RURAL–URBAN LABOR MIGRATION AND URBAN UNEMPLOYMENT IN KENYA

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DEDICATION

To Grace, Ruth, Clark, and Gwen, who shared both the excitement of living in Kenya and the drudgery of my writing about it.

FOREWORD

Roughly 1.8 billion people, 42 percent of the world's population, live in urban areas today. At the beginning of the last century, the urban population of the world was only 25 million. According to recent United Nations estimates, about 3.1 billion people, almost twice today's urban population, will be living in urban areas by the year 2000.

This rapid pace of urbanization makes it imperative that we obtain a better understanding of both the causes and the consequences of urbanization. Such an understanding requires a theoretical framework that leads to findings consistent with the stylized facts of development and that serves to describe the past, permits an assessment of the future, and facilitates the evaluation of policy options. A general model that meets these requirements cannot be expected, at the same time, to explain the behavior of a particular low-income economy. This task requires country-specific case studies.

This report is a case study of Kenya carried out by Professor Henry Rempel of the University of Manitoba in Canada. The starting point is a model of rural household decision-making, which generates a set of testable hypotheses regarding the determinants and consequences of rural–urban migration. A combination of census and survey data is then used to test these hypotheses. On the basis of the results, the study concludes with a general discussion of several aspects of the urbanization process that can be influenced by policy actions.

A list of reports in the Population, Resources, and Growth Series appears at the end of this report.

ANDREI ROGERS
Chairman
Human Settlements and Services Area

ABSTRACT

The starting point of this study is a model of rural household decision-making, which generates a set of testable hypotheses regarding the determinants and consequences of rural–urban migration. A survey of one of Kenya's eight largest urban centers was carried out in December 1968 to provide data that were then combined with census data to test these hypotheses. The questionnaire that was distributed was designed to obtain the migration, employment, and income history of each migrant from 1 year before his move to the time of the survey as well as the migrant's opinions on why he moved, how long he intended to stay, and what he thought of life in urban centers. This volume is an analysis of those data. The basic thesis is that rural–urban migration is a rational response to development in Kenya. Migration does not shape this development; it is merely one symptom of growth. On the basis of the results obtained, the study concludes with a general discussion of several aspects of the urbanization process that can be influenced by policy actions.

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In addition to these institutions, my appreciation is extended to the many people who assisted in this study. First, there are John Harris and Michael Todaro who granted permission to carry out this aspect of their larger research project and who assisted in carrying out the survey. John Harris was also extensively involved in outlining in detail the various chapters of this study and has provided valuable comments on some of the chapters.

Second, mention must be made of the people involved in the survey: the 1,400 respondents who gave of their time; the many students from the University of Nairobi who carried out the interviews and who assisted in preparing the data for computer analysis; and Elaine Berman, who played a key role in preparing the data for analysis. Third, my appreciation is extended to the students who have served as research assistants: Valerie Collier, Linda Cooper, Marina Malmer, and Shah K.E. Rahman. Fourth, the diligent typing of earlier drafts of some of the chapters by Georgina Buddick is much appreciated.

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To all of these I am indeed grateful. Without their assistance this study would not have been completed in its present form. Needless to say, the contents of the study represent the positions taken by the author and are not necessarily shared by the agencies who supported the research. The responsibility for any errors or shortcomings of the study must fall on me.

CONTENTS

1 A THEORY OF RURAL–URBAN LABOR MIGRATION

According to a headline in the *East African Standard* of August 27, 1973, "Local Authorities in Kenya Face 'State of Collapse.' " The occasion of the headline was the presentation of the Nairobi City Council's annual report for 1972. According to the newspaper article, the report indicated that Nairobi had a population of 620,000 and projected a doubling of the population by 1985. Such growth was said to exceed the capability of local authorities to provide essential services.

Several months later, while opening the fifth African Regional Conference of the Commonwealth Association of Planners, the Minister for Finance and Planning, Mr. Kwai Kibaki, is reported to have admitted that Kenya was not able to cope adequately with the rural–urban drift (*East African Standard*, February 13, 1974). He stated that Kenya lacked the resources to develop the rural areas in the near future to the point where the rural–urban drift would be contained. This evaluation of Kenya's capabilities accepts as given the existing urban setting and rules out significant alterations in this setting as one of the options that could be pursued to affect the rural–urban migration flows.

Those who are direct beneficiaries of the urban development that has occurred in Kenya tend to view the extent and nature of the rural–urban drift as a threat to their way of life. For them the nature and the causes of the problem confronting the urban centers are obvious:

> The problem is simple enough to state: it is that people living in the country, far too many of them, want to exchange their rural life for town life.
>
> The underlying causes, too, are easily understood. The fundamental reason is perhaps psychological. There is an inbuilt desire in every one of us to try and better our lot. This applies particularly to the ambitious young, and to them the city or the town becomes a Mecca, a goal to be achieved.
>
> To those people, the bright lights of the city, the entertainment, the cinemas, television, the trappings of modern sophisticated life are an irresistible lure from the sort of existence in the countryside where there is little excitement, where life seems to die when the sun sets.
>
> There is also the attraction of job opportunity, unreal though it may be. Not everyone wants to be an agricultural worker, nor is everyobdy cut out for farming, a job which requires special characteristics such as patience, determination, strong physique, an ability to work to the unchangeable seasons, to be uncomplaining when the weather ruins crops and then to start all over again.
>
> For many people the prospect of an eight-hour day with a regular wage is much preferable to a dawn-to-dusk slog for comparatively small rewards. It is difficult to persuade people dissatisfied with their rural life that the chances of getting an eight-hour-day job, or any job, in the cities, are extremely slim. They are prepared, perhaps even eager, to take the risk.

> The result is that urban areas become overloaded in terms of population, largely a population which is unable to contribute to the maintenance of the area in which it lives (Editorial, *East African Standard*, February 8, 1974).

The purpose of this study is to look at precisely these issues in greater detail. First, the rural–urban flows, using the 1969 census, will be constructed. Second, the determinants of these migration flows will be analyzed. Specifically, the relative importance of "bright lights" and economic determinants of migration will be assessed. Third, the questionnaire responses to a December 1968 survey of recent urban in-migrants will be analyzed for the assessment made by migrants of the nature and causes of the problems confronting Kenya's major urban centers. The information gleaned from these sources will be combined to provide a comprehensive assessment of urbanization and the concomitant urban unemployment in Kenya.

The theoretical framework for the study is a model of rural–urban migration described in this chapter. Behavioral models of the human capital type take as given the social, political, and economic environment in which households make short-term decisions. Chapter 2 describes the historical events that appear to have shaped the environment of the 1960s, in which the migration under study occurred.

In the third chapter the sources of the migration data used are given and the estimated rural–urban migration in Kenya is presented. In the fourth chapter a least-squares linear regression model is developed and tested. The results are compared with the reasons for migration provided by the survey respondents.

In Chapters 5 through 9 the 1968 migration survey data are analyzed as a complement to the information gained from the regression analysis in Chapter 4. Chapter 5 deals with the migration selection process in rural areas, Chapter 6 with the urban employment and income of recent in-migrants, Chapter 7 with the role of kin (extended family and friends) in the towns as a support group for recent in-migrants, Chapter 8 with the importance of amenities, and Chapter 9 with the rural–urban ties maintained by the migrants. Chapter 10 summarizes briefly the limited survey information collected on urban-to-urban migration. The study concludes with a chapter on the various effects that public policy can have on migration and employment in Kenya.

A DECISION-MAKING MODEL OF RURAL HOUSEHOLD LABOR ALLOCATION*

A theory of rural–urban migration must be rooted in the rural context that gives rise to the migratory behavior. Specifically, it is important for the model to incorporate the dominant decision-making unit in rural areas. In addition, the nature of the model should be defined by both the objectives of such decision-making units and the options available to the members of the decision-making units.

The basis for the migration model used here is the peasant-type rural household described and analyzed in detail by Chayanov (1966). This peasant-type decision-making unit is unique in several ways. First, it avoids viewing the sending society as a set of individuals, each making a decision to leave or to stay, and it avoids the alternative extreme of

*An earlier, more extensive version of this model can be found in Lobdell and Rempel (1978).

viewing the rural population in terms of a collective such as a tribe, clan, or village. This approach is not intended to deny that individual household members may exercise a strong influence on the decision-making process, or that extra-household forces are important in decision-making. Rather, the model assumes that decisions are made within the context of the household and its collective needs, subject to a more or less pervasive social system.

Second, the model focuses on the rural household's basic objective to maximize a total of satisfactions as a consuming as well as a producing unit, rather than merely to maximize profit, as is typically assumed in modeling commercial enterprises (Back to the Grass Roots 1969). This conforms to the assessment of Nash (1966, p. 23) that peasant societies have "no durable social units based solely on productive activities." Since the majority of rural residents in a country such as Kenya are more akin to "peasant" than "commercial" entrepreneurs, the model is appropriate as a basis for a theory of rural–urban migration.

Third, according to Chayanov, family labor employed by the household is not measured in monetary terms. Rather, it is measured in terms of labor effort of the family members. A strict application of this point would imply that nonfamily labor is rarely "employed" by the peasant household. Where there is employment, " . . . it must be so clothed in ceremonial and ritual that selling labor power does not appear either to the buyer or the seller as a naked economic transaction" (Nash 1966, p. 24).

In their brief survey of historic employment practices in Kenya, Cowen and Murage (1972, pp. 39–40) confirm that this attitude toward employment was important in the past and is still evident. Nonetheless, labor is hired on peasant farms in Kenya. On the basis of surveys in two quite different agricultural areas in Kenya, Gwyer and Ruigu (1971, Table 3, p. 162) report that from 46 to 51 percent of the small farmers hired farm labor at least seasonally, and from 8 to 18 percent had permanent employees. Therefore, we cannot limit ourselves to a strict Chayanov model based on household labor only – some provision must be made at least for periodic employment of labor.

Finally, the use of the peasant-type household as the decision-making unit for a model avoids making a distinction between farms producing output for the market and those engaged in subsistence farming only. Very few farmers produce solely for local consumption except where some household members are earning income from sources other than the household farm. Also, the distinction between subsistence farming and producing for the market does not serve any particularly useful analytical purpose for modeling the migration behavior of rural households.

Household Objectives

In the short term, a household may be said to possess a complex set of tastes, aspirations, and perceptions of socially acceptable behavior. This taste pattern, along with household size, largely determines the household objectives. We distinguish three broad categories of household objectives.

First, the household perceives as normal some material standard of living below which it will feel deprived. We denote as C the level of consumption per adult-equivalent member of the household that is consistent with this standard of living. C is socially determined and should not be identified with mere subsistence. Certainly C includes the

"minimum caloric rations" identified by Wolf (1966, pp. 5–10). Since C is determined primarily by the relationship of a household to its peers, it bears a strong resemblance to Mill's "scale or standard of comfort" and Ricardo's "natural price of labor."*

Second, household objectives include the maintenance of a set of social relationships. This obliges the household to acquire real resources (time, goods, money) with which to service social relationships such as reciprocal exchange, feast day celebrations, and ceremonial occasions associated with births, marriages, and deaths. Wolf (1966, pp. 5–10) describes this objective as the need to provide for a "ceremonial fund". We use R to denote the minimum expenditure on social relationships per adult-equivalent member of the household. One aspect of R can be a sharing of household output and effort with other households. In this form, R serves to prevent a household from aspiring to a standard of living well above that of its peers.

Third, the household's objectives include provision for a target level of surplus Q to be used for a variety of purposes. First, it encompasses what Wolf (1966, pp. 5–10) has called a fund for "replacement" of productive resources. Further, it represents a partial defense against the misfortune and risk inherent especially in small-scale farming but also in various forms of employment and self-employment. In addition, a household may wish to increase consumption or ceremonial expenditures beyond what is judged to be a socially acceptable minimum; if so, Q represents a means to pursue this objective. Finally, the household may wish to save for investment in land, physical capital, or the education of its members; hence Q represents a fund for investment.

In summary, the short-term desired level of income $\hat{Y}$ for the household can be defined as:

$$\hat{Y} \equiv (C + R)A + Q \tag{1.1}$$

where C is the minimum socially acceptable level of consumption per adult-equivalent member, R is the minimum expenditure on the maintenance of social relationships per adult-equivalent member, A is the number of adult-equivalent members, and Q is the desired level of surplus.

One element conspicuously absent from this set of objectives is a trade-off between work effort and leisure. There are several reasons for not entering leisure as an element in the objective function. First, in a rural, small farm, or small firm setting the opportunity cost of work is not as easily identified as in a society where most people work a 40-hour week. For the peasant-type household it is typically a trade-off between types of work and between more or less work effort rather than between work and leisure *per se*. This is evident from survey work, as reported by Gwyer (1971, p. 11), where farms relying on only family labor were found to use more labor per unit of land during the slack period than farms that also hired labor. But in Nyeri district the farms that hired labor used more family labor during the peak period than farms that utilized family labor only.

Second, in any society where significant amounts of time and effort are invested in maintaining relationships within the family or clan, the distinction between work and leisure becomes difficult to identify. Other than at peak seasons in the agricultural cycle, it is likely

*J.S. Mill's socially defined concept of subsistence appears in both his discussion "Of Wages" (Book Two, II), and "Of the Stationary State" (Book Four, I) in his *Principles of Political Economy*; D. Ricardo, *The Principles of Political Economy and Taxation*. Homewood: Richard D. Irwin, Inc., 1963, p. 47.

that there is room within the household for some greater "self-exploitation" of its labor (Chayanov 1966, Ch. 2). While this possibility exists, to incorporate it into a decision-making model is difficult.

Another possibility is to express the objective function in terms of expected lifetime earnings, which would have the advantage of giving a specific, current value to a major element of Q. But, as Hutton (1973, p. 85) found in her survey in Uganda, with only a few exceptions, men expect that land that they will buy with their earnings or the children that they will have been able to educate with their earnings will be their sources of security in old age. If local inheritance practices do not ensure that children will adequately provide for elderly parents, current expenditures on R may be required as an additional means of socializing children to ensure that they will take this expected responsibility. Therefore, the dominant concern for the household is the current time period, the allocation of labor to attain $\hat{Y}$, even though longer-term interests may have some effect on how such labor is being allocated. As a result, our interest is limited to defining household objectives in the short term.

Over time, the values of C, R, and Q can be expected to change. Household preferences and perceptions of acceptable behavior are shaped by the social, political, and economic environment. The example that public officials set, the ideology they promote, the industries they encourage, as well as the policies they carry out can exercise a powerful influence on households. Also, the future values of C and Q (and possibly R) can be affected by current decisions. For example, a household that plans to dispatch certain of its members to an urban area is likely to perceive a need for schooling these individuals. This decision will affect the composition and possibly the value of C and Q. Both the education and residency in town are likely to have a positive feedback effect on C. Similarly, changing perceptions of risk and revisions of investment plans will affect the desired level of surplus. Finally, expansion of markets and changes in prices will affect both the composition and value of C, R, and Q.

Determinants of Household Income

To achieve its objectives the household must acquire income, whether in cash or in kind, from its productive activities. From its point of view, the immediate concern is net income: gross receipts less costs associated with the acquisition of those receipts. Prominent among these costs are taxes, rent, depreciation, amortization of debt, and purchased inputs. As stated earlier, labor enters as one of these costs of production only if it is hired directly for a wage. In the short run, net income earned from any source is simply the amount of household labor involved in that activity times the average net return to labor from that activity.

There is much evidence that rural households derive income from a variety of sources. The set of relevant possible income sources can be disaggregated as follows:

$$Y \equiv Y_a + Y_m + Y_e + Y_r \tag{1.2}$$

And, more generally,

$$Y \equiv \sum_j L_j W_j + \sum_k \beta_k L_k W_k \tag{1.3}$$

where Y_a is net household income derived from agricultural activity undertaken by household members, Y_m is net household income derived from rural nonagricultural activity undertaken in the local area by household members, Y_e is income derived from household members employed in local activity not organized by the household, and Y_r is the net change in household income caused by the emigration of a member. Included are net remittances plus the reduction in household consumption less the change in output caused by the absence of the household member. (Parents may promote emigration because they derive satisfaction from seeing a family member enjoy a higher standard of living in town even though there are insignificant remittances. This possibility of a psychic return to parental sacrifice is recognized but not built explicitly into the model.) The subscript j refers to the community and the subscript k refers to external areas. L_i is the number of adult-equivalent labor units engaged in activity i, W_i is the average net return per adult-equivalent labor unit engaged in activity i, and $\beta_i = Y_r/L_iW_i$.

In allocating its labor, the perceived values of the W_i's are of paramount importance to the household. Since these values can be known only after the work has been done, planning becomes subject to risk. Moreover, the degree of risk is likely to vary from one activity to another. In general, activities located outside the local area (sources of Y_r) are likely to have a greater variance around an expected average net income than activities centered in the local area (e.g., sources of Y_e), concerning which the household is better informed. Over time the household may be able to increase labor productivity and/or diminish risk through judicious investment and the adaptation of new production techniques. But, in the short term, the household can only attempt to guard against risk through a careful estimation of the W_i's and the use of its surplus fund Q for a buffer against unanticipated adventure.

Out-Migration as One Aspect of Household Labor Allocation

The most important short-term constraint on any household is the work it can do. If some members are exempt from economic activity for reasons of health, age, or sex, or in order to pursue other valued objectives such as schooling, then the household has less than L to allocate. Labor allocation may be constrained in other ways as well. For example, if the household cannot gain access to land, Y_a is 0. Similarly, if barriers exist to rural self-employment activities or if the household lacks the capital required to initiate a business activity, Y_m may be 0 as well.

Operating within such constraints, the household attempts to acquire a total net income equal to the desired level of household income as set out in Eq. (1.1) above. Symbolically,

$$Y = \hat{Y} \equiv (C + R)A + Q \tag{1.4}$$

In the unlikely event that $Y > \hat{Y}$, the household faces an "embarrassment of riches" and may choose to work less, consume or save more, or make additional investment in human or physical capital. If net income falls below desired income ($Y < \hat{Y}$), then the household will be disappointed and will have to reassess its labor allocation. In rural communities where formal schooling for the children is considered desirable and there is

considerable contact with urban centers, either through trade or because of previous rural-urban migration, we postulate that $\hat{Y}$ will rise over time so $Y < \hat{Y}$ is likely to be the more characteristic situation for households in the community.

Such households will pursue one or more of several labor reallocation strategies. If the household has ready access to an adequate supply of productive land the strategy employed will involve, at least in the peak seasons, a decision to intensify work effort, possibly forego some leisure, and reassess the exemptions from work for some household members. Alternatively, if educated members of the household are deemed to have good employment opportunities elsewhere and an adequate supply of labor is available locally, one or more household members may be encouraged to emigrate from the village and local, low-wage labor is substituted.

A decision to employ nonhousehold labor provides a special incentive to seek technological changes or labor-augmenting capital to increase the productivity of labor. In some areas limited availability of cash has been found to be an effective constraint to both innovation and the hiring of more labor to work land more intensively. (Both Gwyer (1971, p. 18) and Moock (1973, pp. 306–307) report evidence of cash shortages for parts of Kenya.) Either a shift to more cash crop production or the successful dispatching of household labor to outside employment can serve as a means for obtaining the needed cash. Also, externally employed labor spreads the household's earning sources over several different types, which can serve as a hedge against the risk involved in adopting new technology in an activity. Connell *et al.* (1976, p. 24) identify both of these effects of migration as the probable reason for "linked" migration observed in a number of low-income countries.

If land to generate $Y = \hat{Y}$ is not available, the labor reallocation strategy becomes more complex. Where some land exists, Goddard's findings (1974, p. 270) for three villages in Sokoto Province in northern Nigeria probably apply - this land will be used first to produce the basic food requirements for the household. For any other land, the household will weigh the returns of cash crop production and nonagricultural employment and allocate its labor accordingly. For one area where land is in short supply, the Maragoli sublocation in Kakamega district, Moock (1973, p. 307) reports that cash crop farming is viewed as merely a supplement to wage income. In this setting parents prepared their children for employment outside the local community by purchasing formal schooling for them as a substitute for the land that they as parents were not able to provide. Moock (1973, p. 304) implies that one aspect of R is declining in this setting in that "status is acquired more by accumulation of wealth than by its distribution."

In general, households prefer to supplement income with local nonagricultural self-employment or periodic wage employment in the home community. In settings where social relationships between family as well as clan members are important, out-migration carries an added cost in that the maintenance of effective relationships becomes more difficult. Where such local employment opportunities do not exist or returns to labor are perceived to be significantly below what is available externally, out-migration of household members is to be expected. Where food is grown locally, the household will be able to expend labor for external uses only where an adequate supply of labor exists. On the basis of a 1966–1967 survey of 70 households in Acuitzio, Mexico, Wiest (1973, Figure 1, p. 204) argues that out-migration of members occurs only if the household has three or more adult members. For smaller households, either the whole household leaves permanently to take up secure employment elsewhere or migration does not occur. We expect that seasonal

out-migration of a member would also be an option for small households. Landless households, unable to find local employment, will have no choice but to leave their home community and seek economic opportunities elsewhere.

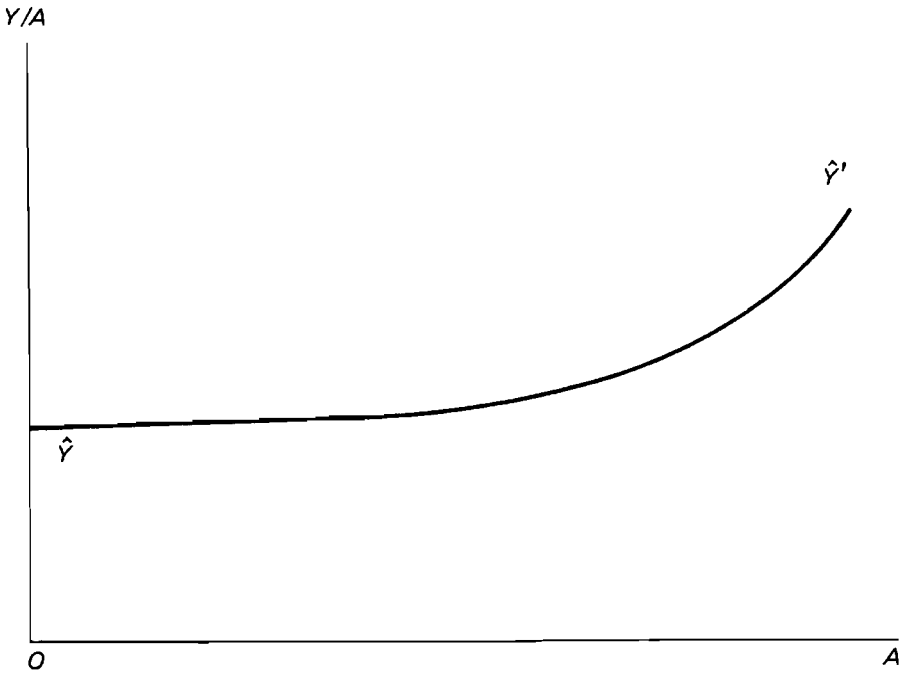

FIGURE 1.1 The aspirations of household members expressed as a function of household income.

The discussion this far can be summarized in a diagram (Figure 1.1). First, the aspirations of the members of the household can be expressed as a function of income. On the horizontal axis we measure the number of adult members A in the household. The line $\hat{Y}\hat{Y}'$ indicates the level of income (measured as Y/A) required to meet the goals and aspirations of each adult member of the household. The adult members of the household are ranked along the horizontal axis – the person with the lowest aspirations (possibly the elderly grandmother) at the left and the one with the highest (possibly a young adult with secondary education) on the right. If all members of the household labor force had the same level of aspirations, then $\hat{Y}\hat{Y}'$ would be a horizontal line at the level $\hat{Y}/A$. Who migrates would then be merely a random selection from the available household labor or would be based solely on different earnings prospects elsewhere among members of the household.

In general, any increase in $\hat{Y}$ for the household will cause $\hat{Y}\hat{Y}'$ to shift up and to the left. Similarly, the possibility of increasing Y, because of an increase in the expected value of external employment (W_k), will cause $\hat{Y}\hat{Y}'$ to shift up and to the left. Finally, any downward shift in the cost of migration (e.g., lower transport costs, kith at a destination)

will cause $\hat{Y}\hat{Y}'$ to shift up and to the left. Increased migration costs would have the opposite effect.

By combining Figure 1.1 with a concept of household labor productivity it becomes possible to portray the household's spatial allocation of labor. (A similar diagram, but based on individual decision-making, is provided by Udall (1975, pp. 4–7) in his study of migration in Colombia.)

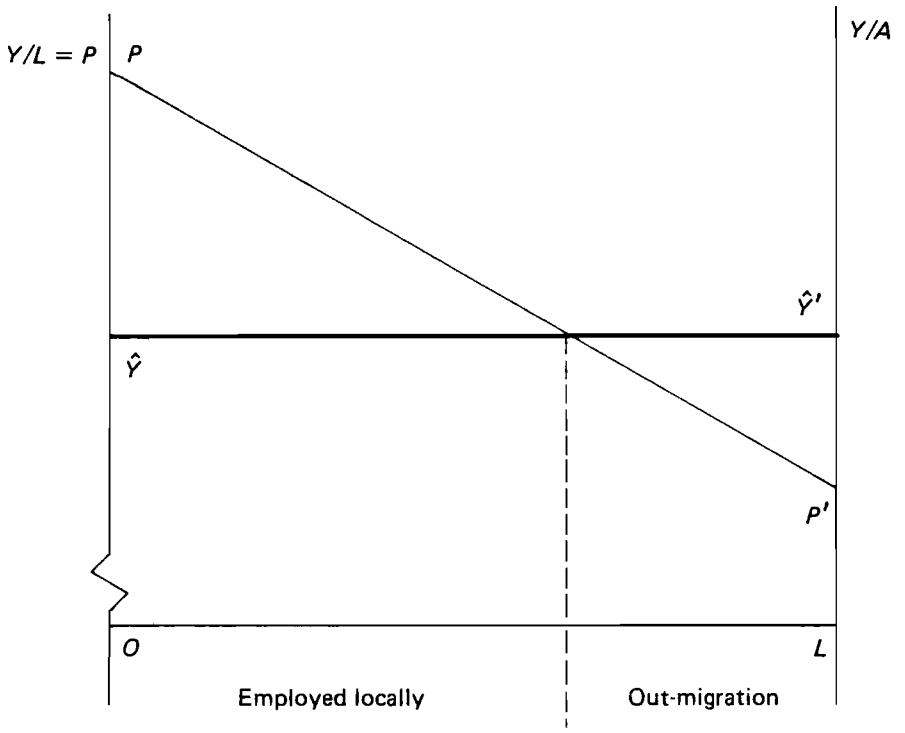

FIGURE 1.2 A model of household allocation of labor between local and external employment opportunities.

The horizontal axis in Figure 1.2 now measures the number of adult-equivalent members in the household labor force. Since we cannot distinguish aspirations among units of labor inputs, $\hat{Y}\hat{Y}'$ has to be shown as a horizontal line and is to be interpreted as an average level of aspiration per adult member in the household. The line $\hat{Y}\hat{Y}'$ in this form explains the extent of out-migration within any one household. The information in Figure 1.1 will be used to discuss which persons in the household are likely to be dispatched to employment opportunities outside the community.

In Figure 1.2 the PP' line indicates the average productivity of household labor at each level of labor employed. If diminishing returns are experienced at the margin, the line slopes down to the right. (The left vertical axis of Figure 1.2 is broken at the bottom

because of difficulties in specifying the output of the marginal unit of labor. If labor productivity is defined by the labor inputs required over an agricultural cycle, then the marginal productivity of labor cannot be zero in most if not all rural areas in Kenya.) In a peasant-type household, family income is shared so the average rather than the marginal product of labor is relevant for measuring the supply of labor available for use outside of the community (Knight 1967, p. 239; Gugler 1976, p. 188).

In general, an increase in Y caused by better transport to facilitate the selling of output and the bringing in of purchased inputs, labor-augmenting technical change, the acquisition of more land or a favorable shift in either household output or input prices will shift PP' to the right. A downward movement in Y would have the opposite effect.

One complicating aspect of modeling household labor allocation in this manner is that shifts in PP' and $\hat{Y}\hat{Y}'$ are not completely independent of each other. According to Hutton (1973, p. 100): " . . . such evidence as exists suggests that aspirations do seem to be stimulated by rising incomes within a given area." Huntington (1973, pp. 2–3) discusses this in terms of rising rural income (a parallel shift in PP' up and to the right), creating both a substitution effect (the rural home has become more attractive relative to external alternatives) and an income effect. The latter could increase out-migration (i.e., cause $\hat{Y}\hat{Y}'$ to shift up). Specifically, Huntington postulates that the increase in income caused by a spread of the cash economy could create a larger demand for market goods, reduce the cost of migration as the household becomes more involved in marketing its goods, and provide the type of work experience that would improve the ability of household members to obtain urban employment.

This approach to modeling out-migration (as summarized in Figure 1.2) is premised on the assumption that migration is the result of purposeful behavior on the part of the rural household. Both the person leaving and the household members remaining believe that the move will be beneficial. With the use of this model an explicit attempt is made to avoid separating the causes of migration as either "push" or "pull" forces. The households are seen to have basically a rural orientation. Any decision to dispatch household members to an urban location is based on perceived income opportunities available there relative to their local employment. The motives for migration are seen to be primarily economic, given the way PP' and $\hat{Y}\hat{Y}'$ are defined, but $\hat{Y}\hat{Y}'$ allows for noneconomic elements as well.

Several possible types of migration are ignored by this approach. First, desperate migration in the wake of natural disaster or armed conflict, both of which may suppress income below an acceptable level ($Y < (C + R)A$), is not included. In recent years there has been such migration in the Sahel and in areas of prolonged drought or severe flooding in India, Pakistan, and Bangladesh. Armed conflict was sufficiently evident in Colombia that Schultz (1971, p. 158) chose to enter "interregional differences in the level of violence" as an explanatory variable in his study of migration in Colombia. Neither of these forces has been particularly evident in Kenya in the postindependence period. Where they are, out-migration has been primarily to other rural areas rather than to one of the towns.

In addition, the people who felt compelled to leave their home communities because of divorce, disputes, or witchcraft are not covered by this model. Among 200 unemployed men interviewed at factory gates in Kampala and Jinja (Uganda), Hutton (1973, p. 72) found three who gave such causes as their reason for out-migration. Being an orphan or the death of the last remaining close relative was given more often (seven times). Therefore, whereas we do not deny such causes of migration, we expect the number of migrants to

be so small relative to the total rural–urban flow that they can be omitted in modeling the overall movement into towns and cities of Kenya.

THE MIGRATION DECISION-MAKING PROCESS

In the previous section, the decision to leave a particular community was placed within the context of the household's allocation of its available labor. The summary statement, as presented in Figure 1.2, provides the general parameters affecting migration decisions within a household.

In this section the household model will be used to discuss various aspects of the process of deciding whether or not to migrate to an urban location. Specifically, we will seek to provide the theoretical basis for answering such questions as: (1) what determines whether migrants leave a household in a rural area; (2) what determines the selection of an urban or a rural destination; (3) what determines which individuals in a household choose a particular urban destination; and (4) what determines whether migrants return, circulate between rural and urban areas, or relocate permanently.

The Determinants of Out-Migration

According to our model, the average product of labor interacting with the goals and aspirations of the household determines the proportion of the household labor that will leave the rural home area. For a given set of external economic and social opportunities this would imply that in rural areas it is the poorest households that leave: this can be seen clearly in Figure 1.2. For a given household size with a given $\hat{Y}\hat{Y}'$, the households with PP' closest to the origin provide the largest proportion of migrants. Where opportunities to employ the household's labor are severely constrained or the net return on labor employed is very low it is to be expected that out-migration rates will be high.

Empirically, this result cannot be substantiated. In Kenya, as in other countries (Connell *et al.* 1976, pp. 200–201; Lipton 1976, p. 17; Sabot 1975a, pp. 15–16), some of the poorest regions of the country provide a relatively low proportion of the urban in-migrants. (Data for Kenya are to be found in Tables 3.1 and 3.2. The lowest income areas of Kenya are in the migration source area designated *Northern*.) There are several reasons.

First, there are differences between households in their goals and aspirations (the position of the $\hat{Y}\hat{Y}'$ line). According to Hutton (1973, p. 97): "These apparent inconsistencies are best looked at in terms of relative aspiration." Aspirations are formed by a household's position in the community and by stimuli external to the community. In a poor region, with a fairly even distribution of income and limited contact with external sources, it is to be expected that the position of the $\hat{Y}\hat{Y}'$ line will be closer to the horizontal axis for all households in the region than it will be in regions with higher income – distributed unevenly – and extensive external interactions (Lipton 1976, p. 5). In addition, the ability of households to fulfill their aspirations will vary inversely with the concentration of wealth and the barriers to access to the productive resources of the community. Where access is severely constrained for some households in the community, it will be the poorest households, other things equal, that are most likely to migrate.

But other things are not necessarily equal among the households in such a community. To move to a place where better opportunities exist is costly. The poorer members of the community, especially those with rent commitments, may not be able to pay for moving nor be free to seek better opportunities elsewhere (Connell *et al.* 1976, p. 21). For such households, the most promising (low risk) prospect probably will be to take up employment opportunities within the richer households that require labor because they have dispatched their better educated young men to urban employment opportunities.

The Selection of a Destination

According to our model, out-migration will occur only if net earning opportunities elsewhere are perceived by the household to be sufficiently better than local sources of income to more than cover all costs associated with moving. Possibly, a number of locations are perceived to have better employment opportunities than the home region, but the destination selected is perceived to have the best opportunities.

The logic of this general position implies that households in one region would all dispatch their emigrants to the one location that had the highest earning prospect. Again, this does not occur because of other factors that do not apply equally across all households.

The dominant factor here is the need to play the urban employment lottery. "The game is very serious: rural income is foregone, costs are incurred in migration, severe hardship is experienced in urban unemployment. But new migrants keep joining in the 'gold rush' prospecting for urban employment" (Gugler 1976, p. 192).

Todaro (1976b, p. 215) defines the probability U of a migrant's finding employment in any one urban center in time t as:

$$U_t = \frac{g_t(1 - u_{t-1})}{u_{t-1}} \quad 0 \leqslant U \leqslant 1 \tag{1.5}$$

where g is the net rate of growth of modern sector employment opportunities in that location, and u is the rate of unemployment in that urban center. A probability less than one of obtaining an urban job enters a distinct risk into both the decision to move and the selection of a destination. As a result, the personalities of household members -- are they "dynamic risk-taking beings"? (Sahota 1968, p. 220) -- and the household's ability to finance a risky venture enter into the decision-making. In general, migrations by school-leavers tend to have a low opportunity cost because the school-leavers are just beginning their working lives, their travel and support costs in town tend to be low, and their aspirations are most likely to be shaped by what towns have to offer. Therefore, it is to be expected that they will have a relatively high propensity to migrate (Byerlee 1972, pp. 18–19). Whether a school-leaver is likely to be a sufficient risk-taker to select an urban destination will depend on several personal factors which will be developed below.

A second element in the decision to move and in the selection of a destination is the cost of the move. Direct pecuniary costs include the cost of the trip, the income foregone while moving and during the job search, and the cost of establishing a place of residence

at the destination. In addition, there may be significant nonpecuniary costs of separation from family and clan.

Costs of income foregone are expected to be higher for urban in-migration because the cost of establishing a residence will be higher than in the rural areas and the job search is bound to take longer given the urban employment lottery. Therefore, rural jobs that pay less than urban jobs may well be selected by migrants who have limited resources to finance the move and/or who are risk-avoiders. Indeed, for the poorest rural residents without land " . . . it is often likely to be the migration of despair, unplanned, uprooting the whole household, and increasingly degenerating into a wandering search for work" (Lipton 1976, p. 17).

A factor that can offset significantly the cost of moving to town are friends and relatives (kin) in town who finance the transition into urban life and assist in securing employment. For the unemployed interviewed by Hutton (1973, p. 83): "It was generally accepted that relatives and tribesmen had a duty to help each other and it was therefore inevitable that those without the necessary contacts would have difficulty in finding work."

It has been argued by some that certainty of earning income in the urban informal sector also overcomes the cost and uncertainty involved in selecting an urban destination (Connell *et al.* 1976, p. 16; Reynolds 1969, p. 91). The role of the urban informal sector in the migration process is deduced from assumptions about the informal sector. These assumptions, and hence the validity of the role of the informal sector will need to be tested empirically.

One final aspect of the role of employment opportunities in the choice of a destination is the term and security of the job. Although urban unemployment exists in Kenya, Gwyer (1972, p. 4) reports vacancies for permanent staff on tea and pineapple plantations and openings for casual employees on coffee farms. He argues that the reason for this seeming anomaly is the difference in the wages of these agricultural jobs and other formal sector jobs. Wasow (1973, p. 25) suggests that part of the answer is the length of employment that the job promises. He observed that interdistrict movement was evident to long-term positions in tea plantation areas but not to the seasonal work on coffee plantations. Hart (1973, p. 78), on the basis of a study in a slum on the outskirts of Accra, Ghana, places primary emphasis on the greater job security inherent in formal sector employment: "Thus, for subsistence purposes alone, regular wage-employment, however badly paid, has some solid advantages; and hence men who derive substandard income from informal activities may still retain or desire formal employment."

Beyond these economic determinants, there are a variety of other factors that may draw people to the cities:

> . . . it is quite obvious that the more important urban centers offer the better opportunities for education and training. Furthermore, a whole range of amenities not available in rural areas is found in the towns, especially in the capital cities. Such amenities as public housing, pipe-borne water, electricity and medical care are typically heavily subsidized (Gugler 1976, pp. 189–190).

The value that household members place on such amenities probably varies within households. It is in this sense that the level of aspirations of household members $\hat{Y}\hat{Y}'$ varies as shown in Figure 1.1.

The Migration Selection Process

The next step required of a theory of migration is to identify who it is in the rural areas that decides to relocate. Given our discussion above on the determinants of out-migration and on the selection of a destination, this part can be limited to those who decide to move to an urban destination. The migration selection process for rural-to-rural migration is not discussed.

The migration selection process includes the members of a household who move to an urban location and the households in the rural areas that are likely to dispatch members to an urban location. The conscious selection of a destination from a set of possible locations implies that the household has some information on the various locations. Very little is known about the process by which information is transmitted to rural residents so it is difficult to identify the causal role of information on the selection process. Huntington (1973, p. 5) proposes the following set of hypotheses:

1. Information is scarce and hence an important component in the migration decision.
2. The more information that flows between two areas, the more widely dispersed it will be over the population of the emigration area . . . .
3. Information is channeled within an ethnic group from one area to another but not between groups.

As a result, it is expected that some areas, each inhabited by a particular ethnic group, will have more information than others. The propensity for households in any one area to dispatch members to particular urban destinations will vary directly with the extent of information available in each area. As proposed by Huntington and cited previously, commercial contact with an urban center is likely to be a prime source of information in an area about that town or city.

In addition to such general information, specific information about a possible migration destination may be available to a household from kin who live or have lived there. Reliance on such personal sources provides extensive information on one or several destinations but does not ensure that the household is well informed on all possible destinations. As a result, a move may be less than optimal for a household, or a decision may be reached not to move.

Given the important role of information in migration it is to be expected that some households will seek information from impersonal sources as well. Such a search provides the possibility of obtaining information on a larger range of destinations, serves as a means of verifying information drawn from personal sources, and can provide more information about a destination than the kin who were resident there.

For the purposes of this study we will designate as passive the migrants who drew primarily on personal information sources. Conversely, the men who relied primarily on impersonal information sources will be designated active migrants. There is no reason to believe that households that dispatch active migrants have access to less information of a personal nature than households that dispatch passive migrants.

A second important aspect of the migration selection process is the distribution of skills both within and among households. In general, skills obtained from schooling tend to

be significantly better paid in urban locations than in rural areas. Therefore, the incentive to acquire information about urban possibilities and to move to an urban location will vary directly with the amount of schooling. In contrast, skills learned "by doing" in rural areas have a known payoff there but not necessarily a significantly higher return in urban areas. Since experience is gained over time, persons with such skills are likely to be somewhat older and an urban job search will have larger opportunity costs for them than for school-leavers. Hence skills gained in rural areas need not be transferable to an urban location.

In addition, the probability of obtaining employment in an urban center will vary directly with the level of schooling completed by prospective migrants. First, their probability of being selected in the urban employment lottery will vary directly with the amount of schooling. In part this reflects the use by employers of schooling as an indicator of work habits and the capability of learning more. Second, the better educated can always turn to lower-skill jobs should they fail to get the better employment opportunities, while the less well educated do not have a corresponding range of options.

Beyond these economic effects of education, it is to be expected that education affects the values and aspirations of the migrants. Hutton (1973, pp. 71–72) describes the better educated in her sample as follows: "What they wanted was a good life and for this they felt they had to have urban jobs which would bring them a steady income and utilize their capacities to the full. They felt an aversion to agriculture only to the extent that they thought they could do better in unskilled urban work than they could in any capacity in the village." This effect of education can be incorporated into Figure 1.1 by a shift up and to the left of the $\hat{Y}\hat{Y}'$ line which, in turn, would shift $\hat{Y}\hat{Y}'$ in Figure 1.2 upward.

A third aspect of the migration selection process is the role of age. In general, it is to be expected that young adults will be most prone to migrate to urban areas (Mitchell 1969, p. 178). In part, this reflects the differences between rural residents in the time they have to collect the difference in expected income from urban and rural jobs. Since this time varies inversely with age, the young adults have a greater incentive to move. Also, the degree to which the future is discounted tends to vary directly with age (Zucker 1967, pp. 538–540). Both of these factors will make the young more willing to consider the better paying, but higher risk, urban employment opportunities.

Also, farming as a direct income source for young men becomes a viable alternative only when the father provides the land. For some this may occur when they marry; for others only on the death of their father. In the meantime, urban employment opportunities, even in low paying jobs, hold out considerably better prospects for the young men than what is available to them in the rural areas as either an employee or merely another member on the family farm (Hutton 1973, p. 71; Elkan 1970, p. 520).

Another hypothesis is that time spent in an urban center may carry a degree of prestige bordering on initiation into manhood (evidence on the subject is summarized by Gugler (1969, p. 137), although he does not lend support to the argument). This explanation implies that the urban stay probably will be temporary and it reduces the importance of differences between age groups in the length of time horizons or rates of discount of the future.

In their study of urbanization in Africa, Hanna and Hanna (1971, pp. 27 and 44) propose a combination of these possible determinants. Placing primary emphasis on the economic determinants, they also note the social compulsion of the younger generation to defer to the elders. Therefore, ambitious youths need to migrate to the towns in order to obtain the freedom to realize their ambitions.

A fourth element in the migration selection process is the considerably higher propensity for males to migrate to an urban location than for females. In part this reflects the important role women play in much of East Africa in the agricultural endeavors of a household. Also, it may reflect discrimination against women in the urban employment lottery. But, for the women who choose to migrate it is not obvious that the motivation of women is markedly different from that of men. Beals *et al.* (1967, p. 486) found that their migration model explained the interdistrict movement of females as well as males. This result is to be expected if migration decisions have firm roots in a household decision-making process.

A fifth element is the role of kin in a city or town. We have noted previously that kith provide information and reduce the costs of migration. It follows that the households that are able to draw on the assistance of kin already resident in an urban area are better able and hence more likely than other rural residents to move to that area.

Why certain communities have established kin in an urban center while others have not is difficult to explain at any point in time. In part it reflects rural and urban conditions at some previous time period that were sufficiently conducive to migration that an urban "beachhead" was established. Further, the kinship structure in a village has some bearing on migration propensities.

> Certain structures encourage and facilitate migration . . . . Traditions of village exogamy and group endogamy clearly promote high rates of total migration. Labour migration is facilitated and may be encouraged by extended families, or by kinship structure which allows exchange between families to take place (Connell *et al.* 1976, p. 52).

When all of these aspects of the migration selection process are drawn together, household income levels can be seen to determine which rural households are likely to provide urban in-migrants. First, the availability of information is a function of the commercial interaction with one or more urban centers. Second, the ability to educate the children is dependent on the availability of income. Third, a household's income may well reflect that some members already employed are in an urban destination. Yet, some of the poorer families may become involved as well. Especially for younger brothers in a household with limited land, it may become clear at an early age that it is imperative for them to strive for an alternative income source if they are to have the opportunity of improving their standard of living.

The Determinants of the Term of Migration

The remaining factor that a migration model must identify is the length of the move. Historically, the parts of East and Central Africa influenced significantly by European settlement have been known for their labor circulation (Mitchell 1959; Mitchell 1969). In this system the migrant viewed the urban setting in instrumental terms only – a place to earn income – and he returned "home" periodically for extended lengths of time. Given the prominent role of women in agricultural production, the men could be absent for extended terms of 2 to 3 years. Weisner's survey (1972), based on a small sample drawn

from one part of Nairobi and one sublocation in Western Province, presents evidence that such circulation was still occurring recently.

While such circulation has not disappeared completely, there is a growing consensus that the urban employment situation has been changing dramatically during the latter part of the 1960s (e.g., Elkan 1970, p. 518; Gugler 1969, p. 147). Elkan provides several reasons for this tendency toward a more permanent urban labor force: (1) a substantial gap has developed between urban and rural earning possibilities; (2) current school-leavers have different motives for urban in-migration from those of the previous generation of migrants; and (3) the competition for the urban jobs has increased to the point that the employed can hardly afford to give up their jobs. Gugler places primary emphasis on the third reason.

This growing permanence in the urban labor force raises the question of who is returning periodically or regularly to the rural areas and who is remaining in the urban labor force. In general, one would expect the length of stay to vary directly with the level of skills of an urban resident. The skills serve to increase the income that the person is likely to earn, and hence raise her/his opportunity cost of returning once more to a rural alternative. In addition, the skills increase significantly the probability of the person's being selected for the better paying urban jobs. That this is occurring is indicated by the survey carried out by Thias and Carnoy (1969 Annex, Table 4.9 and p. 61) who found labor turnover to be higher among the better educated than among those with less schooling. They interpret this result as an indication that the better educated could afford to change employers because the competition for the jobs requiring advanced skills was not as high as for low-skilled employment.

Another explanation of who stays and who returns is the finding by Hutton (1973, pp. 62–63) that the unemployed based their possibility of a return to a rural area primarily on their perception of what specific rural alternatives were available to them. This result is consistent with Weisner's survey. Where the in-migrants fail to obtain satisfactory urban employment or lose their job, they make another evaluation of the prospects in the urban location and the rural home area. For some heads of households who had migrated the rural prospects may now appear more favorable – possibly because $\hat{Y}$ has been dampened or altered by the urban experience, perceptions of the urban earnings prospects have been scaled downward, or because skills obtained and money saved in the urban employment will increase earning possibilities at home (PP' shifts to the right). Thus, they return home. For others, the evaluation of prospects will result in a decision to remain longer or possibly move to another urban center where income and employment prospects (less the costs of moving) are perceived to be better than in the current location.

Amin (1974, p. 66) proposes yet a third possible determinant of eventual return migration. He distinguishes between movement of labor and movement of people. The former involves migrants entering " . . . a receiving society that is already organized and structured. There, they acquire a generally inferior status as workers or share-croppers." One form of such differentiation is the urban center designed for the higher-income groups. Those below the median income level cannot afford to participate fully, as a family, in this setting. Such a failure to be integrated into the social, economic, and political fabric of the receiving area will certainly provide an incentive for eventual return, at least if reasonable income earning prospects can be developed there with income earned while employed. On the other hand, people who become a fully accepted part of the receiving society will not have a similar "push" out of their urban residence to a more hospitable rural home. The

failure to be integrated into the destination area and the pull back to the social network of the home area have been modeled by Mitchell (1959).

SUMMARY OF HYPOTHESES

The discussion of the household's migration decision-making process can be summarized formally in several sets of hypotheses. These hypotheses serve as the analytical basis for the total study. Where possible, the hypotheses presented here are drawn together in Chapter 4 in two different but related aggregate models of migration. In addition to the test of these models presented in Chapter 4, attempts will be made to apply and test these hypotheses throughout the discussion of the survey results in Chapters 5 to 10.

The first set of hypotheses seeks to explain the decision by households to allocate labor to an alternative location.

H1.1 The probability of a decision to leave the local community will vary directly with the level of aspirations $\hat{Y}\hat{Y}'$ of a household.

H1.2 The level of aspirations of a household will be shaped by the community in which the household is located. The level of aspirations will vary directly with: (1) the extent of social and commercial interaction of the community with external areas; and (2) the extent of inequality in the distribution of income and wealth in the local community.

H1.3 The level of aspirations of a household will be shaped by its attempts to accumulate human capital. The level of aspirations will vary directly with: (1) the formal education obtained by members of a household; and (2) the need for young people to go to an urban center to obtain their schooling.

H1.4 The probability of a decision to leave the local community will vary inversely with a household's ability to generate the income Y equal to the income $\hat{Y}$ required to fulfill its aspirations.

H1.5 A household's ability to generate income will vary directly with: (1) the access of the household to the productive resources of the community; (2) the access of the community to ready markets for the output that can be produced in the community; (3) the prices paid for the output; (4) the level of productive, locally useful skills possessed by household members; (5) the number of employment opportunities in the community and the remuneration W_j received for such work; and (6) the ability of the household to employ new technology and labor-augmenting capital goods.

H1.6 The probability of a decision to leave the local community will vary directly with the household's perception of possible economic returns (β_k) from opportunities elsewhere. Such perceptions will vary directly with: (1) the economic opportunities available elsewhere; (2) the remuneration W_k for these opportunities; (3) the term and stability of these opportunities; (4) the commercial interaction with alternative locations with relatively attractive economic opportunities; (5) the extent of previous migration from the clan (or community) to alternative locations; and (6) the formal schooling of household members of the type that carries returns elsewhere but not locally.

H1.7 The probability of a decision to leave the local community will vary directly with the ability of a household to bear the cost of migration, job search, and establishment in another location.

H1.8 The probability that a male member of a household will decide to leave a community will depend on his access to the household's assets: (1) where use of land is controlled by the father until his death, sons will, at least temporarily, seek economic opportunities elsewhere; (2) where all male children inherit equal amounts of land and the total amount is small, the men will be more prone to look elsewhere when they come of age because they will see little future on their father's farm; and (3) where the oldest son inherits the family land younger brothers will seek opportunities elsewhere when they come of age.

H1.9 The probability that a female member of a household will decide to leave a community will vary inversely with the role of women in agricultural production.

H1.10 The probability of a decision to leave a local community will depend on the kinship structure. The extent of out-migration will vary directly with traditions of community "exogamy" and the practice of group endogamy within the clan.

The second set of hypotheses seeks to explain, for those who choose to move, the selection of an urban rather than a rural destination.

H2.1 The probability of selecting an urban destination will vary directly with expected β_k which will be a function of: (1) the income (relative to rural income possibilities) perceived to be available there; (2) the perceived probability of obtaining such an income; and (3) the availability of kin there who will share the costs of the move and assist in the job search.

H2.2 The probability of selecting an urban destination will vary inversely with: (1) the availability of land elsewhere to which the household can gain access; and (2) the commercial viability of such land.

H2.3 The probability of selecting an urban destination will vary inversely with: (1) the level of income available from employment opportunities in rural areas; and (2) the length of term and the security of such jobs.

H2.4 The probability of selecting an urban destination will vary directly with the ability of a household to bear the higher (relative to rural alternatives) costs of a job search and establishment in an urban location.

H2.5 The probability of selecting an urban destination will vary directly with the perceived earning possibilities in the urban informal sector.

H2.6 The probability of selecting an urban destination will vary inversely with the nature and extent of amenities in rural areas and directly with the nature and extent of amenities in the urban centers.

H2.7 The probability of selecting an urban destination will vary directly with the information about urban destinations available to a household. The availability of such information will vary directly with (1) the previous movement by kin to urban areas; and (2) the commercial interaction with urban centers.

H2.8 Households that actively seek information on employment and income conditions across a range of possible destinations are expected to realize a higher return from a rural-to-urban move than households that passively channel members to the locations where family members or close kin (friends and relatives) are resident.

H2.9 The probability of selecting an urban destination will vary directly with the schooling of household members.

H2.10 The probability of selecting an urban destination will vary inversely with the age of adults in a household.

H2.11 The probability of selecting a particular urban destination will vary directly with the cultural, social, and linguistic similarity between the urban center and the rural source area.

H2.12 The probability of selecting a particular urban destination will vary directly with the number and variety of jobs available there.

H2.13 Where the perceived urban income W_k is inadequate to enable a household to forego rural food production and to support the family in an urban setting, the probability of a rural-to-urban move by a household member will vary directly with the number of adult members in a household's labor force.

H2.14 The probability that a female member of a household will select an urban destination will vary inversely with the discrimination against females in the urban formal sector directly with the nature and extent of urban informal sector employment opportunities.

The third set, the personal characteristics that affect the migration process, cannot be separated from the other determinants of migration. As a result, they have been incorporated into the two sets of hypotheses listed above. The fourth set involves the term of the urban stay.

H4.1 The probability of a "permanent" relocation of a family to an urban area will vary directly with the income W_k available there and the perceived security of employment associated with W_k. Where the relocation becomes permanent any rural-based household members will lose most of the benefits from having a member in urban employment because remittances will be reduced to sporadic contributions.

H4.2 The probability of a decision to remain in town will vary inversely with the rural opportunities that exist or can be obtained.

H4.3 The length of an urban stay by males will depend on: (1) whether the immediate family remains to take care of the *shamba* (family land); and (2) the respective roles of males and females in agricultural production.

H4.4 The length of an urban stay will vary directly with the degree of social and political acceptance obtained by the migrant in her/his chosen destination.

2 THE KENYAN SETTING

The growth of both rural–urban migration and urban unemployment occurred as a result of the historical, demographic, and economic realities of the Kenyan economy. Therefore, prior to our analysis of the migration data, we will describe the most relevant aspects of this Kenyan setting. The first part of the chapter focuses on the historical evolution of the employment situation: it was shaped at first by colonial decisions and actions and then by the response of the business community and the government to the Mau Mau emergency. Following this historical sketch, the setting relevant to the migration, as surveyed in December 1968 and reported in the 1969 census, is discussed. The growth of the economy and changes in the structure of production and employment in the postindependence period up to the time of the survey and census are outlined, and the growing public concern over the unemployment problem is documented. Developments in Kenya subsequent to 1969 are discussed in Chapter 11.

The map of Kenya (Figure 2.1) indicates the current provincial and district boundaries and the location of the eight urban centers included in the survey. The bulk of Kenya's economic activity is located in Western, Nyanza, and Central provinces, and in parts of Rift Valley, Eastern and Coast provinces. The northern half of Kenya, much of Coast Province, and some parts of southern Rift Valley and Eastern provinces receive insufficient rainfall to support more than limited agricultural activity.

THE HISTORICAL SETTING

Colonial Rule

The determinants of the observed pattern of rural–urban migration reported in this study have their roots in the colonial period. At an early stage in the colonial period a decision was made to allow European settlement in the Protectorate of Kenya. Although the size of the European settlement, relative to the African population, was small, this European minority dominated political and economic development in Kenya in the twentieth century. Brett (1973, pp. 161–171) asserts that British commitment to settlement was not "overwhelming" but sufficiently strong to ensure the continued "viability of settler agriculture."

The economic domination by the settler community included alienation of land, setting up of limits on access for Africans to economic opportunities, actions to obtain needed African labor for European endeavors, and the importation of Asian workers from India and a subsequent restriction of their access to economic opportunities. Each of these factors will be discussed in turn.

