INTEGRATION OF PUBLICLY - SPONSORED HOUSING PROGRAMS WITH THE DEVELOPMENT PLAN:
CASES OF GHANA AND ISRAEL
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A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF
Master of Arts
in the School
of
Community and Regional Planning

We accept this thesis as conforming to the
required standard.

THE UNIVERSITY OF BRITISH COLUMBIA
May, 1969
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ABSTRACT

The purpose of the study is to substantiate and document the notion that, if government-sponsored housing is effectively integrated with the development plan, it can constitute an effective tool for socioeconomic development. The use of housing as an instrument for economic development is widely recognized by many developing countries, including Ghana. Since housing, urban and regional planning, constitute some of the elements of development planning, they can no more be allowed to operate in isolation than can any other major activity.

Based on the findings of empirical studies and theoretical viewpoints, it is indicated that housing can contribute to worker productivity and external economies. In the first instance, it is noted that housing conditions certainly have some effect on health and longevity, hence productivity. In the latter case, some external economies can be reaped if, for example, resource development in a remote location is supported with housing to attract workers or to prevent wasteful commuting. Thus, housing can be used to positively influence the emerging geographic pattern of economic activities which itself determines, by and large, the new pattern of land use, population distribution, and functional organization of cities and settlements. It is pointed out that the question of implementing housing schemes should be concerned with how best to handle inevitable changes in the social environment in the early stages of economic development through proper planning.
A case study of Israel is presented to illustrate that housing could be adapted to economic development by treating housing programs as some of the essential elements of the development plan. It is argued that the contribution of housing to the economic advancement of Israel, much as it is hard if not impossible to evaluate in isolation, cannot be dismissed as insignificant. The conscious manner in which housing programs are effectively integrated with development planning, it is pointed out, should serve as a lesson to other developing nations. Israel's experience demonstrates, and would seem to support, the notion that housing can be used to support agricultural developments, industrial activities, and even as an instrument for population dispersal calculated to foster economic development.

Using several criteria based on the Israeli experience and against the background of development planning, the relation between government-sponsored housing and planning in Ghana is evaluated. It is discovered that mainly because the State Housing Corporation which builds most public projects operates without a guiding program related to other development programs, its activities are frequently in conflict with planning in an adverse manner. Again, for lack of programing, integrated decisions on housing for local, regional, or national purposes, are out of the question as far as the Corporation is concerned.

An examination of the existing practical program of planning for Ghana reveals the prospect for effective integration of
housing programs with development planning. It is concluded that the opportunity for utilizing government-sponsored housing for economic development will be more available, if the newly-created Housing Division and other relevant agencies are involved more in the planning process.
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ACKNOWLEDGEMENTS

Of all the marvellous people who have been so exceedingly helpful in getting this study done, I would like to thank especially Dr. N. d. Cherukupalle, for her criticisms, Dr. H. Peter Oberlander, Director of the School of Planning, for his constant guidance; the rest of the staff for their amiability, and Owura Kwame Yeboah, a wonderful friend, who spared no pains in sending me important materials from home. My sincere thanks go to Mrs. J.K. Jephson for painstakingly typing the draft and final copies.

Finally, I am grateful to the Canadian International Development Agency and the Government of Ghana for sponsoring my two-year study program at the University of British Columbia.
CHAPTER I
INTRODUCTION

General Introduction

At the national level governments in developing countries recognize that a housing problem presents an obstacle to rapid economic growth which their countries want to achieve. Therefore, public investment criterion for housing is based on the recognition of the benefits of housing in socioeconomic development. The objective of linking housing programs with the national development plan is to use housing as a tool for economic development. This is as it should be, since both economic and social change are integral parts of one process, that of development.

The emerging geographic pattern of economic activities along with housing and other programs determines, by and large, the new pattern of land use, population redistribution and functional organization of cities and settlements. And once fixed, the new pattern can only be improved through the burdensome and expensive process of demolition and renewal. The glaring issue today is how best to handle the inevitable changes in the social environment in the early stages of development.

Lloyd Rodwin presents his opinion by stating that:

One thing is certain: the welter of problems cannot be decisively attacked piecemeal. That would be an endless Sisyphean labor. These countries need to influence markedly, and with minimum effort, many critical determinants of urban development. Probably
the most important goal for urban policy in developing areas must be to create this ability and to use it wisely.\(^1\)

Here Lloyd Rodwin is not suggesting that a developing country should put all its resources into housing and urban development in order to eradicate urban problems overnight. He is indicating that many of the basic decisions on urban development (and one might add rural development) are not, and for some practical purposes, cannot, be made by the market mechanism. They involve public policy on the character of land use control systems and decisions on public investment of capital for urban overhead, including housing.

It will seem reasonable to suggest, then, that it is fairly probable that the improved standard in quality and quantity of housing, no matter how scanty, will not be obtained by merely increasing housing investment, but also by implementing carefully formulated programs that are effectively integrated with the overall development plan. This means that in order to achieve both social and economic gains as quickly and as efficiently as possible, with minimum diversion of resources, housing may be used along with other development tools in pursuit of economic development through satisfactory planning.

**The Purpose of Study**

The purpose of this study, then, is to substantiate and document the notion that by effectively linking housing programs

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with other programs in the development plan the former can constitute a tool for economic development. The objective is to investigate those conditions the existence of which facilitates or hampers the integration of housing with other activities, and to establish whether or not public housing is effectively integrated with planning in Ghana.

**Scope of Study**

This study is about developing countries with case studies of Ghana and Israel. It is recognized that general statements about developing countries are extremely unsafe to make. And for this reason, very few reliable references will be made to these countries, and as specifically as possible.

Most of the data to be used is secondary and is gathered from books, published documents, and papers on the subject. Although there is a lot of literature on the economic role of housing, empirical studies of the subject are very scarce and limited in scope. This is the major limitation of the study. In dispensing with clear-cut data on external economies of housing, in particular, the treatment of the relationship between housing and economic development as tentative as it is, should not be seen as an attempt to provide clear-cut answers to the hypothesis to be tested. While we are still behind a comprehensive understanding of the relationship between housing and socioeconomic development by many years, the way of empirical research is through the formulation and testing of such a hypothesis.
The Problem of Relating Housing to Planning

Confronted with problems of poverty and economic development, the majority of governments in developing countries have had to assume responsibility for development planning to ensure that economic and social advancement would actually occur in their countries. In recent years, according to a United Nations Report, almost all countries have prepared national development plans. Gunmar Myrdal defines a national development plan as:

>a program for the strategy of a national government in applying a system of state interference with the play of market forces, thereby conditioning them in such a way as to give an upward push to the developmental process.  

Its function is to provide guidelines for the use of scarce resources and to indicate the methods of implementation.

Reflected in a number of countries which possess development plans is the recognition of housing as a tool for economic development. Almost all these countries have some form of public housing programs which are linked to the economy as a whole. Some programs are made mandatory requiring the performance of clearly defined tasks, while others are general directions concerning building development. A planned economy could have a


well defined structure of one-year programs, four-year or five-year program and perspective plans covering 15 to 20 years. The degree of precision in the local distribution of the targets assigned and the part played by local factors during the preparation of the programs are bound up with the administrative decision of the country.

In some countries, particularly in Latin America, housing programs are administered by independent agencies, usually housing banks or other institutions with responsibilities in financing and building housing. In other countries, Ghana for example, the building activities are under several departments of the government. As a United Nations Report indicates:

A housing program cuts across so many fields that it is not surprising to find housing responsibilities associated with a variety of ministries and government functions, including agriculture, social welfare, public works.... Housing needs are inseparable from other community needs, such as water supply, sanitary disposal facilities and roads...5

Developing countries, therefore, have not only a housing problem in terms of dwelling shortages, often estimated by the government, but also in terms of coordinating administrative functions relating to housing and planning.

