisaged to continue to be a mining and cattle economy (NDP V). It is doubtful whether these two sectors and their spin-offs will be able to create enough formal as well as informal jobs. In the foreseeable future crop cultivation may thus remain the important sector for complete or part sustenance of livelihood for a large proportion of the population in Botswana.

CHAPTER 9

AGRARIAN TRANSITION

In this chapter "work position" and types of agricultural producers are established according to the definitions given in previous chapters and in appendix 1. The characteristics of the agricultural production process are thereafter described in further detail. Finally, the recent phenomenon of drop-out from agricultural pursuits of certain groups of households and the commonness of multiactivity at the household level are discussed.

"WORK POSITION" AND TYPES OF AGRICULTURAL PRODUCERS

Most of the permanent households in Letlhakeng and Tutume are wholly or partly engaged in agriculture, 76 and 96% respectively (table 14). Agriculture in Botswana is mainly of the peasant form of production. From table 15 it is evident that the majority of the agricultural producer households in Tutume are of the multiactive peasant-cultivator type. In Letlhakeng there are also a few multiactive peasant-herdsman households. The peasant-herdsman households have, contrary to the expected, less cattle than other groups of agricultural producer households. They are thus not on the verge of becoming rancher households. The unexpected change in Letlhakeng from multiactive peasant-cultivator households to pure peasant-cultivator households is a result of the decline in work opportunities in the gold mines in South Africa, and not an aspect of agricultural modernization. No pure rancher households but some albeit very few farmer, multiactive farmer and multiactive rancher households are found in one or the other village. The absence of farmers in 1976 represents an indication of a gradual change towards more modern crop cultivation. It was ownership of a tractor that placed these households in the farmer category. No households in Letlhakeng and Tutume sold 50% or more of their harvest. One household of the sample in Tutume in 1976 sold 15 bags (90 kilos a bag)¹ of sorghum out of a production of 35 bags and accordingly nearly "made it" on the criterion of

¹ Today a standard of 70 kg/bag is used.

aim of production. Another household sold 1 of the 2 bags of beans harvested but did not produce anything else, thus disqualifying on the minimum requirement included in the definition. Those households that sell part of their harvest, sell very little. Even those that produce 40-70

Table 14. "Work position". Letlhakeng and Tutume
1976 and 1980. Percent of households.

	Letlhakeng		Tutume	
	1976	1980	1976	1980
Cultivator only	14	26	10	18
Herdsman only		4		
Pure multiactive cultivator		1		
Non-pure multiactive cultivator	43	21	81	73
Pure multiactive herdsman		4		
Non-pure multiactive herdsman	15	9	3	4
Worker	6	8	3	3
Agricultural labourer	4	11	2	
Non-agricultural self-employed	6	5		
Non-agricultural other	7	4	2	
No source of income	5	8		
Total	100	101	101	100

bags of crops normally sell only 2-4 bags. *It may thus be concluded that the aim regarding direct sales of crops is not primarily commercial but to sustain the household with basic food and other necessary consumer goods.* However, for quite a number of households (about 40% in Tutume and below 10% in Letlhakeng in 1980) self-produced sorghum is used for beer-brewing for local sale. This must be said to be commercial. Moreover, it is economic rational. Besides sales from the home in the village, a substantial portion of the beer is used as payment for various kinds of labour, including agricultural labour, particularly cattle herding. This represents a form of reinvestment in agriculture. But only in some cases are 50% or more of the harvest used for beermaking. Moreover, since the intention of

Table 15. Types of agricultural producers. Letlhakeng and Tutume.
1976 and 1980. Percent of households.

	Letlhakeng		Tutume	
	1976	1980	1976	1980
Pure peasant-cultivator	19	39	11	18
Pure peasant-herdsman		7		
Multiactive peasant-cultivator	60	33	86	75
Multiactive peasant-herdsman	19	17	3	4
Pure farmer only		2		
Multiactive farmer				2
Multiactive rancher	2	2		1
Total	100	100	100	100

crop cultivation also in these cases is not reinvestment in order to improve the yield to facilitate larger sales of beer, they are categorized as peasant-cultivators. To achieve larger sales of beer are close to impossible because of the great number of beermakers and, as is especially the situation in Letlhakeng, of the competition from modern beer on tins. Normally, sales of beer only take on large proportions and regularity when the weather and other fortunate circumstances give an exceptionally good harvest. The marketing constraints on improvement of crop cultivation are well illustrated by the following example: An agricultural producer with a tractor in Letlhakeng had a big harvest in 1975 (he was then a farmer). In 1976 he saw no reason for cultivating crops because there was no channel for selling large amounts of crops (he was then a rancher). Now the situation is somewhat better. The BAMB-network of purchase and sale of agricultural inputs and products have become better established (Morgan 1982). *Commercial production is hence presently a matter of price differentials, and not of absolute constraints.* Nonetheless, still some agricultural producers maintain that they find it difficult to sell their products out of their village (table 16 and 17). The lower percentage of households that have sold crops in 1980 than in 1976 is due to a somewhat below average dis-

tribution of rainfall during the agricultural season. Notice should be made of the high percentage of households in Tutume that say they do not sell crops, the intention is self-sufficiency and sales through beer-making. The latter explains partly the lower percentage in Letlhakeng in this respect, where modern beer has become more popular.

Table 16. Sale of crops. Letlhakeng and Tutume
1976 and 1980. Percent.

	Letlhakeng		Tutume	
	1976	1980	1976	1980
No sale	76	95	76	88
Sale to:				
Local households	23	5	3	3
Local shop/cooperative			5	9
Outside the village	2		16	1
Total	101	100	100	101

Table 17. Reasons for lack of sale. Letlhakeng and Tutume.
1976 and 1980. Percent.

	Letlhakeng		Tutume	
	1976	1980	1976	1980
Little harvest	59	75	11	32
Don't usually sell	32	18	78	65
Nowhere to sell	9	7	11	3
Total	100	100	100	100

Marketing facilities for cattle have existed for a longer time than for crops. The common method before the mid-1970s, when local cooperatives were established, was auctions dominated by South African traders. Only somewhat above half the households with cattle sell any (table 18). The relatively low percentage for Tutume in 1980 is due to a ban on sales in that area in the beginning of the year because of a foot-and-mouth disease.

Table 18. Sale of cattle. Letlhakeng and Tutume.
1976 and 1980. Percent.

	Letlhakeng		Tutume	
	1976	1980	1976	1980
Sold	74	59	60	44

The reason for sale of cattle was, as mentioned, to acquire money for necessary expenditures such as school fees, food and clothes. To sell regularly in order to reinvest in cattle or other sectors was still not common in 1980. Quite on the contrary, a number of peasants explicitly state that they do not sell if they are not forced to for lack of incomes from other sources. The aim of cattle holding is thus only for a few big owners capital accumulation. For the majority, it is a way of storing wealth with a certain increment. It is, for instance, *only when a herd approaches 100 animals (4% of the households in Letlhakeng and Tutume had 100 or more cattle in 1980) that regular sales and reinvestments become really profitable*. This number is also necessary to allow a normal family to live on cattle alone with an income above the Poverty Datum Line (PDL) established for Botswana by the Rural Income Distribution Survey in 1974/75 (Central Statistics Office 1976 a). *A rancher is thus a cattle owner with 100 or more cattle who is not carrying out crop cultivation individually or at the household level*. One may then infer that those agricultural producers who have such an amount of cattle and sell cattle regularly should be called farmers when they combine cattle with peasant crop cultivation.

This has not been done because an objective is to focus at constraints to improvements mainly regarding crop cultivation. Thus, *it is more useful in this work to label an agricultural producer carrying out peasant crop cultivation and ranching for a peasant-cultivator.*

At national level, peasants are in a clear majority in Botswana. Only 3.8% of the cultivating households fall into the farmer category, of which many certainly are multiactive farmer households (calculated from Ministry of Agriculture 1981 a). Of the 2 485 farmer households, only 135 constitute freehold farms. Ownership of tractor is again the indicator that is the relevant one to use. It is a good indicator on commercialization because 21% of the "traditional crop farms" in 1980 used tractor in land preparation, and these farms accounted for 45% of the total food crop production in the "traditional sector" (Litschauer and Kelly 1981). In 1975 only 0.9% of the agricultural producer households owned a tractor (Duggan 1979). The relative number of farmers and multiactive farmers have evidently increased in recent years. However, the total number of commercial farms is still exceptionally low. The usefulness of tractor ownership as indicator on commercialization is also substantiated by the proportion of "crop farms" that use fertilizers or manure, which is 3.7% (Central Statistics Office, Indicators 1982). 700 cultivating households use hand labour only. Almost all of these households would probably belong to the traditional peasant category. All other cultivating households use iron ploughs and then mainly animal traction. In 1975 48% owned a plough. (Figures for later years are not available.) The number of ranchers at national level is impossible to estimate. Most of this group will now be found in urban centres. The number is under no circumstances large, as only 9% of all the households with cattle have more than 100 (Ministry of Agriculture 1981 a). Nearly all of them are likely to be multiactive rancher households. At the individual level *it* is most probable that the majority are worker-ranchers. Also regarding peasant-herdsmen data are not available. There is, however, no reason why the findings for Letlha-keng and Tutume should not be representative for the country at large in this respect. It is then probable that *there are few pure ranchers and pure peasant-herdsmen in Botswana.* Moreover, *it is likely that those peasant-herdsmen that may exist have suddenly found it difficult to obtain wage work.*

Few households without a tractor can be classified as farmer households in Botswana. On average, the proportion of total production sold of crops did

not exceed 59% for any crop. When the farms are divided according to production size, however, the "small farms" sold 66% of their production of beans on average (Ministry of Agriculture 1981 b). Most likely these farms did so out of need for cash, and they did not have sufficient crops left for own consumption throughout the year. Since the largest one-third of the farms did not on average for any crops sell 50% or more of the production, few households would qualify as modern agricultural producers on the criterion of sale in the country at large.

No national statistics are available on the frequency of combination of income sources. Data from NMS (1982) reveal that one-third of the rural households rely on combining three sources - crops, cattle and wages, and nearly two-thirds of the rural population have support from a wage worker. Less than one-fourth depend on agriculture alone (table 19). This fits well with the data from the two study villages.

Table 19. "Work position". Rural Botsana 1978. Percent of households.

Agricultural producer:	86	
Pure agricultural producer	<u>24</u>	
- Cultivator		22
- Herdsman		2
Multiactive agricultural producer	<u>62</u>	
- Multiactive cultivator		56
- Multiactive herdsman		6
Worker	10	
Non-agricultural self-employed	3	
<hr/>		
Total	99	
<hr/>		

Note. 36% of the agricultural producer households did not have any cattle. NMS-data have been adapted to the categories of households used in the present work. N=22 622 individuals.

Source: Central Statistics Office. 1982. National migration study. Gaborone.

To sum up, if agriculture in Botswana is in a process of modernization, it is in the very beginning of such a process. The large number of non-pure multiactive peasant-cultivator households may indicate that the phase of the American path where pure farmers are in majority, may not occur. Under no circumstances can we speak about a peasantization process today. In order to get a closer look at and assess the *tendencies of change* revealed above other characteristics of agricultural production in the two study villages and in Botswana generally will be presented below. Thereafter the combination of income sources at the household level are treated. Lastly, the mechanisms of change operative regarding the agrarian structure will be discussed.

CHARACTERISTICS OF THE AGRICULTURAL PRODUCTION PROCESS

The more detailed characteristics of the peasant form of production will refer to crop cultivation of which cattle as draught-power are an integral part. The essential element in modernization of cattle herding is connected to rearrangement of grassland into so-called commercial ranches where individuals or groups may place their cattle by paying a fee to the state. This will be taken up in chapter 11 which deals with, among other things, the new spatial plans adopted recently. *Land*, for crop cultivation may be obtained by application to local Land Boards (established formally in 1968 and in operation everywhere from 1973, Temane 1980). Since then land is no longer allocated by tribal authorities. Land is in short supply only in some eastern areas, particularly areas close to Gaborone. The most fertile arable land is found in the freehold farms along the eastern boarder to South Africa.

At present 0.6% of the total land area of Botswana is cultivated. 10% is estimated to receive enough rain and have adequate soils for arable farming (Egner and Klausen 1980). The estimates on arable land have tended to increase over the years. Even today the estimates vary greatly: FAO (1981 a) puts it at 2%, ALDEP (1979) at 5-6% and Seidman (1981) at 7%. In my view the extent of arable land is even larger than 10%, particularly if the more humid north-eastern forest land is included in the calculation. Thus, land exists for extending crop cultivation into new areas. The situation regarding land is then different from the typical Asian and Latin American one. In, for instance, Mexico 60% of the economic active rural population in the early

1970s were totally lacking land (Bartra 1974). Shortage of land is also not common in other African countries. Exceptions are, for instance, Kenya and Malawi. Sharecropping and other tenancy arrangements are accordingly less widespread in Africa. Arable land is normally communally owned. If regularly used, such land may be inherited. In Botswana this results in that land closer to villages may prove difficult to obtain. The main point is, however, that the occupancy right to arable land undoubtedly gives the peasant-cultivator household a certain degree of control over the 3-4 hectares normally cultivated (90% of the crop farms plough less than 10 hectares). *This system of land rights may be viewed to represent a transitory stage to individualized arable land.* The Presidential Commission on Economic Opportunities (1982) concludes that this land tenure system provides a good balance between "the individual desire for security of tenure and the needs in a rural setting to make the most productive use of the land and to secure a fair distribution of land to all Batswana (it) is far superior to rural tenure systems in other countries which have created a class of landless and therefore extremely poor rural people."

The system of cultivation is best described as "*shifting cultivation with rotation of fields*". By leaving part of the land fallow, the peasant-cultivators can continue to cultivate the same piece of land for up to 30 years, even sometimes longer if there have been many years with drought. (Every 5 years a moderate drought may be expected. A severe drought occurs on average every 14-20 years and a disastrous drought every fifty years. The Botswana Society 1979, Vierich and Sheppard 1980, Kgathi and Opschoor 1981.) When they move to new land, the tradition was to go relatively far, often changing their place of living. The present fencing of individual fields with wire, which has appeared to some extent in the Tutume area, will probably lead to an abandonment of the present system of shifting to new field areas. A result of this will be the need for applying fertilizers or manure. The investments thus made on one single piece of land (rotation is continued on the fenced fields) are likely to start a process of privatisation of arable land in Botswana outside the freehold farms. The government seems now to feel the pressure towards privatisation. It has established a Presidential Commission to look into the land tenure system. The commission shall, among other things, examine the comparative advantages and disadvantages of creating bankable security over communal land in relation to the requirements of financial institutions (Daily News 1/7-83).

Traditional crop cultivation used to be a *household* task. Although the men held cattle to be their main activity, they cleared and ploughed fields and also participated in harvesting (Bond 1974). Today it is not uncommon to see women both clearing and ploughing. In fact, women are in charge of cultivation in nearly half of the households that grow crops in Letlhakeng and Tutume. Nationally, 36% of all agricultural holdings are run by women (Ministry of Agriculture 1982). *The worker-husband/peasant-wife type of household was found in as much as 40% of the cultivating households in Tutume.* In Letlhakeng the figure was 19%. The difference between the two villages is explained by the higher frequency of wage work in Tutume and by the higher percentage of households in Letlhakeng in which there is no husband (table 20).

Table 20. Types of female households. Letlhakeng and Tutume.
1976 and 1980. Percent of all households.