The British colonial policy appears to have had at least two identifiable goals: the colony was to pay for itself and colonial acts were to be beneficial to the indigenous

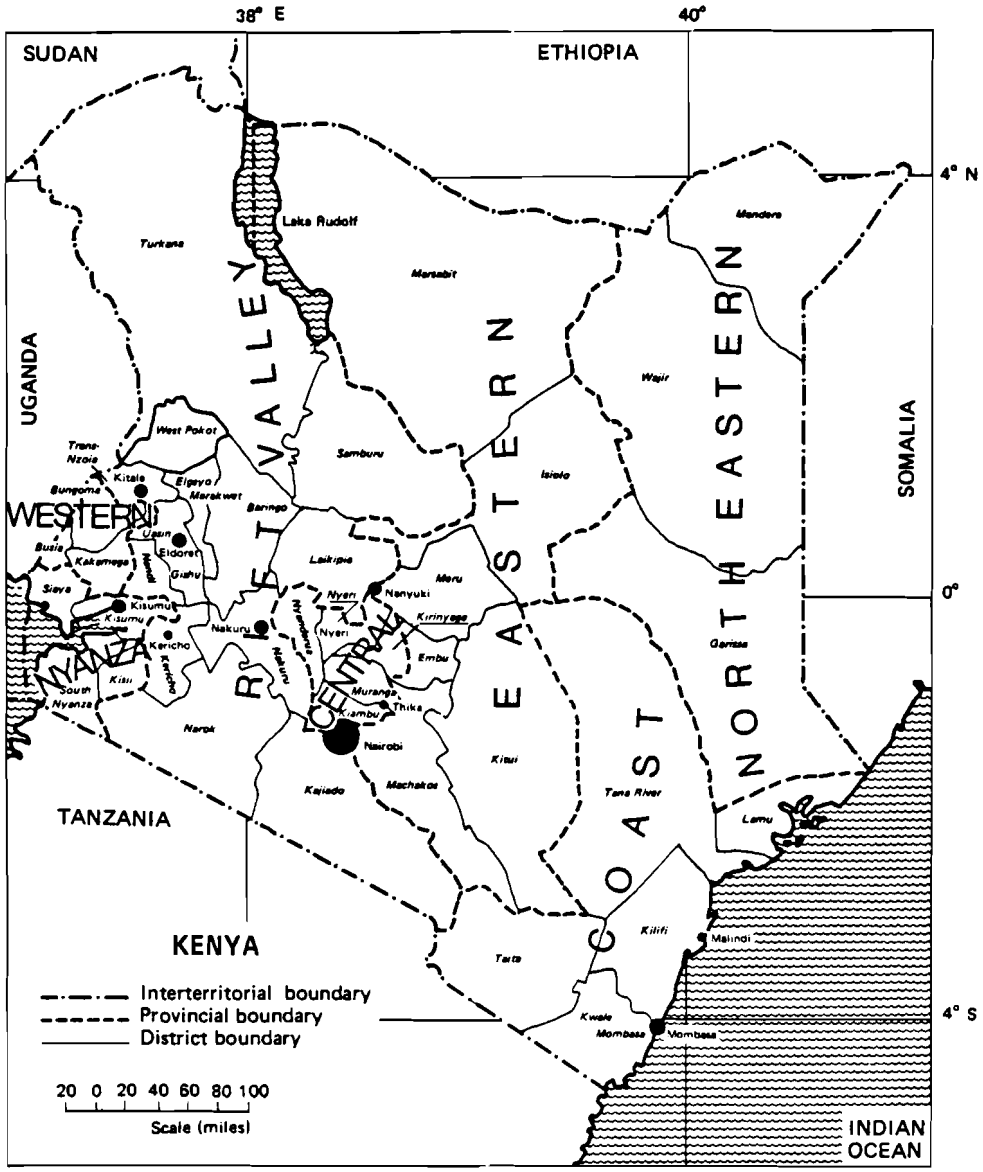

FIGURE 2.1 The provinces, districts, and major cities of Kenya.

population. The inducement of European settlement and the subsequent protection and stimulation of production by the settlers made the first goal a reality (Van Zwanenberg 1972a, p. 28). The presence of the settlers and their importance to the colonial administration frequently gave the European minority the power to define what was beneficial for the Africans. Although the exercise of this power is evident with reference to all four factors mentioned above, it was most noticeable in the alienation of African land for European use.

By the end of 1901, the Uganda Railway, which made European farming of the Kenya highlands economically feasible, was completed to Lake Victoria at Kisumu. Previously, in 1897, the colonial administration had barred the alienation of land if such action was injurious to native interests (Ross 1927, p. 48). In 1901, by order-in-council, purchase of land by Europeans became possible, but some protection was provided for Africans in that only land not occupied could be so alienated (Ingham 1965, pp. 212–213). A combination of several factors prevented the effective use of this protection against the alienation of native land. First, a severe smallpox epidemic had significantly reduced the Kikuyu population of Kiambu (Ingham 1965, p. 214), and a civil war, a smallpox epidemic, and rinderpest among the cattle had reduced the numbers and the fortunes of the Masai (Rosberg and Nottingham 1970, p. 4). As a result, at the turn of the century the land use by both the Kikuyu and the Masai was lower than it had been earlier. Further, the Kikuyu practice of shifting agriculture and the Masai reliance on grazing animals made it appear that land important for their existence over time was sometimes lying idle. Therefore, when several hundred farmers from South Africa arrived in Nairobi in 1904 demanding land immediately, the surveyors did not take time to establish whether land that appeared to be vacant was actually unoccupied (Ingham 1965, p. 213). Once considerable land in Kiambu district had been alienated, the 1901 order-in-council was interpreted quite liberally: some Kikuyu villages were included in the land alienated for the benefit of Europeans (Ross 1927, p. 51).

A second phase of land policy was undertaken in 1906 when four native reserves were created. In addition to defining land areas for the major tribes, this action removed the Masai from the choice farming land in the Rift Valley, which had a climate suitable for Europeans (Ingham 1965, pp. 214–215). Unfortunately for the Africans, the land policy did not provide them with a title to their lands in the reserves. As a result more land from these reserves could be alienated as required for European settlement. For example, in 1920, 50 square miles of land was taken from the Nandi when more World War I veterans than anticipated responded to an invitation to settle in Kenya (Ross 1927, p. 77).

The definition of the size of native reserves appears to have embodied the principle enunciated by John Ainsworth before the Land Committee of 1904–1905 (Rosberg and Nottingham 1970, p. 156). He stated that the basic requirement was to provide enough land for the existence of the natives plus what might be needed for a reasonable increase in the numbers of a tribe. Initially, the colonial action did little more than limit in principle the amount of land available, but after 1920 Africans, especially the Kikuyu, began to experience land shortages (Van Zwanenberg 1972a, p. 12). By the early 1930s the shortage of land in the reserves and the insecure position of the squatters on European lands created sufficient political pressure that a new Kenya Land Commission had to be convened. According to Rosberg and Nottingham (1970, p. 156), this commission did no more to meet the concerns of the Kikuyu for secure access to more land than implement the Ainsworth position as placed before the 1904–1905 Land Committee almost 30 years earlier.

The strong Kikuyu concerns on the land issue emerged from the growing awareness that land was the sole remaining means to a livelihood above a subsistence level in a settler-dominated economy. This position was articulated as early as 1924: "Deprived of our land, we Kikuyu should be dispossessed wanderers, dependent upon the Whiteman for home and livelihood" (this quote is from testimony before the Ormsby-Gore Commission, as provided by Rosberg and Nottingham (1970, p. 89)). Alternative avenues for realizing social and economic development had been cut off by the settler-dominated colonial administration. These restrictions included limitations on what crops could be grown by Africans, less access for Africans than Europeans to markets for farm output, and, in the early years, the limiting of formal education for Africans to that provided by missionaries.

By the 1930s it was becoming evident that the land in parts of the native reserves was deteriorating rapidly but the colonial administration attributed this to overstocking, not to excessive population pressure (Rosberg and Nottingham 1970, p. 167). At the same time large tracts of land claimed by the Europeans were not used for agricultural purposes (Van Zwanenberg 1972a, p. 8). Not only were Africans denied access to this vacant land, they also were prevented from growing such cash crops as coffee, tea, and pyrethrum. Further, access to grade cattle (cattle of a slightly improved quality over indigenous cattle) or sheep with better wool was limited (Ross 1927, p. 100). This did not mean that Africans were excluded completely from the export market. Prior to World War I, Africans provided more than half of the total protectorate exports in the form of hides, skins, wattle, and cotton, and they produced most of the maize used domestically (Ingham 1965, p. 222). The production of these cash crops provided some farmers in the reserves with the means to acquire more land which increased the extent of landlessness in the reserves.

Unequal access to markets took the form of a road and railroad network to service the European areas without a comparable investment for the natives. Also, rail transport of maize was subsidized from colony revenues. Prior to 1936 this was of benefit to Europeans only because African-grown maize was not graded, which was essential for exportation (Van Zwanenberg 1972a, p. 18). Further, African agriculture provided the bulk of Kenya's food, plus some exports, but its contribution was less than its potential because colonial investment in improving farming techniques was limited almost exclusively to the settler areas. Support for education for Africans was limited to one technical school plus subsidization of the instruction of some technical courses in the missionary schools (Ingham 1965, p. 364). Finally, Africans, under the guise of protecting them from indebtedness, were prevented from obtaining capital through borrowing.

The stated intent for these limitations ofAfrican access to economic opportunities was to protect the African and preserve his traditional way of life. Regardless of the intent, the effect was to reinforce the various European efforts to obtain the needed African labor without paying the price necessary to attract a sufficient supply of labor. These policies to obtain African labor have shaped the current urban situation and the pattern of rural–urban migration.

The need for more low-cost African labor in the European sector of the protectorate was evident as early as 1907. Initially the government resisted using compulsion to provide adequate supplies of labor. According to Rosberg and Nottingham (1970, pp. 20–21), the colonial administration accepted the position that the role of the African in the economy was to be confined to providing wage labor. This decision arose from a need for rapid growth, based on White settlement, plus the assumption that Africans would be more

productive working for Europeans than they could be in their own areas. (Brett (1973, p. 45) carries this one step further to encompass the social realm as well. "Since Africans could only benefit from what Europeans brought with them, no special guarantees were required to ensure that their interests were safeguarded; instead the Europeans could be exclusively entrusted with running of the country in accordance with their superior scale of civilized values.") The adoption of this policy on the role of the African in the economy shaped the government policy on access to economic opportunities discussed above.

The use of monetary incentives to induce an adequate labor supply was rejected because Africans were thought to be unresponsive to changes in money wages. A series of taxes – poll tax, hut tax, and then import duties on goods demanded by Africans – were introduced, and subsequently increased when more labor was required. The poll tax and the hut tax were increased by one-third in 1920 to 1921, which coincided with the rapid increase in the demand for labor caused by the influx of European settlers (Rosberg and Nottingham 1970, p. 45). Although the expressed purpose of these taxes was to raise revenue, The Commission Report by Lord Moyne in 1932 indicated that Africans received few benefits from their substantial contribution to the colony's tax revenue (Ingham 1965, p. 337).

More direct means for supplying adequate labor were passed in 1915 and implemented in 1919 in the form of the *kipende* system. The *kipende* made it mandatory that all African males were to be registered and required each to carry with him a paper containing a fingerprinted copy of his employment record. The expressed purpose of the *kipende* was to ensure that Africans had provided their given number of days of service to the government in the reserves, but it also served effectively to control the provision of labor to the settlers. Men who escaped from undesirable employers could be traced with this system and punished for breach of contract (Amsden 1971, p. 8). This provision of labor under conditions requiring control had become a reality under a labor circular signed by Sir Edward in 1919, instructing government officials to use "every possible lawful influence" to ensure adequate labor supplies. For the chiefs implementing this instruction the distinction between influence and force was not obvious (Rosberg and Nottingham 1970, pp. 60–61).

Although the Europeans preferred nonwage means for obtaining adequate labor supplies, they were not able to prevent some employers from increasing wages during periods of rapid economic expansion. An alternative use of wages was concerted action by employers to reduce all wages, which produced more labor, given the level of cash requirements for tax purposes. By 1952 the average wage for unskilled labor was KShs.25 per month, which was considered to be inadequate to provide for the basic needs of a worker (Rosberg and Nottingham 1970, pp. 204–205). A government committee set up in 1952 to study African wages indicated that many Africans received an "inadequate wage" for the work they performed.

One of the more effective means for obtaining labor at low cost was to have Africans live on the European estates with their families and a limited number of cattle. Large numbers entered into such "squatting" relationships, especially the Africans whose land had been alienated. This approach to the problem was altered somewhat by the Kenya Land Commission Report, accepted by the British government in 1938, which argued for more intensive land cultivation in the European areas based on increased European immigration and a large mobile African labor force. The Africans were to serve their time in the European

areas but their roots, family, and cattle were to remain in the reserves and the laborers were expected to retire there.

This concept of African labor prevailed also in the urban areas throughout most of the colonial period. Little concern was shown for the well-being of the workers, few amenities were provided, and few provisions were made for family living in the African sections of the towns (Van Zwanenberg 1972b, p. 14). In this setting the urban workers could not improve their productive capability nor could they develop a permanent urban way of life.

> The African found himself trapped in a vicious circle. It was assumed that his productive capacity would have to rise in order to bring about real wage increases, but the low wages paid inhibited him from acquiring the training for the skills necessary for higher productivity.
>
> One inherent consequence of this low wage economy was that nearly all African workers had to maintain an economic, social, and political stake in their own tribal areas in order to meet the minimum requirements of sustenance and security for themselves and their families (Rosberg and Nottingham 1970, p. 205).

Therefore, prior to independence, even though a number of Africans were employed in the towns at any point in time, it was not possible to speak of an urban, African labor force.

As a footnote to this discussion some mention should be made of the role of the Asians in the development of Kenya. Indians were active traders living on the coast of East Africa before Europeans became interested in the area. The Asians moved inland to trade with the natives as the British opened administration stations inside the territory. However, the goods traded were not Indian but primarily British and in some cases American; they were usually obtained from India. There was a significant influx of Asians during the construction of the Uganda Railway, but the majority left after it was completed. The Uganda Railway, however, continued to be dominated by Asian employees as clerks, ticket agents, and the like (Ross 1927, p. 300). Racial agitation by Europeans against Asians began early in the century as the settlers feared economic competition from Indians. Thus it was very difficult for Asians, even though they outnumbered the Europeans by more than three to one in 1948, to obtain farm land in Kenya and it was impossible for them to obtain land in the "white highlands." Urban areas were racially divided and Asians did not receive similar consideration to that of the Europeans in the provision of such amenities as sanitation and education. In urban employment Whites received the highest wage for a given job, Asians received less, Africans the least. Entrance to some professions was restricted to Whites as were some types of business. The one activity in which Asians maintained a monopoly was rural trade. Their activities in native areas, with their wholesale contacts, made competition from Africans impossible. (An example of the inability of Africans to compete with the Asian traders is cited by Marris and Somerset (1971, Ch. 2) in their description of African trade in Mahiga, Central Province.)

Postindependence Developments

By the beginning of the 1950s the pressure on land in the reserves, the income and wealth disparity between the Europeans and the Africans, and the effect of the denial of

access to the economic opportunities that made the European way of life possible had reached crisis proportions. In part, this crisis was fueled by the broadened awareness of Kenyan soldiers returning from abroad and the taste of a better life by small-scale farmers made possible by rising prices during the war (Hunter 1969, p. 116). Political independence was not realized for another decade, but the colonial policies toward Africans, as outlined in the previous section, were changed significantly during the emergency of the 1950s. Land reform was initiated, education for Africans was supported by the government, the basis for industrial unions was laid (Sandbrook 1975, p. 33), and minimum wage levels were legislated. Political independence in late 1963 allowed the acceleration of the policies initiated during the emergency. Further, there were more opportunities for Africans to claim land in the "white highlands" and to replace noncitizens in the high-wage administration and technical jobs. With the opening of high-wage jobs in the urban areas, following the removal of controls on urban in-migration in 1959, rural–urban migration increased to a level beyond the absorptive capacity of the urban economies (International Labour Office 1972, p. 85). By the time of independence, migration resulting in urban unemployment was an established pattern.

The need for land reform and increased access for Africans to land were especially obvious by the time of the Mau Mau emergency. The colonial response was the Swynnerton Plan, developed in 1954 and initiated shortly thereafter. The aim of the plan was "to provide 600,000 African economic farming units and raise the productivity of each unit from present sales valued at mere £5 to £20 per family to £100 a year or more after providing for the needs of the family" (Swynnerton 1954, p. 12). African farmers were to be provided with secure tenure to a plot of land of economic size and the technical, educational, financial, and marketing assistance to grow "high-priced cash crops for which a long-term demand is probable" (Swynnerton 1954, pp. 8–9). By the time of independence much of the agricultural land in Central Province had been appropriately registered. This approach to land reform has been continued after independence and the amount of land registered has increased from 3 percent in 1963 to 8 percent in 1968. These percentages were calculated from Central Bureau of Statistics (1969, p. 80; 1973, p. 79). Since 1966 the quantity of coffee produced by smallholders has exceeded that produced by the large estates (Central Bureau of Statistics 1969, p. 70).

The result of the Swynnerton Plan, which enabled Africans to purchase and sell land, was to create landed and landless classes in the rural areas. Although settlement schemes were initiated by the colonial administration during the 1950s, their use has been expanded considerably since independence, providing land in the former European areas for some of the landless. The number of hectares purchased for settlement schemes increased from 173,813 in 1963 to 513,849 in 1968. By 1968, 33,131 families had been settled on 127 schemes producing agricultural output from a variety of crops valued at £2,425,729 (Central Bureau of Statistics 1969, pp. 78–79).

A second important grievance leading to the emergency was the low level of wages. Labor unrest under conditions of labor shortages during World War II forced the colonial administration to consider changes. A Commission of Inquiry in 1939 found that 52 percent of the railway staff in Mombasa received KShs.20 a month, and many of them received no housing. Mombasa Municipality road laborers received KShs.16 a month and lived in quarters that had been condemned (Rosberg and Nottingham 1970, p. 184). In 1944 minimum wages were introduced in Nairobi and in 1946 they were extended to Mombasa. Although it was recognized as early as 1946 that the minimum wage had to include some

provision for supporting a family, it was not formally recommended until 1954 and not effectively implemented prior to independence (Hunter 1969, p. 121). As of 1962, the minimum wage in 13 towns for an adult male was only 45 percent above that for a youth or a single woman, although housing allowances were doubled for men if they were over 21 years of age (International Bank for Reconstruction and Development 1963, p. 218). From 1959 to 1963 the minimum wage for adult males in Nairobi and Mombasa increased from KShs.95 to 115 a month while housing allowances increased from KShs.24.5 to 35. In the smaller towns the comparable increases were from KShs.92.5 to 109 for wages and from KShs.20.5 to 26 for housing allowance (Central Bureau of Statistics 1966, p. 216). Postindependence action was not immediate, but in 1967 minimum wages for males 18 years and older were set at KShs.175 per month in Nairobi and Mombasa, and KShs.160 per month in other towns. For Nairobi employees this represented a 5 percent real increase in minimum wages. (The Wage Earner's Consumer Price Index increased during this period from 101 in 1963 to 112 in 1967.)

Of greater significance than these changes in minimum wages has been the increase in wages for Africans. Although no supporting data are provided, Hunter argues that in the mid-1950s there was little or no difference in real earnings between urban and agricultural workers (Hunter 1969, p. 121). Wages had risen significantly in the towns during the first half of the 1950s, but the increases had done little more than offset price increases during the same period (Amsden 1971, p. 14). The Carpenter Report of 1954 advanced a formal argument for a high-wage economy as a means of achieving a more stable labor force (Hunter 1969, pp. 121–122). The inclusion of family responsibilities in calculating the minimum wage was part of this argument.

Within large "modern" manufacturing firms the movement to a high-wage, limited-size labor force was evident from the 1950s onward. It took the form of more capital intensive production plus the reorganization of operations where attempts were made to reduce labor turnover and supervision costs by providing on-the-job training and offering relatively attractive wages to Africans with some education and vocational training (Hunter 1969, p. 120). Therefore, during the 1950s there emerges, even among Africans, what has been termed an "aristocracy of labor" receiving wages significantly above the level of the vast majority in either unskilled jobs or in more traditional industries (Van Zwanenberg 1972b, p. 16). Even with this improved status for Africans with some education, prior to independence their mobility upward into the high-paying jobs held by Europeans and Asians was severely inhibited (Rosberg and Nottingham 1970, pp. 352–353). Access to these jobs was increased after 1967 when a policy of Kenyanization was instituted.

This improvement in employment opportunities for some Kenya Africans from the late 1950s onward was made possible by the colonial administration's acceptance of some responsibility for providing education for Africans. In the decade up to 1962 the enrollment of African primary pupils increased from 333,000 to 800,000. African enrollment in Standards V to VIII increased from 7,600 in 1958 to 156,000 in 1961, and entrance into secondary schools doubled between 1957 and 1961 (International Bank for Reconstruction and Development 1963, pp. 224–230). This improved access for Africans was much accelerated after independence. In 1968 there were 1,212,680 Africans enrolled in primary school, 101,361 in secondary school, 6,634 in teacher training schools, 8,637 in technical or vocational secondary schools, and 1,605 in the University of Nairobi. From 1963 to 1968 the percentage increases in enrollments were: primary schools – 36;

secondary school – 169; teacher training – 61; technical and vocational – 393; and university – 242 (Development Plan: 1970–1974 (1969), p. 451). Using the percentage passes of the external exams for the Cambridge School Certificate and Higher School Certificate as a unit of measurement, the quality of secondary school education does not appear to have deteriorated during this period of rapid expansion.

Along with the advancementof Kenyan Africans as employees there emerged the need for setting up machinery for handling labor disputes. Official recognition of unions dates back to World War II, although effective concerted action by a group of employees dates back at least to the Mombasa strike of 1939. By 1961 the Kenya Federation of Labour and the Federation of Kenya Employers cooperated to form a National Joint Consultative Council as a voluntary means of heading off strikes or lockouts (Hunter 1969, p. 134). One year later these voluntary arrangements were formalized somewhat in the Industrial Relations Charter. As a means of handling labor disputes these arrangements were of limited success because more man-days were lost because of strikes during 1962 than during the whole period from 1948 to 1959 (Amsden 1971, pp. 74–77). The increased power of unions was evident in that some 50 percent of the 1962 strikes were over issues that the Federation of Kenya Employers considered non-negotiable.

In 1964, as a part of a larger program to stabilize the employment situation, the government established the Industrial Court. Disputes that could not be resolved through normal collective bargaining and conciliation channels were to be referred to the court. For many disputes it had no direct power because its decisions became binding only if they were accepted by both sides in the dispute, except in cases involving essential services (Hunter 1969, p. 136).

The effect of unions in the postindependence period has been to maintain, if not increase, the income disparity among different wage groups. Unionization has had this effect because only some employees, primarily in the urban centers, are effectively represented. Also, among unionized employees there are differences in the capability of unions to demand and receive wage increases from firms with an ability to pay. Conversely, the Industrial Court has reduced wage differences among unionized employees in part because of a tendency to award a fixed sum increase for all employees rather than a percentage increase (Ghai and Hollen 1968, pp. 7–10). For all employees the court probably has increased income disparities because the need to hand down decisions acceptable to both parties has tended to promote wage increases for employees who are involved in bringing disputes before the court.

Therefore, by the time of our migration survey, there existed in the larger towns a small but relatively high-wage labor force. The report of the 1967 Public Service Salaries Review Commission (1967, p. 23) estimated that earnings in the towns in 1965 were on the average approximately twice the total earnings of farmers. This portion of the economy was characterized by a slow rate of growth in new employment opportunities and a declining rate of labor turnover (Thias and Carnoy 1969, pp. 57 and 61). The result was an increased inducement to migrate into the towns but a declining probability for a migrant to obtain one of the high-paying jobs. The government had furthered the likelihood of migration into urban unemployment through its rapid expansion of education facilities, but had not changed the structure of the economy to enable the absorption of this growing labor force in meaningful employment.

> . . . Kenyan attitudes and aspirations had perhaps been moulded more than was realized by the style and ethos of the divided economy, by the colonial experience of having to accommodate oneself and to work within the existing structure of the economy rather than to change it. Thus, when national independence was achieved the political aim of taking over the economy became merged almost imperceptibly with individual aspirations to take over the jobs, positions and life styles which the economy made possible (International Labour Office 1972, p. 87).

DEMOGRAPHIC FACTORS

According to the 1969 census the population of Kenya was 10,942,705, of which 98 percent was designated as African. As in other developing countries, the rate of population increase has been rapid: 3.4 percent annually from 1948 to 1969. The average rate for Africans increased from 3.3 percent during the 1948 to 1962 period, to 3.6 percent from 1962 to 1969. This increase in the rate of population growth was offset by a decline during the 1962 to 1969 period of 4.5 percent annually for Europeans and 3.4 percent for Asians. From 1948 to 1962 both groups were increasing at annual rates of 4.5 and 4.2 percent. The decline of the European population was evident throughout the 1962 to 1969 period, but the decline of the Asian population only started in 1967 (Central Bureau of Statistics 1972, p. 13). This indicates the magnitude of the Asian exodus during the last 2 years to produce an average decrease of 3.4 percent a year over a 7-year period.

The population indigenous to Kenya is frequently divided into five major ethnic groups. As indicated in Table 2.1, the dominant group is the Central Bantu; they comprise the Kikuyu of Central Province and the Meru, Embu, and Kamba of Eastern Province. The other two Bantu groups are the Western Bantu, which include the Luhya of Western Province and the Kisii and Kuria of Nyanza Province, and the Coastal Bantu located along Kenya's southeastern coast. The Nilotic group is the Luo tribe, located primarily in Nyanza Province. Among "other Kenyan" are included various tribes in Rift Valley Province, including the Masai and the nomadic tribes of northern Kenya.

Just over 8 percent of Kenya's population was enumerated as resident in the eight urban centers under consideration. The majority of the population that is not indigenous to Kenya is urbanized but accounts for only 3 percent of the total population. Above average urbanization is evident among the Coastal Bantu, located almost exclusively in Mombasa, and the Central Bantu. Both Nairobi and Mombasa draw from the full range of ethnic groups, while Nyeri, Nanyuki, and Thika are quite limited in the range of migrants that they attract. The presence of significant numbers of all ethnic groups, with the possible exception of the Coastal Bantu, in Rift Valley Province is an indication of the in-migration from Central, Western, and Nyanza provinces as many Europeans and Asians departed.

More detailed information on interprovincial migration can be obtained by consideration of data on place of birth as reported in the 1969 census. As indicated in Table 2.2, 1,311,790 people were born in a province other than the one in which they were enumerated. An additional 158,692 were born outside of Kenya. The two most important receiving provinces are Rift Valley and Nairobi. But, Nairobi is also the second most important sending province, next to Central Province. If net interprovincial movements are considered,

TABLE 2.1 The percentage distribution of the major ethnic groups among the provinces of Kenya.[a]

Province	Ethnic groups						Total
	Central Bantu	Western Bantu	Coastal Bantu	Nilotic	Other Kenyan	Other Non-Kenyan	
Nairobi	6.2	3.1	0.9	4.1	0.5	37.6	4.6
Nyanza	0.1	34.1	0.1	86.3	0.4	2.7	19.1
Kisumu	0.1	0.3		1.0		3.1	0.3
Western	0.3	52.8	0.1	1.3	6.0	1.6	12.1
Rift Valley	7.8	7.4	0.4	3.8	76.0	7.8	19.5
Nakuru	0.5	0.4	0.1	0.5	0.1	2.1	0.4
Eldoret	0.1	0.3		0.2	0.1	1.2	0.2
Nanyuki	0.2					0.4	0.1
Central	38.8	0.4	0.2	0.4	0.4	2.9	15.1
Thika	0.3	0.1		0.1		0.7	0.2
Nyeri	0.2					0.5	0.1
Eastern	43.5	0.2	0.3	0.2	3.9	2.3	17.4
Coast	0.8	0.2	85.8	0.6	0.9	7.9	6.4
Mombasa	1.1	0.7	12.0	1.5	0.1	27.6	2.3
Northeastern			0.1		11.6	1.6	2.2
Total rural	91.3	95.1	87.0	92.6	99.2	26.8	91.8
Total urban	8.7	4.9	13.0	7.4	0.8	73.2	8.2
Total	38.1	20.2	6.5	13.9	18.8	2.5	100.0

[a]Provincial percentages are net of the percent located in the towns within the province.
SOURCE: Central Bureau of Statistics (1970 and 1971, Vol. I, Table 2 and Vol. II, Tables 3 and 4).

Rift Valley, Coast, and Nairobi are provinces of in-migration and the remainder are provinces of out-migration. The inclusion of those born outside of Kenya changes the migration magnitudes but not their sign, and it does not change the ranking of the provinces, except for Northeastern Province, which received a net total of 240 people. These results are similar to those reported by Ominde (1968, pp. 122–135) in his analysis of the 1962 census data. The exceptions are the extensive in-migration into Nyanza Province and the out-migration from Nairobi.

The importance of Nairobi, Nyanza, and Central provinces as areas of both in-migration and out-migration requires further explanation. The census data indicate that Nairobi is the most important source of migrants for the rural areas of Nyanza, Western, Central, and Coast provinces. The data analysis was by 5-year age groups: 0–4, 5–9, 10–14, 15–19, and 20 and over (for the three provinces with urban centers the urban and the rural populations were considered separately). It shows that each of the urban areas has less than expected numbers in the school age years of 5–9 and 10–14 and a greater than expected number in the 20–and-older category. This deviation from the distribution for the total population is evident especially in Nairobi and Mombasa. Conversely, the exact opposite pattern was observed in Western Province and the rural portion of Nyanza Province. Central Province had a significant number above expected values in the 0–4 age category but a negative deviation in the 10–14 age group. Both Rift Valley and Coast provinces, important in-migration areas, had distributions more like that of the urban centers. Eastern Province had only small deviations from expected values while in Northeastern Province the number of children less than 10 was well below expected values.

TABLE 2.2 The distribution of the Kenya population by province of birth and province of enumeration.[a]

Province	Number born outside of province of enumeration	Number enumerated outside province of birth	Net interprovincial movement	Number born outside of Kenya	Total number of people received	Number born in province of enumeration
	(1)	(2)	(3 = 1 − 2)	(4)	(5 = 3 + 4)	(6)
Nairobi	330,403	303,580	26,823	52,026	78,849	123,013
Nyanza	169,329	186,069	−16,740	15,503	−1,237	1,928,659
Western	58,699	200,946	−142,247	10,901	−131,346	1,256,088
Rift Valley	404,355	88,823	315,532	24,724	340,256	1,749,617
Central	151,421	332,555	−181,134	5,711	−175,423	1,507,366
Eastern	33,454	161,871	−128,417	6,808	−121,609	1,852,216
Coast	155,210	27,666	127,544	41,418	168,962	731,430
Northeastern	8,919	10,280	−1,361	1,601	240	234,794
Total	1,311,790	1,311,790		158,692		9,383,183

[a]Calculated from unpublished data from the 1969 census provided by the Central Bureau of Statistics, Ministry of Finance and Planning.

On the basis of this information it would appear that children of school age who were born in Nairobi and Mombasa are being returned to rural areas in Nyanza, Western, and Coast provinces. This is especially evident in the 10–14 age group. In Central Province this process of returning children to the rural areas occurs at a younger age, and may reflect a tendency for mothers to come to Nairobi for the birth of their children and for mothers working in Nairobi to return younger children to rural areas for child care. This process of returning children to rural areas is not evident in Eastern Province, possibly because there are fewer schools there than in Central, Western, and Nyanza provinces. The age distribution in Northeastern Province may indicate that the drastic reduction in infant mortality evident elsewhere in Kenya has not yet occurred there.

Further, the migration data indicate that most of the in-migration into the rural part of Central Province comes from Nairobi and Rift Valley provinces, the two most important destinations of migrants from Central Province. This may indicate that some return migration is occurring. An additional explanation is that both migration streams may be affected by people born in Nairobi and Rift Valley provinces who were forced back into Central Province during the emergency. Third, for all towns except those located in Rift Valley Province, the most important source of migrants is the province in which the towns are located. The exception of the Rift Valley Province towns of Nakuru, Eldoret, and Nanyuki reflects the limited out-migration from the rural parts of that province, which was evident in our survey as well. Finally, 43 percent of the in-migration into Coast Province was enumerated in Mombasa. Other than the movement from Nairobi, rural areas in Coast Province draw primarily from Eastern Province, with only small flows evident from Nyanza, Central, and Western provinces. The movement from these three provinces focuses more on Mombasa.

The Kenyan African population in the eight urban centers studied has been growing at an average annual rate of 7 percent from 1948 to 1962 and at 9 percent between 1962 and 1969. Although the rate of growth of these eight towns is substantial, the effect of this growth on population size in the rural areas is limited because less than 7 percent of the Kenyan African population was resident in these towns in 1969. The urban growth in Kenyan African population represents about 3 percent of the potential migrants in the rural areas. Even if all in-migrants into the towns were adults, this would account for a little more than 20 percent of the growth in the rural adult African population from 1962 to 1969.

Although the total number of Kenyan Africans resident in the major urban centers is still low, the concentration of the better educated in these towns is pronounced (see Table 2.3). Almost two-thirds of the adult population has no formal education and 94 percent of these are in the rural areas. At the other end of the education spectrum, only 3 percent of the population has at least 3 years of secondary schooling but more than half of these are enumerated in the eight towns. Of the educated who are in the towns, more than 70 percent are in Nairobi; 20 percent are located in Mombasa. For the total population, the distribution of those with 1 to 4 standards of schooling is proportional to the rural–urban population distribution. For levels of education beyond standard 4, the propensity to locate in one of the eight towns increases directly with the level of education. Therefore, the rural–urban migration process is rather selective in the rural areas: there is a tendency to transfer human capital to the urban centers, especially to Nairobi.

TABLE 2.3 The percentage distribution of the educated for the population 15 years old and older.

Province of enumeration	Years of formal education					
	None or not stated	Standards		Forms		Total
		1 – 4	5 – 8	I – II	III – VI	
Nairobi	2.8	6.5	10.3	17.2	37.3	5.9
Nyanza[a]	19.7	16.7	17.2	15.2	8.2	18.5
Kisumu	0.2	0.3	0.7	1.3	1.7	0.4
Western	9.9	15.3	13.5	12.2	6.8	11.2
Rift Valley[a]	22.6	16.2	14.5	12.2	9.3	19.7
Nakuru	0.2	0.5	0.9	1.3	1.8	0.5
Eldoret	0.1	0.2	0.3	0.5	0.8	0.2
Nanyuki	0.1	0.2	0.2	0.2	0.3	0.1
Central[a]	11.3	19.0	20.3	19.4	12.7	14.2
Thika	0.1	0.3	0.5	0.6	0.6	0.2
Nyeri	0.1	0.1	0.2	0.2	0.3	0.1
Eastern	18.5	18.7	14.5	10.0	6.0	17.2
Coast[a]	8.6	3.7	3.1	3.0	3.9	6.7
Mombasa	2.3	2.1	3.6	6.3	10.0	2.8
Northeastern	3.5	0.2	0.2	0.4	0.3	2.3
Total rural	94.1	89.8	83.3	72.4	47.2	89.8
Total urban	5.9	10.2	16.7	27.6	52.8	10.2
Total	64.5	11.2	18.9	2.9	2.5	100.0

[a]These provincial percentages are net of the educated resident in the towns within the province.
SOURCE: Central Bureau of Statistics (1971, Vol. II, Table 5 and Vol. III, Table 1).

THE STRUCTURE AND RECENT GROWTH OF THE ECONOMY

According to our migration model, human capital can be expected to gravitate to high wages and modern sector activity. Our intent here is to identify the growth sectors in the Kenyan economy and to relate changes in employment and earnings to this growth pattern. Where possible the data are presented in terms of the rural and urban areas to document the extent of the concentration of high-wage employment opportunities in the towns.

During the period under study the Kenyan economy has been growing at 6 percent a year at constant 1964 prices. As indicated in Table 2.4, this rate of growth has not been identical in all parts of the economy. The nonmonetary sector growth has been below average, causing a slight decline in its relative importance in the economy. The same is true for agriculture, both in the monetary and nonmonetary sectors. Within the remainder of the monetary portion of the private sector, growth in manufacturing has been lagging as well. Above average growth occurred in the construction, transport, commerce, and service sectors. The latter three are essential to facilitate economic development but they cannot serve as the leading sectors that provide the engine of growth for a sustained development effort. Because both manufacturing and agriculture are lagging behind overall growth in the economy, a considerable burden is placed on the public sector to serve as the driving force in the growth process.

TABLE 2.4 Gross domestic product at factor costs in constant 1964 prices.

Sector	Gross domestic product		Annual rate of growth (%)	Proportion of total GDP	
	1964 (K£m)	1968 (K£m)		1964 (%)	1968 (%)
Monetary	242.46	316.97	6.9	73.2	75.1
Agriculture	51.97	61.91	4.5	15.7	14.7
Forestry	1.88	2.53	7.7	0.6	0.6
Fishing	0.85	1.14	7.6	0.3	0.3
Mining and quarrying	1.46	1.44	–0.3	0.4	0.3
Manufacturing	33.74	42.11	5.7	10.2	10.0
Building and construction	6.82	10.25	10.8	2.0	2.4
Electricity and water	4.84	5.70	4.2	1.5	1.3
Transport	25.14	38.66	11.3	7.6	9.2
Trade	32.98	42.63	6.6	9.9	10.1
Banking	11.60	16.17	8.6	3.5	3.8
Ownership of dwellings	13.34	13.88	1.0	4.0	3.3
Other services	11.90	17.34	9.9	3.6	4.1
Total	196.52	253.76	6.6	59.3	60.1
Domestic services	2.94	3.73	6.0	0.9	0.9
General government	43.00	59.48	8.4	13.0	14.1
Nonmonetary	88.89	105.10	4.2	26.8	24.9
Agriculture	73.36	87.14	4.3	22.1	20.6
Other	15.53	17.96	3.6	4.7	4.3
Total	331.35	422.07	6.3	100.0	100.0

SOURCE: Development Plan: 1970–1974 (1969, Table 2.5, p. 29).

This growth in gross domestic product is associated with a substantial increase in the level of annual gross capital formation (Table 2.5). In general, the sectoral increase in investment and the growth in output in these sectors are correlated. In manufacturing and transport the increase in investment is larger in the public sector than in the private sector. Just over half of the total increase in capital formation between 1964 and 1968 occurred in the public sector, although it accounts for only 36 percent of the level of 1968 gross capital formation. Precise information on the rural–urban distribution of capital formation is not available. Seven municipal councils –Nairobi, Mombasa, Kisumu, Nakuru, Eldoret, Thika, and Kitale – account for 31 percent of the 1968 General Government investment even though they contain only 8 percent of the population (information on municipal council gross capital formation was obtained from the Central Bureau of Statistics (1972, p. 200)). The eight towns in our survey account for 63 percent of the modern sector, nonagricultural employment in 1968, and it is probable that the private sector rural–urban distribution of nonagricultural investment was similar to the distribution of modern sector employment.

Table 2.6 indicates the changes in employment and earnings associated with the economic growth in the monetary sector of the economy. Data for 1956 and 1963 are included to place the impact of Kenyanization since independence in perspective. Several aspects

TABLE 2.5 Gross capital formation by industry at constant 1964 prices (K£ million).

Sector	Private sector		Public sector		Total capital formation	
	1964	1968	1964	1968	1964	1968
Nonmonetary	5.2	6.5			5.2	6.5
Monetary						
Agriculture	8.1	9.9	0.3	0.5	8.4	10.4
Mining and quarrying		0.5				0.5
Manufacturing	6.8	9.4	0.1	2.8	6.9	12.2
Construction	0.9	3.5	0.5	0.8	1.4	4.3
Electricity and water	1.0	1.9	0.4	0.9	1.4	2.8
Transport	6.2	8.8	4.7	6.4	10.9	15.2
Commerce	2.8	2.7		0.3	2.8	3.0
Services	3.2	5.9	0.8	3.3	4.0	9.2
Total	29.0	42.6	6.8	15.0	35.8	57.6
General government						
Public administration			0.7	1.9	0.7	1.9
Health			0.5	1.1	0.5	1.1
Education			0.6	2.2	0.6	2.2
Agricultural services			1.0	1.1	1.0	1.1
Other services			1.6	6.4	1.6	6.4
Total			4.4	12.7	4.4	12.7
Total capital formation	34.2	49.1	11.2	27.7	45.4	76.8

SOURCE: Development Plan: 1970–1974 (1969, pp. 49–51).

of the data in Table 2.6 need to be noted. First, only the modern sector is included. Second, the degree of coverage in data collection within industry and commerce increased in 1964 so numbers through 1963 are not directly comparable for those from 1964 onward. Finally, comparisons of growth rates between races are not particularly meaningful because of the difference in the magnitude of the numbers involved. For example, between 1964 and 1968 African earnings increased 11 percent annually while European earnings increased at only 3 percent a year. But the absolute difference between African and European earnings increased by KShs.211 a month from 1964 to 1968.

A number of factors become evident from Table 2.6. First, the decline in employment from 1960 to 1963, as Europeans began to leave, was of sufficient magnitude that the 1968 modern sector employment totals are only slightly higher than the 1956 totals, even with increased coverage in 1968. Second, although the rate of employment growth in all sectors is negative for the 1956–1963 period, the rate of increase of monthly earnings in each sector is greater than or equal to the rate of growth after independence. (The Wage Earner's Index of Consumer Prices increased by 7 percent between 1959 and 1963, and by 12 percent from 1964 to 1968.) Third, for the postindependence period, growth in employment has lagged well behind the growth in real domestic product in the monetary sector – 1 versus 7 percent annually – but the annual rate of growth in monthly earnings is identical to the growth of gross domestic product (see Table 2.4). As in the case for gross domestic product, the public sector leads the private sector in the rate of

TABLE 2.6 Reported employment and monthly earnings in the modern sector by race and sector.

Sector	Number employed (10^3)						Average monthly earnings (KShs.)[a]					
	1956	1963	Annual rate of change	1964	1968	Annual rate of change	1956	1963	Annual rate of change	1964	1968	Annual rate of change
Agriculture and Forestry												
African	233.1	213.7	−1.3	200.2	171.1	−3.9	54	76	5.1	84	96	3.4
Asian	0.4	0.7	8.0	0.7	0.7		833	952	1.9	952	1,429	10.2
European	1.7	1.3	−3.8	1.2	1.2		1,569	2,051	3.9	2,639	2,500	−1.4
Total	235.2	215.7	−1.2	202.1	173.0	−3.8	66	91	4.7	103	119	3.6
Private Industry and Commerce												
African	158.3	127.1	−3.1	154.0	174.8	3.2	123	211	7.7	215	336	11.1
Asian	24.7	26.3	0.9	27.5	27.9	0.4	722	930	3.6	961	1,057	2.4
European	10.5	10.7	0.3	9.8	8.8	−2.7	1,746	2,259	3.7	2,347	2,652	5.6
Total	193.5	164.1	−2.4	191.3	211.5	2.5	288	444	6.0	417	527	6.0
Public Service												
African	148.7	141.3	−0.7	168.2	208.8	5.4	124	232	8.9	296	385	6.5
Asian	10.4	11.9	1.9	8.8	8.0	−2.4	849	1,106	3.8	1,231	1,833	10.1
European	8.9	6.3	−5.0	4.9	5.0	0.5	1,817	2,698	5.7	2,891	3,367	3.8
Total	168.0	159.5	−0.8	181.9	221.8	5.0	259	395	6.2	411	504	5.2
All Employment												
African	540.1	482.1	−1.6	522.4	554.7	1.7	94	158	7.5	191	280	11.0
Asian	35.5	38.9	1.3	37.0	36.6	−3.6	761	917	2.7	951	1,407	9.8
European	21.1	18.3	−2.1	15.9	15.0	−1.1	1,762	2,408	4.5	2,521	2,821	2.8
Total	596.7	539.3	−1.5	575.3	606.3	1.3	192	288	5.9	305	402	6.9

[a]Earnings include regular cash wages, other cash payments such as overtime, bonuses, housing and other allowances, plus value of housing provided by employers.

SOURCE: Central Bureau of Statistics (1966, pp. 122–123; 1972, pp. 210, 219).

increase in providing employment, but the opposite is the case for the growth in monthly earnings. In agriculture the growth of employment is negative and the growth of earnings is well below the average for the total monetary sector. In part, the decline in employment in agriculture was offset by former employees who became farmers as some of the European farms were allocated to Africans; in most cases the new farms were on a much smaller scale. Finally, it is impossible to determine what proportion of the 11-percent annual growth in monthly earnings for Africans was caused by a movement into jobs formerly held by Asians and Europeans and what proportion was caused by actual wage increases. If we assume that the 5,600 jobs vacated by Asians and Europeans between 1964 and 1968 were filled by Africans at the average 1968 wage of Asians and Europeans, respectively, then the remaining 553,400 Africans would have had an average annual wage increase of 9 percent during this period.

The average income in 1968 of KShs.402 per month in the total modern sector encompasses a wide range of wage levels. The difference of KShs.280 for Africans and KShs.2,821 for Europeans has been noted already. For 1968 the annual enumeration of employees includes an earnings breakdown for 12 different job categories (see Table 2.7).* The range of monthly earnings is from KShs.166 per month for unskilled workers to

TABLE 2.7 Number employed and average monthly earnings in the modern sector by job category in 1968.[a]

Job category	Number employed			Average monthly earnings (KShs.)		
	Private	Public	Total	Private	Public	Total
Directors and top administrators	6,319	1,033	7,352	2,040	3,020	2,178
Professionals	3,004	3,223	6,227	2,207	2,109	2,156
Executives and managers	5,745	6,638	12,383	2,462	2,167	2,304
Technicians, works managers, foremen, and supervisors	8,602	9,842	18,444	1,306	1,204	1,252
Teachers	7,820	33,878	41,698	468	558	541
Secretaries, typists, and stenographers	3,413	2,158	5,571	1,073	977	1,035
Clerks	11,190	18,275	29,465	705	512	585
Bookkeepers, cashiers	3,229	1,048	4,277	934	1,145	986
Office machine operators	905	692	1,597	785	560	687
Technical sales representatives	1,935	303	2,238	1,240	813	1,182
Shop assistants	2,595	203	2,798	381	406	382
Skilled and semiskilled workers	56,022	48,398	104,420	369	288	332
Unskilled workers	205,642	55,756	261,398	142	253	166
Total	316,421	181,447	497,868	362	487	408

[a]The values were obtained from unpublished data provided by the Central Bureau of Statistics, Ministry of Finance and Planning.

*Reported employment in Table 2.7 is approximately 100,000 less than in Table 2.6. One reason for this difference is the exclusion of casual employees from Table 2.7. The effect of this difference in coverage on reported earnings appears to be minimal as average earnings increase by only KShs.6 a month.

KShs.2,304 a month for executives and managers. The three lowest skill categories, accounting for 74 percent of the enumerated employees, earn below average income. Therefore, income distribution among skill categories is quite skewed. Also, the hypothesis that the government serves as a wage leader in the economy is evident on the basis of the average wage, but this leaderhsip is apparent for unskilled workers, bookkeepers, and teachers only. Public sector salaries are higher for directors and top-level administrators as well, but the comparison is somewhat misleading because the private sector value includes unpaid directors, which reduces the average.

TABLE 2.8 The rural–urban distribution of employment and earnings in the modern sector.

Location	Number employed (10^3)			Average monthly earnings (KShs.)		
	1964	1968	Annual rate of change	1964	1968	Annual rate of change
Eight main towns						
Nairobi	149.9	163.7	2.2	551	744	7.5
Mombasa	56.6	57.4	0.4	418	539	6.3
Kisumu	11.4	13.2	3.7	357	445	5.5
Nakuru	11.2	14.2	6.0	385	480	5.5
Eldoret	9.1	9.5	1.1	270	379	8.5
Thika	5.2	6.1	4.0	292	359	5.2
Nanyuki	1.8	2.0	2.6	257	319	5.5
Nyeri	5.0	5.3	1.7	303	393	6.5
Total	250.2	271.4	2.1	482	641	7.1
Other towns	31.5	33.7	1.7	268	320	4.4
Rural areas	293.7	301.2	0.6	158	196	5.6
Total	575.4	606.3	1.3	305	402	6.9

SOURCE: Statistics Division (1971, pp. 16, 19, 28, and 31; 1972, pp. 70, 71, 112, and 117).

Finally, the rural–urban distribution of modern sector employment is considered. In Table 2.8 the growth in employment and earnings is calculated for the eight urban centers in our survey, all other towns with more than 2,000 people, and the rural areas. In 1968, 45 percent of modern sector employees were concentrated in the eight urban centers, and 60 percent of them were in Nairobi. The towns other than those in the survey are relatively unimportant; half of modern sector employment is located in the rural areas. The growth in employment has been largest in the eight urban centers, but the other towns experienced above average growth as well. The low growth rate in rural areas no doubt reflects the actual decline in modern sector employment in agriculture.

The level of money wages is more than three times higher in the eight towns than in the rural areas, and this differential has increased during the 4 years. In the other towns the average level is well below the average for the modern sector and the rate of growth has been lower than in the rural areas. Not only is the annual rate of growth of earnings highest in the eight towns, the rate applies to a much higher 1964 level than for the balance of the modern sector. Among the eight towns the growth rate is dominated by the

average growth rate in Nairobi. Also, there does appear to be somewhat of an inverse relationship between the rate of increase of monthly earnings and the rate of increase of employment. Not only is the modern sector employment per capita much higher in the major towns, the rate of remuneration in each of the eight towns is, by 1968, significantly higher than in either the smaller towns or the rural areas.

THE GROWING CONCERN ABOUT URBAN UNEMPLOYMENT

Along with the concentration of modern sector economic activity in the major towns there appears to be a growing number of people in the towns trying their chances at obtaining employment. Explicit government concern about the extent of this highly visible urban unemployment became evident within weeks of independence. In January 1964 there was a revolution in Zanzibar and disturbances in the armies of all three East African countries. Also, the unemployed in Nairobi demonstrated for action on the lack of employment opportunities (Amsden 1971, p. 122). The government moved quickly with a 1-year Tripartite Agreement involving the Kenya Federation of Labour and the Federation of Kenya Employers. Under the terms of the agreement there were to be no strikes or go-slows, wages were to remain at existing levels, a limited form of price control was instituted, the private sector was to increase employment by 10 percent while employment in the public sector was to be increased by 15 percent, and an Industrial Court was established with power to resolve disputes that could not be settled through voluntary means (Amsden 1971, pp. 100–101).

The Tripartite Agreement was initiated at a time when employment levels in the modern sector had been declining steadily for 3 years. The effects of the agreement on employment were only temporary, but it did cover the period when a reversal in the employment trend was accomplished. Some 34,000 were employed under the agreement plus some 4,000 more during a 2-month extension in 1965. The public sector accounted for only 6,000 new jobs and many hirings in the private sector merely filled openings caused by normal labor turnover. As a result, the net number of jobs created during the agreement has been estimated at 18,000; in some cases casual jobs were made permanent and in others adult labor was substituted for child labor (International Labour Office 1972, p. 541). Therefore, the more lasting effects of the agreement are to be found primarily in the Trade Disputes Act of 1965 which increased the power of the Minister of Labour to handle disputes and established the Industrial Court on a permanent basis, although its binding powers were limited to essential services only. The government did not follow through at the time with its commitment to establish a more permanent policy on prices and income. For a brief discussion of postindependence legislation dealing with labor disputes and policy on prices and incomes, see Sandbrook (1975).

In 1965 the government published Sessional Paper No. 10, "African Socialism and Its Application to Planning in Kenya." In this definition of African socialism relevant for the Kenya setting, primary emphasis was placed on economic growth to solve such problems as poverty, unemployment, and limited access to important social services. Growth was to be realized through incentives to private businesses including considerable reliance on foreign capital and expertise. This policy statement shaped Kenya's economic growth. With extensive investment, considerable economic growth was realized but, as documented

previously, the rate of employment creation lagged well behind the growth in gross domestic product.

More explicit government action to open new employment opportunities for Kenyan Africans was initiated in 1967 with the White Paper "Kenyanization of the Private Sector," and the Immigration and Trade Licensing Acts. Along with placing more control of the economy in Kenyan hands, this legislation increased access for Kenyan Africans to the high-wage jobs held previously by foreigners. Since the majority of these high-wage jobs were in the major towns, the attempt to increase employment would, according to our migration model, induce more urban in-migration. This hypothesis will be tested in Chapter 4.

This growing urban unemployment problem required further action. Along with moral suasion on the part of President Kenyatta urging the unemployed to return to the land, several steps were taken. In 1963 the Youth Department of the Christian Council of Kenya and the Christian Churches' Educational Association initiated a study on one group of unemployed, the school-leavers. In 1966 these two groups published a report (Christian Council of Kenya 1966) that documented the extent of unemployment among school-leavers. They advocated an explicit "Responsible Parenthood Campaign," reform of the educational system, and urged the establishment of Village Polytechnics to train school-leavers for productive involvement in the rural areas. The government responded by publicly supporting family planning; the Village Polytechnic movement was supported after it had been initiated by the National Christian Council of Kenya. Actual reform of the educational system proved to be too complex and elusive for immediate implementation.

An additional step toward reducing the extent of rural–urban migration was a strong commitment for rural development in the second Development Plan (1969, p. 2): "Rural Development should not be seen as a special programme but as the underlying strategy of the whole Plan." This rural development strategy included improving the range and extent of economic opportunities and providing more amenities in the rural areas. The latter had been initiated earlier by the Town Planning Department of the Ministry of Lands and Settlement in the form of an inventory of amenity availability in each province; this formed the basis for formulating Provincial Physical Development Plans. To facilitate the rural development effort the central government withheld, from 1968 on, 50 percent of the graduated personal tax collected in Nairobi and Mombasa for use in county councils in financial difficulties (Diejomaoh 1970).

The above steps were designed to reduce the urban in-migration by action at the source; additional action was required to deal with the existing urban unemployment problem. For this purpose the Vagrancy Act was passed in 1968. The act empowers the police to arrest people in the towns who do not have legal employment or other lawful means of subsistence and people who have no fixed abode. If found guilty the courts can sentence such vagrants to a rehabilitation center, to a detention center or to their respective home areas and to restrict movement to these home areas for up to 3 years (Kenya Gazette Supplement 1968, pp. 904–905). This act enables urban centers to repatriate to the rural areas migrants who fail to take advantage of productive and legal economic opportunities in the towns.

The principle of discouraging rural people who lack legal means of maintaining themselves in the towns from taking up residence in the towns is well established in Kenya. A common approach during the colonial period was to set building codes and health regulations for each town. All housing that did not conform to these codes and regulations

was considered unauthorized and could be destroyed by the municipal officials. Although extensive action has been taken to provide Municipal Council housing and site and service plots, the pattern of establishing building codes and health regulations and maintaining the right to destroy unauthorized housing has continued since independence (Stren 1970).

In summary then, there is considerable evidence of a growing concern about urban unemployment. This concern has been translated into some government action, but action has been directed more at the symptoms than at the causes of the problem. The strong commitment to economic growth has maintained an economic structure that is urban based and that proves attractive to job-seekers, but it does not appear to provide adequate means for creating sufficient employment opportunities.

SUMMARY

The eight towns covered by the survey for this study grew directly from European settlement in Kenya. Six are located in the settlement area and Mombasa and Kisumu were the terminal points of the original Uganda Railway. In this chapter the colonial practice of limiting African economic opportunities primarily to wage labor while denying them the possibility of forming a stable urban labor force is discussed in some detail.

In the postindependence period the structure of the economy has not changed significantly while conditions that were hypothesized in Chapter 1 to contribute to rural–urban migration have intensified. Population growth has been rapid, educational opportunities have expanded considerably in the rural areas, and the well-educated have had increased access to those high-wage jobs previously held by noncitizens. Given a limited ability to absorb the urban in-migrants in productive employment, the government has found it necessary to resort to various indirect means of controlling the extent of rural–urban migration.

The reasons why the structure of the economy has remained quite stable could not be explored in detail in such a brief survey of the context of the migration under study. Also, the various mechanisms that preserved the structure of the economy during the period of political transition -- transportation networks, credit practices, foreign investment, taxation, policies on education, labor prices and incomes, and foreign exchange, plus the use of parastatal agencies to transfer ownership of assets to Kenyans – have not been discussed.

We turn now to an analysis of the extent of the migration response to the distribution of economic opportunities and social amenities. Specifically, we will seek to identify the relative importance of various causal forces in the migration process. In the concluding chapter, as part of the discussion of the effects of policies on the migration process, we will examine how these mechanisms have affected both the structure of the Kenyan economy and the responses of the labor force to this structure.