A cursory overview of development plans of developing countries reveals that the strategy for setting up new development programs and the corresponding strategy for housing,

although made explicit at the national level, are hardly spelled out in detail and executed at the local level in time and place as integral parts of the development plan. Several examples of problems of coordinating development activities exist in many countries. The Pakistani central planning agency pointed out during the country's First Five Year Plan that, "coordination in the true sense of unified administrative leadership at vital points is generally lacking." In Jamaica, the Department of Housing was planning to construct a housing project on the same land which The Ministry of Agriculture was preparing to flood for irrigation project.

The shared responsibility, independent decision — making, and factional interests, have led to many cases of confusion as can be seen from the above example. This failure to relate housing to other elements of the development plan has obviously engaged the attention of housers, economists, and planners for some time. Housing, urban and regional planning constitute some of the elements of planning. As Charles Abrams points out:

...They are root programs, out of which other activities spring. They can no more be allowed to operate in isolation than can any other major activity.

The ineffectiveness of a housing program that is unrelated to the

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6 Pakistan, National Planning Board, First Five Year Plan, 1955 - 1960, p. 94.
total urban context, for example, can be manifest in several ways. From a social point of view, a housing project unrelated to the total urban picture can isolate social groups from the mainstream of the local urban make-up by providing dwellings unsuited to the cultural background and based upon imported cultural values. According to Francis Violich,⁹ a consistent fault of most housing developments is that they tend to isolate their inhabitants from the main social fabric of community life and thus impede their effectiveness in bringing about a higher social standard of housing. One example can be cited in Chile, where some $42 million was spent in 1961 on post-earthquake construction, building about 25,000 dwelling units. Particularly lacking were the elements and structure about which a town should be composed to suit the social and cultural background set of values and way of life of the occupants.

From an economic point of view, housing unrelated to planning can fail to relate to a local economic base upon which the recipients of housing can rely for employment in the right location and of a suitable type. In terms of physical development of urban areas, whole patterns of cities can be affected by decisions in the location and design of housing development in relation to transportation, community facilities and employment. Without relating housing developments thoughtfully to long-range urban growth patterns, we are leading to undesirable and

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unworkable metropolitan areas and unacceptable living communities looked at as units of three-dimensional design.

The problem of relating housing to planning has also been extensively discussed by Catherine Bauer Wurster. She postulates that urban growth in developing countries is unavoidable and essential for economic and social progress, but that it is also costly. Urban social overhead expenditures must, therefore, be kept as low as possible during this critical period of rapid urbanization, if productivity is to be adequately increased. To give an idea of how the cost of certain elements such as housing and transportation are affected, Professor Wurster isolates the "more obvious variables" of city size (in population terms), density and area and functional structure, particularly the relation between home and work places. If the comparative costs and benefits of different patterns are to be assessed, the effect of these variables on specific elements in the urban environment must be considered. Thus, for example, we can consider housing and its impact on density.

City size per se has little influence on housing costs. But the high land prices and related accessibility problems which are often prevalent in growing cities both tend to increase the required density of residential development. And density is a critical factor in the cost of housing construction.

Apart from the geographic variable, increased city size and density probably tend to make for economy in, for example, water

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distribution system and sewerage system. For any alternative method, however, relatively low density is usually an essential factor in its feasibility for decent and healthy urban living. Size and density can, therefore, work together in both ways to some degree.

There is also the question of transportation: The effects of size, density, and functional structure. The effect of size and transportation costs is qualified by two factors. One is density, which in this case makes for economy until traffic jams begin to counter-balance geographic proximity. The other is city structure, particularly in terms of relationships between homes and work opportunities. If most people live fairly close to an adequate job market, whether in the main centre or elsewhere, community costs will not be high even if the city is large. But where employment in a big city is either highly centralized, so dispersed that job markets tend to spread over a wide area, or is otherwise unrelated to places of residence, transportation problems and costs are likely to be maximum.

Now it is well recognized that it will be worth-while to consider ways and means for the integration of different kinds of industry on, say, a regional basis and then to provide housing to cater to their combined requirements. A housing scheme can play a significant role in contributing to accommodation needs of industrial workers if it is linked with physical planning.

Of course, it is often argued that the trend towards industrial and population concentration in a few major areas,
because of private activities, cannot be diverted whatever the resulting social costs. This view tends to ignore the effect of public decisions on locational attractions. Industry and business require many services and facilities — from utilities to good schools, housing etc. — which are largely provided by the government. What is being overlooked is that while housing, services and facilities are excellent instruments for reducing social costs, they are, nonetheless, usually not adapted to treating or creating the external economies, the fundamental contribution of urbanization to the development process.

These external economies grow within an urban framework, and even within a regional framework. They are brought about by combinations of sectors, i.e. industry, transportation, commerce, housing, etc., working together. But the national development plan is rarely geared to the micro-scale of an individual community so that housing cannot be used effectively to a greater economic advantage. For example, writing on the "Importance of Housing and Planning in Latin America," Anatole A. Solow wonders whether:

...the economists have calculated the enormous waste in man-hours of thousands of people waiting for public transportation in the centre of Sao Paulo...to get to their houses after work — a phenomenon due to

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industrialization and economic development without proper physical planning. It is possible that by using more sophisticated analytical tools in empirical research more insight will be gained into the so-called unnecessary social costs that are often attributed to lack of effective integration of housing with other elements of the physical plan.

It is evident from the foregoing discussion that several patterns of urban development can offer economic opportunities under urban conditions, if given thought and acted upon through the planning process.

Significance of the Problem to Ghana

A sympathetic evaluation of planning in Ghana may probably reveal that the tools and studies for comprehensive regional planning are getting started. Along with overall fiscal economic and social policies, the government wields a great many tools that could have a powerful effect on the organization of the physical environment in pursuit of development objectives. These comprise resource development, irrigation and power system, public utilities, highways and transport, agricultural aids and land use policies, aids and control for industry and services, aids and standards for housing and community facilities. The

ground, as can be seen, is, therefore, very fertile for development planning.

Although Ghana has had some experience with national development plans, it could be claimed that the Seven-Year Development Plan (1963-1970) is the first real plan which sets out the policies and objectives of the government. The plan attempts to provide a national comprehensive development program for both the government and the non-government sectors of the economy. It recognizes that a true development plan must be comprehensive in its coverage; it emphasizes the choice by the whole nation of the socialist form of society, the choice that can:

assure Ghana a rapid rate of economic progress without destroying that social justice, that freedom and equality, which is a central feature of our traditional life. One of the objectives of the plan relates to socialist goals pursued by the nation.

Housing, too, is one of our main preoccupations. We are at this moment in the last stages of formulating large-scale housing projects, which we hope to have ready soon. The recognition that housing is an instrument for socioeconomic development in many countries of the world is candidly acknowledged in the preamble to "Housing Policy," and there is

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14 Ibid., p. 453.

a whole paragraph on "The Economic and Social Importance of Housing." It would not be wrong to believe that the idea of integrating housing with other development programs is not new in the country, either.

The trouble with Ghana is that in the Seven-Year Development Plan the implied "housing policy" did not provide any detailed housing programs that could form integral elements of the plan both at the national and local levels. Strictly speaking, the country did not possess a defined housing policy which specified building activities to be undertaken by various building bodies within certain periods. The government is, in fact, now trying to formulate a housing policy. However, it is true that housing schemes were integrated with other major programs in the "Accra-Tema-Akosombo regional program and plan" and the "Volta River Basin Plan." For the rest of the country housing targets were announced in regional terms, some for selected urban areas, and that was all.