	Letlhakeng		Tutume	
	1976	1980	1976	1980
Female headed households	16	23	15	11
Absent worker female households	19	13	31	28
Female households	35	36	46	39

Only 25% in Tutume and 37% in Letlhakeng manage to cultivate crops solely with household labour. *The working husbands help in crop cultivation in just above 50% of the cases in Letlhakeng and in just below 50% in Tutume.* The mutual help system (reciprocity) is losing some of its commonness. This is especially serious regarding ploughing arrangements (i.e. "putting in hands") which, according to Curtis (1972), are highly sensitive to socio-cultural changes. In Tutume 54% of the cultivating households *hired assistance* for cultivation purposes. In Letlhakeng, a less prosperous village the figure was only 17%. Nationally, 11% of the total labour in crop cul-

tivation was hired (Ministry of Agriculture 1981 b). Work in return in agriculture or in other activities for assistance in cultivation was given by 10 and 22% of the cultivating households for the two villages respectively. *It may thus be concluded that labour is less mobilized by the domestic group nowadays.* Market forces have undoubtedly penetrated the agricultural sector and made labour into a scarce and relatively expensive production factor.

Even for some richer households, this *shortage of labour represents a difficulty.* *Poor households in addition often lack easy access to cattle for ploughing.* In order to plough independently of other households a herd size of 25 is a necessary minimum (Vierich and Sheppard 1980). Bro International (1982) sets the figure to 30 for a ploughing team of 4 oxen and to 40 for a team of 6. To reach a herd size of 30 is difficult for peasants in Botswana. In Letlhakeng, where 36% of the cultivating households did not have any cattle in 1980, access to draught-power is a major problem (table 21). Of the level of living group 3 (including non-cultivating households) as much as 86% had no cattle. 65% of cattle owning households had less than 30 cattle.

Table 21. Borrowed oxen in ploughing. Letlhakeng and Tutume.
1976 and 1980. Percent of cultivating households.

	Letlhakeng		Tutume	
	1976	1980	1976	1980
Only borrowed	24	42	15	19
Borrowed in combination with own or hired	13	1	2	1
Total	37	43	17	20

In Tutume the respective figures were 10, 53 and 60%. Only 3% used tractor for land preparation in the study villages in 1980. In 1976 the percentage was less than one. Nationally, 27% of the cultivating households had no cattle and 70% had less than 30 cattle in 1980 (Lightfoot 1981). In 1981 the former figure had increased to 32%, which is above the margin of error

Table 22. Crop cultivation and cattle ownership. Letlhakeng and Tutume. 1976 and 1980. Percent of cultivating households.

	Letlhakeng		Tutume	
	1976	1980	1976	1980
Cultivating households owning cattle	76	64	81	90

Note. In general, the percentages of households without cattle were:

Letlhakeng	1976	41
	1980	55
Tutume	1976	22
	1980	14

(calculated from Ministry of Agriculture 1981 a). Households with cattle are more likely to cultivate than cattleless households (table 22). Cattle are furthermore important as security for loans, which are now available from the National Development Bank (NDB). (Such loans were not available in 1976). *Only 4% of the households in Tutume and 2% in Letlhakeng had taken a bank loan.* The purpose of the loans were mainly fencing of fields. The reasons for the few loans is neither that loans have been obtained from private sources (which is close to non-existent) nor that bank loans as such are a novelty. The reason is rather that the risk of default is great and that few have enough cattle to risk to lose part of their herd.

The high *risk* of crop cultivation is also evident from the method of sowing, the so-called mixed broadcasting and ploughing down the seeds (of sorghum, maize, millet and various kinds of beans in different combinations). In Letlhakeng nearly all the cultivators broadcast mixed seeds. Only one household of the sample in 1980 practised row planting. In Tutume where rainfall is somewhat more reliable, there has been an increase from 19 to 28% of households practising non-mixed broadcasting. This is mainly done by the richer households. This is an indication of modernization. *The main characteristic is nonetheless risk aversion through a diversified product range and intercropping.* This is not to say that row planting is the ideal method

in most parts of Botswana. Lightfoot (1981) has found that broadcasting gives very high yields on research stations. In fact, he argues that the technology used is not the significant point but the timeliness of sowing according to rainfall and the quality of tillage done. This point is substantiated by Purcell (1982) who shows that row planting does not give higher yields than broadcasting on average. An example which points in the same direction is provided by Ricards (1983). He reports that intercropping in West-Africa both helps to maximize returns to labour and reduces the variability of yields.

Land productivity in Botswana is one of the lowest in the world. Since 1932 till today yields per unit of land have risen very little (Odell 1980). During the 1970s the average yields declined. In the period 1972-1976 the yield for sorghum was 367 kg/ha, for maize 527 kg/ha and for beans 206 kg/ha. The averages for 1978-1981 were 198, 205 and 114 respectively (Purcell and Webster 1977, Ministry of Agriculture 1981 a). The explanation for this trend is probably not only adverse weather condition but also the increased opportunities of work in urban centres in Botswana leaving many households with inadequate labour. NMS (1982) shows that those households that experience a loss of labour due to labour migration to South Africa (other things constant), have a significant lower crop output. The potential for improved yields in normal rainfall years is good. This can be seen from the higher yields obtained on the so-called commercial farms which in 1980 were on average for the major crops three times the yield in the "traditional sector". The 5% of farms with highest yield of sorghum obtained 830 kg/ha. Jones (1981) maintains that a yield of 2 tons of cereals per hectare is technically feasible in Botswana. The 1977-1979 average yield for sorghum in the Third World was 965 kg/ha. The figure for Sub-Saharan countries was 701 (World Bank 1981 a). In addition to the figures given here, it may be argued that major improvements are possible in crop production because of the large variations of yields regionally and among peasant-cultivators.

To a large extent crop cultivation in Botswana is so-called deficit agriculture (Alverson 1979, Fortmann 1981, Lightfoot 1982). In Letlhakeng and Tume sub-subsistence cultivation is typical in that half the cultivating households produce too little basic food to sustain themselves throughout the year. Only a little more than one-third produces more than the family can consume (table 23). The commonly held view that *agriculture in Botswana*

generally is of a subsistence type, is then not correct. Livelihood and other activities in the villages are not "close to entirely" based on local environmental resources. The term subsistence is only applicable regarding the group of households with medium-sized cattle herds.

Table 23. Amount of crops harvested according to the respondents' perceived needs. Letlhakeng and Tutume. 1976 and 1980. Percent.

	Letlhakeng		Tutume	
	1976	1980	1976	1980
Too little	50	53	42	53
Adequate	7	14	6	15
Surplus	43	34	52	33
Total	100	101	100	101

At the national level, only rough estimates of the number of sub-subsistence agricultural households can be made. The caloric needs of a typical family of 4 grown-up persons and 2 children are set at various levels. Lightfoot (1981) puts it at 1 250 kilos and Alverson (1978) at 1 600 - 1 700 kilos. Agricultural producers in Tutume place their need at 750 - 900 kilos (maize and sorghum half each). By using 1 700 kilos as the standard, 90% of the cultivating households in Botswana were sub-subsistence agricultural producers in 1980. The figure would be 83% if a standard of 1 000 kilos was used (calculated from Ministry of Agriculture 1980 a). It is then likely that inputs in crop cultivation cannot be paid for with money earned from this sector alone. According to Alverson (1979), costs exceed returns for almost all crop cultivating households. Even the few well-off peasant-cultivators and farmers do little more than break even. Inputs in crop cultivation are usually bought by sale of cattle and by wage work. The reason for households to subsidize crop cultivation in this way is that this gives cheaper food than to buy food at the shop. Moreover, most households must supplement their agricultural income anyway to be able to buy wanted consumer goods. In contrast to Alverson, Jones (1981) uses BAMB selling prices

of crops instead of producer prices for that proportion of crop production that a household consumes. He finds then that the net income *per man-day* in crop cultivation is 10% above the government stipulated minimum wage. *Because of the seasonality of crop cultivation and present high number of rural households with few or no cattle, it is understandable that the majority of the agricultural producers are multiactive peasant-cultivators.* This conclusion is reinforced by the fact that the returns from a typical farm (in kind included) is half the average yearly government salary for an urban employee with primary education, and one-fourth of the wage received for work in the South-African mines (1980) (calculated from Kerven 1982).

The *national self-sufficiency* in grains was 90% in the 1930s. Around Independence it was 90% in good and 40% in bad years. Now it is 50% even in good years (Opschoor 1981 b). The food production index per person was 88 in 1981 (a normal rainfall year) (1969-1971 = 100) (FAO 1981 a). A reason for this decline in food production is that the average area ploughed per household and the farming methods and hence the yields per hectare have remained nearly constant in this period. In addition, the urban consumption pattern has changed towards a demand for food products not produced in Botswana. The above dismal trend of the food situation in Botswana is not an exception in Africa.

A most serious *lack of mills* to process sorghum may for all future have hindered a real commercialization of this crop. (A mill was built in Molepolole in 1981.) The reason for this is that the purchase of wheat flour and "fat cakes" (wheat balls fried in oil) have become extremely popular in just the last couple of years. The changes in purchase of wheat flour by the households in Letlhakeng and Tutume from 1976 to 1980 were from 17 to 71% and from 57 to 84% respectively (Hesselberg 1982a appendix 2). The spread of the wheat innovation has been rapid and includes the most peripheral areas of Botswana. The market for milled sorghum, which was relatively large but unfilled in urban centres in 1976 when the first trial mill was put up at Pitsane, is now probably irreversibly lost. (Urban wage workers can afford not to carry out the time-consuming and tiring stamping of grains, and to acquire new tastes. This is substantiated by, for instance, Digawana villagers who "complained that their children had forgotten that sorghum was their staple food. They now live on foreign foods such as rice

and bread." Daily News 14/6-82.) In 1981 only 11% of the total sorghum production was sold (Ministry of Agriculture 1981 b). This does not reflect the magnitude of crop transfers which are substantial at the local level regarding past and future kin obligations. There are two main explanations for the *low degree of sales to BAMB*. First, the lack of marketing facilities is only now being tackled by the government. Second, the producer prices offered by BAMB are set at the South African Maize Board prices plus transportation cost from South Africa to Botswana. The local rural prices, although they fluctuate widely through the year and from year to year, are above world market and BAMB prices for sorghum (except at harvest time) (Duggan 1979). This explains why only 0.2% in 1976 and 3% in 1978 of the total sorghum harvest was bought by BAMB. Maize prices offered by BAMB in 1978 were higher than the local ones, which explains the fact that 49% of the maize production was bought by BAMB in that year. In 1976 only 4% was bought, at prices below the local rural ones. *It is then clear that the peasants are responsive to price incentives.* This supports the contention in chapter 4 that responsiveness to prices is general in the Third World.

Rich peasant-cultivators and farmers usually store crops at the fields and sell later at the local market. Less well-off peasants often sell or barter crops, although they produce too little for their own consumption. This is a common phenomenon in the Third World. Bhaduri (undated) reports from India that "petty peasants" as a group, consume an amount equivalent to 116% of what they produce. And still they sell a considerable part of their production. He concludes that this is evidence of forced involvement in the market. The deficit the peasants manage by both engaging in other sources of income than own agricultural production and by increased indebtedness. In Botswana, outside traders used to transport the produce to South Africa. They returned after 6-9 months to sell. This practice added greatly to the cost of living of the Batswana (Monare and Opschoor 1981). Today BAMB is able to win the competition with these traders in the villages where storage facilities exist.

Is it then possible to say that the peasant-cultivators have a certain degree of freedom to pursue aims of their own? Since there are no landlords and the state appropriates little surplus directly from the peasants (for instance in the form of taxes), some might maintain that there is no real

Table 24. Relative price trends in agriculture
Botswana. Index-values, 1978 = 100.

	1979	1980
Output:		
Crops	111	122
Cattle	112	137
Input:		
Seeds	171	226
Fertilizers	100	169

Source: FAO, Production yearbook 1981.

subsumption to capital, only formal. Surplus from agriculture is, however, appropriated indirectly through the price structure (table 24). Ghai and Radwan (1983) maintain that the internal terms of trade of the agricultural producers in 9 African countries studied, show that changes in *relative prices have been an important instrument in extracting surplus from the rural areas*. In Botswana the prices of the category food, beverages and tobacco increased with 40 percentage-points for the "low income group" from 1976 to 1980. In the same period cattle prices per 100 kilos grade 2 increased from P72 to P100 (28%). In 1982 the producer price had risen with P21, whereas the price-index on the above mentioned category of consumer goods increased with 38 percentage-points. Thus, steadily more cattle must be sold (or work obtained) to keep the same level of living as previously. This is not of only minor significance because of the overall sub-subsistence character of peasant production. Table 25 shows that most households buy fairly much foodstuff at the shop and that the proportion of households that buy relatively much is increasing.

Table 25. Purchase of selected food products at shops.
 Letlhakeng and Tutume. 1976 and 1980. Percent.

	Letlhakeng		Tutume	
	1976	1980	1976	1980
Much	3	19	4	26
Middle	51	45	66	58
Little	47	36	29	15
Total	101	100	99	99

The peasant-cultivators are thus under a constant pressure either to increase their production or find additional income sources, that is, to become multiactive peasant-cultivators. Only those households with relatively large cattle herds are unaffected by this price-squeeze. Urban wages have for all levels increased rapidly since 1976, well above the consumer price-index for most groups. To some extent it is possible to say that there is a parallel growth of income and productivity in the formal urban sector in Botswana. This is not the case in peasant production (or in rural areas as a whole). Peasant production cannot keep pace with inflation. The inflation which affects peasants, is a result of national (mainly formal sector) and international forces. Thus, the population in rural areas has to adapt to the *rhythm* of change in the formal national and international sectors. The capital accumulation process in rural areas accordingly depends on and is often constrained by external forces. In short, one may say that *the market principle is fully developed on the purchase side Looking from the peasant point of view. This does not apply to the same degree to the sale side.* Peasant production then competes on unequal terms with formal sector production.

On the question of *irrationality of peasant-cultivators' behaviour*, some scholars maintain that it should be dropped because it completely depends on the values of estimation. Harding (1982), however, makes a good point by distinguishing between "economic optimum" and "rationality" regarding the profit motive of peasants. An economic optimal behaviour would imply to change to new methods of cultivation when capital and other factors of

production are available. It may, on the other hand, be economic rational not to adopt new methods within the frame of constraints existing for peasant-cultivators in a particular regional context. To my mind, there are three ideal type categories of cultivators regarding response to level and changes of producer prices (figure 9).

Figure 9. Types of response to changes in levels of producer prices.