3 DATA SOURCES AND MIGRATION PATTERNS

Migration studies typically are based on one of two data sources, a census or a migration survey. A census provides a comprehensive picture of the current location of the population and indicates the net movement that has occurred to that time. The major weakness of the 1969 census conducted in Kenya is that it is a stock concept merely providing a picture at one point in time. Therefore, one can determine movement by relating place of birth to current residence, but it is not possible to determine when the migration took place. As a result, the act of migrating cannot be related to such personal characteristics as the age of the migrant at the time of the migration nor to external forces that prevailed at the time of the migration. In short, analysis of the causes of the migration is possible solely on the basis of assumptions about when the migration occurred.

The dominant weakness of census data can be overcome with survey data. A survey makes it possible to uncover relevant characteristics of the migrants and to date the time of the migration. The role of environmental factors in the migration decision can then be analyzed. A major weakness of the survey conducted for this study is that it represents a set of samples drawn from different urban centers in a country rather than one sample from the process of urbanization throughout the country. As a result, considerable caution must be exercised in generalizing to the total country unless one has an objective basis for determining the relative importance of each urban center in the urbanization process.

The timing of our rural–urban migration survey, relative to the 1969 census, enables us to combine the two sources of information. Such a combination provides us with the benefits of both approaches and the means for overcoming the dominant weakness of each. In this chapter the two information sources are described, the method used for combining the two information sources is outlined, and the observed patterns of migration are summarized.

THE 1969 POPULATION CENSUS

The most recent general census in Kenya was carried out in August 1969. The political units ranged from the government administration areas down to the sublocation level. The information collected includes age, education completed, sex, tribe, race and nationality, relationship to the head of the household, the place of birth, and the place of current residence. Many of the data have been published in a four-volume set of government documents (Central Bureau of Statistics 1970, 1971, 1977), but the migration data in this chapter are based on unpublished material made available by the Central Bureau of Statistics.

The published census material contains only one caution about possible errors in the census. A comparison of the age distribution of males and females indicated that the proportion of females aged 20 to 39 is higher than that of males, while the opposite is

true for people 10 to 19 years old. The conclusion reached by the census administrators was: "It is particularly probable that girls in fact aged under 16 years may frequently have been shown as adults . . . . For this reason, the figures shown should not be regarded as an accurate representation of the age distribution of the population" (Central Bureau of Statistics 1970, p. i). The only other possible error in the census that we have detected is in the population size of the town of Eldoret. A comparison of the estimated labor force, from census data, with modern sector employment in Eldoret revealed that there were more people employed there than there were in the labor force. After consultation with the town clerk of Eldoret, Mr. J. Asembo, and members of his staff, we accepted their population estimates. For our purposes, this means all census totals for Eldoret have been increased by a scale of 1.558.

The locations of some of the boundaries for government administrative areas were changed after independence. As a result, the 1969 census totals are not directly comparable with the 1962 census totals in all cases. For the limited use made of the 1962 census migration information, percentages in the relevant table (Statistics Division 1966, Vol. 3, Table IV.e), were adjusted to reflect the 1969 boundaries. These adjustments provided direct information on the migration flows into the two major urban centers, Nairobi and Mombasa. For the other six towns it was assumed that the proportion and the composition of the in-migration into a district flowing into the town located in the district was the same for the 1962 census and the 1969 census. On the basis of this assumption interdistrict flows were used to construct estimates of urban in-migration as reported in the 1962 census. The 1962 census contained warnings about the accuracy of data collected in Northern Province. Therefore, the seven districts in Northern Province were treated as one unit. This has only limited bearing on migration studies because the largely nomadic tribes of Northern Province play an insignificant role in rural–urban migration in Kenya.

THE RURAL–URBAN MIGRATION SURVEY

The second source of data was a survey questionnaire given in December 1968 to a representative sample in the eight largest urban centers in Kenya. (A copy of the questionnaire is included in Appendix A. A brief description of the sampling technique, the administration of the survey, and the sample obtained, plus a comment on the quality of the data, are provided in Appendix B.) The population sampled included all African males who voluntarily had entered one of these urban centers after independence (December 1963). No attempt was made to interview rural residents who had chosen not to migrate or migrants who had left the urban centers before the survey. Limiting the survey in this manner deprived us of important information but was necessitated for cost reasons. The bias, if any, introduced by this limitation will understate the magnitude of the variables in which we are interested. Therefore, the direction of the statistical significance of results based on our survey would not be reversed by a more comprehensive survey.

To obtain a random sample from the relevant population, buildings were selected from aerial maps of each town. Stratified sampling was used in towns where sufficient information was available to divide the buildings into housing types. Information on the distribution of the migration population among housing types was not available so 1962 census information was used to determine how extensive our random sampling of buildings from each housing type should be.

The interviews were conducted and the questionnaires were completed by students from the University of Nairobi during their December break. The intent of the survey was to reconstruct the respondent's income and migration history from 1 year prior to the rural-to-urban move until the time of the survey to test the Todaro migration model. First the employment history during this period was constructed and then the relevant place and income information associated with each job was added. In addition, questions were asked about the migrant's reasons for moving, his information sources, the assistance he received, his opinions on various economic and political issues, and his personal characteristics. A total of 1,091 completed questionnaires were obtained from the survey.

THE OBSERVED MIGRATION FLOWS

The most complete picture of urban in-migration in Kenya is provided by the 1969 census. This census information for the Kenyan African population in the eight towns under study is provided in Tables 3.1 and 3.2. Adjustments to population size have been made for two towns, Kisumu and Eldoret, as indicated in the footnotes to the tables. In each case it was assumed that the relative size of the flows from alternative sources remained the same.

Between the 1962 and the 1969 censuses the average annual rate of increase of African population in the eight towns was 9 percent. The growth was dominated by Nairobi with an annual rate of growth of 11 percent. All the other urban centers had below-average rates of growth, and Nanyuki had less than the average growth rate for all of Kenya.

As indicated in Tables 3.1 and 3.2, 75 percent of the African population in these towns were born outside of the urban center in which they were enumerated. The urban in-migration was dominated by several sources: three of the five districts in Central Province, Kitui and Machakos districts in Eastern Province, three of the four districts in Nyanza Province, and Kakamega district in Western Province. Nairobi and Mombasa tend to attract sizable numbers from most parts of Kenya. A comparison with the map in Figure 2.1 in Chapter 2 indicates that the other six towns, with the possible exception of the towns in Rift Valley Province, attract migrants primarily from the surrounding districts. Residents of Coast Province move primarily to the two towns in the province. The urban sex imbalance (1.5 males for every female) is maintained because, on average, six of every ten migrants is male. The total in-migration is 5 percent of the population listed as born in the rural areas.

As stated previously, it is not possible to determine when the migrants make their move. Information about the timing of the movement for the period 1964 to 1968 is available for each of the eight towns covered in the survey. It is necessary to establish a set of weights to adjust the sample size for each town to reflect its relative position in the total in-migration experienced by the eight towns. In establishing these weights one cannot avoid making some assumptions about when the movement observed in the census occurred.

One extreme is to assume that all the migrants arrived recently and that the 1969 census information reflects the net migration picture for the survey period. This position would be consistent with the literature of the early 1960s which emphasized the tendency for urban in-migrants to circulate back to a rural home at least once every 2 years (Elkan 1960; Mitchell 1962; Southall 1962). In the survey, information was collected on the total number of men resident in the buildings selected during the sampling procedure. From this

TABLE 3.1 Rural-to-urban migration flows of African males as reported in the 1969 census.

Migration source	Migration destination								
	Nairobi	Mombasa	Kisumu[a]	Nakuru	Eldoret[a]	Thika	Nanyuki	Nyeri	Total in-migration
Nyanza	31,730	10,510	10,592	4,254	1,889	834	243	213	60,265
Kisii	2,229	387	733	452	103	60	46	41	4,051
Kisumu	13,724	5,318	4,214	1,533	734	372	86	51	26,032
Siaya	11,631	3,502	5,487	1,818	882	232	72	91	23,715
S. Nyanza	4,146	1,303	158	451	170	170	39	30	6,467
Western	34,683	7,464	5,903	4,256	4,201	523	210	149	57,389
Bungoma	1,402	453	242	212	453	19	44	30	2,855
Busia	3,141	2,582	786	542	587	46	12	12	7,708
Kakamega	30,140	4,429	4,875	3,502	3,161	458	154	107	46,826
Rift Valley[b]	7,099	1,044	710	3,417	1,380	222	735	181	14,788
Kajaido	421	41	18	33	3	8	7	2	533
Kericho	1,881	214	218	504	129	14	125	33	3,118
Laikipia	434	50	5	86	20	19	335	39	988
Nakuru	2,118	276	193	2,047	319	121	83	27	5,184
Narok	231	45	5	61	14	7	12	11	386
T. Nzoia	251	57	27	46	90	7	16	5	499
U. Gishu	283	82	55	105	192	25	7	12	761
Baringo	395	53	21	242	86	7	39	8	851
E. Marakwet	310	38	39	99	237		28	19	770
Nandi	668	167	120	170	259	14	79	22	1,499
W. Pokot	107	21	9	24	31		4	3	199
Central	82,169	7,444	1,129	5,113	1,347	5,244	2,282	3,171	107,899
Kiambu	22,297	1,587	480	1,661	693	1,020	146	218	28,102
Kirinyaga	4,316	2,668	41	214	70	136	82	86	7,613

Muranga	36,419	1,875	268	1,423	220	3,583	155	321	44,264
Nyandarua	537	45	23	228	17	49	24	16	939
Nyeri	18,600	1,269	317	1,587	347	456	1,875	2,530	26,981
Eastern[b]	43,813	19,002	533	775	285	1,149	645	400	66,602
Embu	3,100	685	50	103	30	90	31	63	4,152
Kitui	8,682	10,982	103	139	14	228	81	60	20,289
Machakos	29,055	5,853	304	455	204	734	173	144	36,922
Meru	2,976	1,482	76	78	37	97	360	133	5,239
Coast	2,381	29,563	98	143	55	51	34	40	32,365
Kilifi	512	13,587	27	38	2	15	1	9	14,197
Kwale	183	6,490	14	22	3	2	3	14	6,731
Lamu	82	1,246	16	7			4	1	1,356
Taita	1,567	7,277	34	75	50	33	19	12	9,067
Tana R.	37	963	7	1		1	1	4	1,014
Northern[b]	1,622	448	35	213	87	45	202	30	2,682
Total	203,497	75,475	19,000	18,171	9,244	8,078	4,351	4,184	341,990
Born in town	43,685	28,079	3,273	4,327	1,824	1,672	1,384	957	85,201
Born in other urban	955	1,250	536	601	980	154	123	96	4,695
Born outside Kenya	6,837	7,197	773	399	538	48	35	64	15,891
Not stated	2,821	493	477	126	1,298	29	33	62	5,339
Total African population	257,795	112,494	24,059	23,624	13,884	9,971	5,926	5,363	453,116

[a]The numbers for Kisumu town were increased by a scale of 1.77 to reflect the expanded town boundaries. The numbers for Eldoret were increased by a scale of 1.558 to reflect more realistic population totals for Eldoret.

[b]Northern includes the area indicated as Northern Province in the 1962 census. In addition to the current Northeastern Province it includes Isiolo and Marsabit districts from Eastern Province and Samburu and Turkana districts from Rift Valley Province.

TABLE 3.2 Rural-to-urban migration flows of African females as reported in the 1969 census.

Migration source	Migration destination								
	Nairobi	Mombasa	Kisumu[a]	Nakuru	Eldoret[a]	Thika	Nanyuki	Nyeri	Total in-migration
Nyanza	19,465	6,606	8,647	2,662	1,253	371	210	126	39,340
Kisii	1,135	152	379	223	86	22	29	23	2,049
Kisumu	8,872	3,568	2,981	1,077	520	181	73	35	17,307
Siaya	6,991	2,116	4,191	1,116	561	120	71	56	15,222
S. Nyanza	2,467	770	1,096	246	86	48	37	12	4,762
Western	19,861	4,435	4,273	2,779	2,909	280	168	94	34,799
Bungoma	1,017	267	147	191	354	11	40	31	2,058
Busia	1,821	1,500	524	375	391	14	5	8	4,638
Kakamega	17,023	2,668	3,602	2,213	2,164	255	123	55	28,103
Rift Valley[b]	4,356	644	585	2,415	1,096	140	545	108	9,889
Kajaido	270	11	9	31		3	8	5	337
Kericho	819	108	170	311	90	7	58	13	1,576
Laikipia	268	36	12	63	14	13	265	17	688
Nakuru	1,688	217	170	1,412	288	81	80	30	3,966
Narok	113	9	2	22	6	3	8	3	166
T. Nzoia	162	17	16	45	84	3	6		333
U. Gishu	238	74	55	136	136	14	15	7	675
Baringo	190	19	19	179	65	4	23	7	506
E. Marakwet	123	16	30	32	126	4	22	5	358
Nandi	420	132	97	169	268	8	53	18	1,165
W. Pokot	65	5	5	15	19		7	3	119
Central	48,801	3,300	620	3,986	1,091	3,300	2,026	1,266	64,390
Kiambu	17,760	964	246	1,363	542	591	80	81	21,627
Kirinyaga	2,000	1,256	37	102	50	71	57	56	3,629

Muranga	18,340	445	150	1,117	192	2,310	96	111	22,761
Nyandarua	355	19	12	248	23	25	30	8	720
Nyeri	10,346	616	175	1,156	284	303	1,763	1,010	15,653
Eastern[b]	18,852	9,609	235	418	126	521	377	127	30,265
Embu	1,498	337	23	68	20	47	34	37	2,064
Kitui	3,411	5,999	27	55	5	83	56	21	9,657
Machakos	12,834	2,842	166	267	81	362	88	44	16,684
Meru	1,109	431	19	28	20	29	199	25	1,860
Coast	1,372	16,981	50	107	41	23	13	13	18,600
Kilifi	222	5,658	14	31	2	3	1		5,931
Kwale	89	4,629	19	19	2	1	2	5	4,766
Lamu	68	1,179	4	5		1	2		1,259
Taita	977	4,819	11	51	37	17	8	8	5,928
Tana R.	16	696	2	1		1			716
Northern[b]	891	213	28	174	28	22	181	11	1,548
Total	113,598	41,788	14,438	12,541	6,544	4,657	3,520	1,745	198,831
Born in town	42,251	26,896	2,938	5,028	1,972	1,754	1,357	1,693	83,889
Born in other urban	707	1,158	432	590	1,037	132	111	48	4,215
Born outside Kenya	4,701	4,087	524	317	436	31	29	23	10,148
Not stated	2,027	727	426	90	323	29	25	43	3,690
Total African population	163,284	74,656	18,758	18,566	10,312	6,603	5,042	3,552	300,773

[a]The numbers for Kisumu town were increased by a scale of 1.77 to reflect the expanded town boundaries. The numbers for Eldoret were increased by a scale of 1.558 to reflect more realistic population totals for Eldoret.

[b]Northern includes the area indicated as Northern Province in the 1962 census. In addition to the current Northeastern Province it includes Isiolo and Marsabit districts from Eastern Province and Samburu and Turkana districts from Rift Valley Province.

information it was established that the proportion of men resident in the towns who had arrived prior to the 1962 census ranged from 31 percent for Nyeri to 77 percent for Mombasa (this information is provided in Table B.1 of Appendix B). Therefore, the extent of the rural–urban circulation of labor every 2 years appears to have dropped off significantly by the latter half of the 1960s.

This change in the nature of migration in East Africa was noted already in 1967 by Etherington (1967). Etherington's impression is confirmed by a 1971 survey of rural–urban migration in Tanzania. The majority of wage employees who were in regular wage employment in 1967 were still on the same job in 1971. "The urban labour force is now stable and most migrants appear to be committed to wage employment for the remainder of their working lives" (Bienefeld and Sabot 1972, Vol. 2, p. 189). Similar information was obtained orally from staff members of the Federation of Kenya Employers who indicated that a marked decline in labor turnover had occurred in urban industries during the latter part of the 1960s.

The other extreme would be to assume that all labor circulation between rural areas and urban centers had stopped by the time of the 1962 census. If so, the basis for establishing the set of weights would be the difference between in-migration observed in 1969 and 1962. This is not acceptable because the resulting net in-migration in the 1962–69 period was too small to account for the growth of these towns. Given that both extremes were obviously not correct, the midpoint between the two for each town was selected as the appropriate compromise to establish the set of weights. This particular set of weights implies that a total of 267,330 males entered the eight towns during this time. A summary statement on the weights and relative importance of each town in the migration process is provided in Table 3.3.

TABLE 3.3 The relative importance of each urban center in the rural–urban migration process upon application of the set of weights to each urban sample.

Urban center	Number of interviews	Weight	Percent of total in-migration
Nairobi	374	426.7	59.7
Thika	81	62.2	1.9
Nyeri	84	31.8	1.0
Mombasa	254	250.3	23.8
Kisumu	129	131.7	6.3
Nanyuki	51	41.6	0.8
Nakuru	66	147.2	3.6
Eldoret	52	146.8	2.9
Total	1,091	1,238.3	100.0

Given the lack of certainty on the exact number of rural-to-urban migrants during the period covered by the survey, the important contribution of the survey, on the issue of migration flows, is the relative size of each migration path. Table 3.4 indicates the percentage contribution of each migration source to the in-migration for each town. Given the limited size of the sample, more cells are empty in Table 3.4 than in Table 3.1, but

TABLE 3.4 Percentage distribution of the rural migration sources of males for each urban center as observed in the 1968 migration survey.

Migration source	Migration destination								
	Nairobi	Mombasa	Kisumu	Nakuru	Eldoret	Thika	Nanyuki	Nyeri	Total
Nyanza	16.2	12.0	57.9	25.0	21.3	16.8	4.6	2.2	18.2
Kisii	1.3		6.0	2.7		2.8		1.1	1.3
Kisumu	3.8	4.9	24.2	6.5	3.9	9.8	2.3		5.5
Siaya	3.8	4.2	17.4	10.1	15.6	2.8			5.4
S. Nyanza	7.3	2.9	10.3	5.7	1.8	1.4	2.3	1.1	6.0
Western	14.9	12.7	26.2	21.3	50.2	4.2	4.6		16.1
Bungoma	1.5	0.5	1.8	4.4	9.7		2.3		1.6
Busia	2.4	1.4	5.2	4.4	5.9				2.5
Kakamega	11.0	10.8	19.2	12.5	34.6	4.2	2.3		12.0
Rift Valley	3.7	0.5	8.8	26.5	7.9		4.6	2.0	4.5
Kajaido	0.9								0.6
Kericho	0.3		5.2	4.4			2.3		0.7
Laikipia				1.5			2.3	2.0	0.1
Nakuru	1.3		2.7	16.1					1.5
Narok				1.5					0.1
T. Nzoia	0.9				3.9				0.7
U. Gĩshu	0.3	0.5			2.0				0.5
Baringo									
E. Marakwet									
Nandi			0.9						0.1
Samburu									
Turkana				1.5					0.1
W. Pokot				1.5	2.0				0.1
Central	43.9	5.9	1.1	16.3	10.8	56.3	67.9	77.9	31.2
Kiambu	14.5	0.9	0.8	4.0	2.0	28.1	2.3	2.0	9.7
Kirinyaga	1.5	3.3		2.9	5.9	1.5	2.3		2.0
Muranga	19.4	0.5	0.3	2.9	0.9	26.7	9.0	17.8	12.6
Nyandarua				2.9	2.0		2.3		0.2
Nyeri	8.5	1.2		3.6			52.0	58.1	6.7
Eastern	16.4	27.1	0.8	5.4		22.7	18.3	16.8	17.0
Embu	0.3	0.5				5.7	4.6	2.1	0.5
Isiolo									
Kitui	3.4	20.0				4.2	2.3		6.6
Machakos	10.9	5.7	0.8	5.4		11.3			8.3
Marsabit									
Meru	1.8	0.9				1.5	11.4	14.7	1.6
Coast	1.0	33.2			3.9				8.2
Kilifi	0.6	9.1							2.3
Kwale		4.3							0.9
Lamu									
Taita	0.4	18.4			3.9				4.6
Tana R.		1.4							0.4
Northeastern									
Uganda	2.2	4.3	3.4	4.0	5.9			1.1	2.8
Tanzania	1.7	4.3	1.8	1.5					2.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

the overall correspondence between the two tables is high. The percentage contributions of the provinces to the migration process differ by less than two in the two tables.

The survey was designed to capture a rural-to-urban move in the 1964–68 period but it also made provision for up to a maximum of two urban-to-urban moves subsequent to the initial move. As a result, some analysis of urban-to-urban migration is possible. The extent of the urban-to-urban migration flows and the analysis of the data available will be presented in Chapter 10.

4 DETERMINANTS OF RURAL-TO-URBAN MIGRATION

The preferred test of the hypotheses on the determinants of migration presented in Chapter 1 would require survey data drawn from the rural areas of Kenya. Information would have to be obtained from household members who have left the region, from complete households that have emigrated, as well as from household members who have remained. Data of this nature are not yet available for Kenya.

As is frequently the case, the method of analysis tends to be defined by the data. The primary measure of migration is the 1969 census data on numbers born in one area but enumerated in another at the time of the census. Our migration survey is based on a sample drawn from recent in-migrants who were still resident in the urban areas at the time of the survey. Neither returnees nor nonmigrants were surveyed. As a result, the analysis of the determinants of migration will have to be based on an aggregate model of migration.

In this chapter several aggregate models, each consistent with the micro decision-making process outlined in Chapter 1, are formulated. Then the models are tested with the use of least-squares regression technique. Finally, the results of the regression analysis are compared with the reasons given by the men surveyed for leaving their rural homes and selecting a destination.

The discussion in Chapter 1 indicated that there are two separate but related dimensions to the migration decision-making. First, there is the need to identify the probability that a member of the labor force in rural district i will relocate during some defined period to an urban location, say town j. Second, there is a need to identify the determinants of a selection of urban destination j from a set of m possible destinations. Here two models, which are considered appropriate to address the questions posed by these two dimensions of the migration process, are presented and tested.

DETERMINANTS OF THE PROBABILITY OF A RURAL-TO-URBAN MOVE

According to our model of labor allocation decision-making, households, on the basis of the information available, allocate their labor among local and external employment opportunities so as to realize their income objectives. To make this model operational at a regional level of aggregation it becomes necessary to specify the migration behavior in terms of "average" benefits, costs, and characteristics associated with sending regions and receiving regions.

A Polytomous Logistic Model of Migration

The probability P_{ij} that an individual faced with m possible urban locations, plus his current rural location i, will be residing in one of these m urban areas in any one time

period can be expressed as:

$$P_{ij} = \frac{\exp\,[V(Z_j,D_{ij})]}{\sum_{j}^{m} \exp\,[V(Z_j,D_{ij})]} \quad i = 1,\ldots,n;j = 1,\ldots,m \tag{4.1}$$

where Z_j denotes the attributes associated with a region, in this case the receiving area j; D_{ij} reflects the "friction" of distance or intervening obstacles between a rural region i and an urban area j; and V is the part of the utility function that contains the representative components, of the various choices available to all prospective migrants.

Similarly, the probability P_{ii} of the individual's remaining in region i can be expressed as:

$$P_{ii} = \frac{\exp\,[V(Z_i)]}{\sum_{j}^{m} \exp\,[V(Z_j,D_{ij})]} \quad i = 1,\ldots,n;j = 1,\ldots,m \tag{4.2}$$

In this case Z_i refers to attributes associated with the sending area only. Since staying in region i is included as one of the options, the sum of the two probabilities is equal to one, as is normally required for a model of choice (Grant and Vanderkamp 1976, p. 35). A more detailed discussion of this model, including the utility assumptions on which it is based, can be found in Grant and Vanderkamp (1976, pp. 35–81) or Schultz (1976, pp. 38–41).

The difficulty of working with this specification is that the probabilities P_{ij} and P_{ii} are constrained to the interval from zero to one while the right-hand sides of the equations can take on arbitrary real values. This problem can be overcome by combining the two probabilities in the logit form:

$$\frac{P_{ij}}{P_{ii}} = \frac{\exp\,[V(Z_j,D_{ij})]}{\exp\,[V(Z_i)]} \tag{4.3}$$

This ratio of probabilities represents the odds that someone in region i will relocate to some region other than i. The denominator in Eqs. (4.1) and (4.2) cancels out in the process, but is required if one needs to work out the effect of a change in attributes in region k on the composition of migrants between i and j (Grant and Vanderkamp 1976, p. 38).

If logarithms are taken of both sides we obtain the estimation equation:

$$\ln\left(\frac{P_{ij}}{P_{ii}}\right) = V(Z_j,D_{ij}) - V(Z_i) \tag{4.4}$$

What is required now is a specification of the elements of Z_j, Z_i, and D_{ij} in a manner consistent with the set of hypotheses presented at the end of Chapter 1. For this purpose we propose the following:

$$Z_j = f_1(X_j,U_j,A_j,B_j,G_{ij},D_{ij},I_{ij}) \tag{4.5}$$

and

$$Z_i = f_2(\hat{Y}_i, X_i, \tilde{X}_i, T_i, F_i, E_i, A_i) \tag{4.6}$$

where X_j is the income perceived by prospective migrants to be available in urban center j (H: 1.6; 2.1); U_j is the probability, as perceived by prospective migrants, of obtaining X_j (H 2.1); A_j is the amenities perceived by prospective migrants to be available in urban center j (H 2.6); B_j is a measure of the size and job diversity of the labor market in j (H 2.12); G_{ij} is the kin resident in area j who are available to assist prospective migrants from region i (H: 1.6; 1.10); D_{ij} is the cost of moving from region i to area j (H: 1.7; 2.4); I_{ij} is a measure of the information about opportunities and conditions in town j available to prospective migrants in region i (H 2.7); $\hat{Y}_i$ is a measure of aspiration levels in region i (H: 1.1; 1.3; 2.9); X_i is the level of income available in region i (H: 1.4; 1.5; 2.3); $\tilde{X}_i$ is a measure of the inequality in the income distribution in region i (H 1.2); T_i is a measure of the extent of commercial and social interaction between region i and external stimuli such as an urban center (H: 1.2; 1.6); F_i is a measure of the equality of access to the productive resources in region i (H 1.5); E_i is a measure of the system of land tenure and inheritance prevailing in region i (H 1.8); and A_i is a measure of amenities available in region i (H 2.6).

The various personal attributes considered relevant to migration behavior (H: 1.3; 1.5 (4); 1.6 (6); 1.8; 1.9; 2.9; 2.10; 2.14; and 4.3) cannot be entered readily in an aggregate migration function. Rather, to allow for such factors, it becomes necessary to stratify by age, education, and sex the various elements affected by such personal attributes in the two Z vectors (Schultz 1976, p. 40). In this way separate estimates are obtained for the odds that a person in a subgroup in region i will relocate to a town j during a specified time period. In our case, the available data are not stratified by age and education. Therefore, stratification in our model is limited to males versus females. In addition to the dependent variable X, U and $\hat{Y}$ will be measured with sex-specific variables.

For the dependent variable, the probability P_{ij} of migrating from i to j is measured as M_{ij}/B_i. Here M_{ij} is the total number of migrants born in i who were enumerated as resident in j at the time of the census; B_i is the total number of persons enumerated in the census as born in i. The probability of not migrating P_{ii} is measured as M_{ii}/B_i where M_{ii} is the number of persons who were born in i and were enumerated as resident there at the time of the census.

Therefore, the dependent variable is:

$$\ln\left(\frac{P_{ij}}{P_{ij}}\right) = \ln\left(\frac{M_{ij}/B_i}{M_{ii}/B_i}\right) = \ln\left(\frac{M_{ij}}{M_{ii}}\right) \tag{4.7}$$

The nature of the available data limited the options to measuring M_{ij} in gross terms. To base the analysis on gross rather than net migration flows need not be considered a second-best option. It is likely that the urban-to-rural migration in Kenya is similar to that of Sierra Leone where the simple correlation between net migration and gross urban out-migration was found to be 0.89 and that between net migration and gross in-migration was −0.14 (Byerlee *et al.* 1976, p. 88). Given that the observed urban out-migration flows tend to have a disproportionate number of older persons with a below-average level of general skills, the gross urban in-migration can be considered a better indicator than net urban migration of the number of persons added to the urban labor force.

In specifying the urban income variable X_j in an aggregate migration model, it is necessary to identify the wage that can be "assumed to be perceived equally by all potential migrants" (Nelson *et al.* 1971, p. 57). One would expect prospective migrants to aspire to the wage consistent with their schooling and experience. Yet, the one study in which the sample was stratified into five occupational groupings obtained a higher coefficient of determination when using the average urban wage for all occupations than when using the occupation-specific wage rates (Carvajal and Geithman 1974, p. 114). They interpret this to indicate that prospective migrants perceive their income in terms of the regional average rather than the wages paid in their current or desired occupations. Given that wage structures tend to be similar among regions, even if levels differ, the average wage can serve as a good proxy measure for expected income. As a result, the average formal sector wage in each urban center was used as the measure of X_j.

For the rural areas, a weighted average of district formal sector wages and wages paid on small farms and settlement schemes was used to estimate the value of X_i. The weights used were the respective number employed in each. Given a reasonably competitive labor market in rural areas, the rural wage level can be considered a good approximation of the supply price of labor in a setting where labor allocation is decided by households rather than by individuals (Byerlee *et al.* 1976, p. 86). Because relevant data required to adjust these income levels were not available, it was necessary to assume that the income levels had comparable values in the respective locations.

The variable U_j is intended to measure the perception by rural household members of their respective probabilities of obtaining the urban wage X_j. The precise specification of this variable is difficult given the elementary development of the job-search theory as it relates to migration models.

In a survey of the literature that seeks to incorporate the concept of job search into migration theory, Miron (1978) separates the literature premised on differential wages from the literature that focuses on the uncertainty involved in obtaining desired employment. We concur with Miron (1978, p. 527) that the former is not particularly relevant in that prospective migrants are reasonably aware of average wages and the postulated wage illusion cannot be demonstrated empirically.

A more recent, intermediate position is that of Harris and Sabot (1976). They allow that migrants are informed of wages available within each firm and they accept that wages vary considerably among firms. Harris and Sabot (1976, pp. 39–40) attribute the variation in wages among firms to: (1) rapidly expanding firms' raising wages to attract more applicants, and (2) firms with significant training and managerial costs inducing low labor turnover by paying above average wages. (On the basis of analysis of the formal sector labor market in Kenya (House and Rempel 1976a; House and Rempel 1978a), the latter is deemed to be the more appropriate for Kenya.) Their model involved sequential job search where an individual compares an existing job offer with the expected costs of searching for a "better" offer and then decides whether to accept the original offer or to search further. The decision to search further is seen to be a function of: (1) the migrant's subjective evaluation of the labor market conditions; (2) his attitude toward risk and his ability to bear risk; (3) the cost of the kind of search involved; and (4) the extent of dispersion of wages among firms (Harris and Sabot 1976, pp. 40–41). Because of imperfect information available to migrants and possibly because of a tendency to overestimate their respective "critical" (reservation) wages, migrants tend to search longer than might be considered optimal which, in turn, affects adversely the urban unemployment rates.

While this approach to specifying the probability of obtaining employment for a migration model seems promising, it has not been integrated as yet into a model of migration in an operational manner (Miron 1978, p. 527; Todaro 1976a, p. 44). As a result, we confine our approach to specifying U_j to that subset of the job-search literature that focuses on the uncertainty involved in obtaining employment.

Within this subset of the relevant literature Miron (1978, pp. 529–530) identifies three job-search mechanisms: a queuing model of job hiring, the "bingo" model, and Todaro's model. The first assumes that firms maintain lists of all who apply for a position and offer a position to the person at the top of the list at the time the job becomes available. While possibly relevant for high-skill jobs in Kenya, this assumption is not realistic for the hiring mechanisms confronting the vast majority of the rural–urban migrants.

The bingo model is the opposite extreme of the queuing model. Here no waiting lists are maintained and a job is offered to the first qualified person who applies after the job becomes available. The Todaro model is a special case of the bingo model that enables the probability of obtaining employment in a given time period to be specified as a function of the ratio of new openings in the labor market and the number of unemployed in that labor market at that time (Todaro 1969; Miron 1978, p. 530). In subsequent work this probability was simplified in that it was equated to the employment rate (Harris and Todaro 1970; Todaro 1976a, pp. 34–35).

This last specification has several undesirable properties. First, it assumes that all jobs turn over every time period (Fields 1975, p. 178). Second, it represents the special case for the bingo model where the net growth in job creation in the particular labor market is set at zero (Stiglitz 1974, pp. 223–226). Removing these unnecessarily restrictive assumptions, we obtain the more general specification of U, the probability of obtaining urban employment (Tobin 1972, p. 1; Stiglitz 1974, p. 224; Barnum and Sabot 1975, pp. 13–14; Sabot 1975a, p. 12; Todaro 1976b, p. 213). Thus,

$$U(t) = (g_t + q_t)\left(\frac{1 - u_{t-1}}{u_{t-1}}\right) \tag{4.8}$$

where g is the rate of new job creation; q is the quit rate, including retirement; u is the unemployment rate; and t identifies the time period. In his discussion, Stiglitz (1974, p. 226) also specifies the amount of unemployment and the migrant's expected time of unemployment for the queuing model.

This general specification, with the following modifications, was used in our regression model. First, information on q was not available. This omission of q from the specification of U_j will bias downward the coefficient for U_j. Second, employment and labor force data by district and town first became available in 1964 so it was not possible to measure U_j for period $t - 1$.

In addition to these measurement problems, several other shortcomings of this specification of U_j have been identified. First, the model in this form assumes that migrants have to be in town to be able to search for a job. Where this is probably the case for most migrants, there no doubt are exceptions which should be allowed for in Eq. (4.8) (Fields 1975, pp. 169–171). Second, this specification assumes that the migrant is unemployed during the job search. Some migrants get part-time employment in the informal sector while they search for a permanent job so that they can remain in town for a longer period

(Fields 1975, pp. 171–176; Sabot 1975a, pp. 11–13). The omission of these two factors introduces an upward bias to our coefficient for U_j. A third factor is that the probability of being selected from a given stock of unemployed is not equal among all the unemployed. Specifically, the probability of being selected is expected to vary directly with the level of formal schooling completed (Fields 1975, pp. 176–177; Gugler 1976, p. 194). Unfortunately, the data did not allow us to incorporate any of these suggested modifications into the general specification.

Finally, and possibly of greatest significance for our purpose here, the manner in which this general specification of U_j is incorporated into migration models assumes that U_j is known by prospective migrants before they move (Miron 1978, p. 531). The Harris and Sabot approach (1976) is more realistic in that migrants are seen to act on the basis of their subjective evaluation of the conditions prevailing in a particular labor market. It is to be expected that this subjective evaluation draws more on information regarding new jobs becoming available than on the rate of job creation over time. In an attempt to account for this fact, another specification of U_j was tested. In Eq. (4.8), g was defined as the number of new jobs created in town j during time period t divided by the sum of all jobs created during this period in all eight urban centers.

The urban income level X_j and the probability of obtaining employment U_j were entered in the migration model separately to avoid the restrictive assumption, typical of the Todaro migration model, that migrants are risk neutral. We concur with Bausell (1975) that migrants are more likely risk averse. But his position is rather extreme: that the risk inherent in farming, relative to the risk of investing in human capital in the form of a rural-to-urban move, is so low that it can be assumed to be zero (Bausell 1975, pp. 70–71). There is no *a priori* reason for assuming that farming is a less risky means of obtaining a desired level of income ($Y = \hat{Y}$) than the search for urban employment. Rather, the security inherent in farming is that it is a form of protection against income falling below subsistence ($Y < (C \cdot A)$). Also we postulate (H 2.10) that it is the young men who are the most willing to take risk and hence are more likely than older men to select an urban destination. Because the precise role of risk was not known, no attempt was made to build assumptions about risk into the migration model.

Given that our measures of amenity availability were indices only, a decision was made to enter the two indices as one ratio ($A_{ij} = A_j/A_i$). The urban amenity index A_j was weighted by the population size of town j. The rationale here was that two towns may have the same level of amenities, but the larger town, other things equal, is preferred by prospective migrants because a larger quantity and hence variety of this level of amenities is available there. This weighting of A_j by population size incorporates into A_j the labor market size and diversity dimension associated with the manner in which our variable B_j is normally measured (Barnum and Sabot 1975, pp. 3–4; Grant and Vanderkamp 1976, p. 4). As a result, B_j was dropped from the regression equation and the interpretation of the coefficient for A_{ij} will have to be expanded to incorporate the role of B_j.

Similarly, our sole measure for I_{ij}, the information about town j available to residents of rural area i, was the kin resident in j, G_{ij}. As a result, I_{ij} was dropped from the regression equation and the coefficient for G_{ij} will have to be interpreted to incorporate the effect of I_{ij}.

In most migration models the distance, D_{ij}, between i and j, is entered as a measure of both the pecuniary costs of moving as well as the various noneconomic (e.g., psychic)

costs such as being separated from family and friends. (For an extended discussion of this subject see Levy and Wadycki 1974a.) In addition, a complete specification of the pecuniary costs of moving should encompass the cost of subsistence during job search as well as the costs of the job search itself. For this purpose D_{ij} was split into two parts: (1) DA_{ij}, the pecuniary cost of moving – bus fare, subsistence cost during job search, and job-search costs; and (2) DB_{ij}, the extent of psychic separation between i and j measured in terms of the length of a bus trip from i to j.

For the remaining rural variables, direct measures were not available so a variety of proxy measures had to be employed. In the case of aspiration levels $\hat{Y}_i$, the postulated link between the desire for formal schooling and aspirations suggested that the proportion of school-age children who had attended school was a means of measuring the level of $\hat{Y}_i$ in a district.

Income distribution data within districts and most towns are not available for Kenya. As a result, the dominant means of generating income in the rural areas, land, was used as a proxy measure. For the small farmers, income beyond subsistence is earned from cash crops. Therefore, the proportion of land held by smallholders and the proportion of land in settlement schemes in each district that is devoted to cash crops was used as a measure for $\tilde{X}_i$. It is postulated that the larger the proportion of small farmers growing cash crops the more equal the income distribution within the district. In the case of F_i, equality of access to productive resources, the proportion of land in each district (adjusted for quality) that was held by small farmers and in settlement schemes was considered an appropriate measure.

For T_i, the extent of commercial and social interaction between i and j, the length of roads per square kilometer in district i was used as a proxy measure. The more developed a road system within a district the more likely that people in the district would have both the interest and the means for interaction with outside areas such as a town or a city. The effect of T_i on out-migration is not defined precisely. Improved means for commercial interaction can serve to increase local income possibilities, so out-migration may be reduced. Conversely, if increased interaction with the outside heightens awareness of opportunities available elsewhere but does not have a corresponding positive effect on local income possibilities, then out-migration can be expected to increase.

Finally, several local area studies in Kenya have shown that local inheritance laws have an effect on rural out-migration (Weisner 1972, p. 72; Moock 1973, p. 304). (Mendels (1978) makes a similar argument based on historical data for Europe.) Where only the oldest son inherits, the younger siblings must seek economic opportunities elsewhere. Similarly, if all inherit equally, the amount of land is small, and a strong kinship system exists, some household members may be encouraged to seek employment elsewhere. Conversely, a claim to land that cannot be sold, because local traditions prohibit permanent alienation of land, may deter some rural residents from breaking completely from their rural home.

Given that it was impossible to measure directly variations between districts in inheritance laws and land tenure systems a proxy measure also had to be employed for E_i, the measure of the system of land tenure and inheritance prevailing in region i. One that was considered appropriate was the proportion of land in a district available for smallholder registration that had been registered. Registration sets minimum limits on the size of farm holdings, so those with registered land are likely to have a viable farm unit which

would serve to deter out-migration. Conversely, if land cannot be subdivided further, some children may not be able to inherit directly. Since registration facilitates their selling claims to such land, registration may serve to induce more out-migration.

Given this possibility of effects in opposite directions on both T_i and E_i on out-migration, it was not possible to postulate a sign for these two variables. For all the other explanatory variables a one-tail significance test was considered appropriate. The signs for X_i, U_j, A_{ij}, G_{ij}, and $\hat{Y}_i$ are hypothesized to be positive and for DA_{ij}, DB_{ij}, X_i, $\widetilde{X}_i$, and F_i a negative sign is expected.

The functional form considered appropriate for this migration model is log-linear. This form avoids the problem associated with the linear function of assuming that the marginal utility of money income is constant (Grant and Vanderkamp 1976, p. 37). Also, in the log-linear form the marginal effect of individual explanatory variables depends on the values of the other explanatory variables in the function (Knowles and Anker 1977a, p. 4).

An econometric problem associated with this specification of the migration function is the possibility of simultaneity of the dependent variable and some of the explanatory variables. Specifically, the flow of migrants into j, in response to X_j, can be expected to have feedback effects on the level of X_j. A simultaneous equation model would be one method of capturing this interaction between in-migration and wage levels. But, given our choice of model, a simultaneous equation system is not practical because X_j would be affected by the in-migration from all sources, not merely from the one source i.

Our earlier analysis of labor market pressure in Kenya indicates that the labor force is highly responsive to interregional differences in economic opportunities but wages were found to be unresponsive to growing labor market pressure (House and Rempel 1978). Therefore, the simultaneity problem does not appear to be a major obstacle and our proposed model is deemed appropriate for the purposes of this study.

Regression Results

The single-equation ordinary least-square regression results for males and females are reported in Table 4.1. Table 4.2 contains the correlation matrix for the variables in these two equations. The manner in which the variables were measured, including the data sources, is given in the appendix to this chapter.

The postulated regression model serves to explain 85 percent of the interdistrict variation in the odds of a rural resident's relocating to an urban area. The coefficients of determination (R^2) are significant at the 1-percent level.

The effect of economic opportunities in the destination areas, as measured by average wages in the urban modern sector, has the postulated effect on rural–urban migration. The coefficients for X_j are significant in both cases and have the expected positive sign. The effect of urban income on migration of males is almost twice that of females. In each of the two equations the coefficient for X_j is somewhat larger than the coefficient for any of the other explanatory variables, indicating the prime importance of urban income prospects in migration decision-making.

The other measure of urban economic opportunities, U_j, has an unexpected negative sign in both cases and is statistically significant for males. (Given the opposite sign, a two-tail significance test was used for U_j. The coefficient for females is significant at the

TABLE 4.1 Estimates of the polytomous logistic model of migration: the dependent variable is (M_{ij}/M_{ii}).

Explanatory variable		1969 census – males		1969 census – females	
		Coefficient	t-ratio	Coefficient	t-ratio
	Intercept	−15.39[a]	(4.47)	−12.64[a]	(7.44)
X_j	Urban income	1.13[b]	(1.86)	0.64[b]	(2.09)
U_j	Urban employment prospects	−0.12[a]	(2.70)	−0.08	(1.73)
A_{ij}	Amenity index	0.38[a]	(3.54)	0.33[a]	(3.64)
G_{ij}	Urban-based kin	0.46[a]	(15.13)	0.50[a]	(15.60)
DA_{ij}	Cost of move	−0.01	(0.10)	−0.02	(0.19)
DB_{ij}	Extent of separation	−0.40[a]	(5.99)	−0.37[a]	(5.28)
$\hat{Y}_i$	Rural aspiration level	0.53[a]	(2.88)	0.31[a]	(2.46)
X_i	Rural income level	−0.12	(0.78)	−0.06	(0.63)
$\tilde{X}_i$	Rural income distribution	−0.06[a]	(2.58)	−0.08[a]	(4.16)
T_i	Interaction with outside	−0.09	(1.02)	−0.06	(0.59)
F_i	Access to rural resources	−0.06	(1.31)	−0.12[a]	(2.62)
E_i	Inheritance system	−0.12[a]	(3.56)	−0.11[a]	(3.24)
Coefficient of determination		0.86[a]		0.85[a]	
Degrees of freedom		243		243	

[a,b]Coefficients are significantly different from 0 at 1- and 5-percent levels, respectively. The significance of R^2 was determined from the F-test. Two-tail tests were carried out for T_i and E_i since no *a priori* expectations regarding their signs were made. One-tail tests were carried out on the remaining variables.

10-percent level.) The coefficients for the two alternative specifications of U_j are quite similar in magnitude and in both cases the signs are negative. Therefore, what is reported here is the specification reported in Eq. (4.8). For the alternative specification, the coefficient for males is significant even at the 10-percent level.

Evidence that migrants are attracted to the destinations with above-average unemployment is presented in other studies as well (Greenwood 1978, p. 27). The magnitude of the rural–urban income differential may be so large for some towns that rural residents move to urban areas with little regard for the employment prospects (Greenwood 1971b, p. 261; Carvajal and Geithman 1974, p. 118). This has some relevance for Kenya since earlier analysis has shown a correlation coefficient of 0.9 between urban modern sector wage levels and the number of modern sector jobs created in the 1964–68 period (Rempel 1978). Migration to these high-wage centers was probably triggered by the news of new hirings. If individual migrants failed to consider that many others would respond to the same news, then the level of unemployment during the height of this new surge of in-migration would hardly be representative of what rural households perceived to be the chances that their members would obtain a modern sector job.

Second, the knowledge that a number of unemployed were already at a particular destination need not deter people. Each may feel he will be more successful than others in obtaining one of these new jobs. In addition, prospective migrants may well view employment opportunities in a particular location in terms of the kin who can provide sustenance during the job search and can assist in the job search. This is the primary explanation that

TABLE 4.2 Correlation matrix for the polytomous model of migration.

	Females													
	M_{ij}/M_{ii}	X_j	U_j	A_{ij}	G_{ij}	DA_{ij}	DB_{ij}	$\hat{Y}_i$	X_i	$\tilde{X}_i$	T_i	F_i	E_i	
	0.0008	346	0.57	7.8	79	155	7.6	21	34	2.4	92	52	13.9	Mean
M_{ij}/M_{ii}		0.60	0.09	0.60	0.84	0.31	−0.47	0.34	0.15	0.13	0.23	−0.10	0.08	M_{ij}/M_{ii}
X_j	0.67		0.13	0.89	0.40	0.54	−0.06	0.0	0.0	0.0	0.0	0.0	0.0	X_j
U_j	0.04	0.09		0.07	0.08	0.16	−0.27	0.0	0.0	0.0	0.0	0.0	0.0	U_j
A_{ij}	0.63	0.94	0.06		0.43	0.51	0.02	−0.09	−0.08	0.03	−0.03	0.11	0.01	A_{ij}
G_{ij}	0.85	0.46	0.05	0.43		0.20	−0.46	0.49	0.22	0.43	0.39	0.04	0.21	G_{ij}
DA_{ij}	0.30	0.52	0.38	0.51	0.20		0.06	−0.16	−0.05	−0.15	−0.13	0.0	−0.10	DA_{ij}
DB_{ij}	−0.45	−0.01	−0.28	0.02	−0.46	0.06		−0.30	−0.23	−0.08	−0.25	0.16	−0.15	DB_{ij}
$\hat{Y}_i$	0.33	0.0	0.0	−0.09	0.51	−0.16	−0.29		0.33	0.46	0.64	−0.32	0.55	$\hat{Y}_i$
X_i	0.18	0.0	0.0	−0.06	0.37	−0.12	−0.19	0.64		0.13	0.52	−0.32	0.27	X_i
$\tilde{X}_i$	0.17	0.0	0.0	0.03	0.43	−0.15	−0.08	0.56	0.70		0.40	0.32	0.32	$\tilde{X}_i$
T_i	0.22	0.0	0.0	−0.03	0.39	−0.13	−0.25	0.60	0.31	0.40		−0.23	0.59	T_i
F_i	−0.06	0.0	0.0	0.11	0.04	0.0	0.15	−0.31	0.0	0.32	−0.23		−0.25	F_i
E_i	0.07	0.0	0.0	0.01	0.21	−0.10	−0.15	0.54	0.26	0.32	0.59	−0.25		E_i
Mean	0.0012	413	6.8	7.8	79	155	7.6	27	90	2.4	92	52	13.9	
	M_{ij}/M_{ii}	X_j	U_j	A_{ij}	G_{ij}	DA_{ij}	DB_{ij}	$\hat{Y}_i$	X_i	$\tilde{X}_i$	T_i	F_i	E_i	
	Males													

Byerlee *et al.* (1976, pp. 95–96) attach to the low value of the coefficient that they obtain for their unemployment variable in their Sierra Leone survey. We will consider this possibility in the analysis of our survey results, both in the latter part of this chapter and in Chapter 7.

The third measure of urban attractiveness, the amenity index A_{ij}, is statistically significant for both males and females and has the postulated positive sign. This result is obtained even though there is a high correlation between the urban income level X_j and A_{ij}. The results stand in contrast to earlier analysis where amenities were found to be a significant determinant of migration for females only (Rempel 1978, Table 7:4). One major difference between this earlier analysis and the results reported here is our weighting of the urban amenity index by the population sizes of the eight towns.

The effect of this weighting procedure suggests that the impact of B_j, the measure of the size and diversity of the labor market in j, is expressed prominently in our measure of amenities. An attempt will be made to separate the amenity availability effect from the effect of B_j in our analysis of the survey results in the latter part of this chapter and in Chapter 8.

In almost all migration studies distance has been shown to be a significant deterrent to migration. The magnitude of the coefficient has frequently been interpreted to indicate that distance stands as a proxy for more than merely the monetary costs of moving (Greenwood 1969, pp. 285–286, 1971b, pp. 256–257; Levy and Wadycki 1973, 1974b, p. 384; Byerlee *et al.* 1976, p. 92; Rempel 1978; House and Rempel 1978a, p. 14). Our two measures of the cost of moving separate explicitly the total costs of the transition from rural to urban employment, DA_{ij}, from the psychic cost (in terms of the length of a bus ride) of being separated from kin, DB_{ij}. Although the two variables are not highly correlated with each other, the monetary cost of moving is correlated positively with X_j and A_{ij}. These positive correlations indicate the town with the highest wage levels and with the largest, most diverse labor forces attract migrants from a wider circle of rural areas.

The regression coefficients support the conclusion of some scholars that psychic costs and the effect of distance on information flows predominate in migration decision-making (Levy and Wadycki 1973; 1974b, p. 385). When the average one-period rural income differentials of KShs.323 a month for males and KShs.312 for females are projected over a time horizon of several years, then the average cost per person of KShs.155 (Shs. = Shillings) is small indeed and it is not surprising that DA_{ij} is not significant when it no longer measures the psychic costs of a move.

Conversely, the measure of contact between the rural area and an urban center – kin who have migrated previously as measured by G_{ij} – serves as a consistent, strong determinant of rural–urban migration. The size of the coefficients for G_{ij} are less than for X_j, but rank second for females and third for males among all the coefficients. Both the information and the assistance provided by the urban-based kin will be analyzed in detail in Chapter 7.

Of the determinants specific to the origin of migration, the measure of aspiration levels $\hat{Y}_i$ has the most pronounced effect. The significant positive effect is somewhat higher for males than for females. In contrast, the measure of interaction I_i of region i with outside areas, which was postulated to affect aspirations as well as provide information, is not significant. A similar result for this variable was obtained by Knowles and Anker (1977a, Table 1, p. 15) in their analysis of interdistrict migration in Kenya. The correlation

coefficient between T_i and $\hat{Y}_i$ is 0.60 for males and 0.64 for females, so the two variables appear to be measuring similar forces. When included in a set of explanatory variables, the effect of T_i is dissipated.

With reference to the rural income variables, the results are somewhat mixed. The coefficients for the level of rural income X_i have the postulated negative sign but are not significant. In contrast, the measure of income distribution $\widetilde{X}_i$ within a district has a significant coefficient in both equations with the postulated negative sign. Similarly, the coefficients for the measure of access to the primary rural resource land, F_i, have the postulated negative sign, but are significant for females only. These results combined suggest that the distribution of income and resources within the household's more immediate environment does affect migration even though differences in income levels between regions cannot be shown to have a similar effect. Within a district, the more equally income earning possibilities are distributed and, in the case of females, the more equal the access to productive resources, the lower the odds of a rural-to-urban move.

For the final variable, E_i, significant coefficients with a negative sign were obtained in each equation. This indicates, given the effect of the other explanatory variables, that registration of land reduces rural out-migration. The variable E_i must be considered only a crude proxy for inheritance and tenure systems in districts, but the coefficients indicate that the precise role of these two factors in rural–urban migration needs to be explored further.

A MIGRATION ALLOCATION MODEL

The intent of this second model is quite different from that of the model above even though some of the explanatory variables are common to both. First, the dependent variable is limited to migrants only: that subset of the rural residents who actually expend real resources on a move. For this subset of the rural population the concern is to explain what determines which urban destination from the set of m possible destinations will be selected.

The attributes of the sending region i do not enter this aspect of the decision-making process except in the sense that rural income levels may determine the ability to select a more costly (and/or risky) destination (H 2.4). This microeffect of variations in the ability of households to finance migration is difficult to capture at an aggregate level. In his version of the model for interdistrict migration in Brazil, Sahota (1968, Table 3, p. 232) does enter origin region variables in the form of a ratio – the destination j variable divided by the corresponding variable for region i. The proposed form of our migration allocation model is:

$$\frac{M_{ij}}{\sum_i M_{ij}} w_j = f_3(X_j, U_j, A_j, B_j, S_j, G_{ij}, K_{ij}, D_{ij}, X_a, U_a, A_a) \tag{4.9}$$

where M_{ij} is the number of migrants who have moved from region i to urban center j; w_j is a population normalization weight which is equal to the total rural population under study divided by the product of the population size of the receiving area j; X_j is the

income perceived by prospective migrants to be available in j (H 2.1 (1)); U_j is the probability, as perceived by prospective migrants, of obtaining X_j (H 2.1 (2)); A_j is the amenities perceived by prospective migrants to be available in urban center j (H 2.6); B_j is a measure of the size and job diversity of the labor market in j (H 2.12); S_j is a measure of informal sector opportunities available in j (H: 2.5; 2.14); G_{ij} is the kin resident in area j who are available to assist prospective migrants from region i (H: 2.1 (3); 2.7); K_{ij} is a measure of the similarity in cultural, social, and linguistic attributes in region i and area j (H 2.11); D_{ij} is the cost of moving from region i to area j (H 2.4); and the subscript a identifies the values of these variables in the most attractive intervening opportunities between region i and area j.

The allocation of migrants among alternative destinations reflects, in part, differences in sizes between sending and receiving areas (Beals *et al.* 1967, pp. 481–482; Young 1975; Vanderkamp 1976; Yap 1977, pp. 245, 246). To the extent that explanatory variables to be used in the model are correlated with population size, the variation in population sizes will bias the coefficients obtained in the regression model. As a result, a modified version of Young's proposed normalization procedure for the dependent variable was used to minimize this possible bias (Young 1975, p. 97). Population size in the origin area is already reflected in the denominator of the dependent variable, the total number of out-migrants, and was not entered in the weight used.

The specification of X_i, U_j, D_{ij}, G_{ij}, A_j, and B_j was discussed for the previous model and will not be repeated here. Both specifications of U_j, using the rate of growth of urban jobs created and the proportion of all urban jobs created in period t that were created in town j, were tested here as well. Also, the pecuniary costs of moving, DA_{ij}, were separated from the psychic costs, DB_{ij}. Finally, B_j was again dropped from the regression model because the effect of the size and diversity of the urban labor markets was included in the population weights used for A_j.

In selecting a particular destination j, the prospective migrant will have compared information available on j with the information at the migrant's disposal on other possible destinations. Therefore, an attempt must be made to measure the effect of intervening opportunities that might exist between region i and town j. For this purpose we utilize the approach of Levy and Wadycki (1974a), entering into our model the most attractive alternative for urban income, urban employment prospects, and the amenity index from the subset of the m possible destinations that are closer to region i than is town j. Where j was the closest town to region i, the values of these variables for j were entered. Since the relative weight that migrants attach to these three variables is not known, it was not possible to select the "most attractive" alternative. As a result, the best alternative for each variable was entered.