As a result house-building by the government sector has frequently been lacking in criteria for construction, siting of projects often does not fit in with physical development planning, which means that the housing corporation and the planning department often work at cross-purposes. For example, the State Housing

16 Ibid., p. 192.

17 "The major contributor to the housing problem in Ghana is the fact that no effort has been made to implement a sound integrated mass housing policy." J.A.S. de Graft Johnson, (Ag. Director of the Building and Road Research Institute) in Mimeograph for Seminar on Housing Statistics and Programmes - Ghana, United Nations Economic Commission for Africa, 1966. p. 13.
Corporation carried out the Pedu Housing Scheme in Cape Coast without consultations. The planning department later observed that provision was not made for sanitary facilities, a day nursery, a school, and recreational facilities. The Chairman of the State Housing Corporation and the Chief Physical Planning Officer, each submitted a memorandum to the Effah Commission, complaining about lack of cooperation between government bodies concerned with the provision of houses and their attendant services and amenities.

A good deal of expensive mistakes might have been made already as regards the integration of housing projects with the overall national development programs. It is feasible under the conditions prevailing in Ghana to link housing schemes with the development plan consistent with any agreed-upon set of economic or social objectives, and it is possible, indeed likely, that some physical patterns in a rural or urban setting are perhaps more conducive than others to the achievement of these objectives. It only begs the question to assume that the proper patterns would sort themselves out automatically. That they will in fact do so is precisely what is questioned in an urbanizing country like Ghana.

The sequence of development which, for one reason or the other, took place in Europe and North America does not seem to be a rational sequence to follow by a developing country with very

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19 Ibid. p. 330; p. 308.
limited resources and a burning desire for social and economic progress. Catherine Bauer Wurster describes the western development process in this way:

First we encouraged over-centralization, then in reaction, disorderly metropolitan decentralization, both equally wasteful in terms of any rational pattern of civic organization...leaving problems which with all our vast effort and expenditure we are barely beginning to solve.  

It is, of course, realized that it would be more sensible and less costly to take steps now to evolve a pattern of development and land use control that would be conducive to gradual progress in the social environment instead of allowing a pattern that can steadily deteriorate, and even too expensive to correct in the future.

Ghana is faced with many problems. In this situation resources must be used in the best possible manner to advance rational planning of housing programs that fit in with the development plan in reality, both at the local and regional levels.

Hypothesis of the Study

The hypothesis of the study is that if publicly-sponsored housing programs are effectively integrated with the national development plan, they can be used to advance socioeconomic development in Ghana.

Organization of Study

The study will proceed with a quick overview of associated benefits of housing in a developing economy in order to amplify

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the notion that housing constitutes a tool for economic development. In Chapter III a case study of Israel will be presented to illustrate those conditions whose existence may advance or hinder an effective integration of housing with other elements of the development plan in the planning process. It is hoped that criteria for testing the hypothesis will be offered by this presentation.

The task of Chapter IV will be to evaluate the relation between housing and planning in Ghana in order to examine the underlying hypothesis of the study. In the final Chapter, the prospect, if any, for an effective integration of housing projects with the development plan will be discussed.
CHAPTER II
ECONOMIC BENEFITS OF HOUSING INVESTMENT

Housing in the National Economy

The significance of the social role of housing has never been in doubt, and it probably tends to overshadow the importance of the economic role of housing. We are concerned with the economic role of housing because of our interest in economic development. The services produced by the dwelling unit as well as the production of the unit have economic impact. From such a standpoint, Frankenhoff hypothesizes that housing plays a crucial role in a developing economy. This Chapter will discuss some aspects of the potential economic benefits of housing, considered only marginal to the underlying argument of the study, that an effective integration of housing with the development plan can provide an instrument for fostering economic development.

Opinions on the subject of the economic benefits of housing are fairly divided among a number of writers. Among several economists concerned with the problems of capital formation in a developing economy, a majority is of the view that housing investment competes with other forms of investment necessary for economic development. Vice-President Humphrey at a 1965 Urban Development Seminar organized by the Agency for International

Development (AID) had this to say in relation to unfavourable attitudes to housing:

Several years ago there was a feeling on your part and on ours that things like housing were luxury investments that would have to wait on the building of more factories....'Housing,' so they said, was 'unproductive'.

The position that housing is an "unproductive" form of capital investment is described by Charles Abrams as the "devil-take-housing" theory, which states that housing is a durable form of investment requiring a substantial outlay to create but yields very little per year. For this reason, housing is, generally, accorded a low-priority in resource allocation. Jan Tinbergen, for instance, argues that housing yields a high capital-output ratio. He estimates that housing requires an investment of $8.20 per dollar of output while a commercial enterprise needs only one dollar of additional investment to produce another dollar in the North American economy: housing is thus less "productive".

However, according to Frankenhoff, there is some distortion in the use of the capital-output ratio in measuring the economic role of housing stock. A brief analysis of this criterion for investment may be discussed at this point, because it shows very well the distortion which takes place in measuring

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2 Ibid., pp. 7, 8.


the economic role of housing stock and which Frankenhoff⁵ points out. Under the national income accounting procedure, the total value of the housing services produced during the year is represented by the rent factor alone. Although the productivity of a factory is not measured by its rent alone, this is what is done by the national income accounts in the case of housing. In the context of developing countries, in particular, the use of rent alone to measure the value of housing services is clearly inadequate in that houses are often the small production centres for the tailor, dressmaker, or storekeeper.⁶ From another point of view, it is clear that the use of any capital coefficient to measure housing investment yields does not include non-capital factors, such as, political, psychological, or social factors. The problem is that these non-capital factors are precisely the ones which play the major role in determining the productivity of additional capital.

The upshot of this argument over the use of the capital-output ratio in measuring housing investment yields is that a more sophisticated yardstick must be developed. Meanwhile, in the main, the opinion of most American and international policy makers since postwar foreign aid began had continued to be divided. For instance, at a conference sponsored by the Albert Farwell Bemis Foundation in 1953, the theory was advanced by Sir Percy Spender, Australian Ambassador to the United States,

that the problem of housing in developing countries was one about which aid-giving nations did not want to be too urgent. He felt that the more important thing was to help people to obtain the facilities to increase production and progressively they would thereby solve the problem of housing in their own way. At the same conference Max F. Millikan expressed a modified attitude to housing investment when he said that some housing investment is justified where:

The objective is to encourage relatively small scale enterprise in the essentially rural areas in India, rather than to put a heavier load on the large cities or as in Indonesia for reducing the over-concentration of population on Java by moving people en masse to some of the lesser populated islands such as Sumatra.

It could be inferred from this position then that if housing is to be built, it must be an economic necessity to be confined to plant locations, so as to curb excessive journey to work problems; that housing must be sited where it can constitute "concrete demonstrations of the rewards that may be obtained from greater disciplined production effort."

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8 Max F. Millikan, "The Economist's View of the Role of Housing," in (ed), Burnham Kelly, op. cit., pp. 24, 25. According to Charles Abrams, more recently Prof. Millikan has said that the problem is not a choice between housing and other investment, the problem is how much housing you must have in order to make some other investment pay off. (See footnote, C. Abrams, op. cit., p. 107)

9 Leo Grebler, "Possibilities of International Financing of Housing," in (ed), Burnham Kelly, op. cit., p. 32.
The main trouble with both the extremist and modified theories, Charles Abrams, indicates, is that they assume that there is a sharp distinction between "economic" and "social" change, and between "production" and "consumption" standards. They also take it for granted that it is possible to concentrate on increased productivity while deferring any general changes in the social environment until sufficient resources may be available for the purpose. What is happening is that both economic development and social change are interacting in the same process of change in developing countries which requires equal attention at the same time.

There are several writers who would even recommend that a greater emphasis should be given to housing for its economic benefits. For example, Edward D. Hollander notes that even where housing has been small scale, high cost, and high priced, it has been one of the early forms of industrial development, stimulating a variety of auxiliary industries and trades.