In situation A the quantity produced reflects the aim of achieving a certain amount of cash. (The cash amount needed increases with the prices on the culturally determined goods wanted and with the various stages of the life cycle of a household.) If producer prices are raised (other things constant), less may be produced. This is the Chayanov rule. This is typical for traditional peasant-cultivators. In situation B the amount produced by peasant-cultivators reflects the constraints on their production, primarily climate, labour and producer prices in Botswana. The amount cannot easily be increased when producer prices increase only marginally. They will, however, try to market more when the harvest is larger than usual due to favourable weather. If producer prices continue to increase over the years, the peasant-cultivators may invest in new methods of cultivation. Some will then become farmers (C). Others may fail and become either multiactive peasant-cultivators or drop-outs. It is probably only when new methods are adopted that a process of differentiation will be initiated from the production side in crop cultivation. On the consumption side, world inflation may

be a sufficient condition when other options to secure an improved income are not available. *The socio-economic stratification in rural Botswana is thus mainly connected to cattle ownership and education giving relatively high salaries to shuttlers.*

In order to make it more economic rational for peasants to improve their productivity, state subsidies are used in most countries. In Botswana the following *subsidies* are given: 10% of the seeds are subsidized about 50% through the Seed Multiplication Unit (Ministry of Agriculture undated). The construction of BAMB stores are somewhat subsidized. The government has, however, never provided funds to BAMB to allow it to apply a direct subsidy to producer crop prices. Furthermore, fertilizers and machinery and implements receive no subsidy. ALDEP is now providing "technological packages" to "medium peasants" (those with less than 40 cattle). Cheap loans are provided with grant elements of 35-60%. The poor peasant-cultivators are not able to benefit from this programme because of lack of cattle as security for loans. A separate donkey scheme has been started to give draught-power to those crop cultivators that do not own cattle. Jones (1982) has calculated that the ALDEP-package would indeed raise returns from crop cultivation but the labour input would also increase. The net income would then not improve on a man-day basis. He accordingly argues that producer price subsidies should be adopted. The peasants would then see more opportunities in crop cultivation. The total subsidies required will in his calculation be low in relation to the additional rural income thus generated. The Ministry of Agriculture points to the fact that producer price subsidies mostly benefit farmers and not peasant-cultivators. The solution to this dilemma will in most cases be a mix of types of subsidies together with higher agricultural prices generally. In Botswana this could be essential to improve the productivity of the small peasant-cultivators who represent the majority of the agricultural producers. The poor non-cultivators must be protected in such a transition when agricultural prices increase more rapid than other prices. The economic rational in being a multiactive peasant-cultivator would be good in such a situation. A constraint to higher agricultural prices in Botswana is imports of crops from South Africa which are subsidized on the selling price. Since Botswana is in a customs union with South Africa, tariffs cannot be imposed in this case. If this problem was solved in one or another way, smuggling of food would perhaps take place.

The lack of a comprehensive government policy on subsidies regarding crop cultivation may be part of the explanation for the low degree of development of this sector. The political leadership has in contrast looked well after the cattle sector. The Presidential Commission on Economic Opportunities (1982) found that the net subsidy (subsidies given less tax received) to the cattle sector was P15.4 millions (annual average 1977/78 - 1980/81). In addition, the Pula has been "overvalued" due to diamond exports. This has been favourable for cattle owners and detrimental to crop cultivation. Furthermore, in view of the very skewed ownership of cattle (chapter 10), the benefit of this subsidy in reality went only to a few ranchers. Probably, a lower producer price *on cattle* would not have been a disincentive to invest in this sector among peasants. This is particularly true for peasant-cultivators in need of draught-power. For those peasant-cultivators with enough cattle for traction purposes, there would have been an incentive to sell more at lower prices (figure 9). A necessary (and probable) assumption is that ownership of cattle to a large extent is for profit or for covering essential consumer goods through sales (table 26). Picard (1980) substantiates this assumption by maintaining that Botswana is somewhat different from the rest of Sub-Saharan Africa in this respect.

Finally, the build-up of herds taking place because of the high prices (and abundant rainfall) during the latter half of the 1970s, has resulted in overstocking and degradation of vegetation in many places. The Presidential Commission advocates that higher taxes should be used to reduce the present incentive to overstocking. In addition, the existing tax regulations should be enforced more efficiently.

To sum up, crop cultivation has become relatively less remunerative compared to cattle herding over the years. Opschoor (1981 b) has calculated that a herd of 15 would in 1966 give the equivalent of 1 500 kilos of sorghum as normal off-take. In 1980 only 10 cattle would be required to get this amount, which can sustain a normal family of six persons throughout the year. The government's agrarian policy has, because of the increasing number of agricultural households without cattle the last 20 years, promoted the process of differentiation. This will be elaborated upon in the next chapter. Here it suffices to note that rich peasants besides cattle often invest their profits in bars and vehicles. Little more than for main-

Table 26. Marketing of agricultural products. "Traditional" and "commercial" farms¹. 1976/77 and 1980/81. Pula million.

	1976/77		1980/81	
"Traditional":				
Sale of cattle	30.6		36.5	
Net increase in cattle herd	13.3	43% ²	6.4	18%
Sale of crops ³	0.4		1.2	
Cattle and crops for own use	26.5		32.9	
"Commercial":				
Sale of cattle	16.5		20.7	
Net increase in cattle herd	2.3	14%	2.6	13%
Sale of crops	1.0		0.3	
Cattle and crops for own use	0.1		0.1	

¹ "Traditional" and "commercial" refer here to the definitions used by the Ministry of Agriculture, i.e. "commercial" is equal to freehold and leasehold farms and "traditional" all other farms.

² Net increase as percentage of cattle sale.

³ It is more common to sell crops to local households directly than to market crops through a formal market. Thus, the figures included here do not reflect the real magnitude of crops marketed for money.

Source: Calculated from Central Statistics Office,
National Accounts 1980/81.

tenance purposes are reinvested in crop cultivation. At this stage of development in rural Botswana few other profitable activities exist in which to invest. Here is then another reason for combining crop cultivation with other economic activities. *It may thus be argued that not peasant but multiactive agricultural producer at the general level and multiactive peasant-cultivator at the more specific level are the appropriate terms to denote the major part of the agricultural producer households.*

MULTIACTIVITY AT THE HOUSEHOLD AND INDIVIDUAL LEVELS

Several of the mechanisms in the evolution of Botswana touched upon in chapter 8 together with the problem and lack of change in crop cultivation stand out as explanations for the commonness of multiactivity at the household level. The multiactive households will be further discussed after a few remarks have been given on the group of households that have become less multiactive in the last few years. *In Letlhakeng there has been a significant increase in agricultural labourer households.* such households represent what has here been called drop-out. Most of them were earlier engaged in (own) crop cultivation. *They consist of female households only.* The existence and increase of this group of households signify a process of "proletarianization". In Tutume this process is not evident from aggregate data. Nonetheless, when the female households are looked at separately, *it is clear that also in this village some of these households drop out of crop cultivation (Wikan 1981).* Fortmann (1981) reports that female households are twice as often not ploughing than male households in rural areas of Botswana. *Women with cattle are, however, equally likely to plough as men. Drop-out is thus explained not by being a woman but by being without cattle.* The main explanation behind this is the necessity to sow with the first major rainfall (at least 25 mm). Lack of own draught-power means that a household has to wait until some of those owning cattle have finished ploughing. *Women with cattle can furthermore obtain male labour by lending draught-oxen in return. Male labour is otherwise difficult to obtain at peak agricultural times. The data available indicate that even absent worker female households that receive relatively much remittances, may not be able to continue with crop cultivation because of this problem of draught-power and lack of male labour.*

The most common combinations for those households with two income sources are included in table 27 and those with three (or more) in table 28. *The typical combination is peasant production and wage work.* External work is more usual than work in the village. Many households also combine peasant-cultivation, wage work and self-employment (mostly beerbrewing). It should be mentioned that beer-selling seldom is a regular activity. This applies particularly to multiactive households. Furthermore, *it is* important to note that only those household members who *work* elsewhere and *send money* back home, are included. Of the unmarried children staying elsewhere (the married ones are excluded from the study) and who have work, about two-thirds send money to their parents in Tutume in 1980. The figure for Letlhakeng is 50%. There is a positive tendency but not a statistical significant correlation between level of living of the households and whether or not the children send money. The impact of remittances from children working elsewhere is thus not as high as may be thought.

Table 27. Types of multiactive peasant households. Combinations of two income sources. Letlhakeng and Tutume. 1976 and 1980. Percent of all households.

	Letlhakeng		Tutume	
	1976	1980	1976	1980
Peasant cultivation				
+ external wages	6	9	19	19
+ local wages	7	3	7	5
+ beerbrewing	10	3	12	12
+ other self-employment	1	2	4	1
+ agricultural labour		1		
Peasant animal husbandry				
+ external wages	5	3		
+ local wages	3	1		
+ self-employment	1	2		
+ agricultural labour		4		
Total	33	28	42	37

Table 28. Types of multiactive peasant households. Combinations of three income sources. Letlhakeng and Tutume. 1976 and 1980. Percent of all households.

	Letlhakeng		Tutume	
	1976	1980	1976	1980
Peasant cultivation				
+ external wages and local wages	1	2	6	4
+ external wages and beerbrewing	9	1	15	20
+ other combinations	14	5	9	6
Total	24	8	39	36

Note. Those households with four or more sources have been included in this table. Their three main sources have then been taken.

To combine activities at the individual level is not common. In Letlhakeng only about 5% of the households have a member who combine wage work with cultivation. This is somewhat more usual in Tutume, where also the category worker - herdsman/rancher exists (table 29).

Table 29. Types of combination of income sources at the individual level. Letlhakeng and Tutume. 1976 and 1980. Percent of all households.

	Letlhakeng		Tutume	
	1976	1980	1976	1980
Peasant cultivation				
+ wage work	5	4	19	17
Peasant animal husbandry				
+ wage work			4	13
Total	5	4	23	30

Note. Only married people are included, i.e. children and grandparents are excluded.

In about half the households in the two villages, that neither had labour migrants nor shuttlers at the time of the study, the husbands had experiences from labour migration to South Africa (table 30). Nearly all of these men became occupied with agriculture after settling at home. *The earnings from labour migration have evidently not led to a modernization of agriculture.* Labour migration constitutes instead a way of securing a minimum life standard without any possibility for saving and accumulation. Colclough and Fallon (1983) have calculated from RIDS-data that households with labour migrants in South Africa had on average a lower level of living (PDL-values) than the overall rural average.

Table 30. Husbands staying at home and their work experience in South Africa. Letlhakeng and Tutume. 1976 and 1980. Percent.

	Letlhakeng		Tutume	
	1976	1980	1976	1980
Mining	46	55	25	14
Other	3		11	34
Unknown				12
Never worked in South Africa	51	45	64	40
Total	100	100	100	100

On the background of what is said above it is important that a large proportion of the young men (15-34 years) work outside their rural home area. The figures were 68 and 44% for Tutume and Letlhakeng respectively

(excluded from the calculation are married men, who are accompanied by the wife, and those who are schooling). The main reason for the difference between the two villages rests on the fact that nearly all labour migrants to South Africa from Letlhakeng work in the mines. In 1976 the mining companies in South Africa decided to give priority to South African black labour to contribute to a reduction in unemployment regarding this group. It thus became difficult for Batswana to renew contracts with South African mining companies. This led to a higher than normal return of labour migrants to Letlhakeng during the 1976-1979 period. A similar problem was not encountered by most labour migrants to South Africa from Tutume because they primarily work in construction (building and painting).

CONCLUSION

The natural conditions for *crop cultivation* in Botswana are in normal years of amount and distribution of rainfall fair regarding dryland, semi-arid farming. The natural conditions cannot generally be said to impede a modernization of crop cultivation. This conclusion is substantiated by the fact that *a small number of agricultural producers outside the freehold farms have become farmers and especially multiactive farmers during the last few years*. Furthermore, there are some pure peasant-cultivators who have adopted new methods of cultivation such as "pure broadcasting", and who by some would be called emergent farmers.

Botswana is well suited for *cattle ranching*. The situation today is that *a few rich households (rich even by Norwegian standard) rely only on ranching as a source of income or in combination with work or business in urban centres*. This group of households will probably increase absolutely. There will be a relative increase in the not so rich pure rancher and multiactive rancher households. This change will be furthered not least by the new

land tenure system for grazing land. Since cattle still are essential for ploughing in Botswana, the recurrent droughts become an explanatory variable for drop-out of agricultural pursuits through the impact on cattle ownership distribution. In Letlhakeng, where droughts are usually more severe than in Tutume, nearly half of the households do not own any cattle at all. In Tutume the figure is only 9%. Particularly the drought from 1961 to 1966 took a heavy toll on the cattle herds in the eastern more populated part of the country. Many of the big cattle owners were able to take most of their cattle further west and even to drill new boreholes, thereby saving them. The smaller herd owners, especially those having only a few heads of cattle, lost all. Such households are now forced to borrow or hire cattle for ploughing. 42% of the cultivating households in Letlhakeng and 19% in Tutume rely solely on borrowed oxen for ploughing. Since female households have no *male* labour to offer in return for assistance in ploughing, they find it difficult even to hire male labour because of the general lack of such labour in the field areas. This is the main problem expressed by the agricultural producers in Tutume. In Letlhakeng unfavourable natural conditions are somewhat more often mentioned (Hesselberg 1982 a). The opportunities for labour migration earlier and shuttling today have given particularly men an alternative way of acquiring an income. The high percentage of multiactive households in the villages pictures this situation well.

Population growth (presently probably at 3.2% per annum)¹ can neither be said to have been instrumental in bringing about changes in the agrarian system nor in creating a process of drop-out as is the case in many parts of Asia and Latin America. The reason for this is that whenever the fertility of the soil in a field was exhausted, a movement to new land was possible for most agricultural producers in Botswana. This may change in future with higher investments such as wire fencing. *It may thus be concluded that the price-squeeze, that is, world inflation on basic consumer goods, has forced rural households to continue to send members for work to South Africa or increasingly to the new towns in Botswana.* In a few

¹ The annual population increase was 4.6% from the 1971 to the 1981 census. It is, however, likely that undercounting took place in 1971 (Central Statistic Office, Country Profile 1982).

cases the fundamental peasant dilemma has been temporary "solved" by a reduction in level of consumption. An impoverished group of households, the destitutes, has been created. One may argue that this situation has been allowed to persist because of the lack of government intervention in the form of subsidies to crop cultivation. Such subsidies, if adequate, would probably have provided sufficient prospects for improved incomes from agriculture which would have increased the need for more male and female labour in this sector at the present stage of the development of the productive forces.

There is sense in describing the agrarian situation in Botswana as "*delayed transition*": The uneven productivity of the various economic activities and between agriculture in Botswana and in South Africa both make wage work in mining and in other modern activities relatively more remunerative than agriculture (although the wages do not completely follow the relative productivities at any one time). The results are labour shortage in agriculture and competition on the urban food market. The latter is hard to win both for pure peasant-cultivators and multiactive peasant-cultivators in Botswana. Accordingly, *the societal evolution of relations with South Africa and the international price structure are together with the recurrent droughts (leading to high risk aversion behaviour) the main explanations for this "delayed transition"*. An aspect of the recurrent droughts has the opposite effect through the creation of agricultural labourers. This has, however, only happened to a limited degree. In Letlhakeng 16% of the households have at least one member who is an agricultural labourer. The figure for Tutume is 2%. Agricultural labourers may well be more numerous than national statistics signify. However, the reason for the absence of a *large* number of agricultural labourers, is the lack of improved productivity which could have created a larger group of farmers or at least multiactive farmers. Contrary to the common view, *lack of land is not found to be a necessary condition for the creation of drop-outs and agricultural labourers*.

The low need for female labour in agriculture in the present situation gives few options for drop-outs from (own) agriculture but to become destitutes. *The common agrarian transition of improved productivity and/or incomes from agriculture, land grabbing and eviction of tenants who then become urban workers, rural labourers or urban and rural destitutes, has not occurred in*

Botswana in a similar fashion. One finds only part of this process, that is, the creation of poverty and some although few agricultural labourers.

In future, a modernization of crop cultivation and an increase in the number of pure rancher households will depend on the relative strength of the forces behind the "delayed transition". In addition, it may become a problem that the number of people willing to engage in more heavily state subsidized farming in the medium-run, will be low because most households have been *forced by the way* in which the agrarian transition is being delayed, to become multiactive and thus closely linked to urban centres income and cognitive wise.