At least for Africa, the literature has not documented what role, if any, the urban informal sector has in migration decision-making. As a result, no information exists that could suggest the possible form that the specification of S_j might take. If the informal sector serves primarily as a point of entry to the formal sector for the migrant then it is the existence of informal sector opportunity rather than the income levels to be derived from these opportunities that is important. Therefore, the measure used for S_j was an estimate of the proportion of the urban labor force employed in the informal sector.

Finally, for the purposes of selecting a particular destination, it is knowledge of one's ability to fit into the cultural, social, and linguistic setting of j that probably is more

important than only information about j. As a result, Huntington's information index (1973, p. 6) was considered an appropriate measure for K_{ij}. This index represents a weighted average across ethnic groups in region i that are resident in town j. The index is given in the appendix to this chapter.

As was the case in the polytomous logistic model of migration, relevant personal characteristics of the migrants cannot be entered readily into an aggregate migration model. Here also, we are limited by the data to stratifying the sample into males and females. In addition to the dependent variable – with its weight factor – X_j, U_j, S_j, X_a, and U_a were entered in a sex-specific form.

Similarly, for the reasons given for the previous model, a log-linear specification was considered appropriate for the migration allocation model. A one-tail significance test was used for each explanatory variable. The postulated signs are: positive for X_j, U_j, A_j, S_j, G_{ij}, and K_{ij}; and negative for DA_{ij}, DB_{ij}, X_a, U_a, and A_a.

Regression Results

The regression coefficients for the migration allocation model, for males and females, are reported in Table 4.3. The corresponding correlation matrix is provided in Table 4.4. The manner in which the variables were measured, including the data sources, is given in the appendix to this chapter.

TABLE 4.3 Log-linear regression coefficients for the migration allocation model: the dependent variable is $(M_{ij}/\sum_i M_{ij})(\sum_i P_i/P_j)$.[a]

Explanatory variable		1969 census – males		1969 census – females	
		Coefficient	t-ratio	Coefficient	t-ratio
	Intercept	9.26	(1.14)	–0.24	(0.07)
X_i	Urban income	2.99[a]	(3.06)	–1.54[b]	(2.98)
U_j	Urban employment prospects	–0.41[a]	(5.53)	–0.10	(1.43)
A_j	Urban amenity index	–0.15	(1.01)	0.46[b]	(3.12)
S_i	Urban informal sector prospects	–0.05	(1.44)	0.16[b]	(3.12)
G_{ij}	Urban-based kin	0.12[a]	(9.41)	0.13[b]	(3.67)
K_{ij}	Ethnic similarity	–0.02	(0.27)	–0.01	(0.09)
DA_{ij}	Cost of move	0.24	(1.43)	0.31	(1.73)
DB_{ij}	Extent of separation	–0.64[a]	(7.01)	–0.73[b]	(7.31)
X_a	Alternative income	–4.33[a]	(3.38)	2.00[b]	(3.35)
U_a	Alternative employment	0.39[a]	(4.70)	–0.01	(0.12)
A_a	Alternative amenities	0.10	(0.43)	–0.70[b]	(4.38)
Coefficient of determination		0.55[a]		0.49[b]	
Degrees of freedom		244		244	

[a]The significance of R^2 was determined from the F-test. One-tail tests were employed in all cases.
[b]Coefficients are significantly different from 0 at the 1-percent level.

The explanatory capability of the migration allocation model is somewhat lower than that of the polytomous logistic model of migration. The adjusted R^2 is 0.55 for

TABLE 4.4 Correlation matrix for the migration allocation model.

	Females													
	$\frac{M_{ij}}{\sum_i M_{ij}}$	$\frac{\sum_i P_i}{P_j}$	X_j	U_j	A_j	S_j	G_{ij}	K_{ij}	DA_{ij}	DB_{ij}	X_a	U_a	A_a	
	11.4		346	0.01	200	11.1	79	0.07	155	7.6	516	5.4	763	Mean
$\frac{M_{ij}}{\sum_i M_{ij}}$ $\frac{\sum_i P_i}{P_j}$			0.13	0.13	0.12	0.09	0.53	0.32	0.01	−0.61	−0.50	−0.51	0.55	$\frac{M_{ij}}{\sum_i M_{ij}}$ $\frac{\sum_i P_i}{P_j}$
X_j	0.13			0.74	0.91	0.11	0.40	0.04	0.54	−0.06	−0.12	−0.25	−0.15	X_j
U_j	0.10	0.76			0.78	−0.29	0.38	0.0	0.49	−0.17	−0.21	−0.26	−0.22	U_j
A_j	0.12	0.96	0.75			−0.05	0.46	0.08	0.52	−0.01	−0.09	−0.21	−0.08	A_j
S_j	0.0	−0.05	−0.46	−0.10			−0.01	−0.01	−0.34	0.12	−0.02	−0.04	−0.04	S_j
G_{ij}	0.53	0.46	0.35	0.46	−0.04			0.44	0.20	−0.46	−0.34	−0.39	−0.35	G_{ij}
K_{ij}	0.30	0.07	−0.01	0.08	0.0	0.44			−0.10	−0.38	−0.31	−0.24	−0.27	K_{ij}
DA_{ij}	0.04	0.52	0.63	0.52	−0.46	0.20	−0.10			0.06	−0.04	−0.14	−0.04	DA_{ij}
DB_{ij}	−0.61	−0.01	−0.19	−0.01	0.14	−0.46	−0.38	0.06			0.59	0.51	0.56	DB_{ij}
X_a	−0.55	−0.12	−0.24	−0.10	0.02	−0.38	−0.27	−0.07	0.56			0.81	0.94	X_a
U_a	−0.46	−0.25	−0.25	−0.23	−0.03	−0.41	−0.28	−0.11	0.52	0.87			0.84	U_a
A_a	−0.53	−0.11	−0.22	−0.08	0.0	−0.35	−0.31	−0.04	0.52	0.98	0.85			A_a
Mean	7.1	413	0.16	200	3.2	79	0.07	155	7.6	537	10.6	763		
	$\frac{M_{ij}}{\sum_i M_{ij}}$	$\frac{\sum_i P_i}{P_j}$	X_j	U_j	A_j	S_j	G_{ij}	K_{ij}	DA_{ij}	DB_{ij}	X_a	U_a	A_a	
	Males													

males and 0.49 for females. The set of regression coefficients, on the basis of the F-test, is significant in each case.

For males, the magnitude of the coefficients for urban income levels dominates the results. The coefficient for X_j has the expected positive sign and that of X_a is negative as postulated. Both coefficients are significant at the 1-percent level. For females, in contrast, the signs for the two coefficients are reversed. (For females X_j and A_j are highly correlated, but the coefficient for X_j still has a negative sign (though the coefficient is not significant) even if A_j is dropped.) Clearly, females are drawn to a particular urban center by forces other than the level of modern sector income available to females there.

For the urban employment variable U_j, the second specification of g in Eq. (4.8) – modern sector jobs created in j during 1964–68 divided by the total number of jobs created in the eight towns during this period – was used.* The results obtained for U_j are the same as those in the polytomous logistic model. The coefficients of U_j both have an unexpected negative sign although for females it is insignificant. Consistent with these results, the coefficient of U_a for males has an unexpected positive sign and is significant. For females it has the predicted negative sign but again it is not significant. The only explanations that we can offer for these results are the same ones provided in our interpretation of the results obtained for U in the polytomous logistic model.

Our measure of informal sector opportunities serves as a significant determinant of migration destination selection for females only.** This result shows that both extensive discrimination against women exists in modern sector employment and that women who have accompanied their husbands seek to supplement family income in a secondary labor market. The aggregate nature of the data makes it impossible to distinguish between these two plausible explanations.

Again, urban amenities available is also a significant determinant of destination selection for females only. Consistent with the positive sign for the coefficient of A_j for females, the coefficient of A_a for females has the expected negative sign and it is significant. For females the magnitude of the coefficients obtained for A_j and A_a ranks below the urban income variable but above that of all the other explanatory variables.

The presence of kin in a particular destination, G_{ij}, is a significant determinant of the selection of that destination. The effect of kin is similar for both males and females. In contrast, given the effect of the other explanatory variables, our measure of cultural, social, and linguistic similarity, K_{ij}, is not significant.

The results obtained for the two "distance" variables are also quite similar to those obtained in the model presented previously. When the monetary costs of moving are separated from the psychic costs, the former is not significant as a determinant of the selection of a destination. (A two-tail test was used for the coefficient of DA_{ij} for females because of the unexpected negative sign. The coefficient realized is significant at the 10-percent level.) As was the case in the previous model, DB_{ij}, the measure of the separation between region i and j, varies inversely with the proportion of out-migrants from region i who select town j as a destination.

*The coefficients obtained were quite similar – −0.32 for males, −0.11 for females, significant at the 1-percent level in the first case and at the 10-percent level in the second case – but this specification did not cause the coefficient of X_j for males to become insignificant. The first specification of g, as reported in Eq. (4.8), was used throughout for U_a.

**For both males and females the correlation coefficient between S_j and U_j is negative, yet the regression coefficients for U_j are negative. As a result, S_j can be seen as a measure of informal sector alternatives rather than merely the place where an increasing number of unemployed must seek to subsist.

In summary then, many of the hypotheses developed in the first chapter stand up well on the basis of the two migration models developed and tested here. The polytomous logistic model of migration has a relatively high degree of predictive capability. Although the focus of the model is the odds of a rural-to-urban move, rather than the rate of migration frequently used in migration models, any one coefficient can be interpreted in the normal sense of an elasticity, given the effect of the other explanatory variables. The modeling of decision-making for destination selection appears to be quite complex, which is captured only partially by our migration allocation model.

Several summary conclusions can be drawn from the results. Variations in income levels among urban centers are the dominant factor in both the decision whether to migrate and in the selection of a particular destination. The one exception is the selection of a destination by females. Given the effect of the other explanatory variables, urban employment prospects, as specified here, cannot be seen as a significant determinant of either the decision to migrate or the selection of a particular destination. Amenity availability enters into the decision whether to migrate but is significant for females only in selecting a particular destination. The cumulative evidence indicates that it is the size and diversity of what is available in town rather than the level of amenities that a town has to offer, that is important. Variation among rural areas in income levels was not found to be a significant determinant of migration but variation in access to rural income earning possibilities and variation in levels of aspiration among districts were found to be significant. The separation of a rural area from a given town was found to dominate over the monetary cost of moving when the two were separated. The presence of urban-based kin consistently served as a positive factor in both the decision whether to move and in the selection of a particular destination. Finally while the predictive capabilities of the two models were quite similar for males and females, there are substantial differences between the two groups, both in the magnitude of the coefficients and the particular explanatory variables that were found to be significant. As a result, the rural–urban migration of women must be seen as a complex process that cannot be reduced to their merely accompanying husbands who have decided to move.

THE REASONS FOR MIGRATION GIVEN BY THE MIGRANTS

As part of the migration survey the men were asked to explain why they had moved to town. First, the men were asked: "What made you decide to leave the home you had in the district before you came to this town?" (Question 6). The results broken down by education and age are provided in Table 4.5.

The migrants' explanations of their own behavior indicate that economic factors are the determining forces. If the first two rows in Table 4.5 are combined, 82 percent of the men said that their primary reason for leaving was limited economic opportunities. In contrast, only 1 percent listed a lack of social amenities as a primary reason for leaving, while another 5 percent listed their inability to gain entrance to the schools in their home area.

If we compare their second reason for leaving with the primary reason, for the men who said that they could not find work as the primary reason, 73 percent did not state a second reason, 12 percent listed that land was not available, and 11 percent listed other reasons. Similarly, for the men who gave "land was not available" as a primary reason, 6 percent did not state a second reason while 93 percent gave "could not find work" as

TABLE 4.5 The percentage distribution of the primary reasons given by the migrants for leaving their previous location.

Reasons for leaving	Education		Ages		Total sample
	Primary	Secondary	15–22	23–50	
Could not find work	80	73	78	79	78
Land was not available	5	2	1	7	4
Could not enter a school	4	11	9	1	5
Lack of social amenities, including schools		1	1	1	1
Other reasons	11	13	11	12	12
Total	100	100	100	100	100

the second reason. A total of 4 percent of the men listed "could not enter a school" or "lack of social amenities" as a second reason for leaving their home area.

A chi-square test of the primary reason for leaving the home area was based on the two economic reasons (rows 1 and 2 in Table 4.5) *versus* all the other reasons. The variation in the distribution of the two types of reasons for leaving among provincial migration sources was not significant ($p < 0.70$). There is significant variation in the distribution of these two reasons for leaving between the two education subgroups ($p < 0.01$) and between the two age subgroups ($p < 0.01$). For the men with secondary education the access to rural economic opportunities does not appear to rank as important as it does for the primary education group, but the former were more concerned about an inability to gain entrance to schools in their respective home areas. For the two age groups, the older men were relatively more concerned about land not being available while the younger men were relatively more concerned about their inability to gain admission to the local schools.

The second question asked was: "Once you had decided to leave your previous home, why did you choose to come to this town?" (Question 7). The responses obtained to this question (see Table 4.6) stand in direct contrast to the negative sign obtained for U_j, the measure of urban employment prospects used in the regression models. Sixty percent of

TABLE 4.6 The percentage distribution of the reasons given by the migrants in each urban center for selecting their particular migration destination.

Reasons for selection	Urban center								Total sample
	Nairobi	Mombasa	Kisumu	Nakuru	Eldoret	Thika	Nanyuki	Nyeri	
Best employment prospects	66	42	79	66	58	62	67	72	60
Schools available	6	2	5	3		6			5
Social amenities available	1	1							1
I have kin here	17	43	11	28	40	25	17	6	24
It is close to my home	2	1	1			1	2	10	2
Other reasons	8	11	4	3	2	6	14	12	8
Total	100	100	100	100	100	100	100	100	100

the men indicated "best employment prospects" as the primary reason for selecting their destinations. The only other reason of any importance given by the men was "I have kin here." There may be considerable overlap between these two reasons since the possibility of finding employment is determined in part by the existence of kin in town. We note, for example, that 27 percent of the men who indicated that the possibility of finding work was their primary reason also indicated that the presence of kin in town was their second reason for selecting that town. Similarly, 36 percent of the men who indicated the presence of kin as a primary reason gave the possibility of finding employment as their second reason. In both cases, more than half of the men did not indicate a second reason for choosing a particular urban center.

For the purposes of a valid chi-square test, the primary reasons for choosing a particular urban center were divided into four groups: "best employment prospects," "schools available plus social amenities available," "I have kin here," and "other reasons" including "it is close to my home." The variation in the distribution of these four types of reasons among the four groupings of urban centers (Nairobi, Mombasa, the three western towns (Kisumu, Nakuru, and Eldoret), and the three central towns (Thika, Nanyuki, and Nyeri)) was significant ($p < 0.01$). Kisumu, Nyeri, Nanyuki, Nairobi, and Nakuru rank above average with reference to best employment opportunities, while Mombasa and Eldoret rank above average with reference to presence of kin. Availability of social amenities as a "pull" force registers in Nairobi and Mombasa only.

This variation in the distribution of the four reasons for selecting a particular destination was also significant ($p < 0.01$ in all three cases) between the two education groups, the two age groups, and between passive and active migrants (see Table 4.7). (Passive migrants relied on kin as their primary source of information about their destinations while active migrants drew on impersonal information sources primarily.) For the two

TABLE 4.7 The percentage distribution of the primary reasons given by the migrants for selecting their particular migration destination.

Reasons for selection	Education		Ages		Information sources		Total sample
	Primary	Secondary	15–22	23–50	Passive	Active	
Best employment prospects	60	62	57	65	63	57	60
Schools available	3	10	7	2	5	4	5
Social amenities available	1	1	1		1	1	1
I have kin here	26	18	26	21	26	19	24
It is close to my home	2	1	1	3	1	3	2
Other reasons	8	8	8	9	4	16	8
Total	100	100	100	100	100	100	100

education groups the dominant deviation from expected values was the relative weight that the secondary education group placed on the availability of schools. For the older men the exact opposite was the case, which was the dominant deviation from expected values for the two age groups. For the last set, the dominant deviations from expected values were in the "other reasons" row: active migrants placed relatively high emphasis here while the passive migrants placed below-average emphasis on this factor.

Relating these responses of the migrants to the results obtained from the regression analysis, we note first the primary evidence placed by the migrants on a lack of rural opportunities as a reason for leaving; yet the coefficient for the rural income level was not significant. The rural "push" into the urban scene does not appear to take the form of a desperate search for a livelihood. Rather, the significant coefficient with a negative sign for $\widetilde{X}_i$, the measure of the distribution of rural income earning possibilities, suggests that where cash crop earnings are available to a wider range of people the likelihood of rural–urban migration is reduced.

Further, the survey results suggest that there is limited access to land (shown as not significant for males in the regression analysis on the basis of the coefficient for F_i) and jobs in rural areas. This raises the question whether it is the poorest in the rural areas who are migrating. The regression data at the district level were too aggregated to enable us to answer this question. Rather, it will be necessary to address this question on the basis of survey results which form an important part of the next chapter. The evidence presented here points much more to a relative "push" – an inability to meet household aspirations on the basis of rural opportunities open to the household. This is borne out by the positive significant coefficient for the measure of aspiration levels, $\hat{Y}_i$. Also, the survey results reported in Table 4.5 can be seen as consistent with this interpretation. A possible gap between aspirations and rural income earning opportunities is especially relevant for young men whose income earning prospects from farming would be limited at this stage in their lives. The median age at the time of migration for the men in our sample was between 22 and 23.

The survey results and the regression results for males for urban income levels (X_j and X_a) obtained in both models indicate the prime importance of urban income levels as a major "pull" force. The evidence for urban employment prospects is not as consistent given the negative sign of the coefficient for U_j. It is possible that the emphasis placed on employment prospects as a reason for selecting a destination merely shows that there are kin there who can assist in the job search process, and hence is reflected in G_{ij} in the regression equations. But this is not fully convincing given that some men listed both good employment prospects and kin as their first and second reasons for selecting a destination. The actual role played by urban-based kin will be analyzed in detail in Chapter 7. The emphasis on employment as a reason for selecting a destination suggests that U_j in our models is misspecified. First, the simultaneity problem between in-migration and urban unemployment rates will need to be overcome. Second, the rural household's subjective assessment of the employment prospects in town for its members would appear not to be captured accurately in a variable built around the rate of unemployment in the urban labor market.

With reference to the role of amenity availability as a determinant in the migration process, the survey results are not supportive. Neither the lack of amenities in rural areas nor the existence of amenities in town registers as an important reason for migration. This is consistent with the regression results for males for the amenity index in the migration allocation model but contrary to that obtained in the polytomous logistic model of migration. In the latter case the effect of B_j, the size and diversity of the urban job market, appears to be an important element in the coefficient obtained for A_{ij}. This subject will be discussed further in Chapter 8 where urban amenity use by the migrants will be analyzed.

SUMMARY

Given the structure of the economy and its effect both on aspiration levels as well as the spatial distribution of income earning possibilities, as outlined in Chapter 2, and given the dominance of urban income as an explanatory variable, the rural–urban migration can be seen as a rational decision by migrants that serves to reallocate resources to where they are in greatest demand. But it does not follow that the many who have chosen not to move are therefore irrational. The evidence presented here suggests that the migration process is complex, and Amin (1974, pp. 88–89) oversimplifies considerably when he argues that the decision to migrate is "completely predetermined." In the chapters that follow the survey results are analyzed in detail to shed as much light as possible on this complex process; we address the questions of who migrates and why do they migrate. In the concluding chapter we return to the potential in public policy of shaping the structure of the economy and hence affecting the spatial distribution of Kenya's population.

APPENDIX: MEASUREMENT OF THE REGRESSION VARIABLES

The Polytomous Logistic Model of Migration

M_{ij} – migration flows. The numbers used in the regression flows are those reported in Tables 3.1 and 3.2. The source is unpublished data from the 1969 census made available by the Central Bureau of Statistics. In addition to the adjustments to the data noted in the footnotes of the two tables, an adjustment was made for Nyeri, where 37 percent of the enumerated population did not provide a place of birth. It was assumed that the proportions coming from each district were basically correct as reported, so the number of in-migrants from each district was increased by 37 percent. For Nairobi and Mombasa the flows are based on the total population while for the smaller towns they are limited to African population.

M_{ii} – nonmigrants. The value of M_{ii} for males and females is the total number enumerated as born in i (enumerated population less in-migrants plus out-migrants) in the 1969 census less $\Sigma_j M_{ij}$. The source for people born in i is Rempel (1974b, Table 2). For the districts that contained one of the six smaller towns, the relevant urban population was subtracted from the number enumerated as born in i.

X_j – urban income. The urban wage data were obtained from the Annual Enumeration of Employees in the modern sector for the years 1964 to 1968 (Statistics Division 1971, 1972). Because the data for 1964 probably were affected significantly by the Tripartite Agreement (see Chapter 2), a simple average for the 5 years was used. Wage levels for males and females are given for the private sector in 1968 only. This ratio of male to female wages was used to divide the simple average wage level for the 5 years into levels for males and females.

U_j – urban employment prospects. Employment data for males and females were obtained from the Annual Enumeration of Employees in the modern sector for the years 1964 to 1968 (Statistics Division 1971, 1972). Self-employment in the modern sector is enumerated for 1968 only. The ratio of self-employed to wage employed in 1968 was used

to arrive at an estimate of self-employment in the years 1964 to 1967. Labor force estimates were taken from corrected versions of Tables 1 and 3 of Rempel (1974a). Again, because of the possible distortive effect of the Tripartite Agreement, a simple average of the unemployment rate for the 5 years was used. The unemployed were defined as labor force less employed and self-employed in the modern sector.

A – amenity index. The amenity index is based on the amenity availability data provided in Table 8.1. For the purpose of this index, the industry column was omitted because the effect of industry was probably expressed already in our measure of modern sector employment. To arrive at an index the level of amenity availability for each town and district was obtained by summing across the 20 columns in Table 8.1. This sum was then weighted by population size to obtain an index of amenity availability. For the urban centers a relative population weight based on $P_j/\Sigma_j P_j$ such that the weight for Nanyuki remained at one, was used. For the rural areas, the Regional Physical Development Plans rank the towns and villages into four groups depending on the size of the hinterland that each serves. There is some indication that the minimum size of population served is: urban center – 150,000; rural center – 50,000; market center – 15,000; and local center – 5,000. These values were used to calculate a district weighted average across all relevant towns and villages in each district.

G_{ij} – urban-based kin. The measure for kin was the number of people in town j who were from district i as reported in the 1962 census (Statistics Division 1966, Vol. III, Appendix IV.c). The method of estimating rural–urban migration prior to 1962 from the 1962 census information is outlined in Rempel (1974a, p. 1).

DA_{ij} – cost of move. The monetary costs associated with the move are the sum of the cost of the trip, cost of sustenance during the job search multiplied by the average length of time until the first job was obtained, plus the cost of the job search. The cost of the trip was the bus fare from the district headquarters to town j as given in the fare schedule of East African Road Services. In the limited number of cases where a fare was not given the sample average of KShs.0.0496 per kilometer was used. The estimated costs of sustenance and job search were taken from Collier and Rempel (1977, pp. 207–208). The average number of months unemployed prior to the first job was estimated from our survey data. A separate value was entered for each region i to each town j. For the districts where the number of observations was less than five the provincial average was used for the district.

DB_{ij} – extent of separation. The nonmonetary costs of the move were measured in terms of the time of a bus trip from the headquarters of district i to town j. The information was obtained from the schedule of East African Road Services. In the limited number of cases where the district was not serviced, the sample average of 0.0256 hours per kilometer was used.

$\hat{Y}_i$ – rural aspiration levels. Aspiration levels were measured in terms of the percentage of children aged 5–14 in each district that were enumerated in the 1969 census as having some formal schooling. The number of persons aged 0–14 who had completed some formal education was obtained from Central Bureau of Statistics (1971, Vol. III, Table 1). The number of persons aged 5–14 was obtained from unpublished census data. For the purpose of calculating the percentage it was assumed that the children aged 0–4 had not completed any formal education.

X_i – rural income level. The rural income level for males and females was measured as a weighted average of formal sector wages and wages paid on small farms and settlement schemes. The formal sector wage levels were obtained in the same manner as they were for X_j. Information on small farms and settlement schemes was obtained from a 1969 survey as reported in Central Bureau of Statistics (1972, Tables 234 and 235). The weights used were the proportions in each type of employment.

$\widetilde{X}_i$ – rural income distribution. The income distribution in the rural areas was measured in terms of the percentage of the land held by small farmers and in settlement schemes that were devoted to cash crops. The amount of land held by small farmers and in settlement schemes was obtained from Central Bureau of Statistics (1971, Tables 82 and 87). The aggregate area of this land devoted to cash crops was obtained from Central Bureau of Statistics (1971, Table 82).

T_i – interaction with outside. This variable was measured as the kilometers of road per square kilometer in each district as given in Singer and Reynolds (1974, Table 11, p. 42).

F_i – access to rural resources. Access was measured in terms of the percentage of arable land in each district that is available for smallholder registration. The amount of arable land in each district was obtained from Central Bureau of Statistics (1977, Vol. IV, Table 22). The amount available for registration was taken from Central Bureau of Statistics (1972, Table 5, p. 5). In the few instances where the numerator exceeded the denominator, the amount not alienated, as given in Table 5, was used as the denominator.

E_i – inheritance system. This variable was measured as the percentage of land available for registration that had been registered, as given in Central Bureau of Statistics (1972, Table 5, p. 5).

The Migration Allocation Model

There are two additional variables in the allocation model:

S_j – urban informal sector prospects. From our survey sample, self-employment activities that were not obviously in the formal sector were obtained. From the survey sample for each urban center the ratio of the informally self-employed to the sum of the informally self-employed and the unemployed during the first quarter after migration was calculated. This ratio was applied to the portion of the labor force in town j that was not engaged in the modern sector to obtain the portion of the labor force engaged in the urban informal sector. The same ratio was applied to the labor force for males and females to obtain separate estimates for males and females.

K_{ij} – ethnic similarity. The formula provided by Huntington (1973, p. 6) was used:

$$C_{ij} = \sum_{t=1}^{T} \left(\frac{P_{it}}{P_i} \cdot \frac{P_{jt}}{P_j} \right) \tag{4.10}$$

where P_{it} is the population of region i in ethnic group t; P_{jt} is the population of urban area j in ethnic group t; P is total population; and T is the number of ethnic groups. The data were obtained from Central Bureau of Statistics (1970, Vol. I, Table II and 1971, Vol. II, Table 4).

5 THE MIGRATION SELECTION PROCESS IN THE RURAL AREAS

From the vantage point of the towns, the magnitude of the urban in-migration appears large. The views of the urban employed on the matter find expression in the words of the editorial writer quoted previously: " . . . far too many of them want to exchange their rural life for town life" (Editorial, *East African Standard*, February 8, 1974). From the perspective of the total rural population, as reported in Chapter 3, the proportion of the population born in the rural areas that is resident in one of the towns is very small indeed. In any one year only a select few leave a rural area for one of the towns.* Therefore, it is important to determine who is leaving the rural areas.

In this chapter the personal and economic characteristics of the men in the sample are related, where possible, to those of the adult males who have remained in the rural areas. The intent of such a comparison is to shed as much light as possible on the migration selection process in the rural areas. The question of who migrates really cannot be separated from the question of why people migrate. Therefore, the comparisons made here supplement the discussion in the previous chapter on the determinants of migration. Specifically, such personal characteristics as age and education could not be dealt with readily at the aggregate level so they are discussed here.

PERSONAL CHARACTERISTICS OF THE MIGRANTS

Among the more general determinants of migration decision-making in the rural areas, as developed in Chapter 1 and tested in Chapter 4, there is a built-in selection process based on personal factors. Two of these, formal schooling completed and age, can be examined in detail.

According to our migration model the likelihood of a rural-to-urban move will vary directly with the level of education of the household members. Summarizing our hypotheses: (1) the extent of information of rural households about the towns will be correlated directly with the education of the household members; (2) because of the better access to information and a greater ability to adapt to new situations, the educated are more likely to undertake the risk of a rural–urban move; (3) the return realized for an additional year of education is higher in the towns than in the rural areas; and (4) given the high level of unemployment in the towns, the probability of being selected from a given stock of unemployed will vary directly with the level of education of the unemployed. As a result, the probability of being able to profit from an urban job will vary directly with the education of the prospective migrants.

*Certain locations, of course, represent distinct exceptions to this general rule. For example, Moock (1973, p. 303) reports that two-thirds of the adult males in a sublocation in Kakamega district were employed or searching for work outside of the district. But, not all of these men will be in the larger urban centers; it is to be expected that some proportion will be in towns of less than 10,000 and in rural areas.

All of these effects of education are expressed through such variables as level of wages in the rural areas and urban centers and the probability of obtaining employment. A less direct effect of education is the expectations of the family that has contributed to an individual's educational expenses. To the extent that this family views the purchase of formal education as the means for entry into the modern sector of the economy, the school-leaver must try his luck in the modern sector (basically existing only in the urban centers) to justify the investment in education. If he is successful in the urban scene he has the reward of a good return on a wise investment and the family that has contributed to his education can expect to share in this reward. The changing economic conditions in the towns require ever higher levels of education to ensure such urban rewards, but the expectation and their effect on rural--urban migration persist (Godfrey 1973, p. 71).

The effect of education on migration can be expressed in noneconomic terms as well, in the form of a "white-collar hypothesis" (Godfrey 1973, pp. 70–71). According to this hypothesis the educated aspire to white-collar jobs available in the towns and for this reason they reject the rural options independent of economic realities. This hypothesis is not developed here because, as Godfrey indicates, empirical evidence on the subject does not support the hypothesis (evidence for East Africa is provided by Maxwell (1969), Moock (1973, pp. 313–314), Heijnen (1968, pp. 96–104), and Hutton (1973, pp. 66–74)). A more likely effect, which cannot be measured readily, is the desire for additional education which tends to rise with education completed and which requires a rural--urban move because these additional educational opportunities tend to be limited to the towns.

There is considerable evidence in our sample of an association between education and propensity to migrate. Table 5.1 provides the percentage distribution in each province of education completed as observed in the sample and as reported for all males in the comparable age groups in the 1969 census. The comparisons made in the table indicate a rather consistent pattern across the province (the observed pattern is similar to that reported for Ghana by Caldwell (1969, p. 62)). The men without formal education were represented poorly in the sample relative to their proportions in the rural areas. Men who had completed 5 or more years of schooling were represented disproportionately in the sample of migrants. In general, the more education completed the more overrepresented the group in the migration sample (these differences are significant at the $p < 0.01$ level using a chi-square test).

The 1968 survey information on the timing of the rural–urban move also provides support for the hypothesis that a move to the towns is expected of the educated. For the men with some formal education, 60 percent were in school in the quarter prior to migration while 91 percent of the men with some secondary education were in school immediately prior to migration. Of the men who had completed primary education but had not continued on to secondary education, two-thirds had passed the Kenya Preliminary Examination. This may indicate that the completion of a unit of schooling is a propitious time for migrating because a transition into the labor force is required if it is not possible to continue in school.

In Table 5.2 the education of the migrants is cross-tabulated with the education of their fathers. The distribution for the fathers is compared with the education of men in comparable ages as reported in the 1962 census. The age category of 35 to 59 was used as the appropriate age of the migrants' fathers at the time of the 1962 census.

Although there is a positive correlation between the education of a migrant and the education of his father, there does not appear to be a significant difference between the education of the fathers of the migrants and the education of all Kenyan Africans in the

TABLE 5.1 The percentage distribution of the education of the men in each province as reported in the migration survey and the 1969 census.[a]

Province of birth	Education					Total
	No formal education or not stated	Standards		Forms		
		1–4	5–8	1–2	3–6	
Nyanza						
Sample	7	11	50	14	18	100
Census	55	13	26	4	2	100
Western						
Sample	11	14	48	13	14	100
Census	46	17	29	5	3	100
Rift Valley						
Sample	19	9	37	9	26	100
Census	69	5	21	3	2	100
Central						
Sample	11	11	42	9	27	100
Census	37	15	37	7	4	100
Eastern						
Sample	19	24	42	4	11	100
Census	57	16	23	3	1	100
Coast						
Sample	14	23	53	5	5	100
Census	73	9	14	2	2	100
Total						
Sample	12	15	45	10	18	100
Census	68	15	14	2	1	100

[a]The percentages are net of numbers resident in the eight urban centers reported in Central Bureau of Statistics (Vol. II, Table V).
SOURCE: Central Bureau of Statistics (1971, Vol. III, Table I).

TABLE 5.2 Cross-tabulation of the education of the migrants and the education of their fathers (percentage).

Education of the migrant's father	Migrant's education					Distribution of the education of the men aged 35–39 according to the 1962 census
	No formal education	Standards		Forms	Total	
		1–4	5–8	1–6		
No formal education	96.6	91.2	81.5	48.5	75.6	72.7
Standards 1–4	2.0	5.5	10.3	27.3	13.3	18.0
Standards 5–8	1.4	3.3	7.9	23.0	10.6	8.4
Forms 1–6			0.3	1.2	0.5	0.9
Total	100.0	100.0	100.0	100.0	100.0	100.0

SOURCE: Central Bureau of Statistics (1968, Tables 17 and 19).

comparable age group. Therefore, migration does not appear to be determined by the level of education of the fathers of the migrants. The men appear to come from "ordinary" rural backgrounds and families.

Another aspect of the relationship between education and rural–urban migration is the significant variation in the distribution of the levels of education among migrants from different provinces.* Central Province and to a certain extent Nyanza Province provide proportionately more men in the secondary education group. Conversely, Coast and Eastern provinces provide a low number. Eastern and Rift Valley provinces provide proportionately more men with no formal schooling and Coast and Nyanza provinces provide a disproportionate number with only some primary education.

This variation could be the result of three factors: (1) variations between provinces in employment opportunities in the rural areas that lead to migrations to obtain employment; (2) variations between provinces in the quality of primary education which determines a student's ability to compete for the limited number of secondary school admissions available in Kenya; or (3) an unequal distribution of secondary schools among provinces which restricts opportunities for higher education in Eastern, Coast, and Rift Valley provinces.

Given that rural families view formal education as an important means of purchasing entrance to the urban formal sector, one would expect a high correlation between the extent of out-migration and both the availability and quality of rural educational opportunities. If successful entrance into the urban formal sector generates remittances to rural areas, then the high out-migration areas have a greater capability to expand and improve educational facilities. Therefore, the latter two of the three factors listed above probably explain most of the variations among provinces in the level of education completed by the migrants. If so, the type of out-migration observed from Eastern, Coast, and Rift Valley provinces may well reflect a disproportionately low level of rural employment opportunities within these provinces.

THE AGE DISTRIBUTION OF THE MIGRANTS

In part, the tendency for a disproportionate number of the rural young to move to the towns reflects the correlation between age and education. The rapid expansion in the provision of educational opportunities after independence means many of the better-educated Kenyans are relatively young.

According to our migration model there are several additional economic reasons for the higher tendency of the young to migrate: (1) the opportunity costs of moving and job search are lower for the young who have not become established as yet, have not acquired specific skills, or have not taken on immediate family obligations; (2) the young typically discount the future at a lower rate; and (3) the young have a longer time horizon over which to recover the higher costs associated with an urban move. Finally, various social and personal factors that serve to induce rural–urban migration have a great effect on young adults (Mitchell 1969, p. 178).

The 1968 survey confirmed the expected youthfulness of the migrants. The median age of the men at the time of migration was between 22 and 23. More than 80 percent of the men were less than 30 at the time of their migration. As indicated in Table 5.3, the propensity to migrate is consistently higher in the 20–24 age category. The age

*A chi-square test was used for the six provinces and two education groups, primary *versus* secondary. The chi-square value was significant at the $p < 0.01$ level.

TABLE 5.3 The percentage distribution of the age of the men in each province as reported in the migration survey and the 1969 census.[a]

Province of birth	Ages					Total
	15–19	20–24	25–29	30–39	40–59	
Nyanza						
Sample	20	47	17	12	4	100
Census	25	17	13	20	25	100
Western						
Sample	23	43	13	17	4	100
Census	27	17	11	20	25	100
Rift Valley						
Sample	22	34	30	14		100
Census	22	16	15	22	25	100
Central						
Sample	26	40	16	13	5	100
Census	21	18	14	21	26	100
Eastern						
Sample	28	35	20	12	5	100
Census	25	16	13	20	26	100
Coast						
Sample	32	36	15	10	7	100
Census	19	14	15	24	28	100
Total						
Sample	25	41	17	13	4	100
Census	22	17	15	22	24	100

[a]Percentages are net of numbers resident in the eight urban centers as reported in Central Bureau of Statistics (1971, Vol. II, Table V).
SOURCE: Central Bureau of Statistics (1970, Table III).

distribution of the migrants is significantly different from that of the rural population at the $p < 0.05$ level of a chi-square test.

Although the proportion in the 25–29 age category is higher in the survey than in the census (except in Coast Province), the difference for most provinces is rather small. The proportion of migrants over the age of 30 is considerably smaller than for the rural population. For the young, 15–19 years old, the sample and the census percentages are similar, except for Coast Province where there are proportionately more in the migration sample than in the census.

The extent of the dominance of younger men in the migration process suggests that all of the postulated explanations of why the young are more likely to migrate apply in Kenya for the postindependence period. The degree of determination of the migrants to remain in urban areas can serve as one means for sorting out the relative importance of the economic and social explanations for the high propensity to migrate among the young adults. We turn to this aspect of the migration process in Chapter 9.

THE DISTRIBUTION OF ETHNIC GROUPS

As indicated previously, there is positive correlation between education and the size of the migration flows from the respective areas. Therefore, if education is a determinant

of migratory behavior, then the variation in educational achievement among provinces may explain the relative importance of Central and Nyanza provinces as sources of migration and, conversely, the relative unimportance of Eastern and Coast provinces. On the other hand, there may be conditions within these provinces that determine both the educational level and the propensity to migrate.

In order to check on such a common determinant of education and migration, a comparison was made of the distribution of major ethnic groups among provinces in the survey sample and the 1969 census (see Table 5.4). We assumed that the ratio of males aged 15 to 50 to the total African population is the same within each province; the distribution of male Africans in each ethnic group within each province was considered to be the expected value. The deviation of observed migrants in each ethnic group within each province from the corresponding expected values is statistically significant. The dominant deviations from expected values, in order of importance (with an indication whether the observed value is above or below the expected value) are as follows: Kikuyu, Central Province – above; other tribes, Rift Valley Province – below; Kisii and Kipsigi, Rift Valley Province – below; Kisii and Kipsigi, Nyanza Province – below; Luo, Nyanza Province – above; Embu and Meru, Eastern Province – below; other tribes, Eastern Province – below; Kamba, Eastern Province – above; Luhya, Western Province – above. Therefore there is a distinct tendency for the Kikuyu and, to a lesser extent, the Luo, Kamba, and Luhya to have an above-average propensity to migrate. Conversely, other tribes, the Kisii, Kipsigi, Embu, and Meru have a low propensity to migrate.

These results are not fully consistent with those of Segal who seeks to explain differences in the extent of rural-to-urban migration among ethnic groups on the basis of their respective traditional cultural characteristics. According to Segal (1970, pp. 107–108):

> The major theoretical framework utilized in formulating this study's major hypothesis of ethnically based urban migratory differential was scale theory as explicated by Godfrey and Monica Wilson. The major aspect of the scale theory involved was the prediction that large-scale traits will be associated with high urban migratory rates and that small-scale traits will be associated with lower ones. Assuming that my identification of specific traits as large or small in scale is accurate, this general prediction is borne out.

On the basis of his analysis of the 1962 census data the Luo were seen to have a higher propensity to migrate than the Kikuyu.* It is possible that the ranking of the Luo above the Kikuyu in 1962, but the reverse in 1969, reflects the proximity of the 1962 census to the emergency. Kikuyu had been forced out of some of the major urban centers, especially Nairobi, and Luo were brought in to replace them. The 3 years between the lifting of the emergency regulations and the census may have been too short a period for a natural adjustment in the spatial allocation of people to have occurred.

*The analysis of Segal is open to question because of errors in measurement. If as many Luo were urbanized as he claimed, more than 100 percent of the population in the major urban centers in Kenya would be Luo. This error need not totally invalidate his thesis because differences in rural and urban sex ratios among ethnic groups, rather than the number of migrants, is used to measure migration in his analysis.

TABLE 5.4 The percentage distribution of ethnic groups in each province as reported in the migration survey and the 1969 census (males only).

Province	Kikuyu	Embu and Meru	Kamba	Luhya	Luo	Kisii and Kipsigi	Coast tribes	Other tribes	Total
Nyanza									
Sample				1.6	91.6	5.9		0.9	100
Census	0.3			1.8	62.0	32.2	0.5	3.2	100
Western									
Sample				95.2	2.5			2.3	100
Census	0.9	0.1	0.1	87.7	1.5	0.1		9.6	100
Rift Valley									
Sample	69.7			10.5	1.8	9.2		8.8	100
Census	15.3	0.6	0.7	7.3	3.8	22.1	0.2	50.0	100
Central									
Sample	99.9	0.1							100
Census	95.5	0.6	1.6	0.7	0.6	0.3	0.1	0.6	100
Eastern									
Sample	2.6	12.0	83.1	1.0			1.0	0.3	100
Census	1.5	34.6	53.6	0.2	0.2	0.1	0.1	9.7	100
Coast									
Sample			5.1				93.6	1.3	100
Census	2.8	0.5	7.8	2.7	4.3	0.2	76.5	5.2	100
Total									
Sample	36.4	2.2	15.3	17.5	18.6	1.5	7.5	1.0	100
Census	20.4	6.3	11.1	13.5	14.3	11.1	7.1	16.2	100

SOURCE: Central Bureau of Statistics (1970, Table II).

In our regression analysis, as reported in the previous chapter, five ethnic groupings – Central Bantu, Western Bantu, Coastal Bantu, Nilotic, and other tribes – were entered as dummy variables in the polytomous logistic model of migration. In the analysis, Coastal Bantu was omitted so the coefficients for the other four indicate whether their propensities to migrate differ from that of the Coastal Bantu. The results were not reported in Table 4.1 for three reasons: only the coefficient for other tribes was statistically significant, R^2 for each changed by one percentage point only, and several of the other explanatory variables were then found to be no longer significant. As expected, other tribes had a significantly below-average propensity to migrate. For the ethnic groups that show considerable rural–urban migration there are not significant differences between them in migration propensities, given the effect of the other explanatory variables.

In conclusion then, variation between ethnic groups in their propensity to migrate cannot be denied. Our analysis merely questions whether these differences are a function of cultural influences independent of the economic realities of each ethnic group. The regression coefficients for the ethnic groups that dominate the migration process typically are not significant, while other tribes (those not listed specifically) stand out as a distinct exception in our economic analysis; this indicates that Segal's thesis may be a better explanation for why some groups do not migrate than for why other groups do migrate.

ECONOMIC CHARACTERISTICS OF THE MIGRANTS

The identification of the economic variables in the migration selection process is more difficult because the rural data available are not directly comparable to those obtained in the survey. The year 1969 has been selected as the reference point because more data are available for that year. In addition to the population census, surveys were made of small farm and settlement scheme employment and of the operation of small-scale, nonagricultural rural enterprises. Although a reference point in the 1964-to-1968 period would have been preferable, the year-to-year structural changes in rural economic activity tend to be small. As a result, the use of 1969 data does not inject a known bias into the analysis.

The Nature of Employment Prior to Migration

The dominant activity of the men in the quarter prior to migration was obtaining an education (see Table 5.5). Fifty-two percent of the men were in school, ranging from 20 percent of the older men in Coast Province to 96 percent of the younger men in Rift Valley Province. Only a small minority, 15 percent, were engaged in farming prior to migration. The proportion is somewhat higher for older men, with the exceptions of Central and Rift Valley provinces. In the latter case, only 2 percent of the men in the sample had been engaged in farming. As many men were employed for wages as were engaged in farming. Again, the proportion engaged in wage employment is consistently higher for the older men. Almost twice as many men were unemployed as the sum of the self-employed and the part-time employed. Given that many of the younger men were in school, the unemployment rate was higher for the older men.

TABLE 5.5 The percentage distribution of the nature of employment of the men in the sample prior to their rural–urban migration.

Province of birth	In school	Employed for wages	Self-employed	Farming	Employed part-time	Unemployed	Total
Nyanza							
Age 15–22	74.5	10.6	2.0	4.3	0.3	8.3	100
Age 23–59	26.5	22.2	6.9	22.9	6.7	14.8	100
Total	50.9	16.3	4.4	13.7	3.4	11.3	100
Western							
Age 15–22	69.2	6.6	2.4	8.0	0.6	13.2	100
Age 23–59	20.5	33.2	2.9	28.0	2.4	13.0	100
Total	47.1	18.7	2.6	17.1	1.4	13.1	100
Rift Valley							
Age 15–22	95.8		3.2			1.0	100
Age 23–59	20.9	35.0	4.4	3.6	14.1	22.0	100
Total	58.8	17.3	3.8	1.8	7.0	11.3	100
Central							
Age 15–22	85.4	4.9	0.1	4.5	0.1	5.0	100
Age 23–59	31.6	20.9	6.6	14.2	7.7	19.0	100
Total	60.7	12.1	3.0	9.2	3.5	11.5	100
Eastern							
Age 15–22	52.3	10.9	1.1	21.5	4.6	9.6	100
Age 23–59	25.2	20.8	7.7	31.5	3.9	10.9	100
Total	40.5	15.1	4.0	26.1	4.2	10.1	100
Coast							
Age 15–22	74.2	4.7	2.3	9.4	2.3	7.1	100
Age 23–59	20.4	28.3	5.8	36.7	2.9	5.9	100
Total	50.9	15.0	3.8	21.3	2.6	6.4	100
Total							
Age 15–22	74.0	7.2	1.3	8.4	1.2	7.9	100
Age 23–59	26.2	24.3	6.1	22.8	5.8	14.8	100
Total	51.9	15.1	3.5	15.2	3.3	11.0	100

The variation between provinces in the distribution of employment prior to migration is statistically significant for the total sample and within both age categories. Deviations from expected values are primarily in the school, farming, and unemployed columns. Central Province has a proportionately larger number of men in school while Western Province has a below-average proportion. Rift Valley Province also has a high proportion of young men in school but is unimportant in the total sample. With the exception of Coast Province, there is an inverse relationship between the proportion of older men farming and the proportion of younger men in school. This lends support to the position that the purchase of education for young people is determined, in part, by economic factors, not simply by the culture of an ethnic group.

Table 5.6 provides a summary of the available information on the activity of rural males for the year 1969. Comparing Table 5.6 with Table 5.5, the obvious difference is in the proportion in school. "Enrolled in secondary school" is not an accurate measure of the proportion of all rural men in school because some males over the age of 15 will be in primary school or in a trade school. Conversely, some of the secondary school students will be less than 15 years old. Nevertheless, secondary school enrollment is considered to be a good measure of the relative importance placed in each province on having adult males in school. The total proportion in school probably is within a few percentage points of the 3 percent shown in the table.

If we assume that the self-employed in modern sector agriculture are farmers and that all the men not accounted for are either farmers or marginally employed people, then the sum of farmers and such marginally employed people is 69 percent. (According to an unpublished 1969 government survey of nonagricultural enterprises in rural areas, an additional 3 percent of adult males were either employed or self-employed in this sector. The percentages given here represent the sum of the "Total" and the "Self-employed in agriculture" columns in Table 5.6, less 3 percent.) The range involved is from 62 percent for Central Province to 76 percent for Nyanza Province. These proportions are well above the 26 percent who were either farming or unemployed in our migration sample. The range in our sample is from 1 percent for younger men in Rift Valley Province to 43 percent for older men in Coast Province.

If the comparison is limited to the men in the sample who were not in school prior to migration, then the proportion unemployed or engaged in farming rises to 55 percent with a range from 24 percent for younger men in Rift Valley Province to 69 percent for younger men in Western Province. But, all of these young men in Rift Valley Province, 62 percent of these young men in Western Province, and 42 percent of the 55 percent average for the total sample were unemployed. Therefore, it appears that the migration selection process draws heavily from those who either lack the opportunity to farm or who choose not to farm.

Of interest are some exceptions to this general rule. Of the men not in school, a slightly larger proportion of the younger men than of the older men were engaged in farming prior to migration. This unexpected result is caused by an above-average proportion of younger men farming in Eastern and Coast provinces and a well–below-average proportion of older men engaged in farming in Central Province. Therefore, the lack of farming opportunities in Central Province as an important explanation of the high rate of out-migration is supported by evidence presented here. The question of the economic viability of the rather extensive farming observed in Eastern and Coast provinces will be considered in a subsequent section.

TABLE 5.6 Estimates of the distribution of the economic activity of adult males in the rural areas of each province during 1969 (percentage).

Province	Modern-sector activity[a]					Small-scale farm and settlement scheme employment[b]			Enrolled in secondary school[c]	Total	Nature of activity unknown	Total
	Nonagricultural		Agriculture		Total							
	Employed	Self-employed	Employed	Self-employed		Regular	Casual	Total				
Nyanza	5.3	0.3	1.6	0.1	7.3	6.3	5.3	11.6	2.6	21.5	78.5	100
Western	5.2	0.3	1.0	0.1	6.6	9.3	6.1	15.4	3.3	25.3	74.7	100
Rift Valley	6.9	0.4	18.6	2.2	28.1	3.4	1.8	5.2	1.9	35.2	64.8	100
Central	8.8	0.6	10.4	0.7	20.5	5.2	3.3	8.5	6.7	35.7	64.3	100
Eastern	6.3	0.2	2.3	0.3	9.1	11.3	5.0	16.3	2.5	27.9	72.1	100
Coast	8.1	0.2	6.2	0.1	14.6	4.6	3.2	7.8	4.9	27.3	72.7	100
Total	6.6	0.4	7.6	0.7	15.3	6.6	4.0	10.6	3.2	29.1	70.9	100

[a]Statistics Division (1972, Tables 16, 19, 21, 23, and 26).
[b]Central Bureau of Statistics (1972, Table 234).
[c]Central Bureau of Statistics (1973, Table 11.10).

In summary, the results of the analysis of the economic activity in the rural areas are consistent with the conclusions in the discussion of the personal characteristics of the migrants. The completion of a particular school stream, without an opportunity to continue in school, is a propitious time to migrate because a transition into the labor force is required. The choice of an urban rather than a rural location by the men reflects limited employment opportunities in the rural areas and either limited opportunities to farm or an unwillingness to farm. Still to be resolved is whether the men had ready access to farming opportunities. We consider this question next.

Access to Land

The survey indicates that only a small proportion of the men were farming because 69 percent lacked immediate access to land (see Table 5.7).

TABLE 5.7 The percentage distribution of the amount of land owned by the migrant and his father.

Migrant's father	Migrant			Total
	Owns no land	Owns 1–5 acres	Owns more than 5 acres	
(Migrant has no father)	26.0	12.3	4.5	42.8
Owns no land	10.3	0.7		11.0
Owns 1–5 acres	19.8	7.7	0.7	28.2
Owns more than 5 acres	12.9	3.3	1.8	18.0
Total	69.0	24.0	7.0	100.0

Of these landless migrants more than half have either no father or a landless father. Therefore, more than one-third of the migrants are landless and have no prospect of inheriting land. Of the 14 percent who claim to own land and have fathers who own land, approximately one-half of these claims are for the same piece of land. (This was determined from the responses to Question 55 on the questionnaire.) The migrant already refers to the land as his land even though the father still holds it. For the total sample, only some 10 percent of the men possess or are likely to inherit more than 5 acres of land.

These survey results stand in contrast to the position of the government of Kenya, which claims that the urban unemployed have ready access to farm land (Parmena 1971, p. 21). Gwyer (1972, p. 3) states that this used to be the case but the situation is changing in Kenya; for many young men the option of taking up farming is no longer there. "Size of the family farm is so small that it does not seem able to provide employment for all family members."

Our survey results lie between those reported by Ross (1973, p. 134) for three Nairobi neighborhoods. He found that 74 percent of his Mathare Valley respondents were landless but only 41 percent of the respondents in Shauri Moyo and Karikor claimed to be without land. One possible explanation for these differences is that the rapid population growth in the rural areas has increased the number of landless in recent years, which is reflected in our recent migrants. An alternative and more likely explanation is that the longer-term

residents of Nairobi are using their urban earnings to obtain land in the rural areas. This latter explanation is what Hutton (1973, pp. 71–74) obtained from her sample of urban unemployed in Uganda. She found that 41 percent of her sample lacked immediate access to land but the young men " . . . were anxious to work for long enough to ensure that they could buy land and plant cash crops, thus creating the security which they lacked at present."

As an alternative measure of land availability, the average number of acres of agricultural land per resident adult male was calculated for each province (Table 5.8). With some minor variations, for the 31 percent of the men who had access to land, the land ownership in the sample is similar to the average amount of high-potential agricultural land per capita available in each province. In Central Province the amount of land per landholder exceeds the average amount of land available in the province. But, very few migrants owned any land.

TABLE 5.8 A measure of agricultural land available per adult male in each province (acres/adult male).

Province	Acres per adult male			
	Migration sample		Kenyan rural population	
	Men who own land	Total sample	High-potential land[a]	Total agricultural land
Nyanza	6.8	2.5	6.9	7.0
Western	5.9	2.6	7.3	7.3
Rift Valley	13.2	1.6	14.5	74.3
Central	5.6	0.7	3.3	3.5
Eastern	7.8	4.0	3.2	88.9
Coast	3.9	1.1	6.0	109.1
Total	6.6	2.0	6.9	52.7

[a]High-potential land is defined as agricultural land with a minimum of 35 inches (40 inches in Coast Province) of rainfall annually.
SOURCE: Central Bureau of Statistics (1968, Table 68).

Therefore, for those migrants in our sample, access to land does not appear to be less than for the rural population in general. But, more than two-thirds of the men did not have direct access to land when they migrated. This limited access to land is most evident in Central Province which is also the major source of urban in-migration.

Average Income in the Rural Areas

We have observed so far that the migrants, prior to migration, had rather limited access to cash income opportunities in the rural areas. In this section a comparison is made between the income of those migrants who were not in school and the available information on cash income in the rural areas.

As indicated in Table 5.9, the average cash income of the men prior to migration was KShs.95 per month. The income of the men with some secondary education is more than four times the average but the number of men involved is only 6 percent of the total

TABLE 5.9 Average cash income per month prior to migration in each province by nature of employment and within each education category (KShs./month).

Province and education category	Nonfarm income by employment category						Net farm income	Total
	Employed for wages	Self-employed	Farming	Employed part-time	Unemployed	Total		
Nyanza								
Primary	231	105	2	159	0	60	2	62
Secondary	380			60*	0*	301	1	308
Total	306	105	2	150	0	99	2	94
Western								
Primary	327	699*	22	80*	1	143	3	146
Secondary	150*				0*	83*	14*	97*
Total	297	699*	22	80*	1	139	4	142
Rift Valley								
Primary	223		5*	115*	0*	149	8	158
Secondary	586*					586*	0*	586*
Total	263		5*	115*	0*	178	7	186
Central								
Primary	157	138	17	78	2	58	3	62
Secondary	1,018*		53*		0*	858	0	858*
Total	285	138	17	78	2	91	3	95
Eastern								
Primary	190	152	3	80*	5	59	3	62
Secondary								
Total	190	152	3	80*	5	59	3	62
Coast								
Primary	111	20*	6		33	37	1	40
Secondary								
Total	111	20*	6		33	37	1	40
Total sample								
Primary	208	190	12	98	6	85	3	77
Secondary	541		22*	60*	1*	447	12	419
Total	261	190	12	96	6	109	4	95

NOTE: Asterisks indicate that the number of observations is very small.

sample. Most of the income was derived from regular wage employment, and a few men did quite well being self-employed. Net cash revenue from a farm was an insignificant part of the total income. This reflects, in part, the limited access to land but it indicates as well that most of the men who were farming obtained only small amounts of cash income from these farms. This is especially evident in Eastern and Coast provinces where the above-average access to land did not generate an above-average level of farm income.

In our sample, income among provinces varies considerably; Rift Valley and Western provinces have income levels above average while Eastern and Coast provinces have below-average levels. For the former the high average levels reflect that income sources are limited primarily to wage employment. In all the other provinces a number of men also derive income from other sources. The below-average income levels in Coast and Eastern provinces reflect both low wage levels and limited access to wage employment.