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See also: Catherine B. Wurster, "The Case for Regional Planning and Urban Dispersal," in Burnham Kelly, op cit., p. 40.

In this case, the betterment of housing is an integral part of the complex process of development. For housing programs can serve as important "breeders" of development — a fillip to saving and encouragement to investment, an exercise in organization and planning, as well as a breeding ground of enterprise, management technology and craftsmanship.

Arthur Lewis\(^1\) also notes that a housing program can be used as one of the "bootstraps" for distributing income through putting local labor and materials to work, and so raising the standards of living not only in housing but also in food and other ways. The economic role of housing has been observed by Homer Hoyt.\(^2\) He proposes that housing aid to developing countries should not be considered as an independent matter, but as an essential part of the economic development of the nation assisted.

Of a similar opinion but moving a step farther is Anatole Solow.\(^3\) In commenting upon the concession made by some economists that some minimum housing facilities are needed around new major industrial plants to maintain productivity of labor, he points out that in contrast to this approach the following arguments are advanced to prove that housing and planning in Latin America are essential elements of economic development program.


\(^{13}\) Homer Hoyt, "Principles Governing Housing Aid to Underdeveloped Countries," in *Study of International Housing*, op. cit., p. 17.

\(^{14}\) Anatole A Solow, "Importance of Housing and Planning in Latin America," in (ed), Burnham Kelly, op. cit., p. 55.
a) At present millions of people in Latin America live in areas considered by Solow to be "sub-human" that provide no incentive whatsoever for them to become suddenly productive. The goal of a decent life is easily visualized in the form of a decent house, and consequently housing improvement becomes a powerful motive towards productivity.

b) One of the most visible steps to prove the goal intentions behind economic development to the masses is to raise their standard of living by improving housing.

c) Housing betterment is at least as important as the improvement of nutrition through increased production as a means of increasing labor productivity.

d) Funds spent on housing as a form of preventive medicine will balance similar or larger expenditures on hospitals, medical, and social services.

e) A minimum adequate home which permits normal family life is, except for food, the strongest element against social unrest and individual apathy, without which other supposedly quicker forms of raising living standards will not be fully effective.

For the above reasons, individual governments of Latin American countries have increased housing programs. But, as Solow points out, failure to incorporate positive and adequate housing programs in economic development projects has resulted in the "most detrimental consequences" and may lead to an outright failure of such projects.

It may be added that since the trend towards industrialization will continue for many more years, failure to accompany economic development with housing and other mutually supporting facilities can hamper economic development. Especially for its inherent productivity consequences, which require a good deal of research, housing should be complementary with other objectives of economic development.
According to the Organization for European Economic Cooperation, the most usual meaning of productivity is the productivity of labor. When the word productivity is used without further qualification, the productivity of labor is understood. The importance of productivity lies in its central position of labor and is particularly essential for any economy. Productivity of labor is an important indication of the standard of living which depends on a number of factors; the richness of available resources, the abundance or scarcity of manpower relative to other material resources, and so on. But given the quantity and quality of available resources, it is largely the productivity of labor that determines the standards of living. Therefore, the importance of the use of labor as a determinant of the standard of living is a factor of general application operating pretty well at all times not only in developing but also in advanced countries. The importance of productivity is further enhanced when we consider that labor is an element of costs in all branches and sectors of productive activity.

There is some literature on the relation between housing and labor productivity. The association of health and environment has been known since the early days of medicine and in the mid-nineteenth century its importance was repeatedly stressed in the writings of Chadwick, Simon, Southwood, Smith and other

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Conclusions of a survey on factors of productivity recognized housing as one of those factors that foster stability of labor. In a very recent article, Leland S. Burns and B. Khing Tjioe indicate that housing can play a "profitable" role in the economic development of emerging nations. Their article attempts to determine "objectively" the effects of housing investment on economic development. The case studies to be described, the authors claim, constitute important elements of the International Productivity Study, a large-scale research project currently in progress at the University of California, Los Angeles, and supported by the Agency for International Development.

The main objective in the International Housing Productivity Study is the determination and measurement of the merits of better housing in economic terms. The benefits to be determined are broad.

a) greater efficiency from the work force
b) less absenteeism from work
c) reduction in the need for medical care, and improved school attendance which has an effect on the future quality of the work force;

The authors agree that a worker with better housing works more efficiently on the job. He is less concerned about the welfare

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of his family at home and is, therefore, able to devote his attention to the job.

Because good health is one of the major correlates of good housing, the better housed laborer is absent from work less often because of illness. Both benefits — better efficiency on the job plus lower absentee rates — add up to higher earnings for the worker.\(^{19}\)

These benefits even extend to the worker's family who are healthier, require few treatments for illness, and save in medical expenses.

Burns and Tjioe are currently attempting to determine whether these presumptions are, indeed, true with a series of case studies. These studies are at sites where new housing projects have been occupied recently by workers employed in labor-intensive occupations, paying time and incentive wages. In the opinion of the researchers two of the studies completed — one at the Ogala-Sioux Indian reservation in Pine Ridge, South Dakota; the other in Hambaek mining district in South Korea — meet the criteria.

While the results were found to be encouraging, they were interpreted only as a very general indication of the relation between better housing and its effect on economic welfare. Adding all the benefits, (in the Korean study) higher income earned by the employees, increased output for the employer corporation, and medical costs saved, and deducting the operating costs of the project yields a total "profitability" estimate of impressive size. For the project taken as a whole, the benefits amounted to 16.3 million won (\$125 - 385) per year. The value of

\(^{19}\) Ibid., p. 88.
the benefits represents a rate of return of 18.2% on the project's capital cost of 108.2 million won ($832,300). For the corporate investor, the rate of return on the project equalled 16.3%.

Burns and Tjioe compare this "profitability rate" with similar rates for Korean industries. Among the principal mining and manufacturing sectors, the rates ranged between 16.6% for metals and 3.3% for the paper industry (1961-62). The average for all such industries stood roughly at 10%.20

The findings of this study show that housing could be truly an economic investment in its own right. However, it may be concluded that progress achieved by Prof. Burns and by his colleague in bridging the gap between theory and practice on the productivity issue is only a beginning. Hopefully, more tests will be run and the results realized to enlighten us on this crucial relationship between housing and worker productivity.

Another study in the same area but with the emphasis on psychology has been done by Prof. Lee O. Thayer. Although directed toward an explanation of housing's total sociopolitical impact in developing countries, Thayer's work, Elliot points out, is of importance here in its "development of a theory leading toward a social psychology of housing."21

Thayer starts with the assumption that there is a direct and powerful relationship between an individual's physical environmental and psychological perspective. He points out that

20 Ibid., p. 89.

man's home is the most significant thing in the world around him: a man's dwelling being a psychological extension of himself, helps to determine his concept of himself.  

These assumptions are buttressed with separate examinations into the ways in which the home affects human development, both early and later in life:

The physical features and facilities of the family dwelling space, light, sanitation...may serve to form the boundaries or configuration of the individual's psychological ecology. A cluttered and crowded physical environment without personal privacy may lead to a discarded or confused pattern of orientation to life.  

Thayer deduces that psychologically adverse conditions associated with inadequate housing are "underdeveloped personality, difficulty in identifying positively, either rejection or idealism or optimism about life and schizophrenia." These conditions are likely to be passed on to the child from the disillusioned adults who surround him:

....The bitterness of the parents becomes the bitterness of the children. A sense of industriousness, competence, and adequacy cannot develop where these qualities are neither possible nor valued.

Although the psychology of housing is a relatively new field, Elliot's view is that it seems logical to assume Thayer's conclusion that inadequate housing in developing countries can only arrest the development of those skills or attitudes "deemed

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23 Ibid., pp. 41, 42.
necessary for accelerated socioeconomic advancement. There may be some doubt about the relationship of productivity and housing. If so, further research that would either refute, or confirm that doubt will be helpful.