The *conclusions* on the points established in chapter 6 regarding the essential characteristics of an agrarian transition confirm that agriculture in Botswana is well into such a transition because: *First*, risk aversion is a typical trait of the agricultural production. A modern system of insurance has not yet fully replaced the traditional kinship and tribal rules of redistribution. These rules are moreover no longer ubiquitous. *Second*, crop cultivation is albeit very slowly becoming more modern. This is evident both from the village studies and from national statistics. Yields are not improving on average at national level. This hampers a faster modernization. Cattle rearing will probably become more efficient when the new "commercial grazing areas" become fenced. Still, essential aspects of national agrarian policies have to be formulated in order to reduce the risk involved in agriculture. *Third*, multiactive agricultural producers are not becoming more numerous relatively, they already constitute the typical agricultural household in Botswana. A result is that as much as 58% of the cultivators are estimated by ILO to be female (defined as the one doing most of the work, Dixon 1983). The fact that multiactivity is a major characteristic of the economy at the household level in villages in the country, shows that the peasants do not have "limited wants". Quite on the contrary, they pursue "every" source or niche available to them in order to improve their level of living. To claim that Botswana is exceptional because of the proximity to workplaces in Witwatersrand in South Africa (for instance compared to peasants in Tanzania), is just to underline the above point: *Peasants will not, given the right environment in a wide sense, continue to be peasants.* *Fourth*, there is a socio-economic stratification among the peasants which is primarily based on cattle ownership.

This differentiation has up to now only led to the formation of a very small group of modern agricultural producers. At the other hand, drop-out is already a relatively pronounced phenomenon. The agrarian transition in Botswana is different from the typical European transition in that *drop-out is occurring while few modern agricultural producers come into existence.*

CHAPTER 10

INEQUALITY AND POVERTY

This chapter includes data on inequality and poverty in Botswana. The hypotheses formulated regarding the causes of poverty and their connection with the agrarian transition are then discussed.

INEQUALITY

The changes in level of living, evident from index-values (table 31), show a typical pattern for the Third World: There has been a general improvement but with increasing inequality in Tutume and a stagnation in Letlhakeng. The question posed in chapter 6 has thus been confirmed in this case, that is, *economic growth is accompanied with a wider income gap in a market economy at this level of development.*

Table 31. Inequality in level of living. Letlhakeng and Tutume.
1976 and 1980. Index-values for households.

	Letlhakeng		Tutume	
	1976	1980	1976	1980
10% highest	27	27	25	38
25% lowest	-17	-17	-12	- 9
10% lowest	-18	-18	-15	-12

The main finding when level of living is correlated with "work position" and different categories of agricultural producers, is that *households in the various groups are found all along the rich - poor dimension.* The exception consists of those households that rely only on beerbrewing, agricultural labour or other work for local households, (i.e. the drop-outs). These households are among the poorest. There is in this respect no differ-

rence between Letlhakeng and Tutume. It is interesting to note that no significant difference was found between pure peasant-cultivators and multiactive peasant-cultivators. Of those households that combine 3 or more sources of income, there was an overweight on middle-income households relative to the other categories. The above main finding is substantiated by Colclough and Fallon (1983) who found by calculating on RIDS-data no correlation between income sources and income level of households. As expected, the pattern found among the various categories of multiactive agricultural producer households in the two study villages was that *households combining either local or external wage work with crop cultivation and in addition had a few cattle were relatively well-off*. Hence, it is at this disaggregated level that a pattern emerges. This supports the contention of the present work, that is, that *an analysis of the combinations of income sources at the household level in rural Botswana is essential to arrive at meaningful policies of agrarian change and social development*.

There is a positive connection between household size and level of living. This connection is not very strong. Furthermore, the somewhat higher income among larger households on average does not stem from more crops produced. Since both pure peasant-cultivator and multiactive peasant-cultivator households are larger than average, the possibility of larger households to combine more income sources cannot be the explanation. Moreover, Colclough and Fallon (1983) did not find any correlation among income and household size. It is then most likely that there is an intercorrelation in the data from Letlhakeng and Tutume regarding level of living, household size and cattle ownership. (The correlation between level of living and cattle ownership is significant at the 0.001 level.) To own cattle is undoubtedly the most important rural asset at the household level, and therefore the fundamental factor of differentiation. This is substantiated by the lack of correlation both between level of living and whether the male head or woman in the household is in charge of crop cultivation and between level of living and whether or not the husband is helping in agricultural tasks.

In figures 10 and 11 the distribution of cattle ownership shows a skewed and constant pattern at the national level and a not so skewed but an increasingly more unequal ownership in Letlhakeng and Tutume. By excluding the

Note: Households without cattle are excluded

Figure 11. Distribution of cattle ownership
Botswana. 1975 and 1981.

Note. Households without cattle are excluded.

Source: Calculated from RIDS-data 1976,
Ministry of Agriculture, Agricultural Statistics 1981.

freehold and leasehold farms from a calculation at national level, the Gini coefficient (0.63) is still higher than the one found for Letlhakeng and Tutume. The median number of cattle is 15 in Letlhakeng (i.e. 50% of the households owning cattle have 15 or less). In Tutume the median rose from 15 to 17 between 1976 and 1980. Nationally, the median increased from 16 to 22. Since the drought in the early 1960s, the percentage of rural households without cattle has decreased somewhat. In 1966 49% of the rural households did not have any cattle. The Population Census of 1971 gave a figure of 41%. In 1979 Vierich and Sheppard (1980) estimated the percentage to be 40. The above figures stand in sharp contrast to what Schapera found in the 1940s - less than 10% of the households were then without cattle (Schapera 1947). The concentration of cattle ownership has been particularly pronounced among the very few big owners (table 32).

Table 32. Concentration of cattle ownership. Botswana. 1975 and 1981.

1975

9.5%	of cattle owning households had	50.1% of the cattle
0.04%	of cattle owning households had	3.6% of the cattle

1981

9.2%	of cattle owning households had	54.1% of the cattle
0.03%	of cattle owning households had	14.9% of the cattle

Source: Calculated from Central Statistics Office, RIDS 1976,
Ministry of Agriculture, Agricultural Statistics 1981.

Note. It should be stressed that the data on cattle ownership used, are based on samples taken by the Ministry of Agriculture, and do not include the handful of persons with tens of thousands of cattle.

In 1981 19 "cattle farms" (individual ownership) had 6% of the total national herd. Their herds were on average above 10 000. These big owners are mainly chiefs or relatives to chiefs. Thus, the *initial inequality is a cause of today's inequality*. Since the concentration of cattle ownership has been especially strong among the big owners and the Gini coefficients have not changed significantly even from the late 1960s when it was re-

ported to be 0.69 (sample of only 450 households, Ministry of Agriculture 1971), the many smaller or medium owners must have increased their herds during the good rains in the second half of the 1970s. The relative increase has been in the number of households having 21 to 60 cattle, whereas there has been a relative decrease in the number with 1 to 20. The high concentration regarding cattle wealth is in part due to the purchase of meat by EEC. In 1976/77, for instance, the price on boneless beef that the Botswana Meat Commission (BMC) obtained through the Lomé Convention, was 49% higher than the world market price (Jeske 1978). Massow (1981) maintain that this "aid" to Botswana worsens the skewed income distribution among agricultural producers in Botswana by the way the benefits are allocated among those involved in the cattle sector.

Data is not available regarding income inequality in general at national level. The RIDS-report reveals a Gini coefficient at 0.52 for rural areas in 1975. It is not possible to say whether or not this figure has increased. The figure, which would be higher if urban centres were included, depicts a more skewed distribution than most other Third World countries. There is an increasing gap between formal urban minimum wages and incomes derivable from self-employment, which is mainly agriculture (Lipton 1980). Inequality between those with wage work has increased from 1976 to 1980. The wages for Civil Servants increased with 41 to 50% from the secretarial to the super scale, whereas the "industrial class" (unskilled and semi-skilled) only received a 20% increase. The cost of living index for all items and all income groups rose by 36 percentage-points in the same period (August 1980 = 100) (Directorate of Personnel 1981, Central Statistics Office, Bulletins 1979 and 1982). The skilled workers have thus improved their level of living not only relative to other workers and agricultural producers but as the only group besides big cattle owners also in real terms. However, most urban workers earn too little to support their families on their wages alone (table 33). As much as two-thirds of the sample included in the employment survey in Gaborone in 1981 had wages below the Poverty Datum Line established by the government. This is not directly given in the table since a number of the households below the PDL for a normal sized household have fewer members. However, some households above the line have more members. Since the distribution of household size on income groups is not known, the reliability of the above conclusion cannot be assessed. Furthermore, some scholars maintain that the PDL is set at too high a level.

Table 33. Monthly earnings on average for all occupational groups in Gaborone. 1981.

Pula	0-50	51-100	101-150	151-200	201-300	301-400	401-500	>500	Total
%	6	40	24	11	9	4	2	4	100
Cum. %	6	46	70	81	90	94	96	100	

Note. Poverty Datum Line of a 5 members urban household was P177 in 1981

N = 17 913

Source: Central Statistics Office, Employment Survey August 1981.

Watanabe and Mueller (1984), for instance, suggest that an income of 75% of the PDL cut-off point should be used regarding the rural RIDS. To be on the safe side, one may say that *well above half of the households in Gaborone must have incomes from other sources or from more than one wage earner*. The NMS (1982) arrived at the figure 50% for the towns on average. The question posed was in that survey somewhat more narrow, that is, those households in urban centres having fields, cattle or both in addition to urban incomes.

To sum up, time-series data are not available on income in Botswana in general. If cattle and wages are used as indicators, *inequality has been increasing between 1976 and 1980. Moreover, the inequality was already very high by 1976 compared to other countries, and there are few indications on probable changes in this picture in the immediate future.*

POVERTY

Few households are without any source of income. In Tutume not more than a handful of households depend entirely on handouts from relatives and neighbours. In Letlhakeng the proportion of such households increased from 5 to 8% from 1976 to 1980. Other relevant groups of households to include in addition to these households in order to establish the category *destitute households*, are those occupied with: Beerbrewing only, agricultural labour only, non-agricultural work for local households only and any combination of these activities. Almost all households with these occupations are of the level of living group 3. Those who are not, are excluded from the category destitutes. Table 34 shows that even in this more encompassing category, few households are found regarding Tutume. *In Letlhakeng, on the other hand, poverty is relatively widespread.* The destitute households are the households with the lowest level of living index-values. They may thus be said to be **the** poorest of the poor. As expected, these households consist mostly of female households. In Tutume all of them are female. In Letlhakeng the difficulty of getting work in the gold mines in South Africa has changed this pattern. In 1976 20% of the destitute households in this village had a grown-up male member at home, whereas the figure had increased to 30% by 1980. *The figures nonetheless underline the problems women without cattle in the rural areas have in the agrarian transition during which men increa-*

singly take part in modern economic activities. The main reason for the problems is that women stay back with the children in a *partly* transformed agricultural sector.

Table 34. Destitute households. Letlhakeng and Tutume.
1976 and 1980. Percent.

	Letlhakeng		Tutume	
	1976	1980	1976	1980
No source of income	5	8		
Low remunerative source of income	14	13		
Destitute households	19	21	3	1

Basic poverty calculated by ownership of blankets (table 35) portrays a substantial improvement in this one-dimensional view of "absolute poverty".

Table 35. Basic poverty. Letlhakeng and Tutume. 1976 and 1980. Percent.

	Letlhakeng		Tutume	
	1976	1980	1976	1980
Households with less than one blanket per person	61	13	38	10

Note. Only household members above 5 years staying at home are included.

Although virtually all households in Tutume have income sources other than low remunerative ones, 10% were basically poor in 1980. The categories destitute and basically poor are of course not mutually exclusive. Both measure indirectly "absolute poverty" in a minimum requirement sense. The proportion of *relative poor* increased in Letlhakeng from 31 to 41% from 1976 to 1980. The figures for Tutume were 13 and 7% respectively. (The figures are somewhat different from those given in chapter 7. The reason for this is the need to use different average values in the calculation of the level

of living index. The objective is here to compare levels of living over space and time, and not to use the groups as a dependent variable in analyses. For further explanation see Hesselberg 1984.) The proportion of *only relatively poor* households (relatively poor minus destitute households) has declined in Tutume from 10 to 6%, whereas the figure for Letlhakeng has increased from 12 to 21%. This implies that *there is a considerable difference between Letlhakeng and Tutume regarding poverty in 1980.*

At the national level, the number of poor households has probably increased in absolute and decreased in relative terms during the 1970s. It is now estimated that one-third of the population lives below the PDL (Odén 1981). The PDL is calculated on the basis of minimum food and other requirements according to the age and sex composition of each household in the sample in 1974/75 in rural areas and in 1975 in urban centres (Central Statistics Office 1976 a, 1976 b). There has been no similar investigations later. The standard for the former PDL was set at a minimum standard level, whereas the latter was a little more inclusive. The two PDLs are thus not directly comparable. In 1975 it was found that 45% of the rural population were below the PDL. The figure for the various towns lay between 36 and 47%. Egner and Klausen (1980) estimate that 250 000 persons (30%) would now be below the standard set by the PDL. They further estimate that 15 000 (2%) are "chronic destitutes" (without visible or known means of support).

From the magnitudes of the figures on incomes at different levels, there is no doubt that *poverty in Botswana is of the secondary and not primary kind.* The nutritional standard would be adequate if redistribution were undertaken, although FAO (1977) estimates undernourishment to apply to 36% of Botswana's population in the 1972-1974 period. In fact, Botswana's own agricultural production together with food imports have never in the post-Independence period sufficed to reach a per person dietary energy supply according to requirements (2 320 kcal/person/day, FAO 1981 a). In normal years the daily diet is usually adequate during the rainy season. The food shortage is experienced for many households at the end of the dry season. If rainfall fails, as has happened in 1982 and in 1983, food relief programmes are necessary on a large scale. The government has now taken over the responsibilities that the chiefs used to have regarding drought relief.

In April 1982 President Masire declared Botswana drought-stricken and asked the international community to assist in the most serious drought in 10 years. Next April the President had to appeal for continued support. At the same time he said that the priority task of District Officials would be relief programmes. The drought afflicting large parts of Africa, including most of Southern Africa, which was not the case during the so-called Sahelian drought in the early 1970s, is now considered to be the worst in this century (The Times 27/7-83). It is further reported that deaths related to malnutrition in South Africa have increased sharply. The government of Botswana and other Third World countries are on this background arguing in international fora for the need to devise national and international food strategies which do not depend on short term and costly relief programmes (Daily News 8/7-83). The government's own response was to give P40 per hectare land cleared (maximum 3 ha per household) and 20 kilos of seeds free. Obviously, droughts retard the general development of a country. The positive aspect for Botswana is the attention which suddenly has been paid to the long neglected crop cultivation.

Social development has been favourable in Botswana in the 1970s (table 36). In 1966 half of the children that ought to attend primary school, did so. In 1980 71% attended (calculated from Frøysa 1982). Social infrastructure has evidently improved tremendously. For instance, now as much as 78% of the population live within 15 kilometres of a health facility (Egner and Klausen 1980). The conclusion is that basic social infrastructure has been made accessible to most people, at the same time as inequality and poverty persist. In future Botswana's rapid population increase and young population will probably create problems in maintaining, not to speak of improving, basic health and education which to a large extent have been provided by international aid donors.

Table 36. Selected indicators of social development. Botswana.

	1960	1970	1980	Sub-Saharan Africa (weighted average)	
				1960	1979
Life expectancy at birth, years	40	45	48	39	47
Infant mortality rate, 0/00	115	100	87	38	25

Source: Estimates based on UN Demographic Yearbook 1981, UN Statistical Yearbook 1979/80 and earlier editions. World Bank 1981 b.