TABLE 5.10 Estimates of rural employment incomes for adult males in the rural areas during 1969 (KShs./month).

Province	Modern sector employment[a]			Small farm and settlement schemes employment[b]			Average rural wage income
	Agriculture	Other	Total	Regular	Casual	Total	
Nyanza	139	242	219	53	71	61	124
Western	88	400	350	66	66	66	159
Rift Valley	107	364	177	58	42	52	159
Central	114	371	232	106	66	90	197
Eastern	150	314	270	67	83	72	224
Coast	188	319	262	73	74	74	125
Total	117	338	219	68	69	68	161

[a]Statistics Division (1972, Tables 16, 23, 36, 38, and 41).
[b]Ministry of Economic Planning and Development (1972, Tables 234 and 235).

The available information on employment income in the rural areas is summarized in Table 5.10. Wage levels on small farms and in settlement schemes are somewhat lower than modern sector agricultural wages, which are well below the nonagricultural modern sector wage levels. Therefore, the range of wages in the rural areas varies considerably, depending on the type of employment. In part, the KShs.338 per month for nonagricultural modern sector employment will include a premium paid for education. Such a premium is probably much less evident in the agricultural employment. Variations in wage levels between provinces are not large but both Eastern and Coast provinces show above-average wage levels for agricultural employment. The relatively high average does not carry over to average income in Coast Province because the vast majority of the men are employed on small farms or settlement schemes.

In addition to the information in Table 5.10, several other pieces of information are available for Kenya for 1969. First, some 620,000 smallholders are estimated to average less than KShs.100 per month from cash and food crops grown while 250,000 smallholders are estimated to be receiving between KShs.100 and 180 per month from their farms.

Second, according to an unpublished 1969 survey of nonagricultural enterprises, average monthly wages paid for men were KShs.103, ranging from KShs.87 for casual employees to KShs.118 for regular employees. Third, net income of the proprietors of these enterprises averaged KShs.414 per month. Seventy-five percent of these proprietors were farmers as well. Finally, the average monthly income from all sources, including subsistence agriculture, per rural household has been estimated at KShs.223 (International Labour Office 1972, p. 333).

A comparison of the two income tables indicates that the wage levels of the employed men in the migration sample were similar to the modern sector wages paid in the rural areas. The wage level of men with primary education, probably most typical of the general rural pattern, is only KShs.11 per month below the average rural modern sector wage. (The 1969 wages overstate the rural income for the survey period but the difference is probably small because the price levels were quite stable during the latter part of the 1960s.) Conversely, cash income from farming is very low. It is questionable that many of the farmers in the sample produced enough food to bring their farm income to the KShs.100-a-month ceiling observed for the majority of the rural smallholders.

Therefore, we conclude that the migrants lacked access to commercial farming opportunities. In addition, for the employed at least, wage levels compare favorably with the rural average. What rural push was exerted was more in the form of limited access to such opportunities. To obtain a wage at least comparable to the nonagricultural rural wage, the majority of the men had to turn to the urban scene.

SUMMARY

The migration selection process in the rural areas is complex. Nevertheless, some general patterns emerge. Rapid population expansion in the rural areas focuses attention on the limited amount of agricultural land available in some areas and probably is a cause of restlessness, especially among younger men. Add to this emerging restlessness the higher levels of education, bringing with it greater awareness of alternative opportunities outside the immediate home area, and the stage is set for growing out-migration. It is the ethnic groups with best access to educational opportunities and who are under the greatest land pressure that show the highest propensity to migrate.

Within this changing rural scene we find the expected selective process at work. It is the younger men with above-average education who move to the urban centers. The fact that migration follows directly after school for the majority of the men in the sample indicates that the rural-to-urban move may be the expected response from the young men who have reached the end of a particular educational stream. The importance of formal schooling in the rural–urban migration process suggests that it is not the poorest in the rural areas who are most prone to move to town.

6 THE URBAN EMPLOYMENT AND INCOME EXPERIENCE OF THE MIGRANTS

People go to the cities for the following reasons (Ross 1973, p. 42):

1. They believe that they can earn more cash income than in the rural areas. This seems equally important for people with very high and very low levels of education.
2. They feel that there will be better opportunities for education and employment for their children.
3. They have heard stories of urban life from relatives and friends, and want to experience it themselves.
4. They wish to enjoy the technological features of modern society, which are mainly confined to the urban areas.

These reasons for urban in-migration provided by Ross are similar to our hypotheses about why a particular urban migration destination is selected (Chapter 1, H: 2.1 to 2.14). The dominant difference is that we place more emphasis on the economic determinants of migration. Specifically, we argue that a household decision will be reached after an evaluation of the perceived urban income opportunities relative to the economic alternatives in rural areas.

The evidence presented thus far provides support for our emphasis on economic determinants of migration. In our regression models, the urban income levels, rural aspiration levels, and distribution of rural income earning possibilities were all significant determinants of rural–urban migration. Further, in Chapter 5 we have shown that some combination of rural modern sector wages, small business profits, and cash crop farming income need not be considered inferior to urban alternatives, but most of the migrants did not have direct access to such combinations of rural income earning possibilities. Third, prior to migration some of the men were earning relatively good incomes. In addition, more than half of the men were attending school. As a result, it was concluded, in most cases, that it was not the poorest in the rural areas who were migrating. Yet, these men claimed that their primary reason for selecting a particular urban destination was the good employment prospects perceived to exist there.

In this chapter we seek to determine whether these stated economic objectives of the migrants were realized in town. First, we discuss the published evidence on rural–urban income differentials and then the evidence as reported by the migrants. Second, the changes in employment status and incomes during the first 2 years after migration are analyzed. In addition, hypotheses, as presented in Chapter 1, on personal attributes that affect employment status and income earned are tested. Finally, we compare the employment and income experience of the migrants with available data on urban employment and earnings to determine how the migrants have fared relative to the total urban labor force.

THE RURAL–URBAN INCOME DIFFERENTIAL

The Published Evidence

As reported in Chapter 2, the emergence of differences in wage levels between the rural and urban parts of the Kenyan economy was the result of a fundamental shift in power within the economy which occurred during the emergency of the 1950s. Before that, the settler community dominated the economy in general, and in wage policy in particular. With a shift in economic power to industry and modern sector services, the purchase of labor force stability took priority over the level of wages.

The effect of this shift in emphasis in modern sector employment policy was to move the economy from a reported position of rural–urban wage parity to an urban modern sector wage which was more than three times the level of the rural modern sector wage (see Table 2.8). During the period under study, 1964 to 1968, the extent of the rural–urban wage differential increased from KShs.324 to KShs.445 a month. Further, as of 1969, the gross domestic product per employee in the nonagricultural portion of the modern sector was estimated to be 7 or 8 times that of rural activity (Public Service Structure and Remuneration Commission 1971, pp. 41–42). Because of the combined effect of these differentials, average urban household income in 1972 was reported to exceed average rural household income by a multiple of five (Development Plan: 1974–1978 (1974) p. 95).

An inherent weakness of these data is that they ignore differences in the cost of living between rural and urban areas. The matter has been studied in detail for West Africa by Knight (1972), and he concludes that real rural–urban income differentials are somewhat less than the gross income differentials. Yet, the rural and urban ways of life are fundamentally different and it is not clear that it is merely a matter of adjusting for differences in the cost of living. As stated by Amin (1974, p. 107): "The town, in spite of poverty and unemployment, still offers some advantages in comparison with the countryside . . . . Filtered water is one of them, which should not be underestimated, because this alone has reduced infant mortality by half." Such advantages are part of the "technological features of modern society" listed by Ross in the quote provided above.

To participate fully in the advantages of the urban centers an "urban income" is necessary, but that income buys a qualitatively different product. As a result, to be constrained by the data available to a discussion of money income differentials need not invalidate the analysis.

The Income Differential Experienced by the Migrants

A comparison of income earned prior to migration with the income that the men in our sample were able to obtain during the first full quarter after their arrival in town has to be limited to the subset of the sample who were not students immediately prior to migration. This eliminates more than half of the sample and reduces the number of men with secondary education to the point where province-by-province comparison of the income differential for these men becomes impossible.

TABLE 6.1 A comparison by province of origin, of income earned prior to migration and in the second quarter of urban residence.

Province	Average income differential (KShs./month)			Urban income as a percent of rural income		
	Education		Total	Education		Total
	Primary	Secondary		Primary	Secondary	
Nyanza	84	196	99	234	164	205
Western	108	159[a]	111	174	264[a]	178
Rift Valley	74	120[a]	76	147	120[a]	141
Central	72	301[a]	82	216	135[a]	186
Eastern	119		119	293		293
Coast	116		116	392		392
Total	94	212	100	222	151	205

[a]The number of observations is less than 5.

As reported in Table 6.1, the average rural–urban difference in income levels is KShs.100 per month. If we compare this difference with the level of rural income earned, as reported in Table 5.9, we find that the average level of urban income is approximately twice (205 percent) the level of rural income. The average differential for men with secondary education is more than twice that of the other men, but the significantly higher rural income of this group causes the relative gain from the rural–urban move to be substantially lower than that of the men with primary education.

Variation among provinces in the size of the income differentials (col. 6, Table 6.1) is less than the variation in the levels of rural earnings (col. 8, Table 5.9). As a result, the percentage increases in income from a rural–urban move vary substantially among provinces (col. 6, Table 6.1). For example, the relatively high differentials reported for Eastern and Coast provinces reflect the relative poverty of the migrants from these areas rather than superior income earning capabilities in the urban center. For Coast Province, the differential reported reflects movement almost exclusively to Mombasa.

The level of income realized during the first full quarter after arrival in town reflects considerable initial unemployment and some below-average income from self-employment. If a comparison is made between the average income of the men prior to migration and the average income of the men who were employed for wages in the first full quarter after migration, then the rural–urban income differential is substantially larger.

In Table 6.2 the rural–urban income differential for each town and the average income by type of employment in each town are reported. (The last column in Table 6.2 is comparable to the last column in Table 6.1.) A comparison of the last two columns in Table 6.2 indicates an average gain, in money terms, of 277 percent on rural income by men able to obtain wage employment within two quarters of arrival in town. For the smallest three towns, Thika, Nanyuki, and Nyeri, unemployment rates in the second quarter of urban residence were relatively low so the differences in the ratios in these last two columns are not large. Nakuru appears as something of an anomaly with above-average percent differentials in both columns. For reasons that cannot be explained, Nakuru was drawing

TABLE 6.2 A comparison by urban destination of the income earned prior to migration and self-employment, wage employment, and total income earned in the second quarter of urban residence.

Urban destination	Average income differential (KShs./month)	Urban income level (KShs./month)			Urban incomes as a percent of rural income	
		Self-employed	Wage-employed	Total	Wage-employed	Total
Nairobi	110	128	308	212	301	207
Mombasa	88	172	225	161	304	219
Kisumu	99	191	220	202	214	196
Nakuru	118	240	228	179	380	297
Eldoret	23		167	107	200	128
Thika	81		219	206	175	164
Nanyuki	89	93	230	212	187	172
Nyeri	104	115	275	250	201	183
Total	100	147	268	197	277	205

migrants who had significantly lower rural incomes. Of those able to gain employment, the move to Nairobi rather consistently, across the various provincial sources, provides the highest relative return.

In summary, the pattern of rural–urban income differentials indicates a distinct monetary advantage for a typical rural resident who moved to town and was successful in obtaining some form of employment there. This improved income stream was purchased at an estimated average cost of KShs.155 (the mean for DA_{ij} as reported in Table 4.2). Where initial sustenance was provided by kin in town, the cost of purchasing this improved money income stream was even lower.* The income differential of the migrants was lower than the rural–urban income differential reported in published sources, as presented in the previous section. To complete the comparison, growth in income associated with the length of stay in town must be considered as well. We turn to this next.

POSTMIGRATION EMPLOYMENT AND INCOME EXPERIENCE

The discussion thus far has been limited to the subset of migrants who were not in school prior to migration. We turn now to consider the postmigration experience of the total sample (the average income for the total sample during the second quarter of urban residence was KShs.7 per month higher than for the subset of the sample discussed above). Employment and income data were recorded quarterly for each migrant so it becomes possible to trace employment and income changes over time subsequent to arrival in town.

Given the magnitude of the rural–urban income differential, as identified above, it is to be expected that the urban centers will attract more migrants than can be employed at the prevailing urban wage. In the job-search process assumed in the Todaro model, hiring

*Byerlee *et al.* (1976, p. 73) report for Sierra Leone that the higher urban income was purchased at an additional cost of 42 percent more hours worked per year than in the rural areas. They interpreted this as being favorable to the migrants in the sense that the migrants now had the opportunity to work more. A similar comparison was not possible from our Kenya data.

is simply a process of random selection from a given stock of urban unemployed (Todaro 1969, pp. 138–148). In that case, the longer a person remains in the urban center the larger his expected income; that is, the probability of earning the prevailing urban wage increases.

In this section we consider the migrant's postmigration employment and income experience to determine whether average income increased during the first 2 years after migration. An attempt is made to separate the income effect of reduced unemployment from the income effect of upgrading the nature of employment by those who were employed throughout the period. Also, the hiring process is not a strictly random process. Therefore, some consideration will be given to the characteristics of the migrants whose income increased significantly during the first 2 years after migration.

The data collected in the survey were broken down into 3-month periods (quarters). The format of the analysis here is to consider the employment and income experience of the migrants in the first, fourth, and eighth quarters after their arrival in town. If a migrant obtained regular paid employment during the quarter in which he arrived or during the first full quarter after arrival then he is listed as employed in the first quarter. For fourth-quarter analysis it is necessary to exclude the men who arrived during 1968, and eighth-quarter analysis requires dropping the men who arrived in either 1967 or 1968.

Changes in Employment Status

In our sample, just under half the men had a minimum of 2 years of urban experience. Within this subset the stability in employment status was high (see Table 6.3). For

TABLE 6.3 Change in employment status from the first to the fourth to the eighth quarter after arrival in town (percentage).

First quarter	Fourth quarter			Eighth quarter			Total
	Self-employed	Wage-employed	Unemployed	Self-employed	Wage-employed	Unemployed	
Self-employed	98	2		97		3	9
Wage-employed	1	97	2	2	96	2	67
Unemployed	3	42	55	4	47	49	24
Total	10	75	15	12	75	13	

those able to obtain some form of employment in the first quarter after arrival in town, changes in employment status during the first 2 years of urban residence were only marginal. For the 9 percent who were self-employed initially, 98 percent were self-employed in the fourth quarter and 97 percent were self-employed in the eighth quarter. Similarly, for the two-thirds who were wage-employed within the first quarter 97 percent were wage-employed in the fourth quarter and 98 percent were so employed in the eighth quarter.

This reported stability in employment status does not necessarily mean that there was little or no labor turnover. A survey taken in Nairobi reports that most of the employees had "changed occupation categories" during the course of their employment histories

(Thias and Carnoy 1969, p. 53). Conversely, for a sample of 186 trade test candidates in 1973 in Nairobi and Kisumu who had entered the job market in the postindependence period, Godfrey (1975, p. 5) reports that 69 percent had not changed their initial job.

In our sample the major reported changes in employment status occurred among the 24 percent of the men who were still unemployed during the first quarter. Of these, 42 percent were wage-employed by the fourth quarter and an additional 3 percent were self-employed. These percentages change slightly to 47 and 4 by the eighth quarter. The vast majority of the men (85 percent) had obtained some form of gainful employment within the first year of urban residence.

The extent of unemployment for our sample was somewhat lower than that obtained by Godfrey (1975, p. 5) for his sample of trade test candidates. He reports that 71 percent had experienced some unemployment when they first entered the job market. (Godfrey (1975, p. 5, footnote) defines unemployment as a "failure to obtain the sort of job that one has been led to expect.") A total of 46 percent reported 6 months or more of initial unemployment, and 26 percent had spent a minimum of 16 months searching for their first job.

Disaggregating the changes in employment status in our sample into education groups (Table 6.4), we note first that self-employment is limited almost exclusively to men with primary education only. Second, unemployment rates are slightly, but not significantly, lower for the secondary education group than for the men with primary education only.

Among urban centers, the three smallest towns – Thika, Nanyuki, and Nyeri – had very low levels of unemployment throughout (see Table 6.4). For the latter two this is offset by considerably larger proportions in self-employment. Conversely, self-employment is relatively limited in Nakuru and Eldoret but unemployment is well above average throughout, except for Eldoret in the eighth quarter.

The Growth in Average Income

The first concern here is the growth in expected income: the average income of all men in the sample regardless of their employment status. In Table 6.5 the growth in average income during the first 2 years after migration is shown. For the total sample, the average income increased by 30 percent; approximately three-fourths occurred during the first year of urban residence.

Comparing the two education groups, we note that the growth in income was larger for the primary education group (44 percent), than for the men with some secondary education (16 percent). This lower percentage reflects the larger initial income of the secondary education group since the absolute increase in income was only slightly higher for the primary education group. In several cases there was an actual decline in average income from the fourth to the eighth quarter. For the secondary education group in Nanyuki the number involved was too small to attach any significance to the average values reported. For the primary education group in Eldoret and the secondary education group in Nairobi the decline reflects a drop in average employment earnings from 1967 to 1968 for these subgroups in these two locations. The cause of this decline in employment earnings as well as the decline in average eighth-quarter income for the secondary education group in Nyeri is not known.

TABLE 6.4 Employment status in each urban center in the first, fourth, and eighth quarters after arrival in town (percentage).

Urban center	First quarter			Fourth quarter			Eighth quarter		
	Self-employed	Wage-employed	Unemployed	Self-employed	Wage-employed	Unemployed	Self-employed	Wage-employed	Unemployed
Nairobi	11	66	23	12	73	15	14	72	14
Mombasa	6	62	32	9	76	15	9	79	12
Kisumu	7	85	8	7	85	8	8	88	4
Nakuru	3	68	29	3	71	26	5	75	20
Eldoret		68	32		75	25		86	14
Thika		93	7		98	2		97	3
Nanyuki	17	80	3	17	80	3	20	77	3
Nyeri	14	84	2	18	84	2	19	78	3
Total	9	67	24	10	75	15	12	75	13
Primary education	11	64	25	13	71	16	15	71	14
Secondary education	1	77	22		88	12	1	87	12

TABLE 6.5 The growth in average income during the first 2 years after migration within each education group in each urban center (KShs./month).

Urban center	Primary education			Secondary education		
	First quarter	Fourth quarter	Eighth quarter	First quarter	Fourth quarter	Eighth quarter
Nairobi	155	214	220	382	423	402
Mombasa	136	194	207	183	264	281
Kisumu	152	190	232	496	602	888
Nakuru	113	143	184	398	503	503
Eldoret	101	141	110	362	520	588
Thika	161	182	218	244	281	375
Nanyuki	186	199	225	440[a]	420[a]	360[a]
Nyeri	210	218	222	529	746	650
Total	153	200	220	392	440	454

[a]The number of observations involved is less than 5.

This general growth in average income during the first 2 years of urban residence can reflect several different forces. First, as more and more men change their employment status from unemployed and marginally employed and become regularly employed for wages, average income will rise even if wages remain constant. Second, the increase in average income may reflect a general upward trend in wages. Finally, the growth in average income could reflect movement to better-paying jobs or wage increases from on-the-job training. We turn now to consider the relative roles of these three effects.

To measure the effect of obtaining employment, it was assumed that the men who became self-employed after the first quarter obtained initially the average first-quarter self-employment income, while those employed for wages obtained the average first-quarter wage. The product of the numbers who obtained employment and the starting income was added to total first quarter income (number employed multiplied by average income) to obtain a percentage increase caused by employment of the initially unemployed.

For the latter two effects it was not possible to separate a wage increase on a particular job from an increase in income obtained by changing jobs. The sum of the two effects was measured by the percentage increase in average wage received by the employed from the first to the eighth quarter of urban residence.

In Table 6.6 we present the percentage change in average income over the 2-year period plus the relative contribution of obtaining employment and wage increases in this growth of average income. A positive residual indicates that average income increased more than the sum of the effect of the three factors considered. There is little evidence of any upward trend in self-employment income over time. Therefore, one of two mutually exclusive explanations probably accounts for the size and sign of the residual. First, those obtaining employment after the first quarter started at a higher wage level than the average first-quarter income level. If this is the case, the relative contributions of the second and third columns in Table 6.6 will be understated. Alternatively, those who obtained employment subsequent to the first quarter may be receiving below-average wages, which served to bias downward our measure of wage increases. In this case the relative contribution of

TABLE 6.6 The relative importance of decreasing unemployment and wage increases in the growth of average earnings from the first to the eighth quarter of urban residence.

Urban center	Percentage change in income during eight quarters	Percentage contribution of each determinant				
		Unemployed becoming self-employed	Unemployed becoming wage-employed	Wage increases	Unexplained residual	Total
Nairobi	19	11	41	28	20	100
Mombasa	51	8	51	32	9	100
Kisumu	63	1	6	87	6	100
Nakuru	67	4	16	56	24	100
Eldoret	51		58	56	−14	100
Thika	40		11	69	20	100
Nanyuki	11	13	−31	137	−19	100
Nyeri	1[a]					
Total	30	9	37	41	13	100
Primary education	44	9	23	51	17	100
Secondary education	16		81	32	−13	100

[a]Because growth was so limited no attempt was made to disaggregate the determinants.

columns two and three may be overstated and column four will be understated. For a negative residual, the opposite of these explanations would be the case.

For the total sample, most of the growth in income is accounted for by the combination of obtaining wage employment and wage increases. The effect of the latter is slightly greater than the former. For the primary education group wage increases account for half of the growth of average income. For the men with secondary education, obtaining wage employment dominates the explanation. The magnitude of the effect of obtaining wage employment (81 percent) and the negative residual point to the reverse of our first explanation – those who were employed subsequent to the start of the first quarter started at a level below the sample average.

Among urban centers, wage increases had an above-average effect in all towns except Nairobi, Mombasa, and Nyeri. Employment growth appears to have been stagnant in Nanyuki, where self-employment took up some of the slack. In Eldoret self-employment does not appear to have been an option, so the unemployed accepted wage employment at initial wage levels below the average income for the first quarter.

Determinants of Differences in Postmigration Incomes

In a labor market with significant levels of unemployment, employers can afford to be somewhat selective in the hiring process. In contrast, the freedom of the employees to be selective in accepting employment is restricted, especially if job seekers do not have specialized skills in great demand in the market and cannot afford to remain unemployed for an extended time period. Therefore, it is relevant to consider the characteristics of the migrants to determine causes of significant deviations from the average employment and income experiences reported above.

In order to study the deviations from the average experience for the total sample and yet allow for different wage levels in each urban center, the average employment earnings for each center were calculated. Then the average deviation in employment earnings from each of these urban averages was calculated for each subgroup of the total population. A positive deviation indicates above-average employment earnings and a negative deviation indicates the opposite. A "student-t" test was used to determine whether the deviations from zero and differences among the means were statistically significant. A significance level of 5 percent was used as a cut-off.

Average incomes depend both on the proportion of the group finding employment and on the earnings of those who are employed. Generally, higher wages are associated with jobs requiring higher-level skills and employers may have preference for more educated job seekers regardless of skill. As indicated in Table 6.7, there is considerable difference between the average earnings of men who have up to a primary certificate and the men who have some secondary education. All mean deviations are significantly different from zero. The level of average earnings increased KShs.37 per month from the first to the eighth quarter. Also deviations from the average wage increased somewhat from the fourth to the eighth quarter for the secondary education group but remained constant for the others. As noted in Table 6.4, the unemployment rate for the men with secondary education was not significantly lower than for the other men in the sample. This could indicate that the men with secondary education do not have a significantly higher probability of being

TABLE 6.7 Average employment earnings and average deviations from the mean for each education group (KShs./month).

	First quarter	Fourth quarter	Eighth quarter
Average employment earnings	302	316	339
Average deviation from the mean			
Primary education	−68[a]	−68[a]	−69[a]
Secondary education	196[a]	194[a]	220[a]

[a]The deviation from 0 is statistically significant.

selected for employment than their less-educated counterparts, or, possibly, the men with secondary education are more selective in accepting their first job.

If the latter is the case, the available evidence does not show a starting wage advantage for the men who are being more selective. First, the results presented in Table 6.6 suggested that the men with secondary education who obtained employment after the first quarter were starting at a wage level below the average income. Second, as indicated in Table 6.7, the increased deviation in employment earnings for men with secondary education occurred after the fourth quarter, when employment levels had stabilized already.

In addition to the effect of differences in skills, as measured by education, employers may have preferences for men who have prior employment experience or who are considered more stable and reliable on the job. As expected, the average initial earnings of men who were employed prior to migration were significantly above the average wage level (see Table 6.8). However, by the eighth quarter the deviations from the mean are not

TABLE 6.8 Average of deviations from mean employment earnings for the major employment categories prior to migration (KShs./month).

	First quarter	Fourth quarter	Eighth quarter
In school	36	28	31
Employed for wages	55[a]	87[a]	68
Self-employed	−87[a]	−93[a]	−83[a]
Unemployed	−69[a]	−87[a]	−65

[a]The deviation from 0 is statistically significant.

statistically significant, except for the below-average earnings of the men who were engaged in self-employment (including farming), prior to migration. The above-average earnings of the men with employment experience are reflected as well in their ability to obtain employment. In the first quarter after migration, only 13 percent of this subgroup were unemployed while the three other categories experienced more than 30-percent unemployment in the first quarter after migration.

In addition to the effect of previous employment experience on the hiring process, we would expect employers to prefer older, married men. Also, we would expect these migrants to be less flexible in their ability to wait for a preferred job. For the purposes of analysis, the migrants who were 15 to 22 years old were designated younger men and the

migrants 23 to 60 years old were considered older men. In the first quarter after migration, 41 percent of the younger men and 24 percent of the older men were unemployed. The comparable percentages in the fourth and eighth quarters were 14 and 6, and 5 and 3. Therefore, the data indicate that the older men obtain employment faster than the younger men.

In comparing the wage experience of these two groups of migrants, we observe that the older men have slightly higher earnings (the deviations from the mean range from KShs.15 to 20 in each direction), but none of the deviations are significantly different from zero. Neither is the difference between the two deviations statistically significant. In part, the deviations from the mean for the two groups are determined by the education pattern since one-half to two-thirds of the men with some secondary education are in the younger age group in the three quarters. Therefore, it is difficult to determine whether the older men are preferred in the hiring practice or whether they are less selective in choosing a job.

To enable further consideration of this matter, the age categories for the first quarter after migration were broken down further to 15 to 18, 19 to 22, 23 to 26, 27 to 30, and over 30 years old. The 15-to-18 age category experienced a deviation from the mean of KShs.−134, which is well below the average deviation for the 15-to-22 age category (KShs.−20), and is significantly different from zero. Within the primary education group the difference between the wage level of the 15-to-22 age group and the wage levels of the other age groups is significant also. Therefore, those in the 15-to-22 age category are not merely more selective in accepting employment; they experience relatively high unemployment, and when they obtain employment the younger men with only primary education receive wages lower than their older counterparts.

The survey evidence is mixed with reference to our hypothesis that employers prefer married men because they are considered to be more stable (Table 6.9). The married men

TABLE 6.9 Average deviations from the mean employment earnings for the men in each marital status group (KShs./month).

	First quarter	Fourth quarter	Eighth quarter
Married with wife here	65[a]	66[a]	52
Married with wife elsewhere	−36	−50[a]	−40
Single	−7	−3	−9

[a]The deviation from 0 is statistically significant.

who had their wives with them secured better-paying jobs than did single men. In the first and fourth quarters the deviation above the mean is significant. Conversely, the married men whose wives are resident elsewhere had the lowest-paying jobs. But, in considering unemployment rates, only 6 percent of these migrants were unemployed in the first quarter *versus* 20 percent for the other married men and 41 percent for the single men. Therefore, as hypothesized, the married men with wives resident in the rural areas are taking jobs as they become available, even though the wage level received is well below average. In contrast, other married men are more selective in accepting jobs, which results in higher wages realized. The difference between the average earnings of the men with wives resident in

the urban center and each of the other two groups is statistically significant in the first and the fourth quarters after migration. In the eighth quarter the difference is significant between the two groups of married men only.

An additional factor that can affect income performance is discrimination in the labor market. On the basis of a 1971 survey of middle- and lower-income earners in Nairobi, Johnson (1971a, p. 26) reports that the dominant tribe, the Kikuyu, earned significantly less than Kamba, Luo, and Luhya employees. For purposes of analysis of this factor, the migrants were divided into two groups. A person was designated as of the dominant tribe if he was a member of the dominant ethnic group of the district in which the town was located. Other in-migrants were designated as "other tribes." Kikuyu was considered the dominant tribe for Nairobi and Coast tribes were designated dominant in Mombasa. As indicated in Table 6.10, the average employment earnings were slightly higher for the dominant tribe, but the deviations from the mean were not significant, and by the eighth quarter the difference was only KShs.20 a month. The only evidence of significant difference in

TABLE 6.10 Average deviations from the mean employment earnings among ethnic groups (KShs./month).

	First quarter	Fourth quarter	Eighth quarter
Dominant tribe			
Total sample	26	19	10
Primary education	−72*	−82*	−85*
Secondary education	256*	253*	285*
Other tribes			
Total sample	−23	−17	−10
Primary education	−64*	−58*	−53*
Secondary education	117*	122*	141*

NOTE: An asterisk indicates that the deviation from 0 is statistically significant.

employment earnings was within the secondary education group where the wage level of the dominant tribe was significantly above the wage level of the other tribes in all three quarters. Within the primary education group the wage level of the dominant tribe is lower than for other tribes, but the difference between the deviations is not statistically significant.

This failure to find substantive evidence of discrimination within the income data is consistent with the assessment of their situation made by the migrants who were unemployed at the time of the survey. This subset of the sample was asked why they were not able to obtain work (Question 48). Only 8 percent identified tribal discrimination as the main reason for their employment difficulties. This reason ranks well behind too little education, other reasons, and the failure by the government to create an adequate number of jobs. These latter three jointly account for 91 percent of the responses. Discrimination in employment priorities registers as a reason for employment difficulties in Nairobi, Mombasa, and Eldoret only. There are no marked differences in this response between the two education groups and between the two age groups.

Therefore, with the possible exception of the group with secondary education, the data do not indicate discrimination among ethnic groups for the better-paying jobs. Rather,

we postulate that the observed differences are more likely a function of how actively a migrant seeks the optimal employment opportunities. Many of the men from the immediate area of a town passively drift into town or to the town where their friends and relatives have gone in the hope of finding employment, while the men who move to a more distant town actively decide to migrate. For example, even though the deviations from the mean are not significant, the positive deviations from mean employment earnings tend to increase with the distance of the move.

For the purpose of analyzing such differences between active and passive migrants, we utilized Question 8 in the survey, which asked the men to identify the most important sources of information available to them in the rural areas about the urban center to which each chose to migrate. If the person identified either friends or relatives, he was considered a passive migrant. Men who identified impersonal information sources were considered active migrants.

TABLE 6.11 Average deviations from the mean employment earnings for passive and active migrants (KShs./month).

	First quarter	Fourth quarter	Eighth quarter
Passive migrants			
Total sample	−25*	−38*	−30
Primary education	−83*	−86*	−81*
Secondary education	160	116	163*
Active migrants			
Total sample	65*	105*	85*
Primary education	−23	−14	−27
Secondary education	254*	350*	325*

NOTE: An asterisk indicates that the deviation from 0 is statistically significant.

The active migrants earned significantly more than passive migrants (Table 6.11). It is notable that the significant differences persist throughout the first 2 years after migration, although within the group with secondary education the difference between the two deviations was significant in the fourth quarter only. Within the primary-education group the deviation from mean employment earnings is still negative for the active migrants, but this difference is not significant; it was significant for the primary education group as a whole (see Table 6.7). The difference between the two deviations within the primary education group is statistically significant in all three quarters. Therefore, it is the men who show the initiative to obtain information about their migration destination, and do not rely on personal sources, who obtain the better-paying jobs, especially within the primary-education group.

A COMPARISON OF MIGRANTS WITH THE URBAN LABOR FORCE

The analysis to this point of the urban employment and income experience of the migrants has been limited primarily to the survey results. In this final section we compare

the experience of the men in our sample with the published data available on the urban labor force. There are limitations to this type of comparison because the urban labor force data are not age-specific. In general, we would expect the migrant population to be younger than the enumerated modern sector employees. Therefore, recent in-migrants are likely to have inferior jobs which pay lower wages than is the case for the urban labor force in general.

Level and Nature of Employment

Enumeration of employment in the urban labor market has been limited almost exclusively to formal sector employment. The data collected in our survey cannot be broken down explicitly into formal and informal sector employment so direct comparison with published data on the formal sector is not possible. Estimates of employment in the urban informal sector have been prepared for Nairobi only. Therefore, a comparison of the nature and level of employment of the migrants with the urban labor force will need to be limited to Nairobi.

TABLE 6.12 Comparison of the employment status of the migrants to Nairobi with the Nairobi male labor force (percentage).

Employment status	Migrants		Nairobi labor force[a]
	First quarter	Eighth quarter	
Self-employed	8	12	7
Wage-employed	65	74	83
Unemployed	27	14	10
Total	100	100	100

[a]SOURCE: International Labour Office (1972, Table 52, p. 343).

In Table 6.12 the employment status of the migrants to Nairobi and the Nairobi male labor force are presented.* On the basis of these ratios it is clear that the in-migrants initially are at a distinct disadvantage in obtaining wage employment. After 2 years of urban residence this disadvantage has been largely eliminated (14 percent unemployed in the sample and 10 percent for the Nairobi labor force), but movement into self-employment by the migrants is an important source of income.** Should it be the case that most of these self-employed are in the informal sector, this would represent a significantly higher proportion than the 5 percent of Nairobi's male labor force estimated to be self-employed in the informal sector.

*According to the ILO report estimates, 16 percent of the male labor force was in the informal sector. These were apportioned between wage-employment and self-employment, with a ratio of two-thirds and one-third, respectively, on the basis of data provided in the ILO report on informal sector activity in Mathare Valley (International Labour Office 1972, p. 341).

**Both the extent of initial unemployment in Nairobi and the extent of absorption into the modern sector labor force during the first 2 years of urban residence appear to be lower than in other developing countries. For a brief survey of unemployment among urban in-migrants see Stark (1976, pp. 3–13) and Peek and Anatolinez (1976, pp. 2–6).

From this comparison it becomes clear that additional data will be required to determine the role of the urban informal sector in the initial employment experience of urban in-migrants. Among urban centers there are likely to be substantial differences since no self-employment was recorded in our survey for Eldoret and Thika and self-employment was well below the sample average in Mombasa, Kisumu, and Nakuru (see Table 6.4).

Average Employment Earnings

With reference to earnings, the relevant comparison is between the average wages of the migrants who were employed and the average employment earnings in the urban modern sector. As indicated in Table 6.13, the migrants, on average, were obtaining a substantially lower wage than their counterparts in the urban labor force.* In the first quarter after migration the men in our sample averaged 52 percent of the average modern sector wage for the 1964-to-1968 period. By the eighth quarter of urban residence the ratio had increased to 59 percent.

TABLE 6.13 Comparison of monthly employment earnings of the urban in-migrants and the urban modern sector labor force (KShs./month).

Urban center	Modern sector wage (1964–68 average)	Employment earnings of the migrants		Migration earnings as a percentage of average urban wage	
		First quarter	Eighth quarter	First quarter	Eighth quarter
Nairobi	661	343	360	52	54
Mombasa	517	227	265	44	51
Kisumu	400	268	414	67	104
Nakuru	449	254	349	57	18
Eldoret	364	262	337	72	93
Thika	351	234	298	67	85
Nanyuki	300	231	264	77	88
Nyeri	362	344	361	95	100
Total	579	302	339	52	59

These average ratios are somewhat misleading in that the modern sector average is dominated by Nairobi. Interurban comparisons indicate that the migrants had obtained wage parity by the eighth quarter with the urban labor force in Kisumu and Nyeri. The migrants to three of the other four smaller towns had realized at least 84 percent of the average modern sector wage by the end of their second year of urban residence.

*The initial wage level obtained from our sample is higher than the mean starting wage of KShs.271 per month reported by Godfrey (1975, p. 5) for his sample of trade test candidates. Conversely, at the time of his survey he reports an average monthly wage of KShs.435 a month, which is somewhat higher than the average modern sector wage.

It is primarily in Nairobi and Mombasa where a substantial differential between the wage of the migrants and the modern sector employment wage is maintained over time. For Nairobi, the limited growth in wages from the first to the eighth quarter reflects an inability of the men with secondary education to advance significantly on the wage scale. In Mombasa the men in our survey earned below-average wages for the sample even though modern sector wages rank second among the eight urban centers.

Two explanations are consistent with the findings for Nairobi and Mombasa. First, the average modern sector wage is not as accurate a measure of what is available to in-migrants to Nairobi and Mombasa as it is for the smaller towns. Second, both of these cities may prove attractive for the potential for advancement that they represent as well as for the initial level of wages available. These two explanations are not necessarily mutually exclusive.

High urban wages not directly attainable by in-migrants are consistent with the regression results reported in Chapter 4. There it was determined that migration for males varied directly with the level of modern sector wages (X_j) and inversely with the measure of employment prospects (U_j). A comparison of average modern sector wages in each town (Table 6.13) with the proportion who obtained wage employment in the first quarter (Table 6.4), indicates a close, inverse ranking among the five largest urban centers. The sole exception is Kisumu which ranks fourth highest in average modern sector wage levels and second highest in the proportion wage-employed. The explanation here may be that migrants to Kisumu appear to be unusually successful in obtaining the average modern sector wage (see Table 6.13).

The substantial difference between wage levels of the migrants and modern sector wages in Nairobi and Mombasa could mean that a large proportion of the migrants there had to accept jobs below the type that they had hoped to obtain. The same could hold for the disproportionate number of self-employed in Nairobi (see Table 6.12). To assess whether the respondents saw any causal link between wage levels and job availability they were asked: "Some people claim that the reason why there is so much unemployment in the city is that city wages are very much higher than farm income and that at these high wages, there are not enough jobs for everyone. They say that if city wages were lowered there would be more jobs and less unemployment. Do you agree that there would be more jobs and less unemployment here if the wages here were lowered?" (Question 50).

As reported in Table 6.14, the men were rather equally divided on this question. It is in the three smallest towns, where unemployment was lowest throughout for the migrants, where the men are most prone to disagree. In Nairobi and Mombasa the proportion who disagree is also somewhat larger than the sample average. The distribution in responses among education groups was statistically significant. As might be expected, the men with secondary education were more likely to disagree that high wages caused an unemployment problem than were their less educated-counterparts.

SUMMARY

The analysis of the urban structure of employment and earnings evident in the sample indicates that a substantial urban–rural income differential exists. The precise measurement of this income differential is difficult because more than half of the men were in

TABLE 6.14 The percentage distribution of the opinion of the migrants on the question of whether urban unemployment is caused by high urban wages.

Response	Urban center								Total
	Nairobi	Mombasa	Kisumu	Nakuru	Eldoret	Thika	Nanyuki	Nyeri	
Agree	40	37	37	45	39	29	30	38	38
Disagree	42	42	32	34	21	47	70	61	40
Undecided	14	16	24	19	36	6		1	18
Refuses to express own opinion	2	3	3	2		1			2
No response	2	2	4		4	17			2
Total	100	100	100	100	100	100	100	100	100

school prior to migration and what rural opportunities would have been available to them are not known. For men who were not in school prior to migration, the rural–urban move resulted in a level of urban income of 205 percent above the rural level. For those able to obtain urban wage-employment the differential was 277 percent (see Table 6.2).

This observed differential is lower than the reported average income differential between rural and urban households in Kenya. There are two plausible explanations why the migrants experienced an income differential less than the average differential for the country as a whole. First, as indicated in the previous chapter, in many cases it was not the men with below-average rural income prospects who were moving to town. Second, the men were not able to obtain the average urban employment wage on arrival in town. In part this was caused by some initial difficulty in obtaining employment. By the eighth quarter of urban residence the unemployment levels among migrants were probably similar to that of the urban labor force. But, especially in Nairobi and Mombasa, the migrants who were employed still had not realized wage parity.

Within the sample, the available evidence indicates significant differences among various groups in their ability to obtain the better-paying jobs. The men over 20 with secondary education who actively sought a preferred migration destination earned the highest incomes subsequent to migration. Previous wage-employment experience was also a positive factor on arrival in town both in the ability to obtain employment and in the wage earned.

Thus it is clear that despite high initial levels of unemployment, the move to an urban center has, on average, provided a means for individuals to increase their incomes. Furthermore, the longer they stay in town the higher the economic gain. This stands in contrast to popular stereotypes of migrants flooding to towns in search of bright lights and excitement and remaining, irrationally, in the face of a hopeless situation.

Nevertheless, a minority experienced considerable difficulty in obtaining satisfactory employment. In assessing the welfare effect of migration it is necessary to ask how such individuals were able to subsist during their search for employment. This question is addressed directly as part of the next chapter.

7 THE ROLE OF URBAN-BASED KIN

For a rural resident, the move to a city or town involves significant costs as well as the prospects of substantial economic gain. Initially, there is the cost of travel to an urban center. Once in town, there is the need to obtain food and shelter, which typically cost more than in rural areas. Third, there are the costs of the job search. In addition to such economic costs, there are noneconomic costs which are frequently difficult to measure (Somers 1967, p. 428). Beyond the costs involved there can be considerable uncertainty associated with the move since according to our migration model, the probability of obtaining employment with the desired level of income is somewhat less than 1 in the cities and towns of Kenya.

The economic costs of the move as well as the employment uncertainty can be reduced significantly if the prospective migrant can rely on a relative or friend (kin) to provide assistance during and after a move. According to Weisner (1976, p. 200): "The likelihood of a particular male homestead member leaving the countryside and coming to the city depends on two factors: 1) his own perception of the probability of success in obtaining employment in the town; and 2) the nature of the social and economic support available to the migrant in the country and in the city." Although our migration model is premised on migration from within the context of a rural household, the data collected in the survey were limited to assistance provided by urban-based kin. As a result, the role of the rural-based members of the extended family in the migration process, as modeled by Mitchell (1959) and documented in detail by Weisner (1972) for one group in Kenya, is not discussed here. Data on contributions made by rural-based members of the household are limited to money sent to the migrant, which we analyze in Chapter 9 as part of the discussion of rural–urban remittances.

Potentially, kin can provide information about possible destinations, assist in the move by providing transportation, provide housing and food when the migrant first arrives, and assist the new arrival in finding employment. In this chapter we draw on information provided in our survey to determine the role of kin in assisting the prospective migrant. First, we consider the information sources about the destination that the respondent has chosen, the material assistance that he received on arrival, and the role of kin in his finding employment.

Second, since some men were unemployed for a considerable time on first arriving in town, we consider how the unemployed subsist. Again, our data were not coded in terms of the formal–informal sector dichotomy featured prominently in the literature that appeared subsequent to our survey. However, on the basis of our analysis of how the unemployed maintained themselves we seek to address indirectly the deductive proposition that the urban informal sector serves as the point of entry where recent in-migrants queue for the available formal sector jobs.

SOURCES OF INFORMATION ABOUT URBAN CENTERS

In our migration model both the decision by a household to dispatch a member to some external employment opportunity and the selection of a particular urban destination (*versus* a rural destination or another urban destination) were based on the perception by household members of what was available – income levels, employment prospects, amenities, etc. – in these locations. This perception that we hypothesized was shaped by: (1) the extent of commercial interaction between the household's community and the potential migration destinations, and (2) the extent of previous migration from the community to these alternative destinations. The latter, according to Lee (1969, p. 292), creates pathways "which pass over intervening opportunities as elevated highways pass over countryside." Of course, this holds only for kin who were successful in a particular destination; those who return home as failures will make intervening obstacles appear to be larger and intervening opportunities appear to be more attractive than they might be otherwise (Connell *et al.* 1976, p. 7).

As an indicator of the types of information about their selected destination that were utilized by the men, they were asked: "In reaching your decision to come here you must have had some information about job possibilities, income, living conditions, etc. Which of the following gave you the most information?" (Question 8). The men were provided with seven possible sources: newspaper, radio, Labour Exchange, family members, friends, school teacher, and career counselor. After indicating the most important source, the respondent was asked to identify the second and then the third most important source of information.

TABLE 7.1 The percentage distribution of the primary sources of information about the urban migration destinations.

Sources of information	Education		Ages		Friends and relatives were primary "pull" force	Total sample
	Primary	Secondary	15–22	23–50		
Newspapers	7	18	13	7	8	10
Radio	2	3	3	2	4	3
Labour Exchange	2	4	2	3	1	3
Family members	38	22	40	28	50	34
Friends	34	34	27	41	26	33
School teacher	1	6	4	1	2	2
Career counselor		2	1	1	1	1
Other sources	16	11	10	17	8	14
Total	100	100	100	100	100	100

As indicated in Table 7.1, 67 percent of the men ranked either family member or friends as their most important source of information. (In their Sierra Leone survey Byerlee *et al.* (1976, p. 50) also found that two-thirds of the migrants drew their information about town from relatives and friends in these towns.) For a valid chi-square test, the eight rows in Table 7.1 were combined into four – media (rows 1–3), family, friends, and other

sources (the last 3 rows). The variation in the distribution of the information sources between the two education groups and between the two age groups was significant. The younger men rely relatively more on family members and the older men receive more information from friends. Also, the younger men rely somewhat more on the media, especially newspapers. The men with secondary education have a marked tendency to depend more on sources other than relatives and friends.

The variation in the distribution of these four types of information sources among the eight urban centers was also statistically significant. The men in Nairobi, Thika, and Nyeri show proportionately less reliance on family members while men in Nairobi, Kisumu, and Nyeri rely proportionately more on friends.

With reference to the second most important source of information, 39 percent of the men listed relatives or friends, and an additional 44 percent did not indicate a second source. Of the men who ranked family members as their first source, 37 percent did not have a second source, 53 percent indicated friends as their second source, 77 percent did not indicate a third source, and 4 percent indicated friends as a third source. Of the men who gave friends as their first source, 39 percent did not have a second source, 74 percent did not have a third source, 38 percent listed relatives as a second source, and 3 percent listed relatives as a third source. Of the remaining categories, "other sources" had the highest frequency but none appeared prominently in the distribution.

As an additional check on the role of kin as a source of information, the distribution of the primary sources of information is provided in Table 7.1 for men who indicated friends or relatives as their primary "pull" to a particular urban center (Question 7). Several conclusions can be drawn from a comparison of this column with the others in the table. First, for this subset of the sample, family members are more important and friends are less important than for the total sample. Second, even though the presence of kin was the primary "pull" force to town, the distribution of the primary sources of information is not very different from the total sample. Therefore, even though kin are available in the urban center, the migrants have and use other information sources. Indeed, the presence of relatives in town may be the stimulus to use the media to obtain information about a particular center.

The responses to Question 8 indicate the primary importance of personal information sources. This result could show that other sources have proved to be inadequate. In his Ghana study, Caldwell (1969, p. 122) notes the failure of the press or radio to portray the realities of everyday life in the towns and cities. A comparable evaluation of Kenya's mass media was not undertaken. The importance of newspapers for men with secondary education and men with primary education indicates that newspapers provide information about urban life for those who have a number of years of formal schooling. With considerable urban unemployment, it is not surprising that Labour Exchanges fail to serve as an important source of information about urban centers for men who choose to take their chances in the urban employment lottery.

Both Caldwell's study for Ghana (1969, p. 122) and the study by Byerlee *et al.* in Sierra Leone (1976, pp. 50–51) show that urban in-migrants were quite accurately informed about their migration destination before they made the move. Although we did not make a direct attempt to measure the quality of the information received, we did ask the men: "When you first arrived here, what type of work were you hoping to get?" (Question 9); and, "When you first arrived, how much income did you expect you could earn?" (Question 10).

We find first that the vast majority of the men either expected to be employed by others (66 percent), or did not have fixed expectations (31 percent). Only 3 percent expected to be self-employed. Table 7.2 indicates the actual employment experience of the men and the average difference between their expected and actual incomes during the first full quarter after migration. Except for the two men who expected self-employment

TABLE 7.2 The percentage distribution of employment experienced within each type of expected employment and the difference between expected and realized income (KShs./month).

Actual employment	Expected employment		
	No fixed expectations	Expected self-employment	Expected wage-employment
Self-employed			
Percent	17	63	14
Income difference	44	325	100
Wage-employed			
Percent	55	30	69
Income difference	−73[a]	50	29
Unemployed			
Percent	28	7[b]	17
Income difference	110	−10[a]	300
Total			
Percent of total sample	31	3	66
Income difference	2	219	85

[a]A negative number indicates that the income realized exceeds the income expected.
[b]Less than five observations are involved.

and were still unemployed and the men who were without fixed expectations but did obtain employment, the men earned somewhat less income than they had expected. (For Sierra Leone, Byerlee *et al.* (1976, p. 51) report: " . . . intending migrants . . . perceived earnings higher than migrants in town were actually receiving. There is therefore some evidence that migrants who leave home have somewhat higher perceptions of urban earnings than are realistic.") The dominant difference between expectations and reality is for the men expecting to obtain self-employment and who are self-employed. Also, there is considerable difference between the income expectations and reality for men who were still unemployed. Although the average difference between expectations and reality was somewhat larger for the men with secondary education, the difference as a percentage of actual income was greater for the men with primary education. The average income expectations of the men with primary education exceeded actual income by 94 percent, while for the men with secondary education the difference was 61 percent and for the total sample the difference was 83 percent. It is the younger men, aged 15 to 24, who have expectations most out of line with reality. The men aged 25 to 29 actually earned, on average, more income during the first full quarter than they had expected.

If we examine the actual experience of the employed though, we find that they received income rather similar to what they had expected. The actual income of the men

who expected self-employment but were employed for wages is only 11 percent below their expectations, while the men who expected to be employed for wages earned 8 percent less than what they had hoped for. The wide divergence between expectations and reality for men with primary and men with secondary education, as reported above, was caused by an inability to obtain desired employment, not by seriously distorted expectations about income levels in the urban areas.

Therefore, we conclude that the men were rather accurately informed about urban economic possibilities. In general, they were somewhat overly optimistic about incomes at least initially. In part, this optimism may be based on the income experiences of the most successful kin in town, which exceeded average possibilities. It is not surprising that it is the young men and the men with secondary education who have formed unrealistic expectations. It is to be expected that many of them will advance upward on the employment and income scale as they mature and gain experience.

ECONOMIC ASSISTANCE ON ARRIVAL IN TOWN

Once a decision to migrate has been made, the quality of kin relationships becomes important (Moock 1973, p. 313). To what extent can urban-based kin provide the assistance needed to reduce both the cost and the uncertainty associated with the rural-to-urban move? The survey questionnaire was designed to collect information on three types of economic assistance received from urban-based kin on arrival of the migrant in town (see Questions 14 to 19).

Food and Housing

Table 7.3 summarizes the information on the proportion of the men in the sample who received food and/or housing assistance from urban-based kin.

The distribution of men receiving such assistance in each urban center is broken down by the primary sources of information about the urban center (Question 8) and by the primary "pull" forces to that particular urban center (Question 7). We note first that there is considerable variation among urban centers, ranging from 55 percent for Nanyuki to 90 percent for Eldoret. Our average of 82 percent receiving support from kin is a little lower than what is reported in two other surveys. Byerlee *et al.* (1976, pp. 54–55) found that almost 90 percent of the migrants interviewed in Sierra Leone received support from their kin when they first arrived. Similarly, Bienefeld and Sabot (1972, Vol. II, Ch. 7) indicate that 90 percent of the men interviewed in Tanzania received material aid on arrival.

An above-average proportion of migrants received assistance whose relatives were their primary information source, rather than friends, teachers or counselors. But, the percentage of those who drew their primary information from the media was not significantly less. As a result, it is not possible to conclude that passive migrants (those relying primarily on personal information sources) are more likely to be provided with food and housing by kin than active migrants (those relying on impersonal information as the primary source).

For the men who identified urban-based kin as the primary "pull" force the proportion that received food and/or housing is somewhat higher than for the remainder of the

TABLE 7.3 The percentage distribution of men who received food and/or housing in each urban center.

	Nairobi	Mombasa	Kisumu	Nakuru	Eldoret	Thika	Nanyuki	Nyeri	Total
By primary information source									
Media	89	83	77	92	100	88	40	80	86
Family	87	98	75	92	93	100	61	73	89
Friends, teachers or career counselors	79	88	49	80	44	96	60	54	73
Other	92	83	25	50	33	80	43	52	68
By primary "pull" force									
Kin there	97	96	60	90	95	95	56	100	90
All other	82	85	59	83	87	90	56	58	80
Total	84	89	60	86	90	91	55	58	82

sample (90 *versus* 80 percent). This difference is evident primarily in Nairobi, Mombasa, and Nyeri. The willingness and ability of kin in these locations to assist these particular migrants may be seen as an explanation of why they placed so much emphasis on kin as a "pull" force.

The extent of assistance in the form of food and housing provided by urban-based kin (Table 7.4) is relatively low; the extent of housing provided was slightly higher than food provided. Although we were not able to attach a value to this aid provided by the

TABLE 7.4 The percentage distribution of the average amount of assistance received in each urban center during the first full quarter after migration.

Months of assistance	Nairobi	Mombasa	Kisumu	Nakuru	Eldoret	Thika	Nanyuki	Nyeri	Total
No assistance									
Room	50.3	38.2	66.7	46.9	53.9	65.4	68.0	79.7	51.7
Food	64.6	54.7	79.1	60.6	73.1	76.6	72.0	86.9	66.1
One month									
Room	2.1	2.7	3.9	4.6	1.9	2.5		3.6	2.7
Food	2.1	2.4		1.5	1.9	1.2		3.6	1.8
Two months									
Room	3.2	1.2	2.3	3.0	7.7	1.2	4.0		3.1
Food	2.7	1.6		1.5	7.7		4.0		2.5
Three months									
Room	44.4	57.9	27.1	45.5	36.5	30.9	28.0	16.7	42.5
Food	30.8	41.3	20.9	36.4	17.3	22.2	24.0	9.5	29.7
Average number of months									
Room	1.4	1.8	0.9	1.5	1.3	1.0	0.9	0.5	1.4
Food	0.8	0.9	0.6	1.3	1.0	0.5	0.8	0.4	0.9

urban-based kin, Byerlee *et al.* (1976, p. 55) report for Sierra Leone: "Working migrants on an average 'transfer' . . . about 17 percent of their income to support relatives and friends in town. The amount transferred increases absolutely (but not proportionally) with the income of the migrant so that the top 5 percent in the income distribution support up to three persons . . . ."

The initial contact with the urban center is particularly subject to uncertainty so the amount of assistance received during the first full quarter after migration was considered (see Table 7.4). The proportion that received neither food nor housing during the first full quarter after migration is somewhat higher than is indicated in Table 7.3. That is, even though 82 percent of the men had received assistance at some time, by the end of the first full quarter after migration only 43 percent were receiving housing and the percentage receiving food was down to 30. It would appear for most migrants that this form of assistance was provided by their kin for a short period only.

The Role of Kin in Finding Employment

With Question 19 an attempt was made to determine the process used by the men to obtain their first job in town. As reported in Table 7.5, the single most important method

TABLE 7.5 The percentage distribution of the methods used by the migrants in obtaining their first job.

Method used in obtaining first job	Education		Ages		Total
	Primary	Secondary	15–22	23–50	
Friend or relative	40	30	38	36	37
Newspaper	4	11	5	7	6
Labour Exchange	6	8	6	7	6
Radio					
Heard of job and applied	10	18	11	15	12
Other method	18	17	16	20	18
Started his own business	4	1	1	5	3
Still unemployed	18	15	23	10	18
Total	100	100	100	100	100

of obtaining employment was relying on assistance from urban-based kin. The average is 37 percent with a range from 30 percent for men with secondary education to 40 percent for men with primary education. If we limit the sample to those actually wage-employed, the reliance on kin as a means for obtaining a job rises to 47 percent (50 percent for young men; 42 percent for older men; 51 percent for men with primary education only; and 36 percent for men with secondary education). For Sierra Leone, Byerlee *et al.* (1976, p. 55) report that two-thirds of the employed migrants obtained their first job through a relative or friend. In contrast, Bienefeld and Sabot (1972, Vol. II, Ch. 7) report for their Tanzania survey that only a minority of the men surveyed received help from kin in finding a job.