**Housing and Related Industries: Consequences for Labor and the Economy**

Apart from the relationship with productivity, housing is also related with the general construction sector and the building materials industry. Harold Robinson briefly explains why this is particularly true for developing economies.

In countries which are underdeveloped to a limited degree, only, and which have a formal organized construction, as is the case of so much of Latin America,...housing plays...a substantial role in the national economy. 27

In Chile, for example, construction represents a substantial portion of the entire economy and house construction is the major part of all construction. For the ten-year period from 1941 to 1950, site development and home building represented 3.2% of the net national product, while from 1951 to 1955, the percentage was 3.5.

25 Sean M. Elliot, op cit., p. 15.

26 Many authors, including Thayer, do not attempt to oversimplify the relationship between housing and social, economic or psychological factors. Their treatment of these relationships are tentative and should not be seen as an attempt to provide clear-cut answers in the absence of clear-cut data. They are only formulating some hypotheses that deserve attention and best research efforts.

27 Harold Robinson, from address delivered before Senior Executive Conference of Mortgage Bankers Association of America, Dallas, Texas, Jan. 21, 1963, p. 1.
It may be said that although Robinson's argument is logical enough the objective in this case is not to dwell upon the economic potential of housing as an industry, but rather, to advance theories suggesting its capacity to breed complementary building-material industry and a skilled domestic construction sector. Housing's role is further defined by Robinson:

Without the incentive of housing, such industry might not develop, forcing the country to be dependent upon imports. Without housing, other demands for building material might not be sufficient in scale to warrant the construction of cement and brick plants, metal and wood-working establishments... etc.  

In another source, Robinson refers to several cases where housing-induced building-material industries had the effect of reducing the need for imports while, simultaneously, creating new foreign exchange-earning export. For example, in 1953, the Export-Import Bank (U.S.) lent Israel some $16.5 million to help it develop her cement factories in furtherance of its large-scale housing program. By 1963, Israel was no longer importing cement. In fact, cement exports had earned considerable foreign-exchange.  

The relationship between the construction sector and the national economy forms the subject matter of a study being done by Prof. C.A. Frankenhoff in Puerto Rico. Dr. Frankenhoff defines his problem as one of measuring "the key inputs

28 Ibid.

generated by the construction sector in Puerto Rico from 1956-1962,\textsuperscript{30} Data assembled by Frankenhoff indicate the way the developing economy can be affected by the construction sector.

In 1956 the construction sector of Puerto Rico of which housing forms a substantial portion grew by $140$ millions, almost 12% of the gross national product. This growth was responsible for 61% of the total domestic capital formation. In 1962 the construction sector contributed 15.6% of the island's GNP with a value-put-in-place of $306$ millions. While the economy was growing annually at an average rate of 9%, the construction sector was growing at an average annual rate of 17%\textsuperscript{31}.

The general consequences for the labor force from all this in terms of employment and earnings are quite apparent. Thus, it seems that housing's contribution to development of building-material industries and construction sectors can be of major importance. Housing stimulates employment, direct and indirect; it has an impact on other industries and adds to local purchasing power, and saving potential.

\textbf{Housing and Domestic Personal Savings Mobilization}

In recent literature the notion is being entertained that housing can constitute a potential mobilizer of domestic savings. A study undertaken by Sean M. Elliot in Latin America (1966) may
\begin{itemize}
\item \textsuperscript{30} C.A. Frankenhoff, "The Economic Impact of the Construction Sector in Puerto Rico," General Outline for Research, San Juan, April, 1964.
\item \textsuperscript{31} Ibid.
\item \textsuperscript{32} See for example, Financing of Housing and Community Facilities in Developing Countries, (New York: U.N. Publication 1966), pp. 38, 39.
\end{itemize}
be considered as an effort to explore such a notion. Elliot himself considers his work as a response to Kindelberger's implied assertion that, only the higher income sectors of the developing economy are capable of saving, and that this limited savings source may do very little in terms of contributing to domestic capital formation.

By analyzing the lending activities of the credit cooperatives in Puno (Peru), Elliot shows that housing and related investments is a major loan objective of, and a powerful savings incentive to, members of the institution. This finding is further strengthened with statistics taken for five other cooperatives representing various geographic regions of Peru, which shows that on the average, 30.3% of approved loans were channelled into construction of improvements on, or mortgages for, housing. The contention is made that these figures suggest that those who have opposed housing investment in developing countries, on the ground that it tends to divert capital away from more productive activities, have generally failed to recognize the role of housing in the development of new personal savings resources.

Harold Robinson also argues that the demand and desire for housing creates savings which otherwise would not accrue, "and this, in turn, creates a habit and atmosphere of saving that is

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34 Same Elliot, op cit., p. 40.
peculiar to private enterprise societies."^  Whether savings habit and atmosphere created by housing is peculiar or not, Robinson Newcombe's view is that housing as savings stimulus is not confined to modern industrial societies, but to the contrary, is transferable to the developing economies. The mobilizing effect of housing is particularly applicable in the case of middle- to lower- income sectors.

Elliot's overview of massive savings and loan movement in Latin America comes out with the conclusion that there is a positive relationship between the homeownership incentive and mobilization of new personal savings resources in developing economies. Not only has this new savings accumulation increased the formation of domestic capital, but it has become, in countries where appropriate institutions have been established, a major source of funds for financing new home construction. In Table 1, the distribution of national institutionalized savings between commercial and credit cooperatives in Peru (1961-64) shows that substantial savings accrue from cooperative housing savings. The impact of such an activity on the housing sector of the economy can be significant. But it may be noted that running of credit institutions in developing countries, though a worthy idea, involves financing to start with, and efficient organization which are by themselves sources of current difficulties. To achieve any reasonable success with savings institutions such


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<td>Amount on Deposit, Credit Co-ops</td>
<td>60,126,000</td>
<td>114,896,000</td>
<td>180,230,000</td>
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<td>Percentage of Total Institutionalized Savings—Commercial Banks</td>
<td>94.48</td>
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<tr>
<td>Percentage of Total Institutionalized Savings—Credit Cooperatives</td>
<td>3.22</td>
<td>4.99</td>
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barriers must be overcome. In fact the success achieved in cooperative housing in Latin America may largely be attributed to the United States Assistance programs with respect to the initial financing and the availability of technical know-how.

Summary

This Chapter has summarized the role of housing in the developing economy with the emphasis on the associated economic benefits: that housing can contribute to worker productivity, stimulate savings, and generate substantial impact on the building industry and materials, and employment.

In dealing with the housing problem governments may vary their activities in:

a) Metropolitan and urban areas,
b) Areas for development of new resources, and
c) Areas for rural development programs.

In practice, housing investment cannot be divorced from general economic policies, because it is these very areas where development is occurring and where, in consequence, the role of housing can be significant. Once this is accepted, a nation is made more aware and better inclined to plan most effectively and economically for housing. The country can program housing where it is most needed and tie it in with industrial location or settlement policy.

In spite of all the benefits of housing, it is important to take into consideration the argument that only limited resources are available and that techniques should be devised to allocate these limited resources to the best advantage. A country can devote some amount of resources it can afford for housing in its
development plan. But the question is not just how much should be allocated to housing within economic limitations, but rather, "the proper use of resources available for housing — and not in straining all resources indiscriminately for the production of the maximum possible number of modern standard housing units," and facilities.

The thesis has suggested that in order to realize most of the benefits associated with housing programs, it is essential that the latter are integrated with the development plan. At the national level governments may recognize their responsibilities for planning, programing, investment, action research and evaluation in this field through the use of and support for reliable organizations vested with necessary authority for coordination and action in the area.