CONCLUSION

In chapter 8 it was maintained that poverty did not exist in the traditional Tswana societies although the number and diversity of material goods available to the households were low. Poverty can thus be said to be a relatively new phenomenon. Inequality, on the other hand, existed also in earlier times. This inequality was at a relatively low level. Moreover, the degree of inequality was fairly stable. This is a contrast to the growing gap between groups of people in recent times. Since 1976 the overall degree of inequality is not becoming significantly higher - it is already very high compared to an international standard.

Inequality in Botswana is primarily a question of cattle ownership and to a lesser extent due to well-paid skilled and permanent jobs in urban centres. Both national statistics and data from village studies show that inequality has accompanied economic growth since Independence. The high government revenues from diamond mining and cattle exports particularly in the second half of the 1970s were mostly used for physical and social infrastructure. Productive activities which could provide poor people with an income, did not get a comparable attention. *Poverty is thus a persistent phenomenon in Botswana.*

Is poverty then primarily created indirectly from societal evolution via the agrarian transition? This is an important question because if poverty stems directly from either societal evolution or physical conditions for agriculture, poverty is not likely to be easily alleviated through agrarian policies. On the other hand, if the cause of poverty can be traced from societal evolution through agriculture other than physical conditions, then agrarian policies may be used to combat poverty. It is accordingly an important finding that *poverty in Botswana is still mainly associated with rural areas and agriculture.* It is only to a minor extent created by societal evolution unconnected to the agricultural sector. An example of this latter point is the unskilled casual urban workers without other sources of income who have had a declining real wage. Probably, one-fourth of Gaborone's population escapes poverty because they combine urban casual wages with agriculture. Most with permanent employment find no difficulties in sustaining their families on their increasing wages. The fact that many workers in

Gaborone (table 33) earn less than the HDL is connected to the high prices of living in the capital. Most of these workers cannot be said to be poor.

The physical conditions for agriculture can furthermore not be said to be the leading cause of poverty. No one lack access to land as such. The recurrent droughts, however, constitute a mechanism of poverty creation today. This was not so earlier. Droughts may thus rather be said to amplify the consequences of mechanisms categorized under the societal evolution heading than being an isolated force. Changes in the conditions for agriculture in a narrow sense have neither directly resulted in persistent poverty for a few nor in mass poverty, although some households undoubtedly have become poor through bad harvests from time to time.

The main reason for poverty in Botswana thus lies in changes affecting agriculture brought about by the general societal evolution. First, the terms of trade of agriculture is discouraging peasants from modernizing their production process. The negative trend of prices on agricultural output compared to prices on other products, to wages and internally to the agricultural sector to cattle, creates a negative expectation of possible income derivable from crop production in future. The reason for inflation is not primarily found in Botswana but at the international level. Since Botswana has a modern urban sector dependent on international sources of capital and technology, the country is forced to "import" inflation. The traditional sector in Botswana is thus influenced by the existence of the modern sector. This common situation for Third World countries ought to be ameliorated by government policies toward peasant production, in this case crop cultivation (i.e. mixed farming - crops and cattle together). Second, the preoccupation with cattle, particularly in the 1970s, among those with capital and political power has made agricultural policies generally and subsidies especially clearly biased. Third, the lack of manpower in the rural areas due to the above process, has resulted in drop-out from crop cultivation regarding mainly female households without cattle. Peasant-cultivators become poor when they have insufficient labour, equipment and animals to cultivate. There is thus a skewed ownership of production resources simultaneous with a reduction in traditional mechanisms of redistribution of assets. This reduction has not yet been fully replaced by national agrarian and other policies. In particular, lack of labour to clear new land becomes a constraint on agricultural production when the system of mutual help is less common than it used

to be. This constraint may be decisive for many households because fertilizers and manure are not generally used. The wages poor pure peasant-cultivators can afford to pay hired labour are too low to induce an adequate supply. In Barolong, for instance, the farmers take about all available labour because they can pay somewhat better wages.

If the finding is correct that poverty is mainly created by societal forces through their impact on agriculture, agrarian policies counteracting such adverse forces may have a decisive effect on poverty alleviation. It is accordingly of interest to discuss the most recent policies in this respect.

CHAPTER 11

AGRICULTURAL DEVELOPMENT

In this chapter the main efforts with a potential impact on agricultural production are briefly described. Agrarian policies are then discussed in view of attaining both improved production, levels of living and employment.

POLICIES AND PROGRAMMES RELEVANT FOR AGRICULTURAL DEVELOPMENT IN BOTSWANA

Inequality is not stemming primarily from wage employment or business but is inherent in the agrarian sector. The inequality among agricultural producers has, however, been reinforced by the growing modern urban sector because those who obtain higher level employment have relatively high education which is mostly found among the wealthy peasants, farmers and ranchers. In Botswana there is accordingly a wealthy elite that combine urban employment with agricultural production. Moreover, since poverty is *still* mainly a rural phenomenon, inequality and poverty may yet be ameliorated by attacking the agrarian sector. If this is correct, Botswana has, in contrast to many other Third World countries, a rather unique possibility to improve the level of living and future prospects of the majority of its population. *The agrarian policies should hence have the twin objectives of improving total agricultural production and increase employment and income of those engaged in agriculture.* The contradiction which is often seen between higher production and higher employment must thus be solved. This may be possible in Botswana, not as a permanent adaptation but as a solution chosen until enough workplaces can be created in other sectors of the economy. The solution rests on the among scholars in Botswana commonly held view that *a larger crop output primarily is a question of better condition of and access to draught-oxen that plough larger fields. Mixed farming is then the answer.* This was the traditional farming system. Oland (1982), for instance, sets the figure of the area of an individually fenced mixed farm to 100 hectares, which would allow a team of 8 draught-oxen to graze adjacent to the fields. Land is available for such in Botswana large farms, although resettlement would be necessary as well as a shift away from a pri-

marily village based settlement pattern of agricultural producers. To *re-store the ready access to draught-power inherent in the traditional farming system, means that the skewed ownership pattern of cattle has to be tackled.* To subsidize tractors, so that the technology becomes modern on a wide scale, would, if successfully adopted, imply drastically improved land productivity. The total production would thus soon exceed the need of the nation for crops. This might to some extent be countered by cultivation of fodder crops for livestock. To find export markets would not be easy for Botswana. (Since 1981 EEC has even taken the share Botswana earlier had of the Angolan meat market, Clay 1983.) To fulfill the objective of employment in the short and medium run animal draught-power should be applied.

Moreover, spatial arrangement constitute essential components of any strategy for agricultural development. The plans will furthermore be assessed in view of how they promote or impede an efficient and rewarding mixed farming.

Tribal Grazing Land Policy

TGLP was formulated in a White Paper in 1975. The paper was based on Chambers and Feldman's consultancy report of 1973. The main idea was to zone Botswana's tribal land into "commercial" and "communal" areas. The category "reserve areas" was also suggested, but has never been applied. Instead some land (25% in 1980) is "not yet zoned". Commercial ranches with minimum 400 cattle for individual or group management against a minimal rent after a grace period of 3 years comprise 12%, whereas "communal areas" cover 30% of Botswana (Sandford 1980). The "communal areas" represent 8 kilometres radius circles around villages. This is far from enough to establish 100 hectares mixed farms. The objective is to get the large herd owners and groups of medium herd owners to move their cattle away from the often overgrazed village-close lands (Ministry of Agriculture 1981 c). Furthermore, the management practices in the "commercial areas" should improve so as to avoid a further degradation of the range. In short, the problem of the "commons" was intended to be solved without a change to private property but to

a de facto exclusive right of usage. A number of factors are responsible for a non-attainment of these objectives as well as the explicitly expressed view that the reform would reduce inequality of cattle ownership:

1. No maximum cattle quota was established for the "communal areas". The large cattle owners still have part of their herd in the "communal areas". And when the grazing deteriorates in the "commercial areas", they move their cattle legally to the "communal areas". Thus, overgrazing is not alleviated in the "communal areas". On the contrary, the backflow of cattle from the ranches, which was unexpected, seriously threatens the "communal areas" (Behnke 1982).
2. Group ranches have not been established. This is due both to unwillingness on the part of the peasants and to the power of the large owners. The medium and small owners thus have to keep their cattle in "communal areas" and are no longer allowed seasonally or when drought comes to move their cattle to the now "commercially zoned areas". The group ranches that have been tried, have been unsuccessful and no longer exist (Sandford 1980).
3. To many's surprise, the "empty" areas in which commercial ranches should be established, contained cattle posts, permanent living agricultural labourers and even some peasants. Eviction of people and cattle to the already overcrowded "communal areas" has then occurred to some degree (Bro International 1982). In fact, in some "commercial areas" cattle numbers ought not, as stated in the plans, to be increased but should instead be reduced to maintain permanent use of the range. Commercialization has thus not led to a reduction in overgrazing, the opposite is true (Hitchcock 1980). Grove (1982) confirms this by stating that overgrazing often occurs on individually owned land, not only on communal. The conclusion is that there are no unoccupied areas suitable for ranch development any more in Botswana, that is, grazing land is now becoming a scarce resource. This has slowly been realized by planners and ranchers alike. A report in the Daily News (28/8-83) states that the implementation of TGLP no longer has popular support in Kweneng District. The reason for this is said to be that the district does not have enough land to accommodate the policy. Another conclusion which has been drawn from the experiences of the commercial ranches so far, is that no improved management practices have been adopted. At present it may be said that Botswana appears to have no capacity to control its cattle herd size by managed offtake rates. The number of cattle is thus largely a function of the weather, that is, controlled by drought. This leads to the final conclusion that the "communal areas" under the present circumstances cannot be efficiently managed. More-

over the abolition of communal rights would serve in this situation to widen the gap between rich and poor, while offering no protection to the natural resources. *Again we see the negative impact of heterogeneity, this time internal to the cattle sector. By dividing grazing land between a modern and a traditional land tenure system, inequality and poverty are created.*

The solution to the problem of the "communal areas" has by some scholars been seen to lie in reviving part of the traditional allocation and management system (Ministry of Agriculture 1981 c). Fosbrooke (1971) maintains that it is the abandonment of the traditional system and the subsequent chaos in the utilization of natural resources that constrains the maximum tapping of the environment. Grazing control existed 40 years ago, as reported by Schapera. The traditional local institutions such as the Kgotla (general meetings of wards) chaired by traditional chiefs or headmen, would then again have to solve disputes (Odell undated). The land "belonging" to villages were earlier divided into grazing territories, "dinaga", which were watched by overseers, "modisa". The "modisa" used to be appointed by chiefs. This system is said to have been operating efficiently (Hitchcock 1980). There are, however, quite a number of difficulties involved with a return to this system now. This applies not least to the problem of defining the land "belonging" to various villages. But, the main merit in this system, that the number of cattle in "communal areas" could in fact be controlled, makes it *worthwhile to review and include traditional experiences in the discussion of tomorrow's solutions to communal land tenure.* Undoubtedly, land use planning has now come to prominence in the debate on village-level development in Botswana.

Arable Lands Development Programme

ALDEP was initiated in 1978. The objective was to improve the productivity of and incomes from cultivation. On the rhetoric side, the government showed hereby a commitment to a smallholder agrarian strategy. A number of schemes to assist cultivators were started of which the most important ones have been mentioned previously. It has proved difficult to get the peasant-cultivators to adopt the technology package recommended. So far, the programme has not been a success (Purcell 1982). It was therefore at the end of 1983 changed from a primarily loan to a 85% grant and 15% downpayment scheme (Daily News 29/12-83). Alverson (1979) maintains that the cultivators are not ignorant

of the recommended practices (early ploughing, timely row-planting, adequate weeding and use of fertilizers, certified seeds and disease control). Moreover, they can often afford to adopt them. The reasons they give for non-adoption are, however, empirically well founded. For instance, the recommended winter-ploughing is said to stimulate growth of weeds which makes the plough-planting in summer more difficult. Fertilizers are too expensive, that is, the increase in yield does not cover the cost, mainly because of a low humus content in the soil. Broadcasting is cheaper than row-planting, and gives the same yield (Lightfoot 1981).

ALDEP has evidently not managed to attack the root causes of the low productivity in crop cultivation. Nowhere in the numerous ALDEP-papers is combination of income sources at the household level mentioned. *It seems that the planners have assumed that agriculture is the sole or main occupation of the peasants.* This is, as shown, incorrect. *Furthermore, the deficit nature of crop cultivation is not taken as a fundamental premiss on which to plan.* *These two related facts of agriculture in Botswana must, in my opinion, be the very starting point for formulating agrarian policies*

Communal First Development Areas

CFDA is another channel for allocating funds from the modern urban to the rural sector. The initial work on the programme was started in 1980 and is carried out by a special unit in the Ministry of Finance and Development Planning (1982 h). It is neither directly coordinated with TCLP nor with ALDEP. Its area-specific approach makes it complementary to these two programmes. The four main principles of the programme are: 1. Each communal area has a specific resource base which makes different plans necessary for raising production (also non-agricultural) and generating employment. 2. Projects that receive central government funds ought to be integrated inside geographical areas. 3. Planning and implementation of integrated projects should be decentralized. 4. Social justice orientation is essential. This will be achieved by focussing on the poorer households. Agriculture is seen to be the key productive sector. Employment outside agriculture is deemed necessary to attain the social justice principle. The usual "shopping list" approach to rural development is to be avoided by especially looking

at linkages between sectors, and thereby arrive at combining individual projects so as to make them mutually reinforcing. Village-level institutions shall in cooperation with district councils implement the integrated projects. Umbrella-funds have been allocated by the government. The programme is at present designed and carried out on a pilot basis in selected areas. The experiences so far is not altogether negative. Some success have been achieved in erection of drift fences between grazing and arable land, in building dipping tanks for cattle and in forestry. The constraints are, however, fundamental: 1. The shortage of skilled manpower seriously impede adequate planning, and thus the use of the available although limited funds. 2. The coordination of the various sectors at central government level, which is a must for implementation of integrated plans in specific relatively small geographical areas, is problematic. 3. Communication between central government and villages is very difficult but essential if suggestions and local-level knowledge are to reach planners. It is still too early to say how important these constraints are.

Financial Assistance Policy

FAP was implemented from 1982 (Inter-ministerial working group 1982). It consists of, among other things, a grants scheme to assist primarily small-scale productive activities. Priority is to be given to activities which either reduce imports or create exports. An emphasis is placed on activities in rural areas. Foreign investors are also allowed to benefit from the scheme, but only regarding "medium" and "large" activities. The overall objective is to promote employment and to diversify the economy. The rationale of the scheme is the small effective market in Botswana and a relatively un-trained labour force which make initial costs of private production higher than competitors in neighbouring countries. There is then a clear case for government support to productive activities. The only sectors which are excluded from the scheme are cattle and large-scale mining. Crop cultivation is again seen as a main sector for the scheme as well as activities that may support crop cultivation. To identify and review the latter type of activities is a major constraint because of the lack of skilled manpower. Nonetheless, the formulation of this and other schemes show the present government's willingness to support crop cultivation and the rural areas. At the same time as it reveals the earlier neglect of this sector and area.

VIEWPOINTS ON AGRARIAN POLICIES IN BOTSWANA

Several of the arguments on African agriculture in general are relevant regarding Botswana. This should be evident from the previous chapters. Key explanations in Botswana are the government's preoccupation with cattle and lately also with mining to the neglect of crop cultivation (Colclough and McCarthy 1980, Roe 1980, Holm 1982, Kerven 1982) and the high exchange rate allowing for relatively cheap imports of food. Picard (1980), for instance, shows that because of the bureaucracy's socio-economic status, that is, the combination of income sources at household level, those who decide on agrarian policy are the ones who have the most to gain from the policy. Not surprisingly, the factor of lack of male labour in rural areas is not mentioned in reports from international organizations and only pointed at by few scholars. A probable explanation is that in order to discover that agriculture and especially food production often is primarily a female undertaking, one has to conduct a study at the local level. The finding that multiactive cultivators predominate in Botswana, but certainly also elsewhere in Africa, may change the view on solutions. *The solution may in fact rest in planning on the basis of a modernization of the multiactive cultivators' production.* The main reason for doing this is the difficulties inherent in modernizing agriculture in a specialized farm sense in the immediate future. The difficulties consist of expensive imports of particularly technology and fertilizers, training of peasants and funds for subsidizing food production in Botswana for the urban population. Furthermore, one may take the view that political changes in favour of larger investments in crop cultivation are unlikely because of the "pressure groups" with power at present (i.e. groups with interests linked to either cattle, mining or urban wage rates).