The variation in method of obtaining employment was statistically significant among urban centers and between the two education groups but not between the two age groups.* The men with primary education rely more on kin than the men in the secondary education group, who place more emphasis on newspapers or on applying for jobs that they have heard about from others. The variation among urban centers appears to be highest in Eldoret (which had high initial levels of unemployment), Nakuru, and Nyeri. Although assistance from kin was the single most important method used to obtain employment, a smaller proportion of migrants received assistance in this form than received food and/or housing (37 *versus* 82 percent).

As indicated in Table 7.6, there is some correlation between the presence of kin as the primary "pull" force and the proportion of migrants who received assistance from their urban-based kin in finding employment. This is especially so for Nanyuki and Nyeri; the opposite holds in Nakuru and Thika. The correlation between kin as the primary information source and the proportion who received assistance in obtaining employment is higher than the correlation between kin as a primary "pull" force and the proportion who received assistance. The two pieces of information taken together indicate that kin resident in town do represent some security against prolonged periods of unemployment. The

*For the chi-square test the four urban groups were: Nairobi, Mombasa, the three western towns (Kisumu, Nakuru, and Eldoret), and the three central towns (Thika, Nanyuki, and Nyeri). The second and third rows in Table 7.5 were grouped together as were rows four and eight. The significance levels were $p < 0.05$, $p < 0.001$, and $p < 0.5$, respectively.

TABLE 7.6 The percentage distribution of assistance in finding employment received by men who identified friends or relatives as the primary "pull" force or whose primary source of information about the urban center was friends or relatives.

Urban center	"Pull" forces		Sources of information		Total
	Friends or relatives	Other "pull" forces	Friends or relatives	Other sources	
Nairobi	44	34	37	23	35
Mombasa	38	31	37	27	34
Kisumu	47	45	48	31	41
Nakuru	26	48	49	16	42
Eldoret	43	29	38	7	35
Thika	25	34	37	29	32
Nanyuki	78	40	58	5	46
Nyeri	75	40	55	14	43
Total	42	37	41	21	37

seeming ability of the men who said they were pulled by forces other than friends or relatives to rely on kin to assist them in finding employment may be somewhat misleading. A dominant "pull" force listed by the migrants was the good chance of obtaining employment in their chosen destination (see Table 4.6). The reason for this relatively bright prospect for obtaining employment may have been the presence of kin in that town who were thought to be in a position to assist in finding employment. Unfortunately, we cannot sort out from our data this possible overlap between these two "pull" forces.

THE MEANS OF ATTAINING ACCESS TO URBAN EMPLOYMENT

How Do the Unemployed Subsist?

Parts of the urban labor market in Kenya are characterized by wage structures that do not readily adjust downward in response to an excess supply of labor available. As a result, the existence of a stock of unemployed serves as the equilibrating mechanism. The larger the rural–urban income gap the larger the stock of urban unemployed required to generate a spatial equilibrium in Kenya's labor market. In the previous chapter we showed that there was considerable unemployment among the men in our sample. For the primary education group, some 25 percent were unemployed during the first full quarter after migration and 14 percent were still unemployed in the eighth quarter after migration (Table 6.4). The unemployment levels for the secondary-education group were only slightly lower. On average, the men were unemployed for 3.1 months before obtaining regular employment. For Nairobi, 30 percent of the sample experienced some unemployment and 8 percent were still unemployed 2 years after migration. On average, the in-migrants to Nairobi were unemployed 3.5 months (Collier 1973, p. 61).

Therefore, the question which needs to be considered is how did these unemployed subsist in the urban areas while they were searching for employment? In Table 7.7 we present the various sources and amounts of income received by the migrants who were

TABLE 7.7 The percentage distribution and the average amount of income and assistance received by the men who were unemployed during the first full quarter after migration.

Income and assistance	Nairobi	Mombasa	Kisumu	Nakuru	Eldoret	Thika	Nanyuki	Nyeri	Total	Average for the men who are employed
(a) Income from a *shamba* (KShs./month)										
None	96.5	94.6	81.8	100	91.7	100	100	100	94.8	95.1
1 to 100	3.5	5.4	18.2		8.3				5.2	4.5
More than 100										0.4
Average amount	0.7	1.1	7.3		1.7				1.4	1.9
(b) Number of persons receiving food from migrant's *shamba*										
None	93.8	66.7	71.4	100	80.0	100	100	100	85.7	90.0
1 to 5	6.2	28.1	28.6		10.0				12.0	7.1
6 to 10		3.9			10.0				2.0	2.4
11 or more		1.3							0.3	0.5
Average number	0.2	1.2	1.1		0.9				0.5	0.5
(c) Cash assistance received (KShs./month)										
None	83.5	96.0	72.7	77.8	100	83.3	100	100	87.1	96.5
1 to 100	16.5	4.0	27.3	22.2		16.7			12.9	2.4
More than 100										1.1
Average amount	4.8	1.6	5.5	7.8		3.3			3.7	1.1
(d) Number of months of housing assistance										
None	22.6	10.5	27.3	33.3	9.1	37.5	100	50.0	24.4	72.9
1 month					9.1			50.0	2.4	2.3
2 months	1.2				18.2				2.6	1.9
3 months	76.2	89.5	72.7	66.7	63.6	62.5			70.7	22.9
Average number of months	2.3	2.7	2.2	2.0	2.4	1.9		0.5	2.2	0.8
(e) Number of months food assistance received per quarter										
None	18.8	21.9	36.4	30.0	9.1	66.7	100		26.1	73.4
1 month					9.1			50.0	2.4	2.6
2 months					18.2				2.2	2.9
3 months	81.2	78.1	63.6	70.0	63.6	33.3		50.0	69.3	21.1
Average number of months	2.1	2.4	2.2	2.4	2.4	1.0		2.0	2.1	0.7

(f) Other miscellaneous income (KShs./month)									
None	86.6	94.7	90.9	100	100	87.5	100	50.0	91.4
1 to 100	8.6	3.9	9.1			12.5		50.0	6.6
101 to 200	2.4								1.1
More than 200	2.4								0.8
Average amount	15.2	4.4	1.8			10.0		20.0	7.3

unemployed throughout the first full quarter after migration. To place these amounts in perspective, we include in the right-hand column the comparable types of income received by men who were employed during the first full quarter after migration.

We observe first that the unemployed receive considerably more housing and food assistance than the employed. Some two-thirds of the unemployed have their basic needs for food and shelter provided for by others. Second, the men average KShs.4 per month of cash income which they receive as gifts from others. Third, 15 percent of the men have a *shamba* which is providing food for rural-based household members and which may be providing some food for the migrant as well. Finally, the unemployed migrants average KShs.9 a month of income from either a *shamba* or from unspecified sources in the urban areas.

The source of this miscellaneous income is not known. Since some of it may be gained by illegal means it was decided at the outset not to ask for the source. For the limited number with some form of miscellaneous income it is possible that the source was periodic, casual employment. These results are similar to those obtained by Byerlee *et al.* (1976, p. 79) for Sierra Leone. They report that very few migrants sought casual work during the initial period of job search because they thought that the chances of obtaining casual day labor were too low. In contrast, Hutton (1973, pp. 59–60) reports that 48 percent of the unemployed whom she surveyed in Uganda had found some casual work during the course of their search for regular employment. For Mwanza (Tanzania), Heijnen (1968) cites casual day labor as one means to "hold out for some time." Bienefeld and Sabot (1972, Vol. II, Ch. 7) state that 86 percent of the men whom they interviewed in Tanzania had a source of money other than the assistance received from urban-based kin during the first month of their urban stay. Savings and wage employment are listed as the dominant sources.

In our sample considerable variation among urban centers in the income experience of the unemployed is evident, but it is important to remember that there was little unemployment during the first full quarter in Thika, Nanyuki, and Nyeri (see Table 6.4). Unemployment was most severe in Eldoret and Nakuru, and we observe that assistance is above average in these towns. Even in Nairobi and Mombasa, more than three-fourths of the unemployed were receiving housing assistance from urban-based kin.

To determine whether the observed assistance received by the unemployed continued over time, we examined the income and assistance received by men who were unemployed during the fourth quarter after migration. During the course of this first year after migration the housing assistance dwindled to virtually zero, but the majority (72 percent) were still receiving food. Cash assistance received, miscellaneous income, and income from a *shamba* remained virtually unchanged. What is striking is that both the proportion of unemployed with a food-producing *shamba* and the average number of persons receiving food from the *shamba* increased slightly. Hutton's finding for Uganda may apply here as well (1973, pp. 75–76). Even though the amount of income derived from the *shambas* by the unemployed was insignificant, the *shamba* represented some form of security and was providing maintenance for family members. These factors served to make further job search possible.

If it is valid to assume that the men with food-producing *shambas* received some of this food themselves, then, by combining the food obtained from a *shamba* with food assistance received from kin in town, it is possible to conclude that the majority of the unemployed received sufficient food to subsist. But, they must make at least token payment

for housing and living costs other than food, and they must pay for the job search. Such costs must be covered by savings or miscellaneous income obtained while unemployed.

The bare sustenance costs during job search for Nairobi have been estimated at KShs.110 per month (Collier and Rempel 1977, p. 208). Of this total cost, 55 percent was for food, 32 percent for housing, and 13 percent for job search. The cost of housing and the job search, KShs.49 a month, exceeds by a substantial amount the average income earned and received by the unemployed. Therefore, it is to be expected that a number have some savings that they were drawing from and some may have had miscellaneous income from questionable sources which they were not prepared to list for the interviewer.

The Urban Informal Sector as a Point of Entry to Formal Sector Employment

One possible option open to the migrant is to finance the time involved in job search with income earned in the urban informal sector. A postulated function of the urban informal sector is that it serves as a point of entry for rural migrants into the urban labor market. This position is taken especially in migration models based on the Todaro expected income hypothesis (Fields 1975, pp. 171–176; Mazumdar 1977, pp. 18–22; Sabot 1975b, pp. 17–19). The hypothesis arises logically from the assumption that each urban formal sector job created in an urban center induces more than one rural resident to move to that urban center.

The hypothesis that the urban informal sector is the place where recent arrivals queue for the formal sector jobs is the direct result of the assumptions made about the job search in these migration models. First, the rural resident must be present in the urban center to be available for the urban jobs when they open up (Mazumdar 1977, p. 18; Sabot 1975b, p. 18). (For Fields's model (1975, p. 169) rural residence means a lower probability of obtaining an urban job (than urban residence) but not a zero probability.) Second, entry to informal sector activity is assumed to be unrestricted (Fields 1975, p. 172; Mazumdar 1977, p. 18; Sabot 1975b, p. 19). Third, participation in informal sector activity need not interfere significantly with formal sector job search (Fields 1975, p. 173; Mazumdar 1977, p. 18; Sabot 1975b, pp. 21–22). On the basis of these assumptions, the urban informal sector serves as the means for survival while the migrant waits in the queue for a formal sector job. Given the expected payoff from formal sector employment, the informal sector adapts to take up any slack in the labor maket and, as a result, can be characterized as the "flexible income sector" (Sabot 1975b, p. 14). Average income in this sector can theoretically reach an equilibrium level below current income possibilities in the rural areas (Fields 1975, p. 176; Mazumdar 1975, p. 54; Mazumdar 1977, p. 31).

The evidence with reference to this point-of-entry hypothesis is somewhat mixed. On the one hand, Sethuraman (1976, p. 75), on the basis of ILO-sponsored studies in Abidjan, Sao Paulo, and Jakarta, states: " . . . a disproportionately large share of the additions to the urban labour force, resulting especially from rural–urban migration, tends to be absorbed in such small enterprises." Similarly, for San Salvador, Peek and Antolinez (1976, p. 13) found that migrants had a "12 per cent lower probability of working in the formal sector than the remaining urban population."

On the other side there is the conclusion of Yap (1977, p. 255): "The informal sector is an important source of employment for migrants. However, there is little evidence

to suggest that migrants are disproportionately concentrated in that sector." She cites studies for India, Brazil, and Peru. Mazumdar (1975, p. 59) takes an even stronger position: "There is no evidence to suggest that the informal sector plays a predominant role as a point of entry into the labor market for fresh migrants to the urban area." Another study that does not provide empirical support for the point-of-entry hypothesis is the Tanzania survey (Sabot 1975b, p. 9). One study for Costa Rica (Carvajal and Geithman 1974, p. 111) actually found a disproportionate number of recent migrants in "high status/higher-paying professional and managerial employment."

An intermediate position on the point-of-entry hypothesis was obtained for Brazil, Peru, and the Sudan. Yap (1976, pp. 239–240) found that 60 percent of urban in-migrants in Brazil were in the traditional sector while only 50 percent of less-recent migrants and nonmigrants were in the traditional sector. Webb (1975, p. 36) found that the proportion of migrants in the labor force and the average length of urban residence of migrants were similar for both the modern and the urban traditional sector in Peru. But, if the comparison is limited to migrants with 3 years or less of urban residence, then the proportion of migrants is higher in the urban traditional sector than in the modern sector. For Khartoum, Oberai (1975, p. 17) indicates that recent migrants were slightly more evident in services but, in general, the distribution of labor within an industry was not dependent on migration status.

The evidence on the point-of-entry hypothesis is not conclusive because the definitions of what constitutes the informal sector are too diverse and the various studies cited did not limit their analysis to recent migrants. What these migration studies do have in common is that they do not portray the migrant as being forced into some form of subsistence self-employment because of an inability to obtain regular wage employment.

Further, several studies obtained similar results to those reported above for Kenya: urban-based kin represent the dominant means of entry to the urban labor market. For example, Fields (1975, p. 172), on the basis of East African experience, concurs that friends and relatives already resident in town serve as the actual point of entry. Hutton (1973, p. 56) reports that most of the men in her Ugandan sample were able to draw on assistance from urban-based kin during their initial period of unemployment. Sabot (1975b, p. 8), on the basis of the survey in Tanzania, adds personal savings as another means of financing entry into formal sector employment.

As was the case for our sample, some migrants are able to move directly into formal sector jobs. Many of the others are able to engage in virtually full-time job search for at least several months by drawing on their own resources and assistance provided by kin. Some, especially after failing to obtain regular employment during the first few months, are channeled into the informal sector, initially with their hosts (Hutton 1973, p. 56) and eventually on a more commercial basis. This process is documented in detail by Gutkind (1967) on the basis of a relatively small sample drawn in both Lagos and Nairobi. Gugler (1976, p. 195) arrives at a similar conclusion for African cities in general: "If they have not been able to secure employment they are forced to look for casual work, to accept employment well below the legal minimum wage or engage in petty self-employment."

The inference that can be drawn from this evidence is that being a migrant *per se* does not restrict accessibility to urban informal sector activity. Further, the many rural residents who seek urban employment rely on relatives or friends for their entry into the urban scene or, possibly, they subsist temporarily on savings. If these means fail to provide

regular employment, then the migrant either returns home or moves into the urban informal sector (Heijnen 1968, p. 77). Whether one returns home is dependent primarily on what rural options exist (Hutton 1973, pp. 62–63). The remaining migrants, those relegated to the urban informal sector, have limited rural prospects and have been screened out in the formal sector hiring process. They "include the young and the old, females, the less skilled, and the less educated – as well as recent migrants" (Merrick 1976, p. 351). For his Belo Horizonte (Brazil) sample, Merrick found that when he controlled migrant–native differences for other factors, migrant status was not an important determinant of whether an individual was active in the informal sector.

For some of those relegated to the informal sector, activity there becomes an immediate means of survival with little or no prospect for eventual formal sector employment: Temple (1974, p. 97) estimates this to be the case for some 100,000 residents of the slum areas of Jakarta. For others, informal sector activity represents a "prospect of accumulation" even though regular wage employment is not available (Hart 1973, p. 88). For many the hope remains alive that some day they will get their "big break" in the urban employment lottery (Hart 1973, p. 67).

One agglomeration of people employed in the informal sector in Kenya is the squatter settlements in Mathare Valley, Nairobi. A survey of 20,000 residents found that there were 6,400 adult males of whom 20 percent were wage-employed (probably outside of the valley), 63 percent were self-employed, and 17 percent were unemployed (Steele 1974, p. 30). According to Ross (1973, p. 89), residents of Mathare Valley were: "urban misfits and rural outcasts in the sense that the individuals lack the skills and activities needed to participate in the modern economy of Nairobi, while at the same time they have no meaningful rural alternative to life in the city." In many cases these residents were performing the services that no one else was willing or able to carry out. The range of activities included beer-brewing, prostitution, renting rooms, operating small shops, hawking, small-scale agriculture, selling water, working in local community or social organizations, and petty theft (Ross 1973, p. 135). Most seemed to have little prospect of ever obtaining formal sector jobs.

But it would be in error to view such communities of the poor as the informal sector; they are merely one subset of a much larger, diverse urban informal sector (Steele 1975, pp. 30–31; Rempel and House 1978, pp. 167–173). Also, while the composition of such communities is predominantly rural–urban migrants, most are not recent in-migrants. For one settlement in Mathare Valley, Ross (1973, Table 8.1, pp. 158–159) reports that the average length of stay in Nairobi was 11 years. Approximately 75 percent had lived in Nairobi for a minimum of 5 years; many had moved to Mathare Valley after a period of residence elsewhere in the city. As Yap (1976, p. 228) indicates, where complete assimilation never occurs, a significant number of migrants who have been resident in town for an extended period will be evident in the urban informal sector.

SUMMARY

Urban-based kin, defined to include friends and relatives who have come previously from the rural home area, make a significant contribution to the rural–urban migration process. They represent a source of information about urban areas, they provide food and

shelter for the majority of the in-migrants when they first arrive, and, for some in-migrants, they are able to assist in finding employment. The importance of these urban-based kin is especially evident for the younger men and for the men with limited education. Also, such kin serve a vital function of providing basic necessities for the majority of men who remain unemployed for a number of months. These findings are consistent with the regression results reported in Chapter 4; the urban-based kin are an important determinant of both the likelihood of a rural-to-urban move and the selection of a destination.

8 THE IMPORTANCE OF AMENITIES

In a complete specification of the determinants of rural urban migratory behavior it is necessary to include both the motives for leaving an area and the motives for moving to some other area (MacDonald and MacDonald 1968, p. 417). The pull forces may be seen as a means of eliminating the dissatisfaction represented by the rural push factors. The pull factors may be relative only. A person may not be dissatisfied with his rural life until the pull of additional attractions elsewhere lead him to be dissatisfied. In addition, if the migrant has a destination in mind, pull factors were probably important determinants in his choice. Hanna and Hanna (1971, p. 32) suggest that some African migrants select paths of movements rather than specific destinations, and stop off wherever acceptable work and living conditions can be found.

This interaction between rural push and urban pull forces is relevant especially for factors that relate to satisfaction of wants (rather than attainment of the necessities of life). Most amenities would fall in this satisfaction-of-wants category. As a result, differences between the quality of life in rural areas and urban centers must be considered in a discussion of the determinants of migration. Quality of life encompasses a wide range of amenities, from housing and social services or the opportunity to be involved in economic advancement to entertainment, sometimes labeled "bright lights."

There are two opposing positions on the role of "bright lights" in the migration process. According to the editorial writer quoted at length at the beginning of the first chapter, "bright lights" are an "irresistible lure" to the "ambitious young" in the rural areas. Another expression of the magnetic pull of "bright lights," especially for young people, is evident in a mapping of the "residential desirability surface" for university students in Ghana.

> To a large extent the structure of spatial preferences resembles the surface of modernization, with peaks at the highest order urban nodes, ridges connecting these via rail and road, and pits in rural areas. In Tanzania and Nigeria, the 'bright light' effect of the emerging system of cities is strongly impressed in the minds of the people. In Ghana, also, the remoteness of the Northern and Volta regions is measured by the low preference scores (Gould 1972, p. iv).

The opposing position does not deny the favorable evaluation by rural people of the "bright lights" of the city, but discounts it as an important determinant of migration relative to economic factors. According to this position, at least in Subsaharan Africa, the role of amenities in migration can, at best, be relegated to what Gulliver has termed the "last straw" effect (Gulliver 1955, pp. 28–32). In his summary he rejects his own "bright lights theory" as a prime motive for migration and places primary emphasis on economic factors. Factors other than economic ones serve to affect the timing of the migration, but

are considered unimportant in the selection of a destination. Empirical support for Gulliver's position is provided in Caldwell's Ghana study (1969, pp. 88–89).

In this chapter we draw on the available evidence from Kenya to consider the question of the effect of amenity availability on rural–urban migration. First, a measure of differences between rural areas and urban centers in access to a range of amenities is provided. Then, changes in the use patterns of several amenities before and after migration are considered. The section on amenity use patterns is quite limited in scope since the questions asked in the survey only covered "bright lights."

A MEASURE OF ACCESS TO AMENITIES

The government of Kenya has an explicit commitment to upgrade the quality of life and the range of economic opportunities in rural areas (Development Plan: 1970–1974 (1969), p. 2). In preparation for the realization of this objective, the Town Planning Department of the Ministry of Lands and Settlements (1971) has compiled an inventory of existing facilities for each province in Kenya. Included in this inventory is an index of availability across 21 different types of facilities and services in towns and villages in each district that have accumulated some facilities or social services. Each index is based on a range from *0* to *3*; a *3* indicates the highest level of availability and a *0* indicates that the amenity is not available. Here are some examples of the values for several indices: education – the existence of a primary school rates a *2* while a secondary school rates a *3*; retail selling – wholesale and retail stores rate a *3*, more than five shops rates a *2* and less than five shops rates a *1*; industry – more than 500 employees rates a *3*, 100 to 500 employees rates a *2* while less than 100 employees rates *1*. The point level for each type of facility or service is provided in Appendix V of the *Central Province Regional Physical Development Plan* (Ministry of Lands and Settlements 1971c).

In addition, the plans rank the towns and villages into four groups depending on the size of the hinterland that each serves. There is some indication that the minimum size of population served is: urban center – 150,000; rural center – 50,000; market center – 15,000; and local center – 5,000. This information is provided in the *Rift Valley Province Regional Physical Development Plan*, pp. 73–75 (Ministry of Lands and Settlements 1971c). These values were used to calculate a district weighted average across all relevant towns and villages in the district for each of the 21 amenities (Table 8.1).

The urban centers under study as migration destinations are placed just below the district in which they are included. Mombasa is a district in Coast Province. Nairobi is not included in the regional physical development plans, but it can be assumed that a level of *3* would apply for all 21 amenities. The provincial index reported in Table 8.1 is a weighted average across districts in which the 1969 census population figure for each district is the weight.

There are definite limits to what can be derived from Table 8.1. First, it is an index only, not a continuous measure of access to amenities. Second, the rural index is based on villages and towns in the district and overstates the actual availability to the rural population. This is true for both amenities such as water, sanitation, and electricity, which serve an immediate community only, and for the remote districts which have one well-serviced

town but very few other villages with any amenities of significance. Examples of the latter are Turkana, West Pokot, Narok, Samburu, Isiolo, Marsabit, Tana River, and Lamu. Third, not all measures of quality of life are included. Housing is an important omission. Fourth, some districts are understated because they benefit from their closeness to towns in a neighboring district. Some obvious examples are Kiambu (bordering on Nairobi), Muranga (close to Thika), Kirinyaga (next to Embu town), and Nyeri district (bordering on Nanyuki).

In addition, the availability of amenities in the urban centers does not necessarily mean that the incoming migrants can afford to enjoy these amenities. Surveys in Ghana and Sierra Leone report that the dominant unpleasant aspect of town life, according to the in-migrants, is the need to pay for everything and the limited personal resources available for such payment (Caldwell 1969, p. 96; Byerlee *et al.* 1976, p. 60). The city of Nairobi has electricity but the servants' quarters in some areas are not serviced. In other areas electricity is available but turned off because the people cannot afford to pay for it.

Recognizing these limitations of our measures of amenity availability, we still observe a distinct difference in the indices between urban centers under consideration and the districts. With the exception that there is no railway to Nyeri town, the urban center indices are consistently above the averages of their provinces. The difference between town and country is less pronounced for services for personal improvement such as education, health care, and shopping facilities. Such emphasis on facilities that enable personal improvement is commendable, but when emphasized independently of other dimensions essential for overall rural development, extensive out-migration of the better-educated young people is likely. This is recognized by Mr. Kibaki, the minister for finance and planning, in his listing as a problem the inability to hold educated young people in their rural home areas.*

The largest differences between the rural and urban areas are in the social overhead capital categories: electricity, communications, transportation, and banking facilities. These can be seen as a "life support system" that is vital to the environment within which rural development can occur. Their limited availability in most rural areas probably explains the concentration of industry in the major towns. Other aspects of rural development, such as rural works programs, some technical services, training of youth for rural occupations, and the organization and control of rural trade and markets are the responsibility of local government. The acute shortage of funds available to county and area councils is reported to have severely constrained action in these areas (Heyer *et al.* 1971, p. 12).

In summary, rural people have relatively good access to amenities that enhance personal welfare. But they must for now look to the larger urban centers both to obtain some of the essential means for development as well as to participate directly in the benefits from economic growth evident in Kenya. Obtaining formal education is a recognized means of gaining entry to what the towns have to offer. The high education indices in districts such as Kakamega, Kiambu, and Muranga districts are consistent with observations in several recent studies which report that parents in districts with land shortages are investing heavily in education for their children as a substitute for providing land for them (Moock 1973; Gwyer 1972, pp. 14–15).

*According to a newspaper account, this concern was listed by Mr. Kawi Kibaki in a speech given at the opening of the African regional conference of the Commonwealth Association of Planners, "Africa unable to cope with 'urban drift' " (*East African Standard*, February 13, 1974, p. 5).

TABLE 8.1 An index of amenity availability in each district and in the largest towns.

District	Administration	Judicial	Police	Fire protection	Health	Education	Library	Social center	Postal services	Auto services	Bus services	Railway	Air transport	Retail	Open markets	Banks	Hotels	Industry	Electricity	Water	Sanitation
Nyanza	0.9	0.9	1.3	0.5	2.2	2.8	0.2	1.1	1.3	1.3	2.5	0.6	0.3	2.2	2.2	1.5	0.6	0.5	1.1	1.2	0.4
Kisumu	1.1	1.1	1.7	1.2	2.3	2.7	1.0	1.2	1.7	1.4	2.6	1.6	1.0	2.2	2.9	1.6	1.0	1.3	2.2	2.0	1.3
Kisumu[a]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	2.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Siaya	0.8	0.6	1.1	0.5	2.0	2.5		0.9	0.9	1.0	2.1	0.4		1.9	2.1	1.4		0.5		0.9	
Kisii	1.1	1.5	1.6	0.5	2.2	2.9		1.3	1.7	1.6	2.4		0.1	2.5	2.5	2.0	1.4		1.4	1.6	
S. Nyanza	0.7	0.3	0.9	0.2	2.2	2.8		0.8	0.9	1.2	2.6	0.6	0.2	2.1	1.7	1.1		0.6	0.6	0.6	0.5
Western	0.6	0.7	1.1	0.6	1.9	2.8	0.1	0.9	1.3	1.2	2.2	0.6	0.2	2.1	2.4	1.3	0.3	0.8	1.0	1.8	
Bungoma	0.6	0.5	0.9	0.6	1.8	2.7	0.5	1.1	1.0	1.2	2.0	0.8	0.3	2.2	2.2	1.6		1.4	1.0	2.1	
Busia	0.7	0.3	1.2	0.9	1.5	2.5		0.6	1.2	1.2	2.2	0.1	0.1	2.3	2.4	1.2		0.9	0.9	2.2	
Kakamega	0.6	0.9	1.1	0.5	1.9	2.9		1.0	1.4	1.3	2.2	0.6	0.2	2.0	2.5	1.2	0.4	0.4	1.0	1.5	
Rift Valley	1.1	0.8	1.3	0.9	2.2	2.5	1.1	1.7	1.5	1.5	1.7	0.6	0.7	2.2	1.5	1.2	0.8		1.0	2.3	0.4
Turkana	1.4	0.9	2.2	0.9	3.0	2.0		0.9	0.9	0.4			1.4	2.0	1.0					1.3	
W. Pokot	1.4	0.8	0.6	1.0	2.8	2.6		1.3	0.6	0.6	0.6		0.2	1.8	0.8	0.6				3.0	
Trans. Nzoia	1.3	1.3	2.0	2.0	2.3	2.8	1.3	1.7	2.3	2.1	2.6	1.3	1.3	2.3	2.3	2.0	2.0		2.0	2.7	2.0
Uasin Gishu	0.8	0.8	1.8	1.2	2.1	2.5		1.9	2.5	1.9	2.3	1.8	1.0	2.3	1.9	1.8	1.3		1.7	2.0	1.2
Eldoret[a]	2.0	2.0	3.0	3.0	3.0	3.0		2.0	3.0	3.0	3.0	3.0	2.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Nandi	1.0	0.4	1.2	0.7	2.2	2.6		1.2	1.5	1.0	1.8		0.5	2.5	1.6	1.9			1.7	2.6	
Kericho	0.7	0.7	1.0	0.6	1.9	2.4		0.6	1.9	1.8	2.4	0.4	0.5	2.3	1.5	1.4	0.8		0.8	2.0	
Narok	1.2	0.8	1.4	1.0	2.8	2.8		0.8	1.0	0.4	0.9		0.8	1.9	1.0	1.2				2.7	
Kajaido	0.9	0.7	1.1	0.9	2.2	2.5		1.4	1.3	1.4	1.6	0.3	0.5	1.9	1.7	0.1	0.2		1.7	3.0	
Nakuru	1.7	1.4	1.5	1.0	2.3	2.7	0.5	1.7	2.6	2.2	2.5	1.8	0.9	2.5	1.9	1.5	1.6		2.4	2.8	0.7
Nakuru[a]	3.0	3.0	3.0	3.0	3.0	3.0	2.0	2.0	3.0	3.0	3.0	3.0	2.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Laikipia	1.9	1.8	1.9	1.8	2.8	2.9		1.8	2.7	2.7	1.9	1.8	1.9	2.9	2.7	2.7	2.7		2.7	3.0	2.7
Nanyuki[a]	2.0	2.0	2.0	3.0	3.0	3.0		2.0	3.0	3.0	2.0	2.0	1.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
E. Marakwet	0.6	0.3	0.6	0.2	1.7	2.0		0.5	0.8	0.7	0.8			1.8	0.4	0.8				2.6	
Baringo	1.1	0.9	1.4	0.7	2.3	2.5	1.7	1.1	1.0	0.9	1.0	0.1	0.1	1.9	0.7		0.1			1.8	
Samburu	1.6	0.6	1.0	1.0	2.8	2.6			1.3	2.1	0.8		1.0	2.6	1.6	1.3	1.9				

Central	0.9	0.8	1.1	0.7	2.1	2.7	0.7	2.0	1.7	1.6	2.5	1.2	0.4	2.4	2.3	1.3	0.6	0.8	2.0	1.9	0.8
Nyandarua	1.2	1.1	1.4	0.5	2.4	2.8	1.4	1.9	2.7	2.2	2.9	2.0	0.8	2.5	3.0	1.7	1.4	0.7	1.9	1.4	1.4
Nyeri	1.2	1.0	1.3	1.1	1.9	2.7	0.7	1.9	2.0	1.4	2.4	0.8	0.4	2.3	2.7	1.4	0.7	1.1	2.0	1.9	1.0
Nyeri[a]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		1.0	3.0	3.0	3.0	3.0	2.0	3.0	3.0	3.0
Kirinyaga	1.0	0.5	1.1	0.7	1.8	2.6		1.4	1.2	1.6	2.2	0.6	0.1	2.0	2.8	0.7		0.4	1.4	1.3	
Kiambu	0.7	0.9	1.0	0.8	2.4	2.9	0.7	2.2	1.9	2.0	2.6	1.5	0.2	2.7	1.5	1.5	1.0	1.2	2.4	2.3	0.9
Thika[a]	1.0	2.0	2.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	1.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	2.0
Muranga	0.8	0.7	1.0	0.4	1.9	2.7	0.8	2.2	1.3	1.2	2.5	1.3	0.5	2.3	2.3	1.0		0.5	2.1	1.8	0.8
Eastern	0.9	0.8	0.9	0.4	2.3	2.6	0.3	1.5	1.4	1.3	1.9	0.2	0.3	2.3	2.7	1.1	0.5	0.2	0.3	1.6	0.4
Meru	0.9	1.1	0.9	0.3	2.6	2.8	0.6	1.7	1.5	1.4	1.9		0.4	2.6	2.9	1.4	0.8		0.3	1.1	0.8
Embu	1.6	1.2	1.5	1.3	2.3	2.9		1.6	1.9	1.7	2.3		0.4	2.6	2.9	1.6	1.3	0.4	1.3	2.7	1.3
Kitui	0.7	0.6	0.5	0.3	2.2	2.5	0.5	1.2	1.1	0.9	1.9		0.2	2.1	2.9	0.5		0.2		2.2	
Machakos	0.7	0.4	0.7	0.3	1.9	2.5	0.1	1.4	1.4	1.3	2.0	0.4	0.1	2.0	2.5	1.0	0.3	0.3	0.3	1.3	
Isiolo	1.7	1.3	2.7		2.7	2.0		1.9	1.5	1.3	1.3		1.0	2.6	1.3	2.0	0.7			2.7	
Marsabit	1.8	1.5	2.0		3.0	2.3			1.8	1.5			1.8	2.0	3.0					2.3	
Coast	1.5	1.7	1.7	1.0	2.5	2.6	0.9	1.9	2.3	2.0	2.1	1.2	1.4	2.4	2.3	1.7	1.5	1.8	2.0	2.4	0.8
Mombasa	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Tana River	1.5	1.3	0.7	0.9	2.9	2.0			1.8	0.7	1.0	0.2	0.9	1.7	2.0			0.1		2.0	
Taita	1.1	1.4	1.1		2.6	2.6		1.8	2.0	2.5	1.9	1.2	0.6	2.2	2.3	1.4	0.8	1.1	0.9	2.6	
Kilifi	0.9	1.4	1.6	0.4	2.5	2.5	0.3	1.7	2.3	1.9	1.9	0.7	1.3	2.4	2.6	1.8	1.5	1.8	2.0	2.6	
Kwale	0.7	0.8	0.8	0.1	1.7	2.3		1.4	1.7	0.9	1.9	0.2	0.1	1.8	1.1	0.3	0.5	0.9	2.1	1.2	
Lamu	1.8	1.7	0.9		2.8	2.0		1.7	1.9	0.9	0.9	0.8	1.0	2.8	1.7	2.5	2.5	2.6		2.5	

[a]Urban center.

NOTE: Information on industrial amenities in the Rift Valley Province was not provided.

USE OF AMENITIES REPORTED IN THE MIGRATION SURVEY

Changes in Amenity Use Patterns after Migration

As a check on the assessment made by the men of the role of amenity availability in their migratory behavior, changes in their use of amenities were investigated. Three "bright lights" type of amenities – cinemas, dancing places, and newspapers – were selected for analysis. In each case the men were asked to compare their current use of these amenities with that prior to migration (Questions 43 to 45). Where amenity use had increased with migration the men were asked why their use of amenities had increased.

An indication of why the men placed so little emphasis on amenity availability as a determinant of migration can be seen in Table 8.2. Fifty-nine percent of the men did not attend cinemas. In addition, 3 percent of the men had not changed their attendance habits after migration and 10 percent were attending less often than they did prior to migration. As a result, variations between urban centers in the increased availability of cinemas could have a determinative effect on the migration decisions of only 28 percent of the men. Twenty percent of the men indicated that they were attending more often because there are more cinemas in the urban centers.

The role of dancing places in the urban areas is similar to that of cinemas (Table 8.3). Only 14 percent of the men increased their attendance after migration. The vast majority, 72 percent, did not frequent dancing places. Approximately one-half of the men who did attend more frequently identified the better quality of urban dancing places as the reason why they attended more often. The increased number of dancing places in town was not mentioned as a reason for frequenting dancing places more often.

The reading of newspapers appears to be the one amenity for which there was a considerable increase in use after migration: 59 percent of the men increased their reading of newspapers (Table 8.4). The greater availability of newspapers in the urban centers was the most important reason for this increase. Both the availability of more money and the need for reading newspapers for information on jobs were listed as reasons for increased use of newspapers, especially for the men with secondary education.

For all three amenities the interaction between amenity use, the urban centers, and education and age variables is statistically significant (Rempel 1970, pp. 105–107). As expected, it is the younger men and the men with secondary education who have a proportionately greater propensity to increase their use of amenities after they had migrated to an urban center. Among urban centers no distinct pattern is evident. Social amenities registered as a basis for selecting a particular destination for Nairobi and Mombasa only (as reported in Table 4.6). Yet in Tables 8.2 to 8.4, amenity use after migration is not distinctly higher for Nairobi and Mombasa than for either the three western towns or the three central towns.

The comments included on some of the questionnaires indicate that the availability of specialized training courses in some urban centers, especially Nairobi, was the basis for deciding on a destination. As indicated in Table 8.5, 28 percent of the men had completed or were in the process of taking a specialized training course. Also, the proportion enrolled in such courses is somewhat above average for Nairobi. Again, it is the younger men and the men with secondary education who predominate in enrollment in specialized training courses.

TABLE 8.2 The percentage distribution of cinema attendance by migrants in each urban center.

Cinema attendance	Nairobi	Mombasa	Kisumu	Nakuru	Eldoret	Thika	Nanyuki	Nyeri	Total
Does not attend	61	64	67	58	58	42	22	20	59
Attends about the same	3	2	7	6	2	3			3
Attends less often	10	6	7	9	9	22	16	19	10
Attends more often because there are more cinemas here	19	20	17	17	23	22	28	38	20
Attends more often because he has more money	4	6		9	6	8	8	11	5
Attends more often for some other reason	3	2	2	1	2	3	22	12	3
Total	100	100	100	100	100	100	100	100	100

TABLE 8.3 The percentage distribution of attendance at dancing places by the men in each urban center.

Attendance at dancing places	Nairobi	Mombasa	Kisumu	Nakuru	Eldoret	Thika	Nanyuki	Nyeri	Total
Does not attend	70	70	74	79	84	65	76	55	72
Attends about the same	5	2	9	1	2	1	2		4
Attends less often	8	14	6	9	6	22	12	11	10
Attends more often because there are better dancing places here	11	7	5	8	4	3	2	14	8
Attends more often because he has more money	2	3	4			4	2	3	2
Attends more often for some other reason	4	4	2	3	4	5	6	17	4
Total	100	100	100	100	100	100	100	100	100

TABLE 8.4 The percentage distribution of the newspaper reading habits of the migrants in each urban center.

Newspaper reading habits	Nairobi	Mombasa	Kisumu	Nakuru	Eldoret	Thika	Nanyuki	Nyeri	Total
Cannot read	4	5	2	5	4		4	1	4
Does not read newspapers	15	21	26	22	31	7	4	5	19
Reads newspapers about the same	13	12	16	3	10	4	4	6	11
Reads newspapers less often	5	8	6	6	8	15	10	8	7
Reads newspapers more often because they are more readily available	30	41	28	37	29	24	26	25	33
Reads newspapers more often because he has more money	8	8	5	16	8	27	8	25	9
Reads newspapers more often because he wants information on job openings	19	1	7	5	10	11	28	20	11
Reads newspapers more often for some other reason	6	4	10	6		12	16	10	6
Total	100	100	100	100	100	100	100	100	100

TABLE 8.5 The percentage distribution of the number of men in each urban center who are enrolled in special training courses.

Enrollment status	Nairobi	Mombasa	Kisumu	Nakuru	Eldoret	Thika	Nanyuki	Nyeri	Total
No courses completed and not enrolled currently	65	75	74	82	80	58	71	67	72
One or more courses completed	18	13	17	9	10	33	21	21	16
Currently enrolled in a course	17	12	9	9	10	9	8	12	12
Total	100	100	100	100	100	100	100	100	100

Amenity Availability as a Reason for Migration

The evidence points to greater amenity availability in the urban areas and to some differences in amenity availability between urban centers. But, the survey results provide support for the portion of the literature that considers the "bright lights" a relatively unimportant determinant of migration. Evidence to this effect is consistent: amenities do not rank as a significant reason for migration (as reported in Tables 4.5 and 4.6), and only a minority of the migrants increased their use of the amenities covered in the questionnaire.

As indicated earlier, the evidence presented here is not conclusive because a number of amenities, such as health care, housing, piped water,and electricity, were not included in the questionnaire. Evidence exists that rural residents consider these amenities to be more important than "bright lights." A rural survey in Kenya indicated that farmers rated improved health services as a priority item for self-help projects (Heyer *et al.* 1971, p. 36). Education and improved roads were rated important as well, but agricultural projects were not in demand. Similarly, in our survey, opportunities for advancing one's education and skills were rated more important than the social amenities. In Sierra Leone: "Both migrants and nonmigrants attached considerable importance to social amenities such as school, medical facilities, and utilities (electricity and piped water) in town" (Byerlee *et al.* 1976, p. 60). The better quality of the schools located in the urban centers was also noted by the respondents.

These amenities are part of the amenity index (A_{ij} and A_j) used in the regression analysis, as reported in Chapter 4, and no doubt form part of the explanation for the significant positive coefficient for A_{ij}. But for males, A_j was found not to be a significant determinant of the selection of a migration destination. The low priority given by our survey respondents to amenities as a reason for leaving their home area or for selecting a destination provides support for our earlier interpretation of the coefficient for A_{ij}: variations in the range and variety of employment opportunities in the urban centers form an important part of what A_{ij} is measuring.

In conclusion then, amenities *per se* enter into the migration decision-making but are not a central motive for making a move. Hutton (1973, p. 106), on the basis of her survey, concluded:

> The introduction of urban amenities as such into the rural areas will not be effective in retaining people at home if the village cannot give them the standard of living which they require. Similarly, if land is not available or cannot offer a better living, the school cannot hope to inculcate the attitudes or skills that will of themselves change the order of things.

On the basis of the evidence presented in Chapter 4 and here, we consider this conclusion for Uganda applicable to Kenya as well.

9 MAINTENANCE OF RURAL–URBAN TIES

For the typical migrant a rural-to-urban move does not represent a complete break with the rural area. The literature indicates that various social, economic, and psychological ties with the rural area are maintained. Here we explore the range of such ties, their determinants, and their effects. Where possible, survey data will be used to illustrate and test these ideas. Specifically, the evidence on monetary flows between the rural and the urban sectors, the rural stake maintained by the migrants in the form of land ownership and immediate family members who remained behind, the migrant's intention to return to the rural area, and the migrant's preference for urban or rural employment will be analyzed.

THE NATURE OF RURAL–URBAN TIES

The nature of the links maintained by recent urban in-migrants with their home areas has been specified in various forms. According to Mitchell (1959), the rural centrifugal forces that propel individuals elsewhere to satisfy their economic wants are offset at least partially by a social network of centripetal forces that hold a person in the rural orb of influence.

This network provides much needed social contact, in the form of visits and possibly letters, which frequently is difficult for a migrant to establish within an urban environment. Further, the social network can protect against the failure to obtain or to maintain an adequate source of income in an urban center or a work camp. To maintain such protection requires certain social obligations. At a minimum, these obligations involve returning gifts in the form of money or goods. In some societies it can require a periodic return to the rural area to participate in family or community work. Village ceremonies or festive occasions frequently prove to be opportune times to meet the pecuniary requirements of the social obligations.

Plotnicov (1965, p. 22) enumerates these social obligations also, but he adds a psychological dimension.

> "Home is elsewhere." This legend reconciles the immigrant to the loneliness and to the absence of family in the faceless city. Also, if he achieves little success, he has a ready psychological compensation and retreat: he belongs and he has value in a better place – back home.

For Nairobi, Ross (1973, p. 84) argues that the city is not considered "a desirable place to celebrate major thresholds in the social life cycle – birth, initiation, marriage, and death." He provides supporting evidence for this argument in the cases of marriage and death.

A rather different approach to understanding the nature of rural–urban links is taken by Stark (1976, p. 22). His focus is on the rural household as a collective unit rather than on the individual migrant. The household perceives development of its land holdings as the means to its economic advance. To accomplish such agricultural development one or more sons are educated and dispatched to the urban scene to supplement family income from an alternative source. The wage-earning son fulfills several basic functions for the rural family: (1) he provides cash needed for technological change in agriculture; (2) he may be a source of alternative, superior technology; (3) he reduces the risk involved for part of the family's total investment because his income is not tied to the unpredictable performance of agriculture.

These two specifications of the nature of the rural–urban ties have a number of elements in common but there are also significant differences. Social contact in the form of periodic visits certainly is common to both, as are financial flows between the rural and the urban sectors. Where they tend to differ is in the extent and the purpose of such financial flows.

The dominance of economic factors in the rural centrifugal forces of the Mitchell thesis implies that the rural areas have limited resources available to transfer to the migrant in the urban center. The extent of the rural involvement in financing the move tends to be limited to the cost of the trip, whatever savings the migrant carries at the time of the move, plus occasional gifts of food. Similarly, for the urban-to-rural financial flows, the Mitchell thesis implies a basic social obligation. The income earned beyond the basic obligation will be at the disposal of the migrant. Also, as urban job security and social ties develop, the need to fulfill rural–urban social obligations will decline. Therefore, it is to be expected that the proportion of urban income remitted will vary inversely with the size of the urban income, the ongoing certainty of the urban income, and the length of the urban stay.

The Stark thesis implies that the migrant and the rural-based family have a common interest. The migrant's urban living costs are an important part of the family's resource allocation decisions. Until the migrant obtains the desired wage income, the rural family will provide a living allowance as part of its investment in the migrant's job search. Once he is employed, it is likely that income earned beyond urban living costs will be remitted to the family. Therefore, as the level of income rises over time, it is to be expected that the proportion of this income that is remitted will increase also.

Both specifications make provision for the maintenance of a rural stake. Where they differ is in the reasons offered for the maintenance of that rural stake. The Stark thesis is premised on the existence of viable commercial opportunities for the household in farming. The obstacles to taking advantage of such opportunities are production supply constraints: lack of capital, limited access to technology, and the excessive risk of investing available resources in commercial agriculture.

Conversely, the Mitchell thesis states that at the time of migration rural income earning opportunities are perceived by the migrant to be distinctly inferior to those of the urban centers. Therefore, the maintenance of rural stakes reflects such factors as: (1) keeping a rural option open in case of failure in town; (2) the possibility that the cost of supporting a family in town exceeds the migrant's urban earning potential; and/or (3) the possibility that the family is too poor to forego the farm income of the wife and children if they moved to the urban center.

The final point relates to the migrant's intention to return to his rural home area. According to Mitchell, the likelihood of return migration will depend on the balance between the centrifugal and the centripetal forces on the migrant. If the centrifugal forces persist and the centripetal forces decline, because satisfying relationships are emerging in the urban setting and the urban income sources appear to be secure, then the likelihood of return migration for an extended time period will be low throughout the working life of the migrant. Further, according to Plotnicov (1965, p. 21), the extended absence from a relatively closed rural community reinforces the inertia to remain. The dream to return eventually will not be fulfilled in many cases.

Stark, in contrast, does not address the issue of return migration directly. His focus is on the rural household and it is not clear what eventually happens to the migrant. (In a discussion of the shape of the remittance function over time (1976, p. 15, footnote 2) he notes that the migrant either returns or is joined by his family and remains. The probability of either and the determinants of such a decision are not discussed.) The hypothesized motivation for the initial move was to facilitate the development of rural resources rather than to enjoy the attractions of the urban environment *per se*. Therefore, one would expect that the migrant will return once adequate funds to build up rural resources have been transferred home or he decides to establish his own household. Nevertheless, the urban experience may create a desire for an urban way of life and hence, transform a "target" migrant into a long-term urban resident.

In the subsequent parts of this chapter, the relevant evidence on the maintenance of rural–urban ties in Kenya will be presented and analyzed. Where possible, the analysis will be related to the above discussion. In the concluding section, the various aspects of the discussion are drawn together into a more comprehensive picture of the rural–urban ties in Kenya.

RURAL–URBAN MONEY TRANSFERS

An important aspect of the links maintained by the migrants is the gifts of money received and sent. The significance of these flows exceeds the effect of the money on the finances of the family and the migrant; the flows are indicative of the social relationships.

We consider first the money received from the rural home area by the migrant. Second, the money remitted to the rural areas is analyzed. In both cases, the magnitude of the flows is presented and the determinants of the flows are discussed.

The Rural Support for the Migrant

According to the migration survey results, the men received an average of KShs.2 per month from their home areas during the first 3 months of their urban stay.*

By the fourth quarter after migration this level of rural support for the migrants had dropped to 51 percent of the first-quarter level. Given our estimate of 267,330 male

*As reported in Table 7.7, 86 percent of the unemployed and 97 percent of the employed did not receive any cash from their home areas. Therefore, the small minority who were supported received an average of KShs.30 a month.

migrants in the 1964-to-1968 period, this implies an annual rural-to-urban financial flow of approximately KShs.300,000. This sum is just a fraction of 1 percent of Kenya's annual gross domestic product.

To determine whether there are significant differences in either the rural sources or the urban destinations of the funds, the rural-to-urban financial flow per month during the first quarter after migration was apportioned among all possible rural–urban migration combinations. This distribution of the rural support for migrants was compared with the distribution of migration flows among all possible rural–urban migration combinations (based on Table 3.1). Differences between the observed distributions were not statistically significant.* Therefore, the rural-to-urban flows of money among the various possible rural–urban combinations merely reflect the relative importance of each combination in the total migration process.

An attempt was made to explain the variation in the amount received by each migrant during his first quarter of urban residence. The results are not presented here because we were not able to explain the variations. The adjusted coefficient of variation for ordinary least-squares regression, with 967 degrees of freedom, was 0.02. The only variable that proved to be statistically significant was the employment status of the migrants after arrival in town. (Other variables entered in the regression equation were the urban income of the migrant, whether he was head of a household, whether he owned a farm, the amount of land owned by the migrant's father, and the employment status of the father.) Those who failed to obtain employment during the first quarter after arrival received, on the average, KShs.3 per month more than those who obtained employment during this initial period.

In studying the characteristics of the migrants who were supported by their rural home areas, we found that the men who possessed land that was producing cash crops and the migrants who were attracted to a particular urban center because of the amenities available there received financial assistance significantly above the sample average. For other personal characteristics such as age, education, marital status, or activity or passivity, the differences in the amount of assistance are not significant.

By the fourth quarter after migration the amount received by the owners of land producing cash crops drops off to zero. The average amount received by the men who were attracted by urban amenities actually increases from the first to the fourth quarter. Again, this latter amount received is significantly above the sample average. This observed increase in support holds true only for the men in the four largest urban centers.

In relating this empirical evidence from Kenya to the above discussion on the nature of rural urban ties, we must keep several factors in mind. First, the observed cash flows understate by a considerable amount the actual rural support. The transportation costs of the move and the cash savings carried by the migrants are not included in the survey results. According to the Mitchell thesis, these would account for the bulk of the rural-to-urban financial flows. Secondly, studies in other countries indicate large rural-to-urban financial flows, in the form of school fees and living costs, from the rural areas where young people have to leave the home area to obtain formal education (Connell *et al.* 1976, p. 102; *Town Drift* 1973, p. 119). Our sample was designed to eliminate the student migrant so this form of rural support was not evident in the survey results. Thirdly, the role of the transfer of goods in the rural support offered to migrants is not considered. This omission

*Based on a chi-square test using a significance level of $p < 0.05$. The rural source unit used was the province.

probably accounts for a substantial portion of the support offered from areas with limited opportunities to earn cash income.

With these limitations to the data used, several conclusions can nevertheless be drawn. First, the results obtained are consistent with the Mitchell thesis that limited rural economic opportunities are propelling people outward to locations where income could be obtained. Average rural support of KShs.2 per month per migrant is simply inconsequential given the urban cost of living. Stark (1976, p. 14) assumes, for the typical migrant, that urban living costs are approximately two-thirds of the earnings earned by the migrant when he obtains employment. Even the KShs.30 a month received by the limited number of migrants who were being supported is well below this level.

The two other sources that provide evidence on rural-to-urban financial flows in Kenya also lend support to the Mitchell thesis. Knowles and Anker (1977b, p. 7) report rural-to-urban transfers account for merely 6 percent of all income transferred in Kenya. According to Weisner (1972, pp. 134–151), men leave rural areas because they cannot earn the cash income needed to meet their limited aspirations. In the case studies reported by Weisner, the assistance for transport and urban living costs received by the men was provided by employed urban residents who had migrated previously. The rural-based families are not portrayed as "investing" rural resources for the purpose of purchasing an urban income stream. Similarly, Hutton (1973, p. 59) reports for her Ugandan survey that gifts from home, if any, were limited to bus fare plus enough cash for the first few days in town. Two-thirds of her sample had not received any gifts after they had arrived in town.

Nevertheless, it is possible that some portion of the limited number of men in our sample who were receiving assistance from home did represent a form of rural investment as envisioned by Stark. To begin with, the men with land used for cash cropping were receiving significantly above-average amounts. Also, the amounts from Central Province were higher than from Eastern and Nyanza provinces. We had noted earlier that some men in Central Province had land and this land would be readily accessible to the major urban markets. In contrast, Nyanza Province is distant from the major urban markets and Eastern Province does not receive the regular rainfall that is more characteristic of Central Province. But, the evidence for this possibility is weak. The above-average support provided for men who were attracted to the larger urban centers by the amenities is hardly consistent with rural families' "investing" their resources in migration.

Urban Income Remitted to the Rural Home Area

The extent of urban-to-rural financial flows is of quite a different magnitude; on average, they exceed that of rural-to-urban flows by a multiple of 2.4. (In their survey, based on a more comprehensive measurement of rural-to-urban financial flows, Knowles and Anker (1977b, p. 7) report a multiple of 8 for the amount by which urban-to-rural flows exceed the flows in the opposite direction.) Again, the distribution of the urban-to-rural flows among possible rural–urban migration combinations does not vary significantly from the distribution of the observed migration flows among these migration combinations. The relative magnitudes of the financial flows reflect the reverse of the migration flows.

For the total sample, the average amount remitted was KShs.43 a month as of December 1968. These remittances represent 13 percent of the income earned by the

men in the sample. Fifty-nine percent of the men reported remitting regularly to their home areas. This subset of the total sample sent an average of KShs.75 a month, which equals 22 percent of the income that they were earning at the time. An additional 16 percent of the total sample reported remitting some money sporadically.

For the subset of the total sample that was remitting money regularly, 41 percent started sending money in the same quarter that they arrived in their respective urban destinations. An additional 33 percent started remitting regularly during the course of the remainder of the first year after arrival. Only 12 percent of this subset delayed starting regular financial remittances to their home areas until the third year after arriving in town.

The extent of remittances reported in our sample is substantially less than that obtained in other surveys in Kenya. On the basis of information provided by Knowles and Anker (1977b, pp. 6 and 7), it would appear that the people in their sample remitted on average KShs.103 a month to rural areas. Johnson and Whitelaw obtained an average amount of KShs.86 per month. Of the 1,140 males in the sample who had some income in December 1970, 88.9 percent responded that they regularly sent some money out of Nairobi . . . . The average monthly income for the sample was 411.5 shillings per month, so 20.7 percent of the sample urban income was remitted (Johnson and Whitelaw 1974, p. 474). They concluded (1974, pp. 477–478): " . . . on aggregate, rural income is increased by 20 percent by the institution of remittances." This estimate is dependent on two unproved assumptions, both of which bias their estimate upward. First, it is not clear that high-income earners remit the same proportion of their income as those in the middle- and lower-income groups sampled. Their own analysis indicates that the proportion of income remitted varies inversely with the level of income earned (Johnson and Whitelaw 1974, p. 475). Second it has yet to be shown that Nairobi is representative of the other urban centers in Kenya.