The next Chapter will examine how this has been effectively done in a developing country, with a case study of Israel. Since the establishment of the state, Israel has used housing as an effective element of national planning to encourage economic development. It has succeeded in avoiding an unnecessary concentration of the urban population in a few metropolitan areas, as frequently happens where spontaneous and unplanned trends are predominant. Integration of housing programs with the development plan alone cannot produce economic development, though in a suitable environment it can be the missing agent.

CHAPTER III

LINKING HOUSING PROGRAMS WITH DEVELOPMENT PLANNING:
CASE OF ISRAEL

Introduction

In commenting on planning in developing countries, the suggestion was made in the introductory part of this study that broadly speaking, housing programs are not effectively linked with other development programs, so that they will advance rather than hinder economic development. We saw how certain external economies could be overlooked through the ineffectiveness of housing programs, that do not tie in with other elements of the development plan. The second Chapter has presented some aspects of the economic benefits of housing, and the task of the present one is to discuss how housing has been used as a tool for economic development in Israel through development planning.

Israel's effort at housing and national planning in comparison with other developing countries has been exceptional. The exceptional conditions prevailing in the country during the period which followed the creation of the state in 1948 conduced Israel to an experiment in over-all national planning, including planning of the geographical distribution of its population in which housing policy played a significant role. The aim of this planning was to reduce the concentration of urban population within the metropolitan areas and the densely populated coastal zone, and simultaneously to create a pattern of urban settlement.
This called for establishing a network of agricultural settlements, together with urban centres, in accordance with a prepared plan. This network was intended to fulfil three main aims:

a) To obtain a larger density of population in the outlying districts so as to reduce the relative proportion of the population in the major cities.

b) To diminish the exclusive dependence of the rural regions on the three major cities, by transferring part of their service functions to regional and district centres.

c) To foster regional community life by encouraging cooperation between the new centres and their rural environment.\(^1\)

The principles and trends of national planning as reflected in the activities of the Planning Department materialized in a series of National Plans. The policy of population dispersion in which planned housing was effectively used in furtherance of economic development stands in stark contrast to the spontaneous trends in most developing countries, where the population tends to concentrate in a few metropolitan areas, and within the confines of big, primate cities. Thus, a study of Israel's experience might throw considerable light on the nature of rapid social change in which housing and planning may contribute to accelerated economic growth.

Circumstances for Housing Program in Israel

The main problem confronting the newly-created state of Israel was the absorption of immigrants. Housing lagged far

behind the great influx of the immigration. Widespread slum areas in large urban centres, and housing hardships were the chief causes of social problems. Thus the problem of provision of housing for large masses of population ceased to be merely a matter of private concern and became a vital interest of government and public agencies.

In 1948 there were only about 650,000 Jews in the country. From then until the end of 1951, thousands of refugees came from the Nazi extermination camps in Europe at an average rate of about 200,000 persons per year. By the end of 1963 the population of the country numbered about 2.4 million, so that it had increased by 200% within 15 years. (See population increase in Figure 1, on following page)

The absorption of the immigrants within the existing framework of settlement was not only impossible, but also undesirable. The settlement structure was considered unsatisfactory due to the overconcentration of the Jewish population in the main cities. This concentration resulted not only in excessive urbanization, but had its influence on the regional division of the population in settled areas -- the settlement pattern proceeded in the direction of an extreme "polar" arrangement. Greater Tel Aviv alone, taken together with the five closest suburbs, concentrated within its confines 43.7% and the three metropolitan areas of Tel Aviv, Haifa, and Jerusalem together, 70.4% of the Jewish population of the country. The percentage of the Jewish population concentrated within the three administrative districts coinciding with Tel Aviv, Haifa and the Central coastal zone

\[2 \text{Ibid.}, p. 22.\]
FIGURE 1  ISRAEL: INCREASE OF POPULATION 1948–1963

SOURCE: ADAPTED FROM THE ISRAEL PHYSICAL MASTER PLAN, 1964
amounted to 79.5%. Thus the numerical ratio of the non-agricultural population, concentrated in the areas of the big towns to that dispersed among villages, small and medium centres, was 13 : 17 : 70.3

Thus extremely high degree of non-agricultural population concentrated within the areas of three big cities was paralleled by a highly centralized system for the marketing of agricultural produce and for the delivery of supplies to rural areas. The concentration of urban population was followed by a similar concentration of the bulk of the economic, administrative and cultural functions within the three major centres. Administration of essential services was thus divided between the basic rural cell -- the kibbutz or moshav4 -- and the big town, with the almost complete elimination of the intermediary stage of small and medium size urban centres.

Policy for Dispersal of Population

The aim of the economic policy, to reverse the process from the over-concentration in the various service branches to the increase of the productive potential in general, was bound up with a certain settlement policy: to avoid the "over-urbanization" of the new immigration, and decrease the influence of the large towns and that of the more developed regions. The policy aimed at


4 Moshav: a village consisting of 15 to 20 families each cultivating its land individually. Kibbutz: an agricultural settlement comprising one hundred to several hundred families. This settlement is based on collective ownership of all means of production. (H. Drabkin-Darin, Housing in Israel, p. 7, 70.
creating an hierarchical pattern of urban and semi-urban centres as intermediary links between the rural population and the big towns.

In principle, the objective was to modify the 'direct link' between the rural communities and the big centres with a more articulated settlement pattern, where economic and social connections within smaller regional units would emerge and develop. Such smaller regional units defined on the basis of various features of physical and human geography were ultimately delimited as the "zones of influence" of existing urban centres, or such anticipated for the future.

The first grade of this planned hierarchical pattern, (B-centre, since the moshav village was considered an A-centre) was the rural service centre catering for four to six moshavim with only a few hundred inhabitants. They would be craftsmen and people employed in services.

The second (C-centre) was a small township with a planned population of between six and 12,000 inhabitants, designed to serve a small district with an average diameter of 12 to 20 kilometres. Such a centre would contain a large number of workshops, provide service and institutions needed in the area, and would include a few industrial plants, mainly those of the processing and service industries. The manpower needed in the district for hired labor and agriculture, and for building and development works would be equally concentrated in such a centre.

The third grade (D-centre) was a middle-sized town serving a still larger district with a planned population of 15 to 16,000,
This would include central regional institutions and services and a variety of manufacturing enterprises, not necessarily dependent on regional resources. Most of the D-centres were chosen as small "regional capitals" of the basic regional units.

The creation of this network of urban and semi-urban centres has been going on since 1949 and it is not yet entirely finished. A balanced distribution of the population through regional planning and development continues to be the official policy of the government.

Machinery of Population Dispersal

The policy for dispersal of population was implemented mainly through rural colonization and foundation of urban settlements based primarily on absorption of immigrants. Though housing alone was not the only instrument used in absorbing immigrants, "it was obviously, as Drabkin-Darin puts it, "a conditio sine qua non." The provision of shelter was necessarily an essential step without which, to some reasonable degree, productive absorption would not prove effective.

The government took over the main responsibility for residential building, because of heavy migration and the need for a controlled plan of national distribution of settlements and development of agriculture and industry. Government allocation became inseparable and prominent part of the state. On the average, 20% to 28% of the total government budget was expended

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6 H. Drabkin -Darin, *op. cit.*, p. 36.
on housing. For each of the subsequent fiscal years a distribution plan for new housing units was prepared in which the quotas for existing towns and new ones were fixed.

As a result of a comprehensive survey, a general plan for the desired distribution of population served as a starting point for fixing such quotas. A survey frequently included the following items: analysis of the region (zone of influence) of the existing or proposed urban centre; regional resources and their possible utilization; estimates of rural population; demographic targets, and the time schedule for the development of the town proper; long-and-short range employment forecasts and the anticipated structure of employment; required areas for residential and industrial zones, roads, open spaces and public institutions, density standards and the allocation of land necessary for public buildings.