It would probably not be sufficient only to improve the credit facilities for female cultivators and multiactive peasant households. Some of the macro solutions pointed at by international organizations and scholars are also necessary to change the relative prices more in favour of agriculture. In Botswana this has, as shown, been done through aid regarding cattle but not concerning crops. As mentioned, to find export markets for crops would not be easy. One reason for this is that the effective world market for agricultural goods is already well saturated. The prospects in Botswana for an agricultural export-led growth, generally advocated by the World Bank

(1981 a) for the 1980s as a long-run transformation and a prelude to industrialization, is in my opinion non-existent. Although an export type of agriculture is not aimed at, a devaluation (of the overvalued national currency) would improve the incentives for peasant-cultivators to increase the production. The argument raised against devaluation is that the economy needs cheap urban labour, for whom it is necessary to provide cheap food, in order to help industrial growth. Higher producer prices through subsidies (just to raise prices would hit the poor non-cultivators) are also necessary. The problem with subsidies is that it is difficult to avoid that the benefit only goes to a few big farmers. A country with (mass) poverty and few natural resources will find it difficult to raise enough money through taxes to give adequate subsidies. In Botswana the financial resources obtained from diamond mining could have been used to increase the negligent subsidies given at present. A further means of improving agricultural production is privatisation of land which would give the many cattleless households security for loans. However, the common experience of debt accumulation and eventual sale would certainly take place in Botswana as it has elsewhere. The counter argument is that a strategy based on private production factors should now be tried since strategies with various types of communal ownership of land have been a fiasco nearly everywhere. One may then expect that landlessness will occur after a while in the places in Botswana where good crop land is becoming scarce. A ceiling on ownership should therefore be imposed already at this stage. As Payer (1978) puts it- "There is no surer way of depriving a peasant of his land than to give him a title to it which is as freely negotiable as a bank note."

Although both the Lagos Plan and the World Bank's "Berg report" focus on improving the conditions of the private "smallholder" through aid, they do not by this term imply the small peasant, that is, the subsistence and sub-subsistence peasant. These latter groups are the poor in Africa, in contrast to Asia and Latin America where the major hungry poor group is the landless (agricultural) labourers. It thus seems essential, if the twin objectives of increased food production and alleviation of poverty are to be reached, not to plan agricultural development in isolation from other sectors. The fact that the target group combines various sources of income, are multiactive, and that they are sub-subsistence producers should be

taken into consideration. The increasing number of multiactive farmers in developed countries is here an interesting parallel. Favourable policies towards multiactivity can be found in many European countries today (Laurent 1982, FAO 1982 a). In, for instance, Norway and Switzerland a long winter is used as an explanation for the support given to multiactive farmers. The reason for doing so is twofold: To improve the level of living for the farmers and to increase the self-sufficiency in food at national level. To conserve the existing main pattern of settlement has also been stated as an objective. Some European countries had hostile policies towards multiactivity around 1960. This has now changed. In West-Germany, for instance, multiactivity is now even looked upon as a key point in the new agrarian policy.

Even if the objective is limited to increased food production, it is uncertain that an improved terms of trade for agricultural goods will be sufficient in Botswana. The agricultural producers are price responsive but the technology level is so low that a fundamental change is probably necessary. A tractor cannot be repaid with a continued use of the present level of water and fertilizers. To provide most agricultural producers with a "full package" will, however, be too costly for most African governments. *New field tested practices which are inexpensive and in the "front" of the existing technology level may provide a medium-run answer.* It must be remembered that *a large part of the peasants in Botswana continue with agriculture because of lack of alternatives. For them agriculture is no longer a "way of life", it is a way of survival, and they are not willing to take more than marginal part in the market economy to satisfy small needs at the present conditions of production.* Some few pure peasant-cultivators, those that would qualify as smallholders in the World Bank terminology, take part on a bigger scale but few of them invest and accumulate in crop production in Botswana. The responsiveness of agricultural producers regarding the good prices in the cattle sector and of the relatively high sales of maize are evidence of the existence of a general price responsiveness. In fact the relatively large subsidies given to the cattle sector has shifted resources away from peasant production and thereby from the production of cheap food for local consumption. It is therefore highly relevant that, as the French Minister for development cooperation stresses, a priority must be for peasants to reconquer the domestic market (Ideas and Action, no. 2, 1983). Hinderink and Sterkenburg (1983) say it in this way: "The empha-

sis on the role of individual rural cultivators seems the only way to prevent the disaster proclaimed by so many prophets of doom."

The dilemma outlined above consists in short of increased agricultural production through modernization of a few large farmers and the difficulties in feeding the growing urban population with locally produced food through improved peasant cultivation.

A consequence of the former strategy is likely to be to deprive subsistence multiactive peasant-cultivator households of fertile land, which would press most of them out of crop production altogether.

Should an agrarian policy envisage the growth of a group of landless labourers, that is, a group without the security of right of access to land, in a situation where work in industry and services is far from adequate? One may ask whether the agrarian policy adopted should take account of and *change* according to the progress of industrialization and hence of secondary and tertiary employment opportunities. This is what has taken place in China during the last 20 years. The assumption that privatisation of land leads to higher productivity is widely accepted *a priori* in Botswana. Lightfoot and Bennke (1982) find that this may not be so because gaps in knowledge and the complexity of causal interrelationships. Available data, they maintain, are insufficient to verify but indicate that there is no difference between the productivity on private and communal land when other things are held constant.

CONCLUSION

If the objective is that growth of agricultural production and poverty alleviation should be solved together directly, a peasant path to agricultural development in contrast to a "capitalist path" should be adopted in Botswana in the present circumstances. The government must then actively intervene at various levels to, among other things, counteract the continuous price-squeeze. The model would thus be a gradual modernization, parallel to economic differentiation of the national economy, of moderate-sized family farms of which a substantial part has non-agricultural incomes as well. The present lack of part-time employment in rural areas is obviously an essential cause of poverty but also hinders the above suggested strategy. To counteract the urban bias in official and private investment patterns is therefore important. Furthermore, research has to be

conducted to create low-risk technical packages appropriate for poor multi-active peasant-cultivators cultivating in semi-arid rainfed areas. Such packages are not available at the moment (Lipton and Shakow 1982). It should also be underlined that the yield potential of traditional techniques is far from reached by most peasant-cultivators in Botswana. A package should be made to suit the special situation of female households if agriculture is to feed both the peasants and the urban population, although it is doubtful that agricultural production can be much increased through women's work *alone*. Most women already work 10-12 hours a day (Henn 1983). Female households lack the time, the assistance and techniques to achieve an expansion in their food production. Cash incomes from surplus food sales and from other economic activities rural women have, bring such low returns that investments in food production are not feasible. This is a resource problem and neither a cultural nor psychological one. It is accordingly of *utmost importance to make arrangements for men to put in more work in agriculture*. Peasant production of the "multiactivity variant" should be given a new "lease of life". *The worker-peasant household should be stimulated and given better opportunities*, for instance, through leave for workers at peak agricultural periods. In fact, the reality seems to be that the only hope for a continuation of agricultural production by many households lies in combining non-agricultural sources of income, that is, in labour migration and increasingly in shuttling which paradoxically is one of the main reasons for the underdeveloped state of agriculture today. Such a strategy would generally be feasible in Botswana because men and women do neither traditionally have separate plots of land nor separate economies in general. To be successful, a primarily female crop cultivation would in addition to male assistance regarding certain limited tasks need an efficient marketing system with adequate guaranteed prices.

The agrarian policies and programmes adopted by the government of Botswana compare unfavourably with the problems in agriculture discussed in previous chapters. Moreover, they are based on an insufficient knowledge and understanding of the economic and social situation of the agricultural producer households. The efforts to a solution stressed in the international debate on agriculture in the Third World are also not entirely convincing. Although it is not the point of this work to make a detailed model for increased food production, a few necessary conditions for such a model have been underlined above. The most general observation is the must to plan on the basis of the existing ubiquitous category of multiactive households.

CHAPTER 12

RURAL SETTLEMENT PATTERN

In this chapter the relative magnitudes of various settlement categories found in Botswana have been calculated for 1971 and 1981 to identify a possible tendency of a shift from a village towards a field area based agricultural settlement pattern. Letlhakeng and Tutume are then used as cases. A discussion is thereafter made of "hamletization" versus a strategy for a dispersed settlement of agricultural producers. The discussion is conducted by distinguishing between types of peasants and farmers and by assessing the impact on agricultural development. An example from Kweneng District is furthermore included to show a possible contradiction between the government's efforts to regulate cattle grazing and to develop the communal areas. Finally, a conclusion is made about the place Botswana's rural settlement pattern has on figures presented in chapter 5.

In Botswana water availability, agriculture and settlement are highly interdependent. The earliest settlements occurred where perennial water was obtainable (The Botswana Society 1982). Crop cultivation could normally be carried out in the vicinity of these water points. As the population of the settlements grew, fields were cleared further away. Gradually a number of areas without water points in the dry season were occupied seasonally. Some of these areas, especially those close to pans, were settled permanently when wells were dug. Some cultivators also settled permanently in field areas without perennial water. Thus, it is common today to find field areas comprising both permanent and seasonal settlements. Although most of these areas now rely on boreholes for water, the distance to fetch water is often long and implies several hours work for women. Those peasant-cultivators who have cattle, often transport water in drums on sledges. In addition, the boreholes drilled for cattle watering during the 1960s and 1970s attracted some few settlers. There exists accordingly also small so-called cattlepost settlements where crops are cultivated on a very small scale.

The seasonal migration to the fields was a tradition among the Tswana. It was also a dominant feature of the agrarian structure together with the cattlepost. The villages in which most lived during the dry season, constituted a hierarchy with a primate tribal headquarter at the top. Some of the tribal headquarters had more than 10 000 inhabitants in the beginning of the last century. For instance, Molepolole, the headquarter of the Kwena tribe, had a population of about 10 000 already in 1750 (Campbell 1982). In 1971 the population was 9 448. The reason for the decline in population was the Zulu wars and ensuing raiding and warfare throughout Southern Africa, the so-called Difaqane (1823-1837). The Difaqane had a disastrous effect on the well-established tribes in Botswana (Ngcongco 1982). Several tribes were split and pushed (primarily by the Ndebele) into and west of the Kalahari. The territories lost were later regained. The typical settlement pattern now became a more smooth hierarchy of villages size-wise. The reason for the existence of villages in contrast to dispersed settlements was mainly the want of tribal authorities for political control. Strong chiefs and headmen used to punish those who did not return to the village after harvest (Jones 1982). The typical rural settlement and land-use pattern that evolved from this basis and the later gradual reduction in the chiefs' authority are visualized in figure 12.

There are four main settlement categories in Botswana:

1. *Towns*. The urban population is administratively defined in national statistics in Botswana.
2. *Agrotowns*. They consist of the tribal headquarters that have more than 10 000 inhabitants de facto in 1931. This category is established here, and is not used in statistical publications in Botswana.
3. *Villages*. No size or functional criterion are used to identify villages. The census administration and district officials have decided in each particular case whether a settlement is a village or should be included in the category "other settlements", that is, mainly dispersed farms. The smallest village has a population of 27.
4. *Individual farmsteads and small groupings of households*. This category consists of individual farmsteads and small groupings of households.

Figure 12. The typical rural settlement and land use pattern in Botswana.

From table 37 it is evident that the relative size of population in the category other settlements has declined between 1971 and 1981. Although the population of agrotowns are stable on a relative basis on average for the country as a whole, the agrotowns gain relative to dispersed settlements in districts that have agrotowns. Villages also gain in population in many districts. In the more peripheral areas such as Chobe, Ngamiland and parts of Central District, where there are no larger villages, dispersed settlements gain relatively. It is difficult to say from the available census data that an increased permanent settlement at the fields is taking place. Often the smaller villages lie close to the fields and many areas included in "other settlements" consist of

Table 37. Population distribution, 1981 census.
1971 census in parenthesis. Percent.

Districts	Agrotowns	Villages	Other settlements	Total	Total population
Barolong		88 (86)	12 (14)	100	15 471
Chobe		65 (82)	35 (18)	100	7 934
Ghanzi		48 (45)	52 (55)	100	19 096
Kgalagadi north		63 (56)	37 (44)	100	24 059
Kgalagadi south		71	29	100	8 924
Kgatleng	41 (22)	34 (28)	25 (50)	100	44 461
Kweneng	18 (14)	33 (32)	49 (54)	100	117 127
Ngamiland north & delta		34	66	100	9 684
Ngamiland south	22 (29)	30 (30)	48 (42)	100	68 063
North-East		77 (34)	23 (56)	100	36 636
Ngwaketse	19 (15)	35 (25)	45 (60)	99	104 182
South-East	42 (40)	37 (32)	21 (28)	100	30 649
Tuli Block			100 (100)	100	3 872
Central					
Bobonong		45	55	100	46 436
Kalahari game reserve		31	69	100	972
Letlhakane		50	50	100	26 406
Mahalapye	26	36	37	99	79 001
Serowe	26	33	41	100	92 227
Tutume		49	51	100	75 277

Table 37. Cont.

Towns	Total population 1981 census	Annual average growth since 1971. Percent.
Gaborone	59 657	13
Francistown	31 065	5
Selebi-Phikwe	29 469	20
Lobatse	19 034	5
Jwaneng	5 567	- ¹
Orapa	5 229	16
Total urban population	150 021	13

¹ Jwaneng is a mining town only and did not exist in 1971.

Total population distribution 1971 and 1981. Percent.

	Towns	Agrotowns	Villages	Other settlements	Total
1971	7.3	13.1	34.2	45.4	100
1981	15.6	13.7	34.7	36.0	100

Note. Central District (population 189 317 in 1971, excl. of agrotowns) is not included since the boundary changes of enumeration do not allow a comparison with 1971. The same is the case with Ngamiland north & delta, Tuli Block and Kgalagadi south. The time the census was carried out was in the agricultural off-season.

Source: Calculated from Central Statistics Office 1973, 1983 a, 1983 b.

nucleated settlements with a population above 100. Since no functional definition or degree of nucleation has been applied to define a village but the common opinion among administrators used, table 37 does not reveal a possible trend to settle at individual farmsteads. The urban areas have, as expected, grown rapidly (on average 13%). The oldest towns, Francistown and Lobatse have only increased just above the natural growth of their own populations, whereas Gaborone and the mining towns have grown annually with 13 and 20% (Selebi-Phikwe) and 16% (Orapa) respectively. *Still about half of Botswana's population lives in small villages and dispersed farmsteads* (58% in 1971 and 47% in 1981)

The urban population in a functional sense is higher than table 37 shows. The villages around Gaborone particularly Tlokweng and Mogoditshane have grown very rapidly because of the possibility to commute to work in the capital.

Below Letlhakeng and Tutume are used as examples on possible changes in the rural settlement pattern. It should be noted that there are variations in Botswana which make definite generalizations difficult in this field.