Our 1968 survey – based on the subset of the urban population who were recent in-migrants – indicates that men in the three smallest towns remit above-average amounts. The amount remitted from three of the four intermediate-sized urban centers, Mombasa, Kisumu, and Eldoret, was well below average. The effect of the below-average remittances was sufficient to make the amount remitted from Nairobi and from the fourth intermediate-sized town, Nakuru, some KShs.5 above the sample average. Therefore, there is evidence of considerable variation between urban centers in the proportion of income remitted.

The earlier discussion on rural–urban ties suggests two basically different sets of hypotheses on the determinants of the urban-to-rural remittances. The one set, based on Mitchell and others, focuses on the migrant, who cannot afford to break completely the economic, social, and psychological links to his rural home area. According to this view, some minimum amount of remittances is essential to maintain a rural alternative if desired urban opportunities fail to materialize or cease to exist. Therefore, the proportion of urban income that is remitted will vary inversely with the level of income.

Similarly, the proportion of urban income remitted will vary inversely with the level of education of the migrant, the length of the urban stay, and the commitment of the migrant to an urban way of life. The more-educated are hypothesized to have a greater ability to obtain more secure urban positions and to cope with an alien environment. As a result, their need to invest in rural ties is less than for migrants with limited formal education. Also, the longer the migrant is in an urban environment, the more likely he will develop the means to become socially and economically secure; hence the need to maintain

ties to the rural area will decline. Similarly, an intention to remain permanently in an urban setting will cause the migrant to develop urban substitutes for some of the existing rural ties.

Alternatively, if the migrant is the head of a household but he finds it necessary to leave his family in the rural home area, this is clear evidence of strong ties to the rural home area. In such cases it is hypothesized that the proportion of urban income remitted will be significantly larger than for the heads of households with families resident in town. The younger unmarried men will probably fall between these two extremes.

The second set of hypotheses, following the argument of Stark, is premised on the assumption that the initial intent of the rural–urban move was to tap an alternative income source for the rural-based family. Therefore, the proportion of urban income remitted will vary directly with income because the migrant will keep only what is necessary to cover urban living costs.

Similarly, the proportion of urban income remitted will vary directly with the schooling completed by the migrant, the length of the urban stay, the migrant's intent to return eventually to rural farming activity, and the possession of productive land by the migrant or his family. The land ownership hypothesis is a necessary condition for the Stark thesis. The intent to return reflects a commitment to a rural rather than an urban way of life. Therefore, the proportion of income remitted will be higher than for those who see their future lying in town. The basis for the hypothesized relationships between remittance flows and the migrant's education and the length of his urban stay is the assumption that urban income will be correlated positively with both variables. Indeed, entering urban income, education of the migrant, and the length of urban stay simultaneously as explanatory variables may create a problem of multicollinearity.

In summary, the hypothesized regression model is:

$$R = Y^{b_1} E^{b_2} L^{b_3} \exp(b_0 + b_4 H + b_5 W + b_6 F + b_7 P + b_8 T + v) \tag{9.1}$$

where R is the amount remitted per month divided by monthly income as of December 1968; Y is urban income per month as of December 1968; E is the number of years of formal education completed by the migrant; L is the month of arrival in the urban center – January 1964 is set at 13 and December 1968 at 72; H is one if the migrant is married and zero if not; W is one if the migrant's wife is resident in a rural area and zero if not; F is one if the migrant possesses land that produces cash crops or food for family members and zero if not; P is one if the migrant intends to remain permanently in the urban center and zero if not; T is one if the migrant intends to return to farming activity in a rural area and zero if not;* v is a random error term assumed to have a zero mean and constant variance and to be uncorrelated with the explanatory variables. The b's are regression coefficients. The hypothesized signs for the coefficients are: b_5, b_6, and b_8 – positive; b_7 – negative; and b_1 to b_4 – intermediate. The sign for the coefficients of b_1 to b_3 will depend on which of the two theories is found to apply in Kenya.

The set of regression coefficients for the total sample and for each urban center is reported in Table 9.1. The explanatory ability of the regression model is reasonably good

*T and P do not exhaust the possible combinations. There were migrants who intended to return to their rural home area at the time of retirement and others who were uncertain about their plans for the future.

TABLE 9.1 Regression results: the proportion of urban income remitted for the total sample and for each of the eight urban centers: dependent variable is $\ln R$.

Regression number	Urban center	Constant	$\ln Y$	$\ln E$	$\ln L$	H	W	F	P	T	Adjusted R^2	Degrees of freedom
1	Total sample	−6.34	0.41[a]	0.09[a]	−0.19	−0.32	1.54[a]	0.16	−0.18	0.59	0.32[a]	981
			(18.99)	(3.07)	(0.40)	(0.86)	(3.84)	(0.32)	(0.57)	(1.48)		
2	Nairobi	−8.22	0.41[a]	0.18[a]	0.23	−0.27	2.12[a]	−0.52	0.26[a]	−0.15	0.32[a]	340
			(11.40)	(3.32)	(0.53)	(0.44)	(3.25)	(0.48)	(11.57)	(0.24)		
3	Mombasa	−2.49	0.35[a]	0.08	−1.25	−1.87	2.22[b]	0.52	−1.16	2.02[b]	0.28[a]	209
			(7.54)	(1.23)	(1.91)	(1.92)	(2.09)	(0.52)	(1.62)	(2.17)		
4	Kisumu	−10.27	0.39[a]	−0.01	0.78	0.61	0.89	−0.26	−0.46	1.06	0.21[a]	108
			(5.18)	(0.13)	(0.94)	(0.56)	(0.75)	(0.22)	(0.47)	(0.79)		
5	Nakuru	−3.97	0.44[a]	0.04	−0.70	0.43	1.18	1.66	−0.02	0.94	0.52[a]	47
			(5.77)	(0.37)	(0.58)	(0.29)	(0.73)	(0.61)	(0.02)	(0.53)		
6	Eldoret	−8.22	0.40[a]	−0.12	0.00	1.17	0.07	0.61	0.04	2.22	0.42[a]	40
			(5.41)	(1.18)	(0.00)	(0.81)	(0.04)	(0.29)	(0.03)	(0.98)		
7	Thika	−1.73	0.45[a]	0.06	−0.16	−0.37	0.31	1.15	−0.91	1.30	0.19[a]	70
			(4.15)	(0.38)	(1.02)	(0.27)	(0.21)	(0.77)	(1.03)	(0.95)		
8	Nanyuki	−9.95	0.50	−0.03	−0.25	2.69	−0.14	1.10	3.11	0.19	0.02	26
			(1.76)	(0.12)	(0.14)	(1.13)	(0.07)	(0.32)	(1.52)	(0.10)		
9	Nyeri	−0.37	0.52[a]	0.05	−1.48	0.93	−0.49	1.15	0.18	−0.53	0.28[a]	68
			(5.01)	(0.50)	(1.84)	(0.61)	(0.31)	(0.33)	(0.20)	(0.45)		

[a,b]The coefficients are significantly different from 0 at the 1- and 5-percent levels, respectively. The significance of R^2 was determined from the F-test. The numbers in parentheses are t-ratios.

for cross-section data. The adjusted coefficient of variation indicates that 32 percent of the variation in the proportion of income remitted was accounted for with the set of explanatory variables. For the individual urban centers, the explanatory power of the model varies from 2 percent for Nanyuki to 52 percent for Nakuru. The sets of explanatory variables taken together were significant at the 1-percent level in all cases except Nanyuki where the F-statistic obtained was not significant.

Considering first Eq. 1 of Table 9.1, for the total sample, we found that the results appear to support the set of hypotheses associated with the Stark thesis. The coefficients for urban income and education of the migrant are both positive and significant while the coefficient for the length of urban stay has the consistent negative sign, but it is not statistically significant. (Given the way L was measured, a negative sign for b_3 indicates that the most recent in-migrants are remitting a smaller proportion of their urban income.)

These results are basically the opposite of those obtained by Johnson and Whitelaw (1974, Table 2, p. 475) and Knowles and Anker. (Knowles and Anker (1977b, Table 7, p. 30, Eq. (2)) report a significant coefficient with a negative sign for urban income but neither their education variable nor their length of stay variable has a significant coefficient.) Johnson and Whitelaw, using a Nairobi sample not limited to recent in-migrants, found support for what we have termed the Mitchell set of hypotheses for both the variables of urban income and the length of urban stay. The sign obtained for the education coefficient is positive also, as in our case, but they interpret this to mean that the more-educated must remit a larger share of their income because the education costs invested in the migrant by the rural support group represent a debt that must be repaid (Johnson and Whitelaw 1974, p. 476). This interpretation for the education variable may apply here as well. Contrary to expectation, the urban income and the education variables are not correlated. The simple correlation coefficient between the urban income and the education variables was 0.04. This low correlation between the two variables was evident for each of the urban centers as well, with the exception of Eldoret, for which the simple correlation coefficient was 0.39. The better educated chose to remit a larger portion of their urban income even though their superior educational qualifications did not provide them with above-average urban income opportunities at this early stage of their urban residence.

For the variables of urban income and the length of urban stay, the results obtained by Johnson and Whitelaw are the opposite of ours and are more difficult to explain than were the results for the education variable. The men in our sample arrived at their destination during the 2 years before the survey. It is possible that our regression results are dominated sufficiently by recent in-migrants struggling to become established -- and hence remitting a low proportion of a below-average level of income -- that they produce the coefficient signs for these two variables as reported in Table 9.1. Had it been possible to observe the behavior of the men in our sample for a longer time period, the signs of these coefficients might have been reversed to become consistent with the results obtained by Johnson and Whitelaw and also by Knowles and Anker.

The regression results for the other variables are also consistent with the hypothesis that decisions about the proportion of income remitted to rural areas are being shaped by the process of becoming established upon arrival in the urban environment. Both the men who have decided to remain permanently and the men who intend to return to their rural home area are not remitting a significantly different proportion of their income from that

of the men who do not have such concrete plans about the future. Similarly, the possession of productive farmland does not generate an above-average proportion of income remitted. Conversely, the coefficient for the men with wives resident in a rural area is significant at the 1-percent level and has the expected sign. The size of this coefficient, larger than any others, indicates that this factor has a strong influence on the decision to remit urban income.

Comparing the regression results for each of the eight urban centers with those of the total sample does not resolve the difficulty in interpreting the results. Three variables, the length of urban stay L, the measure for head of household H, and the measure of land ownership F, indicate differences among towns in that the signs of the coefficients vary, but none of the coefficients is significant. The coefficient for the education variable is significant for Nairobi only and the signs are different for some of the other towns. The coefficient for the measure of the intent to remain permanently is also significant for Nairobi but has an unexpected positive sign. The intent to return to a rural area in the not-too-distant future proves significant in the case of Mombasa only, with the expected positive sign. The presence of a wife in a rural area causes a significantly higher proportion of income to be remitted only for Nairobi and Mombasa. For the other towns, the magnitude of the coefficients is substantially smaller and actually becomes negative for the smallest two towns – Nanyuki and Nyeri (but the coefficients were not significant).

The only variable that has a consistent positive sign is that for urban income. The regression coefficients are significant in all cases except for Nanyuki. The magnitude of this elasticity of the proportion of urban income remitted with respect to urban income earned is very similar throughout, ranging from 0.35 for Mombasa to 0.52 for Nyeri. The latter is a small town situated in a productive farming area and drawing migrants primarily from the district in which it is located. Mombasa, in contrast, is well removed from the rich farming areas of Kenya with the exception of the narrow coastal strip in which it is located.

Summarizing these results, we find that some men in Nairobi and Mombasa in the early stages of urban residence and, as yet, unable to support a wife in town provide significantly above-average support to their rural-based families. Similarly, the men in Nairobi with higher levels of formal schooling felt obligated to remit a larger proportion of their income rather independent of the level of that income. In all cases, the higher the urban income earned, the larger the proportion of this income remitted. But the elasticity of the proportion of income remitted with respect to income earned is less than 0.5, except for the smallest two towns.

To assist in interpreting these results we turn now to study in greater detail the migrants' intention to remain in town or to return home and their attitudes toward urban employment and rural employment. Such a study of the degree of urban commitment can shed additional light on the role of urban-to-rural remittances in the Kenyan migration process.

THE DEGREE OF URBAN COMMITMENT

Future Migration Intentions

An issue under considerable debate is whether urban in-migrants plan to stay permanently or whether they are merely circulating between rural and urban areas. Earlier studies

on migration have shown a strong tendency for the migrants to circulate, but recently doubt has been cast on the validity of the studies (this literature was surveyed toward the end of Chapter 3).

In an attempt to assess the degree of urban commitment, the men were asked: "Do you wish to stay here for the rest of your life?" (Question 38). Those who answered *No* were asked further: "How much longer do you wish to stay?" (Question 39). The responses to Questions 38 and 39 indicate that 58 percent of the men consider themselves a permanent part of the urban labor force (Table 9.2). (In contrast, for her sample of unemployed migrants in Kampala and Jinja, Hutton (1973, pp. 84–85) found that only 5 percent intended to remain permanently.) An additional 15 percent were uncertain about their future migration plans.

TABLE 9.2 The percentage distribution of the future migration plans of the migrants.

Migration plan	Education		Total sample
	Primary	Secondary	
Men who plan to stay permanently	20	32	23
Men who plan to stay to retirement	36	33	35
Men who plan to leave within 2 years	6	4	5
Men who plan to stay 3 or more years	21	23	22
Men who are uncertain about future migration plans	17	8	15
Total	100	100	100

As indicated in Table 9.2, the men with some secondary education are more intent on remaining permanently. The difference between the two educational groups in their intentions to remain is significant at the 1-percent level. With reference to land ownership, it is the men who have land that is used to produce cash crops who are most intent on remaining for some time, while the men who claim to have land that is still in the hands of their fathers are more likely to be thinking in terms of a temporary stay. For the first group, 65 percent plan to remain permanently or until they retire. For the latter, only 39 percent intended to remain through their working life. Of those who would leave, 59 percent want to return to their home area or to improve a *shamba.* For the 69 percent of the sample who state that they have no land, the distribution of future migration intentions and the distribution of the reasons why they would leave are almost identical to that of the total sample.

For the subset of the total sample that have fathers who possess land, it is the men with fathers who own 6 or more acres who least often have the intention to stay permanently. Within this subgroup, of the 38 percent who plan to leave or are uncertain, 4 percent intend to return to a *shamba*, 7 percent want to return to buy or improve a *shamba*, and 31 percent are "target" workers, i.e., men who want to earn money only to purchase a specific item. Therefore, it is not clear that their greater propensity to want to leave is determined by a stronger desire to return to an available agricultural alternative.

As indicated in Table 9.3, for the 15 percent of the total sample who plan to leave within 5 years, approximately one-third fit the labor circulation category and another third were thinking of leaving because they were unemployed or they wished to improve their

TABLE 9.3 The percentage distribution of the reasons that the migrants gave for leaving their present location.

Reasons for leaving	Migrants who plan to leave within 5 years	Migrants who are uncertain about future migration plans
Target worker	19	11
Target worker, to buy or improve a *shamba*[a]	8	17
Leave to take care of a *shamba*	6	3
Leaving because unemployed	18	13
Wishes to improve his employment status elsewhere	16	30
Other reasons	33	26
Total	100	100

[a]Family land.

employment position elsewhere. Of the men who were uncertain about their future plans, 31 percent fit into the labor circulation category and 43 percent were concerned about improving their employment position. Combining the information from both tables, only 9 percent of the total sample clearly fit the designation of temporary migrants. The survey results confirm the conclusions of the more recent literature, as cited in Chapter 3, that urban in-migrants of the latter half of the 1960s are more likely to consider their urban stay as permanent.

One possibility that had to be considered is that the men who planned to leave or who were uncertain were recent arrivals. If so, the above information would understate the effect of temporary migrants. The distribution of the four future migration possibilities was determined for each of the 5 years in which the migrants had arrived. The variation of the observed distribution from expected values was not statistically significant. Therefore, the hypothesis that the distribution of men who are considering further migration is concentrated among the more recent arrivals had to be rejected.

The men who were considering an additional move were asked: "Where do you think you will go?" (Question 42). Of the 366 men who responded to this question, 20 percent were planning to move to one of the other seven urban centers. Of the remaining 80 percent, 78 were planning to move back to their province of birth, and 2 percent were considering a move to another province (a small number born in Central Province were considering a move to Rift Valley Province and a small number in Eastern Province were planning to go to either Coast or Northeastern Province).

Furthermore, the men who were planning to leave within 5 years and the men who were uncertain about future migration plans had access to more land than the other men in the sample. The differences in the amount of land owned between the men who planned to leave and the men who were uncertain, and the men who planned to remain permanently were statistically significant. The level of availability of this rural alternative appears to have some bearing on the degree of urban commitment.

Although the sample data point to a rather high degree of urban commitment, it may be due more to the apparent superior urban economic opportunities than to an urban way of life. For example, of the men who plan to leave or are uncertain, 16 percent want to leave because they are unemployed and another 22 percent want to try to improve

their employment position elsewhere. In the total sample, the men who were employed experienced an average wage increase from KShs.302 to 339 a month during the first 2 years of urban residence. The men who were employed but uncertain about their future migration intentions started at a lower level (KShs.295) and experienced a smaller increase (to KShs.299). It is possible that this relative deterioration in their wages is a prime cause for their uncertainty about the future. For the others, the degree of urban commitment may be a function of the degree of employment and income security and their satisfaction.

A final piece of evidence that indicates that the basis for the urban commitment is primarily economic is that 35 percent of the men plan to stay throughout their working life only. Whether they will retire to their rural home areas when that time comes remains to be seen. Hanna and Hanna (1971, p. 47), in their brief survey of rural ties, suggest that the desire to return home eventually may be more symbolic than real. Plotnicov (1965), on the basis of field work in Nigeria, concurs in the conclusion of the Hannas. The case studies represented by Weisner (1972) suggest that future migration intentions may change dramatically if employment status in town changes significantly. This is confirmed by the Sierra Leone survey, where economic hardship encountered in town was found to be a more important reason for return migration than a desire to retire (Byerlee *et al.* 1976, p. 59). As a result, it is not unexpected that Hutton (1973, pp. 67–85), for a sample of unemployed men in Uganda, reports substantially lower levels of urban commitment.

The Preference for Urban *versus* Rural Employment

In an attempt to assess the role of the migrant's perception of superior urban economic opportunities in the migration process, two types of questions were asked. First, the men were asked if they would prefer basically the same work and income in their rural home area or their current urban location. In addition, the men were invited to express their opinion on a "back to the land" policy announced by the government in neighboring Tanzania.

The first question was quite hypothetical in that it did not necessarily reflect the migrant's actual urban employment experience. "If you were offered a job paying KShs.200 per month in your home district and the same kind of job also paying KShs.200 here, which job would you rather have?" (Question 46).

Seventy-nine percent of the men said they would prefer the job in their home area. Such a strong perference for the rural job had not been anticipated so, unfortunately, the questionnaire was not designed to probe why the men preferred the rural job. The impression gained by some of the interviewers was that the respondents were well aware of the cost of living in the two locations and recognized that KShs.200 would be a higher real income in their rural home areas than in their current urban location.

It is of interest that in three intermediate-sized towns – Mombasa, Kisumu, and Eldoret – which reported below-average amounts of urban-to-rural remittances, an above-average proportion of the men expressed a preference for the job in their current location. This is consistent with the contention that remitting income reflects an attempt to keep open the possibility to return to the rural home area.

The men who indicated that they preferred the urban job were asked why this was their preference. Twenty-six percent stated that the living conditions were better in town

and 18 percent stated that they had a better chance of obtaining another job in the event that they would become unemployed. For the remainder, 17 percent said that there were more things to do in town, 13 percent claimed that they had more friends in town, and another 26 percent provided a variety of miscellaneous answers. The men with secondary education placed considerably more weight on better living conditions and the nearness of friends than was the case for the men with less formal education. It would appear that some men perceive an urban way of life to have a superior quality that is worth the added cost of urban residence.

The results for Question 46 were cross-tabulated with a number of other variables in an attempt to obtain a profile of the type of people who preferred the rural job and the people who preferred the urban job. A substantially lower proportion than the sample average preferred the rural job in those cases where: (1) the men had been attracted to a particular urban center by the amenities available there or by the kin resident there; (2) the men intended to remain permanently in the urban location; (3) the father of the migrant did not possess any land; and (4) the men were only employed part-time prior to migration. In contrast, a substantially above-average proportion preferred a rural job in those cases where: (1) the men owned land but it was either unproductive or was used to produce food for family members only; (2) the men planned to stay for a limited time period to earn the money needed to buy a *shamba*; (3) the men were farming prior to migration; (4) the men were married and their wives were resident in their rural home areas; and (5) the men intended to leave their urban place of residence during the course of the next 3 to 5 years or they were uncertain about their migration intentions.

The pattern that emerges from such a study of the dominant deviations from the sample mean indicates that the men with limited access to rural resources and with a definite commitment to urban residence are less likely to express a preference for a rural job. Those with access to land that does not appear to be commercially viable at this time are most likely to prefer a rural job. This is especially so for the men with a wife resident in their home areas.

The second question was based on a program announced for Tanzania several months before our Kenya survey. "The Tanzania Government has recently established a law which seeks to re-settle the urban unemployed but landless workers on co-operative farming ventures; or for those who have their own land, the Tanzania Government is sending the urban unemployed back to their land to become farmers. Do you think this is a good policy?" (Question 49). Those who were unemployed were also asked: "Would you be willing to go back to your farm or to a government co-operative, or would you prefer to stay here and continue to try and find work?" (Question 49). Twenty-four percent of the total sample responded to this second part of the question, which indicates that some who were employed responded as well.

The distribution of the opinions of the urban in-migrants on the Tanzania policy is summarized in Table 9.4. The men with some secondary education have more definite opinions than the men with less formal education. The men with secondary education are more prone to agree in principle that the Tanzania policy is a good one but their willingness to participate in such a program is significantly less than that of the men with primary education only. Similarly, the men who had land that was being used to produce cash crops were not interested in such a program.

The men least likely to agree with the policy were those who stated that they were pushed out of their rural home area because they had no land; those who had land that

TABLE 9.4 The percentage distribution of the expressed opinions on Tanzania's back-to-the-land policy.

Response	Do you agree with the policy?		Would you be willing to return under such a policy? (Only 24% of the total sample)	
	Education		Education	
	Primary	Secondary	Primary	Secondary
Agree	53	63	62	41
Disagree	31	29	27	55
Do not know	9	1	5	0
I have not heard of the policy	5	3	3	3
Refuses to express an opinion	2	4	3	I
Total	100	100	100	100

was not being used productively; those who were farming, self-employed, or unemployed prior to migration; and those who had arrived in their urban destination during the year prior to the survey. In contrast, the men attracted most to the policy were the men from Central Province and the men resident in the two smallest towns, Nanyuki and Nyeri. These are the men from areas most accessible to the major urban markets.

The unemployed who were willing to comply with such a hypothetical policy option: (1) arrived in town more than a year prior to the survey; (2) did not intend to remain permanently; and (3) were married and their wives were with them in town. The unemployed men least interested in such a back-to-the-land policy were the recent arrivals and the men who had land.

Several patterns emerge from this brief survey of the dominant deviations from the mean sample distribution of opinions expressed on the Tanzania policy. First, the provision of land does not attract men who already possess land that is being used to produce cash crops. Secondly, the men unable or unwilling to produce cash crops and the men who were at best marginally employed prior to migration were attracted least by a promise of land should they return to a rural way of life. Thirdly, the men whose aspirations have been tempered by a year or more of urban unemployment are much more open to considering a rural option than the more recent arrivals. This result is consistent with Duggan's observation (1969) that young people who had failed to obtain urban employment were more enthusiastic about their involvement in village polytechnic activity than young people who had not as yet attempted a rural-to-urban move.

Fourth, the variation in the preferences has a geographical dimension. The above-average interest in such a policy shown by the men from Central Province is not surprising. Landlessness tends to be most pronounced there. Also, the land in the province, other than the slopes of steep hills, tends to be commercially viable because of regular rainfall and ready access to major urban markets. Finally, the above-average interest expressed by men resident in the two smallest towns which draw men primarily from the immediately surrounding areas may indicate that such migration reflects a distinct preference to remain in one's home locality provided that adequate economic opportunities are available there.

THE ROLE OF RURAL–URBAN REMITTANCES

Summarizing the discussion thus far, we noted that rural–urban remittances were inherent to the migration process. For remittance flows in both directions, the distribution of gross flows among the possible rural–urban combinations did not vary significantly from the observed distribution of the movement of men among these possible rural–urban combinations. In brief, the extent of the financial flows in both directions is determined primarily by the number of men who move from a rural district to an urban center.

Secondly, the purely financial flows on balance favored the rural areas by a substantial margin. This is likely the case, although considerable caution needs to be exercised here because the nature of the survey prevented the measurement of what may well be the most significant rural-to-urban financial flows: all forms of nonmonetary flows were not measured in the survey.

All the evidence on the determinants of remittances and on the degree of urban commitment does not provide support for the hypothesis that the urban in-migrants are seeking to provide an additional means for building up a viable family farming operation. The vast majority of the men interviewed would have preferred to remain in their home areas had it been possible to earn there the income needed to satisfy their aspirations. Given their perception that economic opportunities were more promising in the urban centers than in their home areas, most men indicated an intention to remain in town at least until retirement age. For the minority who were uncertain about their future location preferences or who were intending to leave their current urban place, the desire to find employment or to improve one's employment situation was a key motivating factor. With the possible exception of the limited number who possess land that produces cash crops or who have a father who possesses 6 or more acres of land that is commercially viable, the survey does not give any indication that the migrants see their future in farming and are engaging in urban employment as a means for building up that farming opportunity. At best, 10 percent of the sample behave according to the Stark model.

Rather, the dominant role of the urban-to-rural remittances appears to be to further the interests of the migrant. In effect, such remittances are insurance premiums paid to protect the migrant against the problems associated with losing current urban employment because of lay-offs, disability, or illness. The possibility for such insurance policies exists in Kenya because some form of rural alternative is still available for many migrants even though the income potential is inadequate to satisfy their aspirations.

The determinants of the amount of premiums that need to be paid do not appear to have been studied explicitly. The amount paid tends to vary directly with the size of the urban income, although the proportion of urban income remitted varies inversely with the size of the urban income. The better-educated pay more, even though the education need not generate a significantly higher urban income. But it is not clear whether such payments are part of the insurance premium, merely repayment of a debt incurred when family members financed the education, or possibly some combination of the two. The effect of the level of wealth and income of the rural-based family on the magnitude of the insurance premium is not known. Where a man has a wife to support in the rural home area, the proportion of urban income remitted is significantly higher than is the case for the men who do not have such immediate family obligations.

According to the Johnson and Whitelaw survey in Nairobi (1974, p. 475), the need for making insurance premium payments declines as urban employment becomes more

remunerative and secure. Greater security is not correlated positively in all cases with the length of urban stay and the level of urban income. As Parkin (1971) has argued, the Luo in the Kaloleni Housing Estate in Nairobi tend to earn above-average income and they have considerable job security by virtue of their job seniority that dates back, in many cases, to the Mau Mau emergency in the 1950s. Yet, they have cultivated their ties very carefully with the rural home area through extensive remittances. Parkin attributes this to a fear by the Luo that their position in the Nairobi economy is threatened by a move by the Kikuyu majority to gradually take control of economic activity in Nairobi.

Another dimension that must be considered in a discussion of the role of remittances is the use made of the money by those who receive it. Unfortunately, an urban-based survey is not particularly useful for gathering information on this subject. In a survey of literature drawn from numerous developing countries, Connell *et al.* conclude (1976, p. 98): "The overwhelming weight of evidence suggests that the spending of remittances reflects the poverty and lack of investment opportunities from which the migrant came. The majority of remittances are consumed in everyday household needs, or in conspicuous consumption". Although they find some evidence that remittances are used to pay debts, build homes, and pay school fees, investment in agriculture was not particularly evident.

The limited evidence on the subject provided by Parkin and Weisner indicates that at least for western Kenya, well removed from the major urban markets other than Kisumu, the conclusions reached by Connell *et al.* have general application. Parkin (1971, p. 3) reports that 15 percent of his sample had purchased land in their rural home area and 25 percent had constructed permanent homes on their land. On the basis of two case studies in Kisa location, Weisner (1972, pp. 134–151) lists various uses of remittances: to bring gifts for one's parents and wife; to pay the bus fare for clansmen who wish to seek work in town; to repair the existing rural house or construct a new house in Kisa; to pay school fees for younger brothers; to provide health care and pay school fees for one's own family members; and to buy light consumer durables. He goes on to argue (1972, p. 152):

> Men with wage income are clearly better off in terms of ready cash than those without wage jobs. But there is no evidence that those with current jobs have more rural productive resources when compared to rural network men. At a single point in time, some men with cash income will be able to spend more for school fees, health services, and food than will non-employed. But for the 75 percent of network men who are basically similar in years of urban experience, little difference in productive resources seem to be present.

In conclusion, the urban-to-rural remittances serve primarily as a means of income redistribution between urban and rural areas. Their effect is to improve the quality of life in the form of better housing, better health care, more access to consumer durable goods, etc., for some households in the rural areas. For some young people, the range of opportunities is broadened in that their school fees are paid and bus fare to an urban center is made available. To the extent that the remittances flow to parents and village elders who use them as a means to enhance their prestige in the village, the remittances can be seen as keeping the traditional systems functioning in the rural areas. Therefore, it is not merely a matter of a failure to use the remittances for development; they may be used to prevent the change required for development.

10 INTERURBAN MOVEMENTS

> We have already proved that the great body of our migrants only proceed a short distance, and that there takes place consequently a universal shifting or displacement of the population, which produces "currents of migration" setting in the direction of the great centres of commerce and industry which absorb the migrants (Ravenstein 1885, p. 198).

> Whenever I was able to make a comparison I found that an increase in the means of locomotion and a development of manufactures and commerce have led to an increase of migration. In fact you need only seek out those provinces of a country to which migration is proceeding most actively, and you will either find yourself in the great centres of human industry, or in a part of the country whose resources have only recently become available. Migration means life and progress; a sedentary population stagnation (Ravenstein 1889, p. 288).

In subsequent migration literature, it has been assumed that this step migration aspect of Ravenstein's "Laws of Migration" is the basis for the role of interurban migration in the rural–urban migration process. Especially in Latin America, this step migration concept has been found to be applicable.

The data collected in our survey cannot be used to analyze the urban-to-urban migration process because long-term residents were not included in the sample. (The full extent of urban-to-urban migration is not known. According to the 1969 census, 1 percent of all male urban in-migrants and 2 percent of the female urban in-migrants were born in Nairobi and Mombasa.) As a result, our discussion of interurban movement is limited to the subset of all urban-to-urban migrants who also made a rural-to-urban move at some time during the 1964–1968 period. As such, the data are well suited to determine whether step migration, as observed by Ravenstein in nineteenth-century England, is also evident in Kenya.

MAGNITUDE OF THE FLOW

The results of our migration survey indicate that 12 percent (131) of the men made an urban-to-urban move subsequent to their rural-to-urban move (Table 10.1).* In terms of the number moving between towns, Nairobi provides one-third of the migrants and

*The extent of subsequent urban-to-urban movement observed here is much lower than in Sierra Leone, where the men surveyed had, on average, lived in two urban centers other than their current urban residence by the age of 25 (Byerlee *et al.* 1976, p. 54). Conversely, in Uganda, Hutton (1973, pp. 50–51) reports that almost 80 percent of her sample had searched for employment only in the one urban center which they were located in at the time of her survey.

TABLE 10.1 The percentage distribution of the source of the urban-to-urban migrants in each urban center.

Migration source	Migration destination								Total	Total urban out-migration as a % of total in-migration
	Nairobi	Mombasa	Kisumu	Nakuru	Eldoret	Thika	Nanyuki	Nyeri		
Nairobi		63	57	74	50	85		82	33	7
Mombasa	24		6	15		3	33		14	8
Kisumu	2	16		7		3	33	9	5	9
Nakuru	32	21	17		12	3		3	22	52
Eldoret	5		8			3			4	13
Thika	18		6	4	26				11	56
Nanyuki	5				2			6	3	52
Nyeri	14		6			3	34		8	61
Total	100	100	100	100	100	100	100	100	100	12
Urban-to-urban migration as a % of total in-migration	10	10	13	29	14	31	6	13	12	
Number of observations	66	23	9	15	5	8	1	3	130	

Nairobi and Mombasa together account for almost half of the urban out-migrants. The other major contributor is the fourth largest urban center, Nakuru. For individual centers, Nairobi contributes at least half of the urban-to-urban migrants for each with the sole exception of Nanyuki, which drew very few migrants from an urban source.

When viewed from the perspective of total in-migration, the contribution of urban sources is within 2 percentage points of the sample average for five of the eight urban centers. The exceptions are Nakuru and Thika, where in-migration from urban sources is higher, and Nanyuki, which is well below average. Both Nairobi and Mombasa draw proportionately less from urban sources than the sample average.

Marked differences between urban centers are evident if total urban out-migration is expressed as a percentage of total in-migration. Here we observe that Nairobi and Mombasa lose only 7 and 8 percent, respectively, of their in-migrants. Conversely, four of the six smaller towns lose more than half of their in-migrants to one of the other towns. The two exceptions are Kisumu and Eldoret, the third and fifth largest towns.

In Table 10.2, the destination of the urban out-migrants is reported. Here we note that half of the migrants go to Nairobi and more than two-thirds go to the cities of Nairobi and Mombasa. For six of the seven centers, a minimum of 74 percent of the out-migrants

TABLE 10.2 The percentage distribution of the urban destinations of the out-migrants from each urban center.

Migration source	Migration destination								Total
	Nairobi	Mombasa	Kisumu	Nakuru	Eldoret	Thika	Nanyuki	Nyeri	
Nairobi		36	12	27	6	15		4	100
Mombasa	83		3	12		1	1		100
Kisumu	15	59		17		4	2	3	100
Nakuru	74	17	5		2	1		1	100
Eldoret	78		17			5			100
Thika	83		4	4	9				100
Nanyuki	83				14			3	100
Nyeri	91		5			2	2		100
Total	51	18	7	12	4	6		2	100

go to Nairobi. The exception is Kisumu, where 59 percent go to Mombasa and 17 percent to Nakuru. Although Mombasa is the most distant center form Kisumu, there is a direct rail link which makes it as accessible as the other centers with the exception of Nakuru and then Nairobi. Secondly, Mombasa, because of its lower altitude, has a climate most similar to that of Kisumu.

The information from this second table provides direct support for the step migration thesis. With only limited exceptions, the smaller towns are losing a significant proportion of their in-migrants and the vast majority of them are going to Nairobi. Yet Nairobi also contributes a large number of out-migrants and one-quarter of them are going to the smallest four towns. Therefore, the interurban movement appears to be a more complex process than a mere stepwise migration to the larger urban centers. As a means of understanding

this more complex process, we turn now to the questions of who is migrating and why they are migrating.

CHARACTERISTICS OF THE MIGRANTS

In his discussion of the characteristics of migrants, Lee (1969, p. 295) puts forth the hypothesis that migrants who are leaving because of minus (push) factors at their points of origin will be "negatively selected"; that is, these migrants will be economic or social failures in their place of origin. Conversely, if the dominant cause of migration is plus (pull) factors at the destination, then migrants will be "positively selected."

To determine the relative importance of such minus and plus factors in the interurban movement of the men in our sample, a comparison was made between the employment and income experience of the interurban migrants and the total sample at both the place of origin and the destination of the interurban migration. At the destination, it is possible to separate the interurban migrants from those in the total sample who had not moved from their initial urban destination, so the comparison will be made between the urban-to-urban migrants and the remainder of our sample.

Considering employment status first, we note in Table 10.3 that only 2 percent of the interurban migrants were self-employed in their previous location, but 41 percent were unemployed. The latter is much higher than for the total sample (24 percent unemployed in the first quarter after migration, 15 percent in the fourth, and 13 percent in the eighth quarter; see Table 6.4). The few who were self-employed all obtained wage employment in their new location within the first quarter after migration. For the unemployed, 61 percent were employed within the first quarter and 37 percent were still searching for employment. For the 57 percent who were wage-employed previously, the job search in their new location was more productive; 80 percent were again wage-employed and only 19 percent were unemployed. Combining all three, we observe that 26 percent were unemployed, which is slightly higher than the 23 percent for the remainder of the sample. But 73 percent were wage-employed, though 66 percent were wage-employed in the remainder of the sample. As a result, the interurban migrants either have a distinct aversion to self-employment or they were not forced to rely on it as much as the remainder of the sample.

With reference to average income in the previous urban location, the interurban migrants cannot be seen as obvious economic failures relative to the total sample. For the interurban migrants, average income was KShs.235 a month, which is 10 percent above the first-quarter level for the total sample and 85 percent of the eighth-quarter level for the total sample. (Thirty percent of the interurban migrants had been resident in their previous location for less than 1 year, while 70 percent had lived there for more than a year.) Among urban centers, there are marked differences: in Mombasa, Nakuru, and Eldoret, the average income of the interurban migrants was above the eighth-quarter average for the total sample; in Nyeri, Kisumu, Nairobi, and Thika, the interurban migrants were earning, on the average, substantially less than the average for the total sample. In these latter locations, a combination of limited employment prospects and relatively low wages faced by the interurban migrants may be a reason for their seeking better prospects elsewhere. Therefore, some of the interurban migrants appear to have been economic failures, but the proportion is sufficiently small that, on the average, this cannot be the case.

TABLE 10.3 A comparison of the employment status in the urban place of origin and the employment status in the current location during the first quarter after migration (percentage).

Previous location employment	Previous location employment distribution	Current location employment			Total
		Self-employed	Wage-employed	Unemployed	
Self-employed	2		100		100
Wage-employed	57	1	80	19	100
Unemployed	41	2	61	37	100
Total	100	1	73	26	100
Remainder of the sample		10	67	23	100

Turning to the postmigration income experience of the migrants, we observe evidence of plus factors in the destination shaping the interurban migration process (Table 10.4). First, the interurban migrants earned an average income in the first quarter after migration which is 46 percent above that for the remainder of the sample.* This advantage is especially evident in Eldoret and Mombasa, while in Nairobi, the relative gain is only slightly above average.

A major part of this superior income status is a wage level for the interurban migrants 30 percent above that obtained by the remainder of the sample during the first quarter after migration.** The relative difference in wage levels corresponds directly to the relative differences in average incomes between the two groups, with the exception of Nakuru. There, a 39 percent higher wage level generated an average income only 6 percent above that for the remainder of the sample, indicating that employment prospects at this relatively high wage were not particularly good.

Combining the results obtained from this comparison of employment and income prior to and subsequent to migration, we obtain only limited evidence of minus factors in the origin area propelling migrants elsewhere. The evidence of plus factors in the destination area attracting migrants is considerably stronger but not conclusive. Neither the higher income nor the higher wage obtained by the interurban migrants was significantly different from the income and wage levels of the remainder of the sample.***

The relative strength of the pull factors indicated that the migrants are positively rather than negatively selected. The available evidence on the personal characteristics of the migrants indicates this to be the case. First, with reference to the education, the proportion with secondary education is 42 percent for the interurban migrants, which is significantly above the 26 percent for the remainder of the sample.†

Similarly, the proportion of the interurban sample who are "active" migrants is significantly higher for the interurban migrants (55 percent *versus* 33 percent).

For other personal characteristics such as age, the proportion not married, the proportion who can be identified with the dominant ethnic group in the destination, and the proportion without land, the differences between the two groups are not statistically significant. This is as expected because none of these characteristics can be identified as obvious positive or negative attributes with reference to interurban migration.

DETERMINANTS OF THE INTERURBAN MOVE

As indicated previously (Table 4.6), the dominant reason (for 60 percent of the sample) for selecting a particular urban destination was the employment prospects perceived to be available there. The presence of kin there ranked a distant second (24 percent).

*The difference between the two income levels is not statistically significant on the basis of a "student-t" test.

**The difference between the two wage levels is not statistically significant on the basis of a "student-t" test.

***The average income level in Nyeri was also lower for the interurban migrants as was the average wage obtained by the interurban migrants to Nanyuki, but the numbers involved here were too small to consider the estimates reliable.

†The difference is significant at the level of $p < 0.05$ using a "student-t" test.

TABLE 10.4 A comparison between the interurban migrants and the remainder of the sample of the level of average income and wages obtained during the first quarter after migration (KShs./month).

Current urban location	Interurban migrants		Remainder of the sample		Interurban migrant income as a % of the remainder of the sample	
	Average income	Average wage	Average income	Average wage	Average income	Average wage
Nairobi	335	426	221	325	152	131
Mombasa	270	326	136	217	199	150
Kisumu	272	271	228	268	119	101
Nakuru	173	325	163	233	106	139
Eldoret	528	634	141	222	374	286
Thika	220	251	204	232	108	108
Nanyuki	220	220	207	231	106	95
Nyeri	71	360	218	300	33	120
Total	295	379	202	292	146	130

If we compare this distribution of the answers to Question 7 for the total sample with the responses given by the subset of the sample who were interurban migrants, we note that the two distributions are almost identical (see Table 10.5). The only real difference is that the presence of kin is less important for the latter. Given that the current location is a second choice and that the interurban subset has a significantly higher proportion of "active" migrants, the smaller role of kin as a reason for selecting a particular destination is to be expected. Among urban centers, the dominant differences in the distribution between the two tables are for Eldoret and Nanyuki, where all other reasons have collapsed into the employment prospects category for the interurban migrants.

Given the dominant role of employment prospects and the declining role of the presence of kin as a reason for selecting a particular urban destination, we need to consider the difference in income earned by the interurban migrants in the two urban locations and whether they received assistance from kin on arrival in their current location. The extent of the income differential is reported in Table 10.6.

We note, first, that all column totals, except for the zero differential for Nanyuki, are positive. On the average, the interurban migrants to each of the eight centers improved their earning power by KShs.87 a month through their change of location. This improvement in income is consistent with the improved employment status reported in Table 10.3 and the higher wages obtained by interurban migrants reported in Table 10.4. There are only four negative income differentials – two of these are in movements to Nairobi. The four migration sources for these negative differentials were the four intermediate-sized towns. In only one case, Nakuru to Nyeri, was the flow for a negative differential to a destination smaller than the source. It is to be expected that the limited number of negative differentials reflects primarily a migrant's inability to obtain employment in a location by the end of the first quarter.

With reference to assistance provided by kin, the relevant comparison is between Tables 10.7 and 7.4. Again, the distributions are strikingly similar; the average number of months of assistance received is only marginally lower for interurban migrants. Also, the proportions in the two tables not receiving any assistance are within 5 percentage points of each other. Among urban centers, there are substantial differences between the two for several urban centers. In Kisumu, Thika, and Nanyuki, a larger proportion of the interurban migrants were receiving assistance than of the total sample.

Combining the information from Tables 10.6 and 10.7, we found that the results are consistent with the emphasis that the migrants place on employment prospects as the reason for selecting their destination. Even though the presence of kin is less important for the interurban migrants than for the total sample, the men did not receive significantly less assistance on arrival from kin than did the total sample. The interurban migrants are basically similar to the total sample in their motivation and in their reliance on kin as a point of entry into the urban scene.

Finally, this similarity between the interurban migrants and the total sample is also evident in the future migration intentions of the men (see Tables 10.8 and 9.2). The only real difference in the two distributions is that the interurban migrants with secondary education place less emphasis on staying until retirement and more on staying for a given number of years. No doubt, should an opportunity to improve their situation arise, many of the men with secondary education would be willing to move on to yet another location.

TABLE 10.5 The percentage distribution of the reasons given by the interurban migrants for selecting their particular migration destination.

Reasons for selection	Urban center								Total
	Nairobi	Mombasa	Kisumu	Nakuru	Eldoret	Thika	Nanyuki	Nyeri	
Best employment prospects	64	41	83	65	100	52	100	18	60
Schools available	5	3	6	11		8			5
Social amenities available	2								1
I have kin here	11	33	11	13		32		82	18
It is close to my home	1	3							1
Other reasons	17	20		11		8			15
Total	100	100	100	100	100	100	100	100	100

TABLE 10.6 Average difference in income between the previous urban location and earnings obtained in the first quarter after migration in the current urban location (KShs./month).

Previous location	Current location								Total
	Nairobi	Mombasa	Kisumu	Nakuru	Eldoret	Thika	Nanyuki	Nyeri	
Nairobi		126	260	49	629	96		0	137
Mombasa	120			107					117
Kisumu	−60	107		120		0	0	52	83
Nakuru	29	48	253		0	280		−60	54
Eldoret	−640		170						−387
Thika	87		160	−60					79
Nanyuki								180	180
Nyeri	0								0
Total	17	11	233	61	472	103	0	8	87

TABLE 10.7 The percentage distribution of the average amount of assistance received in each urban center by interurban migrants during the first full quarter after migration.

Months of assistance	Nairobi	Mombasa	Kisumu	Nakuru	Eldoret	Thika	Nanyuki	Nyeri	Total
No assistance									
Room	60	51	43	65	87	48	67	97	58
Food	74	58	71	76	87	80	67	100	71
One month									
Room	2	3	6	4	13	4			3
Food	2	6		4	13	4			4
Two months									
Room	7		6			4			4
Food	7	3							4
Three months									
Room	31	46	45	31		44	33	3	35
Food	17	33	29	20		16	33		21
Total	100	100	100	100	100	100	100	100	100
Average number of months									
Room	1.1	1.4	1.5	1.0	0.1	1.4	1.0	0.1	1.2
Food	0.7	1.1	0,9	0.7	0.1	0.5	1.0	0.0	0.8

TABLE 10.8 The percentage distribution of the future migration plans of the interurban migrants.

Migration plans	Education		Total
	Primary	Secondary	
Men who plan to stay permanently	22	32	26
Men who plan to stay to retirement	37	21	30
Men who plan to leave within 5 years	17	21	19
Men who plan to stay 6 or more years	10	13	11
Men who are uncertain about future migration plans	14	13	14
Total	100	100	100

TABLE 10.9 A ranking by various characteristics of the eight urban centers.

Urban center	Population size	Amenity index	Modern sector average wage	Number of modern sector jobs created 1964–1968	Number of in-migrants from urban sources	Inverse ranking of proportion of in-migrants who left for another urban center
Nairobi	1	1	1	1	1	1
Mombasa	2	2	2	4	2	2
Kisumu	3	3	4	3	4	3
Nakuru	4	4	3	6	3	5
Eldoret	5	5	5	2	6	4
Thika	6	6	8	5	5	7
Nanyuki	7	7	6	8	8	6
Nyeri	8	8	7	7	7	8

THE ROLE OF THE DIFFERENT CITIES AND TOWNS

The evidence of step migration in Kenya includes the high proportion of in-migrants to most of the smaller towns who move on to another urban center and the improved employment and income levels of the migrants in this subsequent location. As a final means of assessing the relative roles of the different cities and towns of Kenya in its urbanization process, the urban centers were ranked by various indicators of economic activity as well as by the extent of interurban migration (see Table 10.9). In all except the last column, the ranking is from the highest to the lowest.

We note first that the rankings for population size and the amenity index are identical. Our discussion here will be in terms of population size but it is recognized that this variable also stands for amenity availability. Secondly, with reference to modern sector wage levels, Nakuru advances one level. Thirdly, even though there are marked differences between urban centers in the level of modern sector employment, new job creation is not proportional in all cases to the level of employment. Here both Nakuru and Thika advance two levels while Mombasa drops to fifth position. The relative positions of Nanyuki and Nyeri are reversed as well.

Comparing interurban migration with these urban indicators, we note that Nakuru, Thika, and Nyeri each move up one level in the number-of-in-migrants column. For Nyeri, this is consistent with the relative level of wages and the employment creation occurring there, but for Nakuru, it is consistent with the relative wage ranking only, since wage levels there are relatively low. But in Thika, assistance from kin is relatively high. For the proportion of in-migrants who leave for another urban center, the ranking is the inverse of the population size column with the exception that both Eldoret and Nanyuki move up one level. For Eldoret this is consistent with its relatively high ranking in the job creation column; for Nanyuki it is consistent with the ranking shown in the wage level column.

In conclusion, Nanyuki and Nyeri are very local towns, drawing migrants primarily from the districts in their immediate vicinity (Chapter 3) and filtering a significant proportion of them on to larger centers. Thika would fall into the same category except that its proximity to Nairobi complicates the dynamics of the labor market there. Nairobi, and to some extent Mombasa, by virtue of their size and the extent of high-wage industries concentrated there, dominate the urbanization process. Not only are they the primary destinations for the total sample, but they are also the primary destinations for the interurban migrants.

11 THE IMPACT OF PUBLIC POLICY ON MIGRATION AND EMPLOYMENT

In Chapter 2 the colonial policy of concentrating centers of economic growth in a limited number of geographic locations was described briefly. At the conclusion of the chapter the observation was made that the strong commitment to achieving economic growth in the postindependence period has kept the colonial economic structure basically intact. The migration survey results, as reported and analyzed in the subsequent chapters, have shown rural-to-urban migration to be a rational response by some members of the rural labor force to this geographic concentration of economic opportunities.

In this concluding chapter attention is directed to the aspects of the migration process that are amenable to public policy. First, we develop further the precise nature of the aspects of the existing economic structure that shape and determine the migration process. Second, a variety of policy options that can directly affect the migration process are presented and the likely effectiveness of each is assessed. Finally, some attention is devoted to additional, more radical policies that could change the aspects of the existing economic structure that are the underlying causes of the current internal migration.

THE STRUCTURE OF THE URBAN ECONOMY

As summarized in Chapter 2, the Kenyan economy has displayed commendable advances since independence. First, the annual rate of growth of gross domestic product through 1968 was just over 6 percent. This rate of growth has been maintained into the 1970s (Development Plan: 1974–1978 (1974), Vol. I, p. 148). In addition, entrants into secondary schools have more than doubled and the number of secondary school-leavers has more than tripled (Kinyanjui 1973, p. 79).

Less commendable is the unequal distribution of benefits generated by these advances in the economy. The scanty evidence available indicates that most of the benefits accrue to a small minority: approximately 13 percent of the households obtain 72 percent of the annual income flow generated in the economy (Rempel 1975, Table 1). This minority includes owner-operators of large-scale businesses and farms, skilled and some semiskilled employees, and the owners of some of the smaller businesses and cash crop farms.

Their position in the economy provides this minority with several important privileges: they control the important means of production; they claim virtually all of the rent and operating surplus generated in the economy; they dominate the demand for output and hence largely determine what goods will be produced in the modern sector.

Given the taste preferences of this wealthy minority, the type of goods and services demanded frequently require technology and capital beyond the immediate capability of existing or potential Kenyan businessmen.* To overcome import constraints, foreign firms

*The effect of this concentration of demand for particular goods and services is reinforced by the emphasis placed on tourism in Kenya's development strategy.

have been invited to supply the required technology and capital. Protection against imports was provided as an inducement where necessary. An additional inducement provided such firms, as a means of obtaining and retaining their services, was the provision of a particular type of infrastructure in certain urban localities. This infrastructure causes other firms and government to concentrate their activities in these same localities. The combination of these forces has served to agglomerate most modern sector employment in a selected number of urban centers.

For such foreign firms with a limited capacity to manage a diverse local labor force, the type of technology that has minimal labor requirements will be preferred. For this type of technology, high labor turnover increases significantly the risk of being able to maintain a desired level of profits over time. (A foreign-owned firm, relying on a transfer-pricing mechanism to repatriate profits to a parent company, seeks to minimize the variance in profits over time as well as to maximize the level of profits. The transfer-pricing mechanism does not lend itself to repatriating widely fluctuating levels of profit.) To obtain the desired labor force stability a firm may well find it advantageous to invest some current profits in higher wages to stabilize a desired level of profits over time.

Where the initial wage increase generates a "reserve army" of visibly unemployed at the factory gates, the firm provides the current employees with a powerful incentive to remain at their jobs. (According to Mr. D. Richmond, Chief Executive Officer of the Federation of Kenya Employers, labor turnover in most of the firms represented by the federation had dropped below 5 percent a year by 1967/68.) Once labor force stability has been accomplished, the firm will continue to pay above the wage necessary to obtain a desired supply of labor because of the increased labor efficiency made possible by low labor turnover. For a detailed discussion of this concept see Rempel and House (1978, pp. 78–81).

To initiate this process a firm must have sufficient financial resources to purchase the advanced technology and to pay the initial higher wages. Provided the labor market is competitive, any one firm will not know the exact amount of the initial premium it has to pay to purchase labor force stability. As a result, a number of firms, and possibly government, may well bid up wages beyond the level required for their initial purposes. For the firms that can pass such cost increases on in the form of higher prices and for government which can pass the higher wage costs on in the form of higher taxes, such initial trial-and-error mistakes need not present a serious problem.

For the purpose of subsequent analysis we will refer to employment in such firms and in government as "sheltered" employment. The employed are sheltered in the sense that the firm pays a wage above what would be necessary to induce an adequate labor supply. The firm pursues this wage policy to obtain a stable labor force so its employees are protected against the unemployed lined up outside the firm's gates. This protection does not reflect control by employees over their work conditions; employers are not beyond using these potential replacements as a means of controlling their present employees.

The remaining modern sector firms, with limited financial resources and facing effective competition in the product market, will be forced out of the game of purchasing a stable, more efficient, selected labor force. As a result, employment in these firms will be labeled "competitive" employment. In practice the two employment lotteries cannot be identified as separate entities but it was useful to separate them conceptually. The balance of the urban labor force will either need to seek some form of employment in the informal sector or will remain unemployed.

In Figure 11.1 an attempt is made to summarize this information as a set of employment prospects that confronts urban in-migrants. The urban "pull" is seen to be the "sheltered" employment and, possibly for the unskilled, the "competitive" employment. The hiring process, based heavily on education as a means of selection and influenced significantly through kin already employed, serves to channel where the in-migrants go. For those who go the employment lottery routes, realization of employment (level 4) can take some time so kin also provide support during this time of job search. The dual roles of kin already resident in town provide the migration process with its own internal momentum: the more people there are in town the greater the potential to assist new entrants.

The informal sector is portrayed as primarily a residual employer rather than the place where in-migrants queue for the available modern sector jobs. Some of the successful entrepreneurs in the informal sector are voluntary drop-outs from "competitive" employment. At level 6 in the flow diagram the urban income, Y_u, is to be seen as something that can change dramatically as employment status changes. Hence, a layoff or an inability to work because of a disability may be the immediate cause of the urban out-migration shown in the flow diagram. For other participants in the urban labor market, Y_u is to be viewed also as a level of income that is compared by the migrant with the level of income perceived to be available in his home area or in some other potential migration destination.

POLICY DEALING WITH SYMPTOMS OF MIGRATION

Established urban residents are notably concerned about the extent of urban in-migration because excessive numbers coming in can be a threat to the way of life of the urban residents. Therefore, policy designed to control in-migration is not merely being considered but in some cases is being put into effect in Kenya. We examine the basis for these policies in this section. It is recognized that such policies may have some immediate effect on the extent of in-migration but in most cases they deal with symptoms rather than underlying causes. Policies attacking the causes are addressed in the concluding section.

The Availability and Content of Education

The survey and census data analyzed in this study indicate a definite positive correlation between the level of formal schooling completed and the propensity to migrate to an urban location. In Chapter 5 we reported that the extent of the gap in the proportion that had completed a given level of schooling between the migrant sample and the total rural male population varied directly with the level of schooling completed. Further, we reported that the completion of a particular education stream served to affect the timing of the rural-to-urban move. The regression results reported in Table 4.1 indicate a significant, positive relationship between the proportion of school-aged children in a district with formal education and the odds of a rural-to-urban move.