The following three maps in Figure 2, 3, and 4 (see next pages) show past and future trends in the distribution of the population in Israel. The first map depicts the situation existing in 1948 when planning was in its early stages. The second map shows the impact of the new population dispersal policy based on data from the first Population Census, conducted in 1961. The third map indicates the projected and planned distribution of a population of four million inhabitants, a target which will probably be reached in another 20 years.

On the whole, the results of the policy for planned population distribution, in which housing played a critical role since 1948, were not insignificant. The percentage of the Jewish population residing in the three big cities and their suburbs
PROPOSED DISTRIBUTION
OF A FUTURE POPULATION
OF 4,000,000 INHABITANTS (1982)

FIGURE 4
SOURCE: ADAPTED FROM THE ISRAEL MASTER PHYSICAL PLAN, 1964
dropped from 70.4% in 1948 to 51.5% in 1963 as shown in Figure 5. (see following page) The relative concentration of the coastal zone dropped from 79.5% to 70.9% within the same period.

This achievement by Israel demonstrates that the opportunity exists for other developing nations to adopt a planning policy which can use housing and other devices in an integrative fashion to channel migration into desirable areas. Government and public agencies are capable of giving assistance or special facilities and incentives to priority areas so as to attract people, services, and industries there. Such aid may be given in a number of ways: for example, priority in erection of public housing, establishment of industrial zones, encouragement of private investment in industry -- all consistent with the development plan.

In Israel's drive toward the general goal of national development, housing programs play no small role, for housing provides one of the foundations necessary for the existence of settlements with diversified occupational structure, and performing socio-economic functions which integrate them with their regions. We shall now examine the place of the Housing Division in this process.

The Role of the Housing Division

In Israel the quantity and quality of housing are in practice largely determined by the economic capacity of the government. Since 1948 one-third of the houses have been built by private enterprise and two-thirds by public enterprise.

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7 E. Brutzkus, op. cit., p. 25.
FIGURE 5  CHANGE IN POPULATION DISTRIBUTION IN ISRAEL 1948-1963

SOURCE: ADAPTED FROM ELIEZER BRUTZKUS, PHYSICAL PLANNING IN ISRAEL, 1964
The government has made itself responsible for the housing of immigrants and for the housing needs of the whole population except the very well-off who can buy their own houses through the private enterprise. This dependence of absorption on public bodies, (which is significant) offered a unique opportunity for the planned geographical distribution, and indirectly for far-reaching alteration of the existing settlement pattern. The first priority was to direct immigrants to predetermined areas and provide them with jobs.

One special character of housing seems to be that it takes into consideration the changing character of the country, as a result of its intensive immigration and economic development. It is true to say that many countries also developed in the past as regions of constant immigration and absorption. But as far as housing the immigrants was concerned, the function of the authorities was at best regulatory rather than planning in advance. In fact, this regulatory activity by the government is more common in developing countries than advanced planning. Israel itself started on similar lines until it created a new planning department, enacted a nation-wide physical planning law and seriously started actual planning of population distribution based on an official policy.

The practical planning of a new urban and semi-urban districts is in the hands of the Housing Division within the Ministry of Labor. It is responsible for all housing activities in the country that are carried out with the aid of government.

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resources. The Division plans and provides housing for various sections of the population, the actual construction of housing being carried out either directly or through other bodies. These plans are prepared for a long-term period over several years, changing to meet the needs from year to year in the light of a scale of priorities and financial possibilities.

One lesson offered by the Housing Division is its coordinating role. The structure of the Division results from its range of activities, including the planning, financing, and allocation of housing for various sections of the population. The Division is composed of a managerial committee that determines housing policy and formulates programs and effects changes in the course of their implementation. The committee negotiates with the Ministry of Finance, and determines jointly therewith the financial aspects of housing. It coordinates activities with several agencies and institutions which are interested in housing plans, such as, the Absorption and Settlement Departments of the Jewish Agency, housing companies, contracting bodies, and the planning department. The committee also centralizes and coordinates the activities of the various departments within the Division itself. These include:

a) Department of Immigrant Housing and Development Areas;  
b) Department for Miscellaneous Housing Projects;  
c) Public Institutions Department;  
d) Planning and Engineering Department  
e) Execution Department;  
f) Department for Development Works and Inspection  
g) Financial Department;  
h) Building Materials Department.

The important thing to note is that there is a clear division of responsibilities in the administrative set-up and
the effort is made to ensure that all interdependent activities merge together according to plans. The skill developed by the Israelis in using housing as an effective tool for organizing immigration, supporting agricultural villages, industrial cities, and the urban economy, would not have been possible without integrating common efforts whether financing, planning or building. Effective coordination of inter-departmental activities remains a crucial point in housing and planning in many developing countries.

Israel had to minimize this problem reasonably in order to achieve a resounding success in housing. By 1962, housing densities had decreased from 2.18 persons per room in 1948 to 1.9 persons per room. The rate of house construction necessary for this achievement is the highest recorded for any nation in proportion to its inhabitants, 16 houses per thousand in 1963, compared to 11 per thousand in the U.S.S.R. (the next highest) and nearly 6 per thousand in the United Kingdom. Certainly, a lot of resources went into housing, but the point being emphasized here is how these resources have been used through coordinated planning.

One other important point in connection with housing in Israel is its impact on the national economy through employment, building materials, capital investment, labor productivity. Thus, in order to fully appreciate housing as an instrument for economic development, it is essential not only to consider it against the planning background, but also against the local economic background.

9 A. Doudai, "Regional Development and Housing in Israel", in Ekistics, June 1962, p. 385.
Housing and the National Economy

The problems of the building industry are relatively more important in Israel than in many other countries. Israel's economy is largely influenced by extensive development activities that require large-scale building, not only for housing but also for the needs of economic investment. Furthermore, between 1948 and 1961, rural settlements alone rose from 479 to 732.\(^{10}\)

According to A. Doudai,\(^{11}\) the share of building construction for all purposes fluctuates at around 60% of the entire raw investments; the investment in housing alone being about 30% of raw investments in recent years. The manufacturing of building materials comprises about 10% of all industrial activity in the country and by including the by-products consumed in building construction the figure stands at 19%.

The share building represents in the country's economic structure becomes clear from the following data on the part played by building in the national incomes of various countries including Israel, according to the United Nations Statistical Yearbook of 1955.

<table>
<thead>
<tr>
<th>Percentage of Building in National Income, 1954</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
</tr>
<tr>
<td>Britain</td>
</tr>
<tr>
<td>Finland</td>
</tr>
<tr>
<td>Israel</td>
</tr>
</tbody>
</table>

The above data indicate that the significance of building in Israel corresponds more or less to that of the countries of

\(^{10}\) The Israel Physical Master Plan

\(^{11}\) A. Doudai, op. cit., p. 384.
Europe and North America. In the same year, 1954, the investment share of housing was 35% which again compares with several European countries' allocations. A United Nations Publication of 1955 provides the following data:

Percentage of Housing in Gross Capital Investment, 1954

<table>
<thead>
<tr>
<th>Country</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>England</td>
<td>24%</td>
</tr>
<tr>
<td>Belgium</td>
<td>24%</td>
</tr>
<tr>
<td>West Germany</td>
<td>28%</td>
</tr>
<tr>
<td>Denmark</td>
<td>17%</td>
</tr>
<tr>
<td>Greece</td>
<td>32%</td>
</tr>
<tr>
<td>Sweden</td>
<td>24%</td>
</tr>
</tbody>
</table>

One characteristic aspect about financing of housing is the role played by the government. From the development budget the government grants loans for housing under two main headings; as a special item for housing earmarked for immigrants and long-established population, and second, as special expenditure for housing in agricultural settlements, constituting part of government expenditure on the development of agriculture. Between 1949 to 1955, for example, as shown in Table II the government allocations fluctuated at between 20% and 28% of all development expenditure.