LETLHAKENG

At Independence relatively many households in Letlhakeng went to stay permanently at field areas. A group of households thus preferred to stay close to their fields and cattle. At present there is only an insignificant movement of households from the village to settle permanently at the fields. Instead the movement of households to the village from the fields is increasing (Hesselberg 1982 b). *The increased permanent settlement at field areas reported by others* (Field 1980, Silitsheha 1982, Fortmann and Roe 1982) *is probably not a general feature in Botswana* (see below). The reasons for a preference of living at the fields throughout the year are primarily to look after often relatively small herds of cattle and secondly to cultivate crops and avoid damage on the crops by cattle. This second reason is due to insufficient labour for crop cultivation because of, among other things, the decline in the mutual help system. The explanation given by those living at the fields around Letlhakeng, who did not have a second

dwelling in the village, was shortage of grazing in the vicinity of the village and lack of labour generally. They said that they preferred (no one used the expression "forced to by necessity") to stay at the fields inspite of lack of easy access to drinking water. Some, who had had a good harvest, mentioned that there was very little time, if any, to go to the village after harvest and threshing and before preparing the fields for the next ploughing. Undoubtedly, *village-based agriculture is difficult in Botswana's semi-arid environment when the productivity improves.* In particular, the mixed farming type of agriculture advocated in this work favours a permanent settlement at the fields. Furthermore, the shortage of labour caused by labour migration, shuttling and lately also by increased school attendance among children, strengthen the need to stay at the fields. Those who drop out of crop cultivation, on the other hand, prefer to stay in the village because of the better opportunities for sale of homemade beer and of casual in kind work. Thus, the poorest together with the richer households are found in the village. At the fields there is hence an overrepresentation of middle-income households (Fortmann and Roe 1982). The above conclusions are supported by the data from the Letlhakeng area.

Since 38% of the crop cultivating households in Letlhakeng have fields more than 20 kilometres and 5% more than 50 kilometres away, it is understandable that many would prefer to live at the fields if the accessibility to water had been better. Moreover, the bush roads to the field areas are mostly impassable to ordinary cars. Carts have frequent breakdowns and are seldom used. The sledge is common, and a rational choice over shorter distances. In this light it is interesting that 50% of the different field areas around Letlhakeng have experienced a drop in dwelling houses between 1971 and 1981. In 30% of the areas there are more people, whereas 20% have a stable population (calculated from Central Statistics Office 1973 and 1983 b). There are no systematic variations of magnitude of net migration to or from the different size categories of field areas. Still the data are not conclusive because some field areas may be recultivated after a long fallow period. By knowing the area well, this is not likely the case in more than a few localities due to the limited number of areas with suitable soils for crops. Another factor which reduces the reliability of the data, is the delimitation of the areas at the two censuses. They may not always coincide in the practice of data collection for the censuses. How-

ever, the percentages above fit the more general data regarding *net step-wise migration up the village and urban hierarchy*. This does not imply that there are no field areas with growing populations constituting viable local communities. It should be mentioned, that mixed farming is common among those living at the fields permanently. This is substantiated by the fact that 59% of the localities around Letlhakeng are regarded to be both field and cattle areas. Furthermore, of the 874 occupied dwelling houses identified in the 1981 census in the Letlhakeng area, 56% are found outside the village.

TUTUME

Many households also left Tutume to live permanently at the fields when Independence reduced the formal powers of the tribal authority. Today 52% of the 1 268 occupied dwelling houses in the Tutume area are found outside the village. 86% of the localities are traditionally regarded to be only field areas, whereas 14% are combined field areas and cattleposts. The reason for this difference between Letlhakeng and Tutume is that the fields lie closer to Tutume, only 7% of the cultivating households have fields further away than 20 kilometres. Space for cattle is thus inadequate in the field areas. The tracks and bush roads to the fields are bad. Few are passable by lorry. The Mopane forest cover makes driving possible only on well-cleared tracks. Bicycle is commonly used on the paths in this area because the paths are not sandy as they are in the Letlhakeng area.

In 40% of the field areas around Tutume there have been a decline in dwelling houses between 1971 and 1981, whereas 40% had an increase and 20% were stable. As explained above, these data are somewhat unreliable. At present there is quite a substantial movement of households to the village from the field areas (Hesselberg 1982 b). Many of the dwelling houses built in the village will, however, not be used more than a month or two each year, if at all. The reason to put them up is said to be pressure exerted by tribal authority. The Chief and Headmen explained that to stay in the village during the dry season is essential to development of the whole area. Another reason is found to be that piped water was provided to the periphery of the village in 1978 allowing people to live less crowded in the village. The movement to the village shows a marked increase after piped water became

available. It is thus possible for the households to have smallstock and chicken around the house also in the village. Still, many of those who had just made a dwelling house in the village (without a fence), said that it was against their economic interests to stay part of the year away from the fields and cattle. Very few of these households and those at the fields had a cattlepost, that is, they pursued mixed farming. The reason for staying at the fields are the same as for Letlhakeng. In addition, many mentioned the problem of transportation of crops from the fields to the village. They were also afraid of stealing if the crops were stored unwatched at the fields.

To sum up, earlier the want of tribal chiefs of political control led to the maintenance of villages often through "forced movement" of households. This is evident both in Letlhakeng and in Tutume. Movement of an "induced" type can be found today in Tutume, where the tribal authority put verbal pressure on those who live permanently at the fields, to erect a house in the village. "Normal spontaneous movement" was found to be the only type of movement to Letlhakeng. An example of this movement is a household that reaches the stage in its life-cycle when children attain schooling age. The last type of movement is "abnormal spontaneous", e.g. when a change in the environment or new information influences the decision to move. The water taps put up in Tutume are here a case in point. In Botswana in general the provision of potable water to most villages above 500 inhabitants during the 1970s has led to a movement away from the fields. *However, there seems to be a fairly large group of pure peasant-cultivators and also of multiactive peasant-cultivators who still prefer to stay at the fields. There does not seem to be any quantitative significant migration from the villages to the fields during the Last decade or today.* The societal evolution has rather resulted in the expected increasing flow of population up the village and urban hierarchy.

THE PLANNING DIMENSION

In the NDP V it is stated that the goal is to increase incomes and employment in rural areas through improved productivity in agriculture and industry. This is also important, it is recognized, in order to stem the flow of workers to urban centres. Formal as well as informal urban sector

employment cannot provide all those who now migrate with work. Since crop cultivation can give work to more people than animal husbandry, a shift in government attention is anticipated. This novel emphasis on the rural areas has not yet resulted in a change in government spending pattern. Still only 19% of the Ministry of Agriculture's expenditures are directed at crop production. Moreover, 22% of the government's overall expenditures will go to a takeover of the railway in Botswana (from Zimbabwe), building of a new international airport in Gaborone and strengthening the new military force. Only 12% of the Development Budget for 1979/80 to 1984/85 are allocated to the Ministry of Agriculture. In comparison, 7% of the budget are earmarked for improvements of the infrastructure in the largest towns (Hesselberg 1981 b). This pattern of investments represents a continuation of the past pattern. Of the government capital expenditures between 1966/67 and 1976/77 only 22% went to rural areas where 80% of the population lived (Colclough and McCarthy 1980). The relatively heavy government investments in urban centres explain the urban migration. Other explanatory factors are few rural jobs, inequality of rural means of production particularly of cattle and the increasing gap between rural and urban incomes in general (Lucas 1981). The government is undoubtedly aware of this fact and may in future harmonize rhetoric and practice somewhat better. Even then, I agree with Elkan (1980), that urban migration will probably continue when agricultural production is improved.

The main question regarding the rural settlement pattern is whether the traditional village pattern should be preserved. In a debate in Botswana in the early 1970s Fosbrooke (1972) advocated a "hamletization" of rural Botswana. He maintained that the agrotowns should be demolished, and villages of about 1 200 people with basic services and fields and grazing land adjacent established where they did not already exist. Grant (1972) was of the opinion that this idea would prove too costly. Moreover, it would not be applicable everywhere in Botswana. For instance, according to Werbner (1975), the Bakalanga prefer to live dispersed because of a traditional aversion to central authority. Furthermore, in the Tuli Block and in Barolong the farmstead type of rural settlement has proved to be favourable regarding agricultural production in cattle and crops respectively. Comaroff (1977) reports that peasant-cultivators and farmers in Barolong resist villagization. If experiences from other countries have validity for Botswana, notice should be taken of the failures of the "village regrouping" in Zambia

(Dumont and Mottin 1979) and of the Ujamaa policy in Tanzania. Still Dumont and Mottin maintain that villages of 1 000 to 1 500 people should be established with the necessary minimum services and agricultural institutions. Furthermore, those living by their fields should be formally linked to certain villages. This is a long-run strategy. (As a necessary immediate strategy, they suggest a mobilization of peasants to become a counterforce to urban interests.) In the National Settlement Policy formulated in 1979 it was envisaged that villages with a population of 150 or more should get piped water, and villages with more than 500 people should be entitled to a primary school and a health post. It may be concluded that the conflict between a dispersed or a village based agricultural population has not been solved in Botswana: The Ministry of Agriculture continues to support measures such as water-provision at the fields (it will take a long time before most field areas have perennial water) and other ministries establish services in villages above certain levels. *It may thus be expected that the present pattern in which peasant-cultivators and farmers may be found living permanently both at fields and in villages will persist.* The proportional distribution between the two types of settlement will probably vary regionally in Botswana according to settlement tradition and the local environment. The agrotowns, it must be expected, will gradually become combined commercial and service centres, that is, secondary centres in the National Settlement Policy terminology.

What will the effect of the above conclusion be regarding agricultural development and the agricultural population? Probably only a small group of resource rich households will be able to fully benefit from the ALDEP programme and still remain in the medium to large villages where a range of services will be available. Those households that decide to invest in crops and cattle will, because of the increased demand on labour inherent in the ALDEP-package, normally tend to favour a non-village location. It must then be expected that quite a number of households will prefer to stay in the village and carry out a traditional type of agricultural production, as long as they manage. The positive effects of the "package" on total food production may accordingly be limited. *The tradition of a village settlement*

pattern in Botswana thus hampers agricultural development today. The distance between villages and fields also constitutes a part explanation for drop-out. This process of discontinuation of agricultural production has been shown to exist in Letlhakeng generally and among female households in Tutume (see also Hesselberg and Wikan 1982). Although there is no general shortage of land in Botswana, **it** is likely that this classic process will be found in most places of the country in future.

The following example from Tutume illustrates the process of drop-out and shows the interdependence of form of agricultural production and rural settlement pattern: The recent tendency found close to Tutume of individual fencing of fields may have far-reaching effects. The area now fenced with wire was cultivated during the 1940s. The soil became exhausted around 1950. A number of the peasant-cultivators then moved 20 kilometres from the village and became permanent field dwellers. Others continued to stay in the village in the dry season and cleared fields up to 10 kilometres away. Today most of the area close to the village is overgrown with thornbushes and Mopane trees. Each year only a part of the individually fenced areas is used for cultivation. In some cases female cultivators are allowed to use part of the fenced land in return for labour to the "owner". Due to the scarcity of land in the immediate vicinity of the village, a group of households will switch from cultivating own fields further away from the village and become agricultural labourers on other people's fields only. The main reason for this is that **it** may be essential for small households wanting to look after a few cattle and a small plot of crops to live outside the village. The low level of geographic mobility due in part to the sparsely rural physical infrastructure, makes **it** difficult particularly for female households to live at the fields. (This is made more so because these areas are generally poorly served by small shops and hawkers.) Due to the investment incurred in fencing, the traditional system of rotation and fallowing may become uneconomic. This again will necessitate more inputs to retain the fertility of the soil. One consequence regarding the settlement pattern is to consolidate the village as a population centre. In planning in the short-run **it** thus seems wise to take the low geographic mobility of the major part of the rural population as given. In the medium range perspective the concept "commuting field" should be applied to facilitate a combination of non-agricultural work with farming. This implies to plan according to the prevailing situation, that is,

on the fact that the majority of the households are dispersed physically and economically to take advantage of different income-earning opportunities and to spread risk.

A last point which ought to be stressed here, is *the possible contradiction between TGLP and CFDA*. If integrated rural development is to be organized for specific geographical localities and the local resources to be the base of this development, **it** is necessary to rely on mixed farming in most areas of Botswana. The peasant-cultivators must have at least some cattle to secure an adequate income and to be able to plough at the right time. The delimitation and fencing of large areas for the exclusive use of large cattle owners will endanger the development of such a rewarding type of agrarian system. This may amply be demonstrated by an example from Kweneng District (map 11). When only the field areas and a relatively small additional communal grazing area is available for the small herd owners, mixed farming will gradually become more difficult. In no way would **it** be possible for all those **now** cultivating crops also to keep cattle in the often already overgrazed communal areas, that is, village near land.

CONCLUSION

Figures 7 and 8 (page 89) may now be used to place the evolution of the settlement pattern and migration in Botswana. The traditional large villages of which some later became agrotowns, were gradually replaced by a hierarchy of villages through population increase (**it** became too far to travel to fields and fuel wood). Another reason for this evolution was political and other disagreements which resulted in that whole kin groups migrated to form own smaller villages. Multiactive peasant-cultivators continued to live in villages. Those peasant-cultivators who lived dispersed, did not move to a village when members in their households obtained wage work elsewhere. *The hypothesis inherent in figure 7 that when peasant-cultivator households became multiactive they would prefer a village location is thus not supported.* Furthermore, *those few who produce relatively large quantities of crops and have much cattle are mainly found in villages* and do not live dispersed. This is not to say that **it** is unlikely that when the *number* of farmers increases, the migration to field areas from villages **may** increase.

Map 11. PROPOSED LAND USE FOR WESTERN KWENENG

Drawn on the basis of Kweneng District Administration on. 1979.
Planning for development: Western Kweneng District Molepolole

CHAPTER 13

THE PEASANT CONTROVERSY - SUMMARY AND CONCLUSION

The analysis of agriculture and the peasantry in Botswana has amply shown that peasants do not "withdraw" from production for markets because that is their traditional "way of life". Today agriculture is rather a way of survival for a large proportion of Botswana's population. The reason for the ability of many poor households to continue with agricultural production is the fact that they use close to no other input than their own labour. The peasants know perfectly well that if they use more costly inputs, it is not likely that these expenditures can be recovered. Moreover, their experiences tell that over the years the prices on inputs increase more than those on the products made. So, as long as land is free cattle may graze and crops can be cultivated with a minimum of inputs even of family labour. The result is then that the typical farm produces less than what is necessary for subsistence, that is, sub-subsistence crop cultivation is normal. Some peasants fill the gap with sale of cattle, while the majority takes on wage work in urban centres. The worker-husband/peasant-wife household is thus common in Botswana. This multiactivity at the household level has an important negative consequence for an increasing group of female households. The lack of male labour for ploughing with oxen together with the decline in mutual assistance between families have resulted in drop-out from agricultural pursuits. Most of the poor households are found in this group of female households in rural Botswana. The female households that own sufficient cattle for traction purposes manage to obtain male assistance by lending oxen in return. This is possible because the recurrent droughts together with the large number of cattle in Botswana have produced a substantial group of male peasant-cultivators without or with less than required oxen for ploughing. Poor households are also found in this group.

It is distressing that the agricultural land productivity in Africa on average today is lower than it was in Europe before the Industrial Revolution. The declining food production per person in Africa, and the ensuing scarcities, are sufficiently explained at the general level by the analysis of

Botswana. Before summarizing the forces behind the present dismal situation, the vicious circle of the present form of multiactivity which is mainly found at the *household level*, will be outlined: The lack of male labour in rural areas has had a negative impact on agricultural productivity both regarding land and labour. Still, the fact that many urban workers' families have some incomes from agriculture leads to low wages and makes it easier for employers to rely on a casual workforce. Because of this, the labour productivity in urban industries is low. The low productivity in most industries and in the major part of agriculture prohibits higher wages and better returns. The circle is closed.