This evidence suggests that reductions in expenditures on formal schooling might reduce the extent of rural-to-urban migration, at least temporarily. Whether such a policy could be implemented is another matter. Given the role of education as a prerequisite for

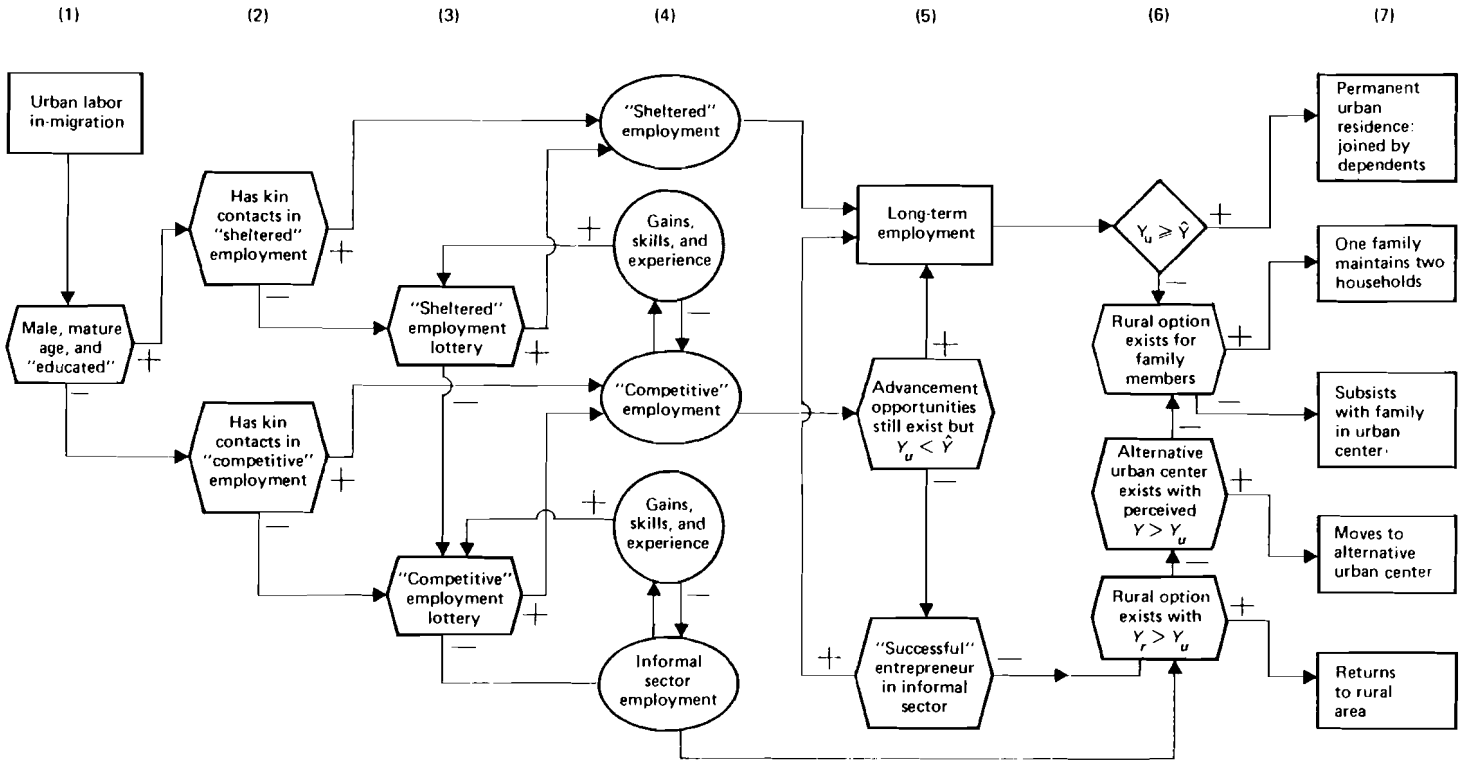

FIGURE 11.1 A model of urban options available to a migrant. Symbols: + = yes, win; − = no, lose; Y = household income; u = urban; r = rural; $\hat{Y}$ = desired level of household income.

participating in the "sheltered" employment lottery, the stimulus to obtain formal schooling is very strong for many young people and parents. According to the government of Kenya, the rapid increases in secondary school enrollment " . . . have as their basis the conviction, on the part of almost all Kenyans, that education is very nearly the only ladder to high status, to good jobs and associated high incomes" (Sessional Paper on Employment 1973, p. 47).

Therefore, the starting point for policy change with reference to education will have to be the "sheltered" employment: both in the level of wages paid and in the use of education as the primary selection device. Any reduction in the attractiveness of "sheltered" employment would reduce the role that primary education now plays as the means to advancement.

Such a change would have several beneficial effects on the economy. First, the projected increase during the period 1975 to 1985 of school-leavers who will not be absorbed by wage employment is from approximately 150,000 to 500,000 (Federation of Kenya Employers 1976, Table 13A). Any decline in the enrollment of people who do not finish school (people who use government education funds but do not contribute to development) will better enable the government to achieve its stated objective of reducing education costs from 15 percent to 11 percent of its annual expenditures.

Second, the incentive of people to repeat standard VII in the hope of obtaining secondary school admission would be reduced. The potential reduction in wasted resources here is substantial. A survey in one district reported that as many as 78 percent of the students who failed to gain admission into a secondary school repeated standard VII (Somerset 1973, p. 27). The median time for completing the 7-year program was 8.2 years.

Third, changes in the need for secondary education for an opportunity for rapid personal advancement would open the possibility for redirecting the tremendous community energies and substantial local resources that have gone into building Harambee (self-help) secondary schools. These schools have become low-quality carbon copies of the government-supported secondary schools. The result is an educational system which is " . . . not only producing the least needed type of manpower but also of low academic quality" (Kinyanjui 1973, p. 96). The community development potential of an alternative use of these resources and energies could be substantial.

Finally, such a proposed change in the incentive system could open the door for effective curriculum reform. The content of the existing curriculum is characterized by what doctors, engineers, teachers, economists, and administrators will need to know, not by what is useful for rural development (Somerset 1973, p. 37). The premium placed on rote learning to obtain high scores on exams given at the end of each educational stream is generating graduates who lack both the skills and the self-confidence to venture out on their own in some form of self-employment (Kinyanjui 1973, p. 95; Federation of Kenya Employers 1976, p. 48).

The Federation of Kenya Employers states (1976, p. 93): "The content of education even at present, bears little relevance to the economic needs of the country, especially the rural areas." At another point (p. 39), they argue: " Employers, students and parents have no significant control over curricula."

It is our contention here that the federation, in the form of those of its members providing "sheltered" employment, does indeed determine the content of the current curriculum. Further, the educational system is serving these firms well. It provides a suitable

employment screening device and it generates secondary school graduates who have developed desired work habits and acquired some desired academic skills. The potential for using public policy to change the availability and content of education to decrease rural-to-urban migration is constrained severely by the actions of those firms that are operating the "sheltered" employment system.

Expansion of Urban *versus* Rural Employment Opportunities

According to the migrants surveyed the spatial distribution of the employment opportunities is at the crux of the migration problem (see Tables 4.5 and 4.6). As a result, one would expect, *ceterus paribus*, that any job creation projects in the towns will draw in more migrants since the odds of winning in the urban employment lottery will rise.

Given that the rate of urban in-migration is correlated positively with the rate of urban job creation and that the odds of a rural–urban move vary inversely with our measure of urban employment prospects, we expect that the labor supply elasticity with respect to the urban job creation is larger than one.* As we indicate in Chapter 4, our measure of urban employment prospects probably is capturing the increased unemployment caused by the surge of in-migrants who are responding to the new employment opportunities. This was borne out by the labor supply response to the employment creation inherent in the 1964 and the 1971 Tripartite agreements.

With reference to the other half of the policy question, whether expanding rural employment will serve to stem the extent of rural-to-urban flows, there is some debate. According to the migrants the answer would be in the affirmative. Seventy-nine percent said that they would prefer to live in their rural home areas provided comparable employment to that in town was available there (based on responses to Question 46 as analyzed in Chapter 9). Further support for the position taken by the respondents is evident in the fact that the bulk of the new economic opportunities have been in the rural areas. These new opportunities are serving to absorb the majority of the new entrants into Kenya's labor force (Federation of Kenya Employers 1976, p. 118).

Evidence to the contrary hinges on the adequacy of these rural options relative to the employment opportunities available in the towns. The Federation of Kenya Employers estimates that approximately 30 percent of the rural households do not have access to land (1976, p. 188). This is similar to our finding that 36 percent of the migrants were from landless households. In addition, the Federation of Kenya Employers argues that approximately one-fourth of the small-holder farmers do not have access to sufficient land to be able to produce a subsistence income from farming (1976, p. 8).

Some of these rural poor can be expected to look to the towns for a means of survival. Our flow diagram (Figure 11.1) would locate them primarily in the informal sector even if income available there is very low. Evidence that the landless are concentrated in informal activities in the urban slums is provided by Ross (1973, p. 143) in his study of Mathare Valley in Nairobi.

In addition to the rural poor there are those households which may well have an income above subsistence but it is too low to enable them to fulfill their aspirations ($\hat{Y}$).

*In an unpublished paper Scott (1972) provides a set of assumptions and a range of parameter values for Kenya which would generate a labor supply elasticity less than one.

For these households it is not merely a matter that rural employment opportunities are available; if a rural-to-urban move is to be prevented the level of income generated by the employment must be comparable to what household members perceive to be available to them in town.

Some rural employers find it difficult to recruit an adequate labor supply. This fact, together with the fact that open unemployment is evident in the towns, indicates that not all rural employment opportunities provide a level of remuneration comparable to what people hope to obtain elsewhere. The Federation of Kenya Employers attributes these rural labor shortages to the perverse effect of education which turns people against farm labor (1976, p. 39). In contrast, both Gwyer (1972, p. 4) and Wasow (1973, p. 25) attribute these labor shortages to the low wages and poor working conditions inherent in these jobs. For the better educated at least, modern sector employment in town is probable enough that they can exercise some choice with reference to where they will work.

The creation of new employment opportunities in rural areas is a policy option under direct control of the government. First, it can exercise some control over the spatial location of its activities. In addition, the Ministry of Agriculture can be instrumental in the promotion of the type of farming techniques which increase labor productivity but minimize the substitution of capital for labor. The Johnston and Kilby (1975) unimodel approach to agricultural development, with backward linkages to the type of agricultural inputs that can be produced within Kenya without primary reliance on outside sources of technology, capital, and entrepreneurship, would be an appropriate model to pursue.

Where such rural development efforts are implemented it must be recognized that the aspiration levels of the households involved may also be raised by these development projects. If so, these projects may induce rural-to-urban migration if the increased rural income generated by the projects is less than both the new aspiration levels of the households and the income they perceive to be available to their members in one of the urban centers.

Changes in Urban *versus* Rural Wage Levels

The initial extension of the Todaro migration model by Harris and Todaro (1970) advocated an urban wage subsidy as a means for absorbing the urban in-migration. Although they did not consider all the implications of such a subsidy (see Stiglitz 1974), and their position was premised on the unrealistic assumption that modern sector labor–capital ratios are quite responsive to changes in relative factor prices, this article did serve to focus attention on wage policy as the prime mechanism for affecting the migration process.

Reducing rural-to-urban wage differentials as a policy approach has considerable intuitive appeal. For a given probability of winning in the urban employment lottery the reward for winning varies directly with the magnitude of the urban wage. Conversely, the opportunity cost of participating in the urban employment lottery varies directly with rural income opportunities. Therefore, either reducing urban wages or increasing rural wages will reduce rural-to-urban migration.

The regression results reported here (Table 4.1) indicate this to be the case for Kenya. The urban income variables have a direct effect on the odds of a rural-to-urban move. (For rural areas a negative relationship between these variables was obtained but

these coefficients were not statistically significant.) In the urban areas action on male incomes would have a greater impact than for females since the elasticity of the propensity to migrate because of urban wages is almost twice as high for males as for females.

The question still to be resolved is: what scope is there for affecting wage levels with public policy? Harris and Todaro see substantial scope since they assume that the migration-determining wage is the legislated minimum wage. As indicated in Table 4.2, the average urban income is approximately twice the legal minimum wage. The Federation of Kenya Employers (1976, p. 126) admits that most of its members are paying "far above the statutory minimum." As early as 1963, Amsden (1971, pp. 142–143) found the median minimum rate for unskilled labor to be 28 percent above the statutory minimum. Indeed, she found evidence that the federation had privately favored some minimum wage increases on the grounds that they would reduce a possible competitive advantage by nonmembers (Amsden 1971, p. 24).

In terms of our Figure 11.1, the minimum wage has relevance, if at all, in "competitive" employment. As a result, reducing or constraining the minimum wage levels will not affect choice of technology, and hence employment levels, for firms operating the "sheltered" employment system.

As a participant in the "sheltered" employment system the government of Kenya could consider unilateral action with reference to the wage levels of its own employees. Unfortunately, here the Ndegwa Commission was probably correct: the government is a wage follower not a leader (Public Service Structure and Remuneration Commission 1971, p. 45). As a result, unilateral wage reductions in the public sector would increase labor turnover there with such concomitant costs to the public sector as loss of key personnel, reduced morale, and higher training costs. The government has been exercising what moral suasion it can against further wage increases for high-skilled labor paid by foreign-owned firms.

With choice of technology in industry controlled primarily by forces outside of Kenya, effective wage constraints in foreign-owned firms will affect profit levels in these firms but not necessarily the employment levels. This was recognized by the Select Committee on Unemployment and, as a result, on both fiscal and administrative grounds, it recommended increased taxation of high-income persons to reduce the rural–urban wage differential (National Assembly 1970, p. 9). In addition, the sales tax on nonessential goods could be increased. Both of these actions would affect primarily the urban-based, high-income earners in "sheltered" employment and the owner-operators of modern sector firms. Hence these policies would serve to reduce the effect of an important determinant of rural-to-urban labor migration as well as limit somewhat the control of this wealthy minority over demand for the output of the modern sector.

Improved Transportation and Communication Links within Kenya

Effective changes in internal transportation and communication links affect the migration process in several ways. First, improved links between rural and urban areas provide more ready access to markets and they make possible reductions in transportation costs. Both effectively serve to increase the average productivity of rural labor. Second, increased contact with outside areas can facilitate the diffusion of technology in the rural areas.

In contrast, the improved links also reduce the cost and risk involved in making a rural–urban move. Also, the increased contact probably will have a positive effect on rural household aspirations as well as increase the information available about opportunities elsewhere.

Given these different effects, it is not possible to make an unambiguous statement about the overall effect of improvements in transportation and communication links on the migration process. The increase in labor productivity can be seen as a fundamental, long-term change essential to the development process. In contrast, controlling the current rate of rural-to-urban migration is an immediate but temporary problem. Hence, we would be inclined to favor improvements in the internal transportation and communication links.

One other aspect of improving internal transportation and communication links is the creation of employment inherent in the construction and maintenance of such facilities. Most of this employment would be located in rural areas. The government, by virtue of its control over road construction, can use such opportunities to create employment as part of its strategy to increase the attractiveness of the rural areas.

In part, the government of Kenya has pursued this course of action through the use of the National Youth Service to construct roads and in the settlement road construction aspects of the more recent Special Rural Development Programmes (Federation of Kenya Employers 1976, pp. 81–82). Where the government has not been as diligent as it might have been is in the labor intensity of the road construction it has carried out or funded (Kenya, Select Committee on Unemployment 1970, p. 21; International Labour Office 1972, pp. 383–390).

To maximize the employment potential of such road construction, some action will have to be taken. As in much of the modern sector, private contractors are either unable or unwilling to supervise the labor force involved in a labor intensive approach to road construction. The International Labour Office report (1972, pp. 284 and 389–390) found that constraints in the form of a limited capability to supervise a large labor force, rather than relative factor prices, were the reasons given by the contractors interviewed for their choosing a capital intensive approach to construction. Therefore, to require the use of particular labor intensive construction practices will have to be made an explicit aspect of the bidding process for road construction contracts.

Increased Availability of Amenities in Rural *versus* Urban Areas

One of the conclusions reached by the Select Committee on Unemployment (1970, p. 9) was: "Rural life should be made more attractive through provision of water, better schools, better housing, health services, feeder roads, and better communication facilities. This will stem the tide of migration of rural population, especially the school-leavers, to the towns."

The desirability of making such basic needs more accessible in rural areas is hardly open to question. Whether the provision of such social services will stem the urban in-migration is questionable. Our analysis indicates that differences between rural and urban areas in amenity availability exert a significant, positive effect on the odds of a rural–urban move (Table 4.1). Differences between urban centers in amenity availability exert a positive effect on the selection of a particular urban destination for females only (Table 4.3).

As we indicate in Chapter 4, the first result is probably dominated by our measure of urban amenity availability, which captures the effect of the size and diversity of the urban job market. The migrants' reasons for leaving their rural home and selecting a particular urban destination, and the changes that they made in amenity use after migration bear out this interpretation of the coefficients for A_{ij} in Table 4.1.

The results of this study cannot be considered definitive because it is not clear that the migrants who were interviewed distinguished between actual amenities in town and their ability to take advantage of them. For the lower-income groups, clean water is the primary amenity that is more accessible in town than in the rural areas.

In addition to the direct effect of amenities on migration there are several possible indirect effects. First, the provision of social services in rural areas may well raise aspiration levels. If so, additional rural-to-urban migration may be induced. Second, the actual provision of social services generates employment. The rural–urban distribution of such employment creation can be expected to affect the migration process.

SHAPING AN ALTERNATIVE ENVIRONMENT FOR RURAL DEVELOPMENT

The majority of Kenya's rural young people, especially those with limited formal schooling, have chosen to remain rural. Some rural residents have moved to another district for employment or to take advantage of opportunities presented by a land settlement scheme, but they remain rural.

To be rural in a setting, where potential entrepreneurs have been siphoned off to employment opportunities in town, is a struggle to maintain a mere existence. There are virtually no possibilities for obtaining a relatively larger portion of the national income. An example of the philosophy of life such a struggle engenders is provided by Gwyer (1972, p. 4): "We have tilled this soil ever since time immemorial; we are as poor as ever: if you want to live as poor as we do then stay with us and enjoy our poverty." This quote was taken from an examination answer in the Faculty of Agriculture at the University of Nairobi. It is reputed to represent the views of parents, as expressed to their children, in Meru district.

For such rural residents the most successful avenue of escape from persistent poverty has been modern sector employment, usually in the towns. The government basically has granted to rural residents who so desire the right to play the urban employment lottery. Those who fail to win a level of income superior to their rural alternative return home. Other "losers" have chosen to remain in town and struggle there for an existence or they have moved on to try their fortunes in some other town (see Figure 11.1).

Our discussion of policy options that attack the symptoms of rural-to-urban labor flows indicates that these policies provide hope for little more than marginal changes. Their potential benefits are limited because they do not deal directly with the underlying causes of the migration. Also, at several points it was noted that effective policy action was not likely because of the constraining effect of the existing economic and political structures.

It has been argued by some that fundamental change via policy action is unlikely in Kenya because present decision-makers will not act contrary to their own vested interests. There is considerable truth in this, but the relevant options are not whether particular

policies are accepted or ignored. As Findley observes (1977, p. 111): "... the lack of a decision about migration is a decision in itself. Even in the absence of a conscious policy on population distribution, national agricultural and urban development policies constitute a migration strategy."

Kenya's existing migration strategy will arrive at its own logical conclusion: access to quality education limited primarily to the children of the wealthy will generate sharp class divisions; continuation of existing rates of urban in-migration will exceed the capacity of the urban centers to cope with their populations; increasing landlessness and rising unemployment will exert growing pressure on the economic and political structures. In the words of Gutkind: the energy of despair is turning into an anger of despair and is likely heading toward an explosion of despair.

A society that chooses to act before environmental factors force action typically has more directions to pursue and more ways to proceed. The concluding remarks here are an attempt to identify the changes that must be considered seriously if Kenya is to avoid being forced into one particular course of development.

The ongoing development of the Kenyan economy and a more equitable distribution of the benefits of development are already the explicit objectives of Kenya's development plans. A variety of partial solutions for the realization of these goals has been proposed. They include: an effective family planning program, ongoing educational reform, accelerated rural development, a comprehensive income policy, and a substantial change in government policy toward informal sector activity.

Each proposal has its own partial validity but all share a presupposition that a solution can be imposed in some manner from above. Very little attention has been devoted to changing the environment within which the Kenyan people make their day-to-day decisions.

For the 60 percent at the bottom of Kenya's income scale life is dominated by their environment. For them the environment has merely become more complex. Now it is not merely the vagaries of the weather, which can mean temporary prosperity or starvation; they are subjected also to the ramifications of the new technology in the modern sector. But, as a people, they are limited still to merely responding to such changes. For these poor, technology has not become a recognized tool, something to be used to obtain a degree of mastery over one's environment, making possible more than merely a day-to-day struggle for existence.

Policy action to change this situation must alter the economic environment, making it more conducive for the transition for the people from being mere reactors to becoming active participants in the development process. The key elements to the appropriate environment are access to the means of production, technology, and markets and the incentive system that motivates action.

Given that most of the people are rural and will remain so for some time, the most important resource to which access will be imperative is arable land. The evidence shows small farms in Kenya to be relatively efficient in output per unit of land (Singer and Jolly 1973). In addition Gwyer (1972, pp. 5–6) cites evidence from Nyeri district that shows that a combination of land registration and crop intensification on small farms has generated substantial employment gains. Both maximum output per unit of land and labor intensive production techniques are important elements of Kenya's longer-term objectives. The studies cited here indicate that increased access to land for the rural poor need not be

viewed as an objective with a substantial opportunity cost, in the form of reduced agricultural output, for the Kenyan economy.

Crop intensification by small farmers with limited resources requires a range of supporting elements. First, there must be ready access to markets and to required inputs that have to be purchased. The physical aspect of access, roads, is being developed at a commendable rate in Kenya. For small farmers, some initial organizational assistance and institutional support may be required to aid in initiating the agricultural development process. The latter would involve establishing local savings and lending institutions, local processing facilities, and local buying and selling facilities. Also, connecting feeder roads may be required. Means for decentralizing decisions on how local tax revenues are to be spent should be devised as well.

Although small farmers have been shown to be responsive to market opportunities they typically do not have ready access to existing and emerging technology. Public policy can increase their access by demonstrating the advantages of alternative technologies in such areas as new crops, improved seeds, and alternative farming techniques. For small businesses, access to technology would include both new products as well as alternative production methods. Family planning methods are another form of technology that would be beneficial to rural society as a whole.

Access to means of production, markets, and technology is only part of the rural development process. If farmers are to respond with new production methods and renewed effort, an adequate return for their effort will be required. A weakness of previous plans has been the omission of a system of appropriate production incentives. Specifically, internal pricing policies, the price of foreign exchange, the various subsidies paid, and the cost of credit need to be built into the development plans if their objectives with reference to employment and income redistribution are to be realized. What is directly relevant for an employment policy premised heavily on rural development is the internal terms of trade. The evidence indicates that they have been turning against agriculture and in favor of the industrial sector in the postindependence period (Public Service Structure and Remuneration Commission 1971, p. 42). This process needs to be reversed and the implicit tax on agricultural exports, in the form of an overvalued exchange rate, needs to be reassessed carefully.

In addition to providing a new set of positive inducements for rural development there is a need to minimize the disincentive in the formal sector of an adverse demonstration effect and inappropriate wages paid within "sheltered" employment. To dismantle what exists already is always more difficult than to start something new. An appropriate starting point would be the announcement of the intent of phasing out the import substitution industries requiring substantial rates of effective tariff protection. This would put pressure on the firms involved to rely more on locally produced inputs and to adopt employment strategies that would enable them to be competitive on the international market. Also, for new firms wanting to start up and for the purposes of negotiating for foreign aid, an explicit plan of action would provide the criteria for defining terms that would make the firms' production and the proposed aid contribute to Kenya's overall development objectives.

The discussion above has focused primarily on rural development. A corresponding policy shift to provide small-scale, urban-based firms with improved access to means of production, markets, and technology and to provide them with an appropriate set of

production incentives is called for. This dimension of the employment strategy has been developed at length by the International Labour Office employment mission in its recommendations with reference to the informal sector (1972, pp. 21–22). Although we feel that the report is overly optimistic, in that the informal sector is not likely to serve as a leading sector, we concur that such small businesses provide the output that meets most of the needs of the lower-income groups. Also, these firms use labor intensive technology. Hence, the promotion and expansion of small-scale businesses can serve as an integral part of an overall employment strategy. The migration effects of such employment creation will be less than comparable job creation in the formal sector.

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APPENDIXES

A THE SURVEY QUESTIONNAIRE

The questionnaires were available in both English and Swahili and the interviewers were free to use the copy that they preferred. In most cases the interviewers came from the general area of the urban center in which they were interviewing. As a result, the interviewers were able to translate the questions into the local tribal language if the respondent could not understand either English or Swahili. There were only two or three cases where the interviewer could not converse directly with the respondent and he had to call on a third person for assistance.

The questionnaires were developed with helpful comments from other members in the Institute for Development Studies. The initial questionnaire was tested prior to the survey. The supervisors were sent to houses in Nairobi selected in the same manner as for the actual survey. On the basis of this pretest, several changes were made in the questionnaire. First, the questions about members of the family were dropped since they were of limited relevance and the men seemed to resent having their family counted. In addition, questions on the personal characteristics of the migrants were moved to the end of the questionnaire. This information was of secondary importance so this change enabled us to obtain the essential information before the respondent lost interest in the interview. Also, the tables were included in the questionnaire to facilitate the recording of employment and income information. The pretest also provided helpful insights on what to stress in the training of interviewers. Throughout, the term *CHECKLIST* indicates that the options listed were included to facilitate recording the answer. These options were not to be read to the respondent.

Confidential

SURVEY OF RURAL-TO-URBAN MIGRATION

Interviewer. . . . . Date. . . . . .

Urban centre . . . . . .

Building number . . . . . .

(If applicable) Flat (or room) number . . . . . .

FROM THE BUILDING INFORMATION SHEET FILL IN:
(a) The number of men staying regularly in this (house, flat, room) . . . . . .
(b) The number of men in this (house, flat, room) who have come to . . . . . .
after Uhuru . . . . . .
(c) The number of men in this (house, flat, room) who came to . . . . . .
in 1962 or 1963 . . . . . .

First, I would like to ask some questions about where you have been living since Uhuru.
1. Where were you living at the time of Uhuru? Town or village. . . . . .
in District . . . . . .
2. After Uhuru, when did you first come to . . . . . .?
Month *(approximate)* . . . . . , 196. . .
3. Between the time of Uhuru and when you first came to . . . . . , did you live for a time *(at least three months)* in either Nairobi, Mombasa, Kisumu, Nakuru, Thika, Eldoret, Nanyuki or Nyeri? . . . .Yes . . . . No
IF YES – (1) Urban centre . . . . . .
from month . . . . . , 196. . .
to month . . . . . , 196. . .
(2) Urban centre . . . . . .
from month . . . . . , 196. . .
to month . . . . . , 196. . .
4. Since coming to . . . . . have there been times when you lived in another district or urban centre? *(For at least three months)* . . . . Yes . . . . No
IF YES – (1) District or urban centre . . . . . .
from month . . . . . , 196. . .
to month . . . . . , 196. . .
(2) District or urban centre . . . . . .
from month . . . . . , 196. . .
to month . . . . . , 196. . .

FOR FUTURE REFERENCE PURPOSES, FROM QUESTIONS 1, 3, 2 AND THEN 4, LIST THE RURAL-TO-URBAN MIGRATIONS IN THE ORDER IN WHICH THEY TOOK PLACE.

5.

Migration	From District	To Urban Centre	Date
1			196. . .
2			196. . .

Now I would like to ask a few questions about why you came to . . . . . and what you were expecting to find when you first arrived here.
6. What made you decide to leave the home you had in the district before you came to. . . . . .?
Anything else? *(CHECKLIST — Use 1 to indicate his first response and 2 to indicate his second response)*

(1) . . . . I could not find work where I was living before
(2) . . . . Land was not available so I had to go out to find work
(3) . . . . I was transferred by my employer
(4) . . . . I could not get into school in my home areas
(5) . . . . I could not get my child into school there
(6) . . . . The schools were of very low standard there
(7) . . . . There were no dancing places, cinemas, etc. there
(8) . . . . Others (explain) . . . . . .

7. Once you had decided to leave your previous home, why did you choose to come to. . . . . ? *(CHECKLIST — Use 1 and 2 as in 6 above)*

(1) . . . . That was the place where I had the best chances of finding work
(2) . . . . There are good schools here
(3) . . . . There are opportunities here to get into school
(4) . . . . I wanted the opportunities for social life (dancing, cinemas, etc.) available here
(5) . . . . I was transferred here by my employer
(6) . . . . I have relatives (friends) here
(7) . . . . Others (explain) . . . . . .

8. In reaching your decision to come to. . . . . you must have had some information about job possibilities, income, living conditions, etc. in. . . . . Which of the following gave you the most information about. . . . . ? *(Using 1, 2, and 3, rank the three most important)*

(1) . . . . Newspapers
(2) . . . . Radio
(3) . . . . The Labour Exchange
(4) . . . . Family members
(5) . . . . Friends
(6) . . . . School teacher
(7) . . . . Career counsellor
(8) . . . . Others (explain) . . . . . .

9. When you first arrived in. . . . . what type of work were you hoping to get? . . . . . .

10. When you first arrived in. . . . . .how much income did you expect you could earn? Shs. . . . . per (month/week/day)

You are being very patient and helpful. Thank you very much. We now come to the most important part of this survey — the type of work you were doing before you moved to the city (or town), the type of work you were doing after you got there, and the income received in each case. Let us start with the first time you moved to a city (or town). *(Questions 11 to 13 refer to migration 1 — see Q. 5)*

11. During the year before you moved to . . . . . .what were you doing? *(Mark all that apply)*

(1) . . . . Were you in school?
(2) . . . . Were you employed for wages? *(If yes, fill in category (a) in Table 1)*
(3) . . . . Were you in business for yourself (selling newspapers, shining shoes, or running your own shop, etc.)? *(If yes, fill in category (b) in Table 1)*
(4) . . . . Were you farming? *(If yes, this will be covered in Questions 22 to 26)*
(5) . . . . Were you at any time employed only part-time such as doing casual (day) labour? *(If yes, fill in category (c) in Table 1)*
(6) . . . . Were you totally unemployed for a time? *(If yes, fill in category (d) in Table 1)*

12. During this year were you at any time staying in either your parents' house, a friend's house, or in a house provided by your employer? . . . . Yes . . . . No

13. IF YES — (a) From month. . . . . , 196. . .
to month . . . . . , 196. . .

TABLE 1 Job and Income History for the Twelve Months Prior to Migration 1

1	2	3	4	5	6	7
(a) Employed for wages	Type of work	Starting wage shs./mon.	Wages raised to shs./mon.	Housing allowance, bonuses, etc. shs./mon.	From mon.196...	To mon.196...
Job 1						
Job 2						
(b) Operating his own business		Type of business or trade		Net income shs./year	From mon.196...	To mon.196...
Business 1						
Business 2						
(c) Employed for wages on a part-time or casual basis		Type of work	Days/week	Hours/day	Wages shs./day	From mon.196...	To mon.196...
Job 1							
Job 2							
(d) Totally unemployed						From mon.196...	To mon.196...
Period 1							
Period 2							
(e) Miscellaneous income			Shillings			From mon.196...	To mon.196...
Source 1							
Source 2							

(Check columns 6 and 7 to make sure the full twelve months have been accounted for.)

(b) Did you pay rent for staying there? . . . . Yes . . . . No
(c) Did you get most of your meals there as well?
. . . . A few . . . . About half . . . . Most . . . . All . . . . None
(d) Did you pay for these meals? . . . . Yes . . . . No

Now I would like to ask some questions about what you are doing at present here in . . . . . What type of work (if any) do you have? How long have you had this job? What were the starting wages you received? Was there a raise in wages? Is there a housing allowance, a bonus, etc., associated with this job? (What about before that, what were you doing? Etc.) *(On the basis of questions such as these, fill in Table 2 for the full period of his current stay in . . . . .)*

14. When you first came to. . . . . did you stay with a friend, a family member, or in a house provided by an employer? . . . . Yes . . . . No. *(If yes, continue with 15 and 16. If no, skip to Q. 17)*

15. What job or business did he have? . . . . . *(If the host appears to be present omit Q. 16)*

16. (a) How long did you stay there?
From month. . . . . , 196. . .
to month . . . . . , 196. . .
(b) Did you pay rent for staying there? . . . . Yes . . . . No

TABLE 2 Job and Income History for the Length of the Current Stay in . . . . . .

1	2	3	4	5	6	7
(a) Employed for wages	Type of work	Starting wage shs./mon.	Wages raised to shs./mon.	Housing allowance, bonuses, etc. shs./mon.	From mon.196...	To mon.196...
Job 1						
Job 2						
(b) Operating his own business		Type of business or trade		Net income shs./year	From mon.196...	To mon.196...
Business 1						
Business 2						
(c) Employed for wages on a part-time or casual basis		Type of work	Days/week	Hours/day	Wages shs./day	From mon.196... To mon.196...
Job 1						
Job 2						
(d) Totally unemployed						From mon.196... To mon.196...
Period 1						
Period 2						
(e) Miscellaneous income			Shillings			From mon.196... To mon.196...
Source 1						
Source 2						

(Check columns 6 and 7 to make sure the current stay in . . . . . has been completely accounted for.)

(c) Did you get most of your meals there as well?
. . . . A few . . . . About half . . . . Most . . . . All . . . . None
(d) Did you pay for these meals? . . . . Yes . . . . No

17. Since then have you at any time lived in a friend's house, in the house of a family member, or in a house provided by an employer? . . . . Yes . . . . No. *(If yes, continue with 18, otherwise skip to Q. 19. If the host appears to be present, then omit Q. 18)*

18. (a) How long did you stay there?
From month. . . . . , 196. . .
to month . . . . . , 196. . .
(b) Did you pay rent for staying there? . . . . Yes . . . . No
(c) Did you get most of your meals there as well?
. . . . A few . . . . About half . . . . Most . . . . All . . . . None
(d) IF YES – Did you pay for these meals? . . . . Yes . . . . No

19. When you first came to. . . . . did a friend or family member help you find work? . . . . Yes . . . . No. IF YES – What job or business did *he* have at the time?
. . . . . .
IF NO – How did you find your first job? *(CHECKLIST)*
(1) . . . . I answered an advertisement in the newspaper
(2) . . . . Through the Labour Exchange

TABLE 3 Job and Income History for the Time Period Between the First and Last Migration

1	2	3	4	5	6	7
(a) Employed for wages	Type of work	Starting wage shs./mon.	Wages raised to shs./mon.	Housing allowance, bonuses, etc. shs./mon.	From mon.196...	To mon.196...
Job 1						
Job 2						
(b) Operating his own business		Type of business or trade		Net income shs./year	From mon.196...	To mon.196...
Business 1						
Business 2						
(c) Employed for wages on a part-time or casual basis		Type of work	Days/week	Hours/day	Wages shs./day	From mon.196... To mon.196...
Job 1						
Job 2						
(d) Totally unemployed						From mon.196... To mon.196...
Period 1						
Period 2						
(e) Miscellaneous income		Shillings	Housing provided	Meals provided	From mon.196...	To mon.196...
Source 1						
Source 2						

(Check columns 6 and 7 to make sure the total time period between the first and the last migration has been accounted for.)

(3) . . . . I heard of jobs through the radio
(4) . . . . I heard from others of a job opening so I applied
(5) . . . . Others (explain) . . . . . .

20. Since coming to . . . . . have you been receiving money from friends or relatives who live outside of . . . . . ? . . . . Yes . . . . No. IF YES – about how many shillings a month did you receive? . . . . . .
From month. . . . . , 196. . .
to month . . . . . , 196. . .

21. Since coming to . . . . . have you been sending money out of . . . . . to friends or relatives or to improve your shamba? . . . . Yes . . . . No
From month. . . . . , 196. . .
to month . . . . . , 196. . .

(If the respondent has had only one rural-to-urban migration (see Q. 5), then the survey to this point has covered the relevant job and income history with the exception of shamba income. BUT if the respondent has had more than one rural-to-urban migration (see Q. 5), then we still need to cover the time period BETWEEN his first and his last migration. Using the same type of questions as for Table 2, fill in Table 3 to cover the total period between the first and the last migration.)

In addition to wage income and income from their own business, some people receive income from their own shamba.

22. Do you have a shamba? (1) . . . . Yes (0) . . . . No

23. IF NO – Did you have a shamba before moving to. . . . . ? *(See Migration 1)* (2) . . . . Yes (0) . . . . No. *(If yes to either 22 or 23, then continue with 24. If no to both 22 and 23, then continue with Question 27)*

24. How many acres do (did) you farm? . . . . . .

25. In what district is (was) your shamba? . . . . . .

26. When did you get this land? Year 19. . . . . .

(Fill in the answers to the following questions in Table 4. Cover all years for which he had the shamba starting with the first full year prior to Migration 1 (or at the date the land was obtained if this is later than Migration 1))

Now, please think back to year 196. . . Did you make any money selling cash crops or food that you grew on your shamba?

IF YES – What crops and food did you sell?

How many (acres, trees, cows, etc.) did you have?

After you had paid your farming expenses, how many shillings did you make that year?

During that year did you get any rent money from your shamba? If yes, how many shillings?

During that year how many adults and how many children got most of their food at your shamba?

TABLE 4 Shamba Income

Year	Type of crop	Quantity produced				Net income shs./year	Rental income shs./year	Food grown for adults/child.
		Acres	Trees	Cows	Other			
1963								
1964								
1965								
1966								
1967								
1968								

We have now completed all the questions about your work and your income. You have been most helpful. Thank you very much. I would now like to ask some questions about yourself and about your plans for the future.

27. In what district (or urban centre) were you born? . . . . . .

28. How old are you *(approximate)*? . . . . . .

29. To what tribe do you belong? . . . . . .

30. Are you married? . . . . Yes . . . . No

31. IF YES – In what district (or urban centre) is your wife (wives) living? . . . . . .

32. Have you passed KPE (or CPE)? . . . . Yes . . . . No. *(If yes, continue with Question 34. If no, ask Question 33 but omit Questions 34 to 36)*

33. What is the highest standard in primary school that you have completed? . . . . . .

34. Have you attended a secondary school? . . . . Yes . . . . No

35. IF YES – What form did you reach? . . . . . What type of secondary school was it?

(1) . . . . Government aided

(2) . . . . Harambee

(3) . . . . Private

Have you passed KJSE? . . . . Yes . . . . No

36. Do you have any of the following?:
(1) . . . . A P_4 teacher training certificate
(2) . . . . A P_3 teacher training certificate
(3) . . . . A trade test certificate
(4) . . . . A P_2 teacher training certificate
(5) . . . . School certificate or GCE, O level
(6) . . . . A P_1 teacher training certificate
(7) . . . . Higher school certificate or GCE, A level
(8) . . . . S, teacher training certificate
(9) . . . . University degree
(0) . . . . None of the above

37. Are you now taking or have you already completed any special training course such as a correspondence course, an apprenticeship, a driver training course, or an agricultural course at a farm training centre? . . . . Completed . . . . Now taking . . . . No
IF YES – What course(s)? . . . . . .
How many months did (will) it take to complete the course? . . . . . .

38. Do you wish to stay in . . . . . for the rest of your life? . . . . Yes . . . . No
IF NO – Do you wish to stay in . . . . . until you retire? . . . . Yes . . . . No. *(If no, continue with 39. If yes, continue with 43)*

39. How much longer do you wish to stay? *(CHECKLIST)*
(1) . . . . Less than three months
(2) . . . . Three months to a year
(3) . . . . One to two years
(4) . . . . Two to five years
(5) . . . . More than five years

40. Why do you wish to stay for that period of time?
(Record his answer, do not suggest answers)
. . . . . .

41. Why would you leave? *(CHECKLIST)*
(1) . . . . I cannot find work here
(2) . . . . The wages are too low here
(3) . . . . I do not like the work I can get here
(4) . . . . I must return to my home area to take care of my shamba
(5) . . . . I have inherited some land from my father
(6) . . . . I just do not like living here
(7) . . . . The same reason as given in Q. 40
(8) . . . . Other (explain) . . . . . .

42. Where do you think you will go? (Name district or urban centre) . . . . . .

43. Do you go to cinemas more or less often in . . . . . than you did where you lived before you came here?
(1) . . . . More (2) . . . . About the same (3) . . . . Less (0) . . . . I do not go to cinemas
IF MORE OFTEN – Why do you go more often? *(CHECKLIST)*
(1) . . . . There are more cinemas here than where I lived before
(2) . . . . I have more money now so I can afford to go more often
(3) . . . . Other (explain) . . . . . .

44. Do you go to dances more or less often in . . . . . than you did where you lived before you came here?
(1) . . . . More (2) . . . . About the same (3) . . . . Less (0) . . . . I do not go to dances
IF MORE OFTEN – Why do you go more often? *(CHECKLIST)*
(1) . . . . There are more places here where one can dance
(2) . . . . There are better dancing places here
(3) . . . . I have more money now so I can afford to go dancing more often
(4) . . . . Other (explain) . . . . . .

45. Do you read newspapers more or less often in . . . . . .than you did where you lived before?

(1) . . . . I cannot read (2) . . . . More (3) . . . . About the same (4) . . . . I do not read newspapers

IF MORE OFTEN – Why do you read newspapers more often? *(CHECKLIST)*

(1) . . . . Newspapers are more readily available here
(2) . . . . I have more money now so I can afford to buy newspapers
(3) . . . . I need to read newspapers here to learn of job openings, etc.
(4) . . . . Other (explain) . . . . . .

46. If you were offered a job paying shs. 200 per month in your home district and the same kind of job also paying shs. 200 here, which job would you rather have?

(0) . . . . in home district (1) . . . . here

IF HE ANSWERS HERE – Why would you choose the job here in. . . . . ? *(CHECKLIST)*

(1) . . . . I have more friends here
(2) . . . . There are more things to do here
(3) . . . . Living conditions are better here
(4) . . . . If I lost the job I would have a better chance of getting another one here
(5) . . . . Other (explain) . . . . . .

47. If you were offered a job here in . . . . . .paying shs. 200 per month, would you accept the same kind of job in your home district if it paid (1) . . . . shs. 210? (2) . . . . shs. 220? (3) . . . . shs. 240? (4) . . . . shs. 250? *(Continue from shs. 250 up until you get a yes answer)*

48. *(To be asked only if the respondent is currently unemployed)* What do you think is the main reason why you are not able to find work here? *(Check as many as apply)*

(1) . . . . You have too little education
(2) . . . . Your tribe is discriminated against when a firm hires more people
(3) . . . . The Government is not trying hard enough to create jobs for the unemployed
(4) . . . . The trade unions only look out for the welfare of their own members and not for people like you
(5) . . . . Other (explain) . . . . . .

49. The Tanzania Government has recently established a law which seeks to re-settle the urban unemployed but landless workers on cooperative farming ventures; or for those who have their own land, the Tanzania Government is sending the urban unemployed back to their land to become farmers. Do you think this is a good policy? *(CHECKLIST)*

(1) . . . . Yes
(2) . . . . No
(3) . . . . Do not know
(4) . . . . I have not heard of the policy
(5) . . . . Refuses to express an opinion

IF HE IS CURRENTLY UNEMPLOYED – Would you be willing to go back to your farm or to a Government cooperative, or would you prefer to stay in . . . . . .and continue to try and find work? *(CHECKLIST)*

(1) . . . . Yes
(2) . . . . No
(3) . . . . Do not know
(4) . . . . Refuses to express an opinion

50. Some people claim that the reason why there is so much unemployment in the city is that city wages are very much higher than farm income and that at these high wages there are not enough jobs for everyone. They say that if city wages were lowered there would be more jobs and less unemployment. Do you agree that there would be more jobs and less unemployment here if the wages were lowered? *(CHECKLIST)*

(1) . . . . Agree
(2) . . . . Disagree
(3) . . . . Do not know
(4) . . . . Refuses to express an opinion

Thank you very much. You have been most helpful. Now I would like to ask a few questions about your father and then we are finished.

51. Is your father living? . . . . Yes . . . . No. *(If yes, continue with 52. If no, go to Question 57)*
52. In what district (or urban centre) does your father live? . . . . . .
53. Does your father have a shamba? . . . . Yes . . . . No. IF YES – How many acres of land does he have? . . . . . .
54. How did he get this land? *(CHECKLIST)*
(1) . . . . Inherited
(2) . . . . Clan
(3) . . . . Gift
(4) . . . . Cleared
(5) . . . . Consolidation
(6) . . . . Rented
(7) . . . . Purchased
(8) . . . . Provided by his employer
(9) . . . . Other (explain) . . . . . .
55. IF APPLICABLE – Is this the same shamba as your shamba? . . . . Yes . . . . No
56. Does your father work for wages? . . . . Yes . . . . No. IF YES – What job does he have? . . . . . Does your father have a business of his own? . . . . Yes . . . . No. IF YES – What type of business is it? . . . . . .
57. What is the highest standard (or form) in school that your father completed? . . . . .

Name of Respondent . . . . . .

IMPRESSIONS OF THE INTERVIEW

1. The respondent was:
(1) . . . . Quite cooperative
(2) . . . . Neutral
(3) . . . . Not very cooperative

2. The respondent:
(1) . . . . Seemed to remember well and likely was giving accurate answers
(2) . . . . Had difficulty recalling the information desired from him
(3) . . . . May not have been giving accurate answers

3. The interview lasted about . . . . . minutes.

B THE RURAL–URBAN MIGRATION SURVEY

THE SURVEY

Purpose of the Survey

In order to carry out a statistical test of the migration model developed in Chapter 1, it was necessary to obtain data on rural–urban migration flows and the expected income variables in both rural areas and the urban centers. In addition to testing the migration model, there was interest in obtaining as much information as possible about the process of rural-to-urban migration in Kenya. For these purposes a survey was carried out in Kenya during December 1968. The questionnaire was administered by some 50 students from University College, Nairobi. Complete documentation of the sampling procedure, a description of the survey, and a copy of all instruments used in the survey are included in Rempel (1969).

The Sampling Technique

For sampling purposes, the relevant population included all the people who had migrated to one of the urban centers in Kenya. For practical reasons, the scope of the survey was limited to a population of men ranging in age from 15 to 50 who had migrated to one of Kenya's eight largest urban centers since Kenya's independence (December 1963), and who were still resident in one of these urban centers. This restriction on the survey meant going without information about migrants who had returned to a rural area. This omission was justified because it reduced considerably the cost of the survey and simplified the sampling procedure. The sample was restricted to men because the migration flows in Kenya are dominated by males. Also, the migration decision-making model for women is probably more complex, ranging across a larger set of determining variables, given that women have more ready access to the economic opportunities in the rural areas than they do to the available legal economic opportunities in the towns. Finally, limiting the survey to men did not reduce the validity of the statistical test and enabled us to use published sources of data which tend to be limited to men. A lower age limit of 15 was chosen because this is the break typically found in these data sources. The upper age limit was set deliberately on the low side to minimize the effect of the people retiring to rural areas after a period of employment in an urban center. Kenya's independence was chosen as an obvious reference point to which all the respondents would readily relate as each attempted to recall his migration, employment, and income history.

A critical decision for this study was the definition of the areas of origin and destination. Again, both were defined in terms of what was practical, given the published data sources. Rural areas were defined in terms of Kenya's administrative districts because the

district was the only geographical unit for which the needed data were available. This type of definition proved reasonably acceptable since the most recent redistribution had been based on the distribution of the major ethnic groups.

The migration destinations were limited to the nine urban centers that had more than 5,000 resident Africans according to the 1962 census. These nine centers are: Nairobi District, Mombasa Municipality, Kisumu Municipality, Nakuru Municipality, Eldoret Municipality, Thika Township, Nanyuki Township, Nyeri Township, and Kitale Municipality. Subsequently, Kitale was dropped because we were informed that growth after independence was limited to natural growth rates and, as a result, we would find little in-migration there.

The goal of the sampling procedure was to select at random a set of buildings in each of the eight urban centers and then to interview the male in-migrants resident in each of these buildings. The selection of buildings was made on the most recent maps available for each of the urban centers. The preferred approach would have been to select buildings within any one urban center in proportion to the distribution of the relevant population throughout the urban center. Since the required information on the distribution of the migrant population was not available, the existing information on the distribution of the total population was used as a proxy. This proxy is appropriate, provided the average and the variance of the number of people per building are comparable in different areas of the urban center.

In the selection of buildings on a map, some stratification by types of housing was carried out where feasible in order to reduce the cost of the survey. In the majority of the areas involved in the sampling procedure, a table of random numbers was used in the selection of individual buildings. The exceptions were in the category of temporary housing where actual buildings were not indicated on the map (e.g., Mathare Valley in Nairobi), or where the location of buildings would have made it very difficult to identify a particular house as indicated on the map (e.g., the periurban area of Kisumu). In the latter cases the areas involved were divided into identifiable clusters of buildings; a cluster was selected at random, and then the interviewer was instructed to cover 20 houses in the approximate location of the selected cluster.

Using the approach of selecting buildings to obtain a sample of migrants, there was a tendency to miss migrants not residing in known buildings during December 1968. If there were migrants who had no residence and spent all of their time outdoors, then they were missed completely. An alternative situation was people residing in buildings not indicated on the map. In all cases where it was known that new buildings had been erected after the publication of the map, these buildings were incorporated into the sampling procedure. In Nairobi, recent aerial photos were used for updating the maps. Some examples are Uhuru Estate in Nairobi and the new Municipal Council Housing in Thika. A more difficult problem was the unauthorized housing which did not appear on the available maps. Although it was not possible to incorporate all the small areas that exist throughout the urban centers, rather extensive sampling was carried out in known areas of unauthorized housing. To our knowledge, there was adequate and representative sampling in the areas of unauthorized housing.

Although questions can be raised about the procedure of selecting buildings to obtain a sample of men, this procedure appears most suitable given the situation and has been used in other surveys (Mombasa Labor Force Survey in 1969 and the Ministry of

Economic Planning, Budget Survey in Nairobi in 1968). In the selection of buildings it was necessary in some cases to make allowances for variations in the number of people resident in any one building. During the survey it was impossible to maintain an equal degree of coverage across all eight urban centers of the houses selected in each urban center, but we attempted to maintain equal coverage throughout all parts of any urban center. As a result, the interviews should be viewed as eight separate samples. A systematic bias in the type of men who could not be located or who refused an interview was not apparent.

Administration of the Survey

In the actual administration of the survey we attempted to maintain close supervision over each interviewer's work to minimize intentional or unintentional errors in the way he conducted the interview and filled in the questionnaire. The work of each interviewer was checked daily by his supervisor to ensure that the questionnaire was complete and the information internally consistent. The interviewers were paid a daily rate in an attempt to emphasize quality rather than quantity of work. All except one supervisor were chosen from an upper-level seminar in economic development. The migration model was analyzed in the seminar to enable the supervisors to gain some appreciation for the type of data needed. The interviewers were selected from the student body of University College, Nairobi. The vast majority of the students selected had previous survey experience (census enumerator, survey research with a Nairobi firm, or survey research with other faculty members at University College, Nairobi).

Throughout the planning and administration stages of the survey there was considerable concern about the respondent's ability to recall and his willingness to relate his past migration and income history. Experience in other surveys conducted within the Institute for Development Studies, University College, Nairobi, indicated that people who are not used to storing information by writing it down have an amazing ability to recall past details in their life. We attempted to use obvious reference dates, such as Independence Day, as aids in recalling information. The questionnaire was designed to move back from the respondent's present location and employment experience to the time before and after his migration. The interviewers were asked to record their impressions about how cooperative the respondent had been and whether he appeared to be giving accurate information to the best of his ability. Although we have not used these impressions in our analysis, most men appear to have been quite willing to cooperate in the survey. If there was a tendency to overstate rural income or understate urban income, this will affect our results primarily if the misstatements were in the opposite direction or of varying proportions of rural or urban income.

On the basis of this survey, 1,091 regular questionnaires plus an additional 353 "short" questionnaires were completed. The questionnaire was designed to cover up to three urban in-migrations during the 5-year period under consideration. To the extent that there were multiple migrations, our sample includes some urban-to-urban migration. Combining this survey information on rural-to-urban and urban-to-urban migration with other published data, we obtain a matrix of information for 146 migration origin–destination pairs. In the pages that follow, a brief description is provided of the sample obtained in each center and a brief comment is made on the quality of the data obtained in the survey.

THE SAMPLE

In the selection of buildings on a map, some stratification by types of housing was carried out where feasible in order to reduce the cost of the survey. (A list of the maps used in the survey and the sections within each housing type in each urban center are listed in Rempel 1969, pp. 31–35.) The six housing types were:

A. High-cost, low-density housing
B. Medium-cost, medium-density housing
C. Transitional area
D. Low-cost, high-density housing
E. Temporary housing
F. Housing in a business section

Mombasa represents a rather major departure from the basic sampling technique because a recent, comprehensive map was not available. The Mombasa Town Planning Department of the Ministry of Lands and Settlement had recently completed a housing survey covering more than 20 percent of Mombasa's housing. This survey was based on a stratification of the different types of housing and provided detailed information on the population in each type of housing. As a result, a decision was made to select our sample from within this housing survey sample, using the available information to determine the number of buildings to be selected in each type of housing.

Table B.1 presents a summary of the number of migrants found in the selected buildings within each housing type. Although the ratio of migrants to total men resident within a housing type tends to be higher in the high-cost, low-density and transitional areas, the majority of the migrants were located in the low-cost, high-density housing areas. The ratio of completed questionnaires to known sample members was higher than 80 percent. The primary reason for not obtaining an interview was the inability to locate the particular respondent. Eighteen men refused to grant an interview. Twenty-one completed questionnaires had to be rejected because the information provided was incomplete.

THE QUALITY OF THE DATA

It is not possible to make direct comparisons between our results and results reported in other studies in Kenya because the population from which we were sampling was different from the population under consideration in these other studies. Nevertheless, the results obtained in our study appear to be "reasonable" when compared with the similar information available. For example, the *Economic Survey of Central Province – 1963/64* reports an average monthly income per household of KShs.294 in urban areas and KShs.138 in rural areas (Ministry of Economic Planning and Devleopment 1968, Table 80). These totals do not vary substantially from our 1964 average expected income for the Kikuyu of KShs.244 and 178 per month. *The Economic Survey, 1969* reports an average monthly earning of all employees ofKShs.322 (Central Bureau of Statistics 1969, Table 8.12). In his 1969 labor force survey of Mombasa, Hall reports a median income between KShs.311 and 600 per month and a mode between KShs.111 and 300 per month (Hall 1969, Table IX).

TABLE B.1 The sample of migrants for the rural urban labor migration survey.

Housing type	Number of men residents	Migrants		Migrants interviewed	
		Number	Percent of (2)	Number	Percent of (3)
(1)	(2)	(3)	(4)	(5)	(6)
Nairobi					
A	85	33	39	31	94
B	143	93	65	68	73
C	142	28	20	23	82
D	1,023	275	27	224	81
E	459	241	53	199	83
F	25	17	68	15	88
Total	1,877	687	37	560	82
Mombasa					
Island	1,031	176	17	157	89
Mainland West	381	168	44	147	88
Mainland North	333	70	21	59	84
Mainland South	46	2	4	1	50
Total	1,791	416	23	364	88
Kisumu					
A	20	13	65	9	69
B	76	47	62	29	62
D	156	79	51	50	63
E	105	62	59	51	82
Total	357	201	56	139	69
Nakuru					
A	4	3	75	3	100
B	12	8	67	8	100
D	199	86	43	70	81
Total	215	97	45	81	84
Eldoret					
A	15	9	60	5	56
D	129	67	52	54	81
Total	144	76	53	59	78
Thika					
Total	255	168	66	91	54
Nanyuki					
A	8[a]	3	38	3	100
D	75[a]	54	72	48	89
Total	83[a]	57	69	51	89
Nyeri					
A	3[a]	2	67	1	50
D	164[a]	113	69	98	87
Total	167[a]	115	69	99	86

[a]This number may be understated since in cases where there were no migrants in a building the interviewers did not always record the total number of residents.

These values compare reasonably well with our 1968 expected average monthly income for all tribes, other than Kikuyu and Luo, of KShs.322, especially if we recognize that according to Hall's sample, 76 percent of the labor force in Mombasa had always lived there.

An alternative check on the reliability of the survey is a comparison of the observed migration flows with the migration flows reported in the 1962 census and the 1969 census. Although comparison with the 1962 census is complicated by the changes in provincial boundaries, there does appear to be a very close correspondence between the survey migration flows and the migration flows reported in each census. The relative importance of each migration stream appears to have remained fairly stable during the 1960s and the weighted sample, as used in this study, is a good representation of these flows.

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