Besides colonial taxation, the initial inequality of cattle ownership explains the tradition of labour migration in Botswana. The continuation and increase in labour migration and lately in shuttling may be ascribed to negative trends in the terms of trade between agricultural products (meat excluded) and both agricultural inputs and basic consumer goods. Since Botswana is in a customs union with South Africa tariffs cannot be erected to protect crop cultivation. The cultivators in Botswana must then compete with highly advanced and subsidized agriculture in developed countries. The gradually declining relative cost of bulk transportation is another factor allowing for relatively cheap imports of food. The effect on urban consumer preferences of American food aid also makes it difficult for the local cultivators to market their traditional staples at competitive prices.

The above argument of particularly differentials of productivity at the Southern African level and worldwide can also be made regarding industries. Botswana is thus evidently part of larger systems. The participation in these systems explains the hardship many people in Botswana endure. However, at the same time a small modern urban sector has developed and a small number of cultivators have become farmers. Thus heterogeneity now exists in Botswana as well. To label the socio-economic formation as transitory, is then appropriate. Furthermore, agrarian transition is an adequate term regarding the agricultural sector. It should here be stressed that drop-out from agriculture, and thereby a large extent of the prevalent poverty, occurs without a simultaneous higher capital-labour ratio in agriculture. This is contrary to the marxist theory which implies that a proletarianization process is caused by a capitalist modernization of agriculture. The situa-

tion is rather that Botswana, as other Third World countries, is linked to the world market in many ways and must thus relate to the fact that global competition leads to a continuously increasing capital-labour ratio in an already highly modern agriculture elsewhere.

Since the labour productivity is more difficult to improve in agriculture than in most other sectors, the terms of trade of agriculture in a free market would be declining. In most Third World countries producer prices are not or inadequately subsidized. The income peasants obtain from agriculture is then gradually reducing the buying-power of the peasants. This price-squeeze has in Botswana and probably in many other African countries already pushed the peasants to the stage where cultivation is only undertaken for lack of alternatives. The high rate of urban underemployment is the reason why many are still engaged in agriculture at either the individual or household level. However, it is probable that the increase in income a peasant-cultivator would respond to would be relatively small. The subsidy needed to achieve even such a small increase would be large if the aim is to bridge the labour productivity gap with modern agriculture with which they compete. The possibilities inherent in the alternative, that is, a gradually improved peasant production is discussed later regarding Botswana.

The conclusion that may be drawn from the arguments above, is that Botswana, as many other Third World countries, is caught in a number of externally dominated interlocking vicious circles. The country is clearly in a transition from an "ecological" to an "economic situation". The agricultural sector has advanced from traditional cultivation to the peasant stage. The functionality of the sector at this stage has been shown to have become distorted. The term part-dissolution depicts this situation well. The transition to modernity may, however, seem to be blocked, to be in an "infinite pause". This does not fit the facts. The analysis has shown that several albeit separately small changes occur in many dimensions. "Delayed transition" is thus a more adequate term. One of the main reasons behind the "delayed transition", besides the external system domination, is the absence of suitable government policies. The government has been preoccupied with the cattle sector. This sector has also expanded, and been profitable for the large cattle owners. Crop cultivation and other economic activities, besides mining, have received scant attention but in the last four years when the international diamond market contracted seriously and the number of unemployed increased rapidly. The old cattle elite together with the new

urban workers with permanent employment will probably act as pressure groups to hinder a substantial subsidization of peasant production in the immediate future. In light of the above, it is unlikely that the peasant-cultivators should be blamed for the "delayed transition". Since Botswana has, for instance, many of the same characteristics as Tanzania, the causes for lack of agricultural development and thus of poverty are probably the same. The stress Hydén (1980) places on the peasants' negative influence for overall national development in Tanzania thus becomes nothing but incredible. In my opinion the conclusions reached regarding Botswana are probably general for Third World countries where state involvement in and agrarian policies for peasant production are negligent or inappropriate. This applies both to countries with market economies and those that rely on socialist planning principles. Before turning to a suggestion of some of the elements in a model of agricultural development in Botswana, I want to underline the serious consequence it may have to maintain that peasants behave according to culturally prescribed norms rather than economic rationality. Planners who base their work on the assumption that peasants do not respond to incentives, argue that to increase prices will achieve nothing else than more expensive urban labour. A reason for Africa's present food crises is thus that policy-makers have been deluded to believe that peasants are not price responsive. The behaviour of the peasants in Botswana, which there is no reason to believe is atypical for Africa, supports the findings of studies on Asia and Latin America that peasants are well aware of modern agricultural methods and adopt them at the household level at once they thereby gain income and security wise.

Poverty in Botswana is still mainly associated with rural areas and agriculture. The analysis has shown that there is scope for poverty alleviation through changes in the agricultural sector. It is therefore of interest that Botswana has not yet advanced far along a definite modern agrarian structure. This applies both to the cattle and crop sector. A choice of agrarian structure for the future may thus be taken without too many "lost" investments.

To choose a high capital input type of specialized crop farming would necessitate an establishment of really large farms to be economic rational in semi-arid Botswana. In addition some degree of irrigation would probably also be

required to reduce the risk. A small number of such large farms would undoubtedly suffice to feed the relatively small urban population in Botswana. This would even be the case when most of the peasant-cultivators then had to migrate to urban centres, or those who are presently pure peasant-cultivators, would become multiactive (i.e. they would obtain reduced agricultural output on average). There is then a contradiction between poverty alleviation and this type of rapid rise in agricultural productivity. When economic and social *development* is the objective, an alternative path to agricultural development should be sought. The Presidential Commission on Land Tenure (1983) recognizes that to make arable land private would lead to a rapidly increasing unemployed landless class. This the social security system cannot afford. The traditional communal land tenure system is thus advocated also for the near future. It is, however, important to note that also the Commission stresses that tenuresystems ought to change with the growth of economic activities generally in the country. Although the major part of the peasants but the richest now cannot take advantage of privatisation due to lack of capital, the market value of land will probably improve from the presently very low level. Land may thus be acceptable as security for bank loans at some future date when population growth has made land into a real scarce factor of production. From the above it should be clear that to maintain that governments must make a choice between support to agriculture or industry is a false dilemma. I accordingly agree with the Vice-President Mmusi of Botswana that tangible progress in other sectors (than agriculture), rests on finding a solution to agricultural development. It is, however, in my opinion, difficult to see that agriculture can be "the primary engine of economic and social transformation" in Botswana (Daily News 10/5-83).

The elements of a solution discussed here will thus only aim at reducing poverty and achieving a food surplus for urban consumption (i.e. agriculture should not be a bottleneck for sustained economic and social development). The peasant path to agricultural development advocated here is based on mixed farming. Mixed farming implies that an agricultural producer has cattle and cultivates crops. The cattle may either "always" graze in the field areas or be kept in grazing areas. Both types have existed traditionally in Botswana, but the latter is the more common. The viability of small peasant farms in future probably depends on the ability to keep some cattle close to the farmstead. A ready access to cattle for traction is essential regarding

peasant production. Even government assistance to peasant production in the form of subsidies on inputs and producer prices and of marketing arrangements would not be sufficient if the present large proportion of households with inadequate access to draught-power is retained. The income obtained would then probably be too low to induce peasant-cultivators to improve their production practices. The major problem is evidently the skewed distribution of cattle ownership. A redistribution of cattle would solve the twin problems of draught-power and income. The favourable price trend for cattle would in such a situation enable more peasant-cultivators to rely on cattle sale for security of livelihood, and thus allow them to invest more time and resources in risky crop cultivation. A redistribution would, however, be a revolutionary measure in Botswana today. The alternative regarding the income target is multiactivity at household level. The objectives of improved agricultural production and higher levels of living could be achieved by multiactivity at the individual level.

"Small" is then possible in Botswana at present by basing agricultural development planning on the already existing commonness of multiactivity. It would then also be of importance that statistical publications include the phenomenon of multiactivity. The operationalization used here may constitute an input to the process of establishing a set of new concepts in this respect. The Ministry of Agriculture ought furthermore to change the definitions of "traditional" and "commercial" farmer more in line with the distinction made in the present work between peasant-cultivator and farmer (etc.). In a strategy of "multiactive peasant production" the marketed output of each peasant-cultivator will not be large. However, since many will produce a surplus under somewhat improved conditions, the domestic urban market would be satisfied in normal years with lowcost staples. In years of ample and well distributed rainfall through the season and regionally a national surplus may be produced. If storage facilities are built, expensive imports (and food aid) may be avoided when drought hits. At the household level it is essential that multiactivity allows for an escape from the vagaries of seasons and market fluctuation.

The small urban population and semi-arid climate in Botswana may make a direct generalization of the suggestions put forward difficult. A larger urban population would in other countries probably allow for a faster development along

a peasant path when agrarian policies are favourable. In countries where the climate offers better physical conditions for agriculture, multiactivity would not be equally important for all agricultural producers. China is an illustrative case on this latter point. Mao Tse Tung showed that his idea of a peasant path to agricultural development was possible in practice at the level of the development of the productive forces at that time. The majority of the peasant-cultivators in China took part in the modernization, that is, a highly productive agriculture was achieved without a creation of a minority of farmers, and thus of drop-out and poverty. The explanation for this lies in the possibility of double and tripple cropping in large parts of this country. In Botswana, as in many other Third World countries, multiactivity enables many cultivators to continue with a low remunerative crop cultivation. Viewed in the light of the commonness of multiactivity in developed market economies, it seems wise not to plan for an interim period of specialized pure farmers.

The analysis has shown that there in Botswana is a connection between rural settlement pattern and agricultural production and level of living. The overall rural settlement pattern still corresponds to the settlement pattern of agricultural producers. The low geographical mobility caused by insufficient infrastructure, makes the distance between villages and field areas into a bottleneck regarding agricultural development. Quite a number of peasant-cultivators prefer to live at the fields the whole year. Many of them do not have a house and part of their close family in a village. A substantial proportion of the large amount of foreign aid that Botswana has received during the last 15 years, has been in the form of social infrastructure. The availability of potable water, education and health services in most villages but the smallest ones now constitute a "magnet" on people living at the fields. Since the modernization of agriculture is still very limited, the migration from villages to fields has not yet become a general phenomenon in Botswana. In an agricultural strategy as described above a village location would not be profitable for most peasant-cultivators. The traditional village pattern is thus also counterproductive regarding poverty alleviation.

APPENDIX 1

DEFINITIONS

The general concepts (figure 13) are defined as follows:

Agricultural producer refers to a person who carries out work on own land, either sharecropped, leased or held on other arrangements irrespective of historical epoch or economic system. Those working on solely other people's land against payment are not included. Agricultural producers may combine agriculture with paid work either in agriculture or in other activities or they may be self-employed in such activities.

Cultivator refers to an agricultural producer who grows crops (this term includes vegetables etc.). The term includes those who keep livestock in combination with cultivation.

Herdsmen refers to an agricultural producer who keeps livestock only and who is sedentary. The animals may be moved between grazing areas, but the owner (the herdsman) must have a specific place where he spends most of the year. A herdsman does not even grow fodder.

Multiactive agricultural producer refers to an agricultural producer who combine agricultural production with one or more non-agricultural income sources and/or paid work in other people's agriculture. The same definition applies to *multiactive cultivator*.

Pure multiactive cultivator refers to a multiactive cultivator who relies on a combination of own cultivation and work in other people's agriculture only.

Similar specifications apply to herdsmen.

Concepts related to stages in agricultural development (figure 14) are defined as follows:

CONCEPTS
at the general level.

Figure 14. CONCEPTS
related to stages in agricultural development.

Traditional, agriculturalist refers to an agricultural producer who lived by using simple techniques of production in a pre-market or pre-socialist society. Traditional agriculturalists did not depend on sales of products in order to acquire goods of fundamental importance to their survival except, for instance, for an occasional ironblade for the hoe or irontip for the spear.

Multiactive traditional cultivator refers to a traditional cultivator who grew crops (and possibly had livestock) and in addition had incomes from other sources by, for instance, being a traditional doctor or artisan.

Peasant refers to an agricultural producer who lives in a society dominated by capitalist or modern socialist market principles. (*Traditional peasant* denotes a peasant who uses similar technology of production as traditional agriculturalists and who does not sell any produce.)

Multiactive peasant-cultivator refers to a peasant-cultivator who combines own cultivation with paid work either in agriculture or in a non-agricultural sector(s), or who is self-employed in such sectors.

Modern agricultural producer refers to an agricultural producer who has accepted new and advanced technology. He or she produces for a profit, and reinvests in production on a sustained basis.

Farmer refers to a modern agricultural producer who cultivates crops. A farmer may also keep livestock.

Rancher refers to a modern agricultural producer who keeps livestock only. The main produce is meat not milk.

Multiactive farmer refers to a farmer who has paid work either in agriculture or in a non-agricultural sector(s), or who is self-employed in such sectors.

Pure peasant/farmer/etc. denotes non-multiactive peasants/etc. Some of the concepts may also be given prefixes to delimit a more specified category such as dairy farmer, cattle rancher, multiactive weekend farmer etc.

Worker refers to a person who has either permanent or casual employment in agriculture or in other sectors. A worker is paid in money, and may be unskilled, skilled or professional. An agricultural labourer is a worker who may not necessarily be paid in money.

Trader refers to a person who owns a shop, **bar** etc. or who is buying and selling without a permanent point of business. A trader is self-employed.

APPENDIX 2

FUNCTIONS IN LETLHAKENG AND TUTUME 1976 AND 1980

LET L H A K E N G

	Numbers	
	1976	1980
Bottlestore	1	1
Chibuku salespoint	1	7 ¹
Clinic	1	1
Cooperative office	1	1
Cooperative store		1
Police station	1	1
Post office	1	1
Primary school	1	2
National Recruiting Corp.		1 ²
Shabeens		2 ³
Shop/restaurants	2	3
Sub-landboard		1
Tax collectors' office		1
Agricultural Demonstrator	1	1
Chief's representative	1	1
Community Development Officer	1	1
Cooperative Officer	1	1
Councillors	1	2
Tax Collectors	2	2

¹National beer salespoint with a sign outside.

²The name was changed by 1980 to the Employment Bureau of Africa. It is a South African organization for recruiting labour migrants to the mines there.

³Illegal alcohol salespoint.

Note. Clerks in the various institutions etc. are not included.

T U T U M E

	Numbers	
	1976	1980
Botswana Agr. Marketing Board		
Barclay's Bank (one day every second week)		1
Bottlestore/bar	1	5
Brigade Centre	1	1 ¹
Chibuku salespoint	1	3
Clinic	1	1
District Council Office		1
District Council works dept.		1
Immigration office		1
National Dev. Bank		1
Police station	1	1
Post office	1	1
Primary school	3	3 (1 new to start 1981)
Secondary school	1	1
Shops/restaurants	6	13
Vegetable market		2
Bicycle repair		
Watch repair		1
Transport vehicles (passengers)		5
Agricultural Demonstrator		2
Ass. Council Secretary		1
Chief's representative	1	1 (Chief)
Community Dev. Officer	1	1
District Agr. Officer		1
District Officer of Dev.		1
District Officer of Lands		1
District Officer of the Council		1
Education Officer	1	1
Inspector of Schools		1
Tax Collectors	2	2

¹Dressmakers, mechanics, carpenters, brickmakers, vegetable garden and poultry farm.

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