### TABLE II

Government Allocations in Housing, 1949 - 1955

<table>
<thead>
<tr>
<th>Year</th>
<th>Development Budget (IL. l,000,000)</th>
<th>Government Housing Allocations</th>
<th>% for Housing Allocations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1949</td>
<td>35.9</td>
<td>9.5</td>
<td>26.4</td>
</tr>
<tr>
<td>1950</td>
<td>67.4</td>
<td>24.0</td>
<td>28.0</td>
</tr>
<tr>
<td>1951</td>
<td>73.5</td>
<td>18.3</td>
<td>24.9</td>
</tr>
<tr>
<td>1952</td>
<td>100.8</td>
<td>20.6</td>
<td>20.4</td>
</tr>
<tr>
<td>1953</td>
<td>197.6</td>
<td>42.5</td>
<td>21.5</td>
</tr>
<tr>
<td>1954</td>
<td>197.6</td>
<td>42.5</td>
<td>21.5</td>
</tr>
<tr>
<td>1955</td>
<td>236.8</td>
<td>59.1</td>
<td>25.0</td>
</tr>
<tr>
<td>Total</td>
<td>869.2</td>
<td>199.7</td>
<td>23.0</td>
</tr>
</tbody>
</table>

Source: The Israel Economic Annual, (1949-1955, Jerusalem)
Thus, government allocations for housing offered a basis for the development of a special sector within the country's building activities, namely, housing, which was subject to the supervision and planning by the state. All building with the partial or entire financing of the state is conducted in accordance with government plans and is subject to the control of and direct administration by government institutions. The consequences of these investment activities for labor were obvious in the Israeli economy.

Housing as a Source of Employment

The process of absorbing immigration had to be accompanied with the ensuring of regular employment based on making productive use of the immigrants. Because of the disproportion between the expansion of industrial and agricultural production and large-scale immigration, a situation was created in which the economy could not promptly or immediately absorb all those requiring work into the cycle of production. A Manpower Survey carried out in 1955 gives an idea of the state of employment in the early stages of the new economy. It shows that as against 631,200 persons gainfully employed at that time, 45,500 persons were without employment. Hence full employment was found among the substantial ratio of 7.2% of the earners. The survey also indicates the relatively limited absorptive capacity of the basic branches of production in Israel. Only 39.9 of the earners were employed in agriculture, mines and industry, while 60.1% made their living.

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from building, commerce and other services.

Under these conditions the building of dwellings and public works was of particular importance. These branches could exercise a regulatory function in the field of employment and in some measure counterbalance the difficulties deriving from the restricted absorptive capacity of industry and agriculture, besides diminishing the dangers of increased unemployment. Furthermore, as Drabkin - Darin\textsuperscript{13} speculates, as long as the basic branches of production have not been adequately expanded and agriculture is highly mechanized, a high potential of housing activities and public works can maintain economic activity and the purchasing power of the local market at a desirable level, thus permitting the speedy expansion of local production.

It must be noted that an appreciable part of Israel's labor force makes its living directly or indirectly from building. According to the data of the "Manpower Survey", in the middle of 1954, a total of 50,800 earners were directly employed in building and their number had risen to 52,600 earners by the end of 1955. In addition, however, more than 8,000 persons were employed in quarries and in the stone and cement industries. Nearly 6,000 persons were engaged in carpentry, mechanics and the industrial production of wooden and metal products required in building. As at this period, it was computed that 12\% or more of all earners lived either directly or indirectly from housing.

Hence housing and public works are a valuable instrument

\textsuperscript{13} H. Drabkin - Darin, \textit{op. cit.}, p. 175.
for the government in dealing with employment and providing work for a large number of people. While the public works serve only in part for the consolidation of agriculture, and thus contribute to the expansion of production, housing is fundamental and vitally necessary, for it creates prerequisite conditions for production by ensuring dwellings for the workers, and at the same time serving as a major source of employment.

Economic Importance of Agricultural Settlements

Quite apart from providing sources of employment housing in settlements is particularly important for its value in expanding the agricultural economy of the country. For this reason, housing is largely concentrated in new villages which are planned to conform with the development plan.

Of the 22,609 dwellings built in farming areas at the end of 1955, 85% were in 230 new villages and only 15% in the previously established 85 villages. The value of settlements for absorbing immigrants and promoting the economic productivity of the country is further illustrated by the following facts.

At the end of 1955, there were 720 Jewish agricultural settlements, with a total population of about 50,000 families. These settlements contained 31,000 farm units as at 1955. Thus the new settlements contained 60% of what was then the total Jewish agricultural population in the country.

In the past the attempt has been made to set up, in addition to the new villages, an entire agricultural region,

\[14\] Ibid., p. 76.
comprising about 36 villages as shown in Figure 6 (see following page). The objective is to coordinate agriculture with industrial enterprises, the latter to be established so as to utilize the agricultural products. This regional set-up of villages and semi-urban centres has several advantages: it allows for a planned variety of crops and a combined provision of services, which can be managed more effectively for an entire region than for isolated villages.

During the development stage envisaged in the National Plan\(^1\) (1962-67) rural population should attain a total of 600,000, of which nearly 450,000 would be Jewish rural population, as compared with 85,120 in 1948. Priorities in housing aimed at allocating 85% of the 236,000 permanent units constructed under public building projects to immigrant housing and agricultural settlers. To achieve this objective, planning of agricultural development on a regional scale has been designed to fit in with the country-wide plan.

It has been indicated by Drabkin - Darin\(^2\) that this regional experiment has proven to be very effective. The kibbutz economy is fairly established, and its achievements greater than that of any other agricultural sector. Agricultural settlements of all kinds, in which housing undoubtedly played a predominant role represents one of the striking achievements of Israel in economic development. For instance, agricultural exports during 1954-1959 increased by 64%.\(^3\)

\(^1\) A. Doudai, *op. cit.*, p. 388.

\(^2\) *Ibid.*, p. 82.

\(^3\) A. Doudai, *op. cit.*, p. 384.
FIGURE 6  AGRICULTURAL REGION CONCEPT

SOURCE: ADAPTED FROM A. DOUDAI, "REGIONAL DEVELOPMENT AND HOUSING IN ISRAEL", EKISTICS, JUNE 1962, PAGE 387
From the foregoing discussion, it may be concluded that housing as an instrument for economic development can positively influence not only the industrial but also the agricultural sector of the economy, if it is effectively linked with the overall national plan. It is in this respect that Israel's experience, in spite of its uniqueness and problems, offers a lesson worth emulating by other developing nations.

Lessons of Israel's Experience

There are indeed many lessons to be learned from Israel's experience by many countries anticipating large increases in population, or undergoing rapid urbanization. A few of them will be mentioned here.

The first is the importance of adopting a national policy aimed at using housing to influence population distribution through planning. For planning to be effective it must have a nation-wide legal basis. The Israel Parliament (Knesset) had to strengthen the legal basis of planning by enacting a new Physical Planning Act which, to a very large extent, enables housing projects to be adapted to the country's needs for economic development. Although national plans are not legally binding, they are authoritative plans for subsequent execution. The policy of population dispersal has been successful, for while there is still some unemployment in a few development areas, most are thriving. It is true Tel Aviv and Haifa have continued to grow, but the proportion of the population in them has fallen.

18 The Israel Physical Master Plan, p. 125.
Joan Ash\(^{19}\) notes that although there is no direct control over the location of industry, government enterprises move into development areas and private industry is induced to go into them by several benefits, including housing.

For many developing countries it has long been urgent to link housing projects with the development plan, so as to direct housing into more constructive channels that will encourage economic development both in urban and rural areas. The national development plan, for example, can illustrate each aspect in relation to housing or some other aspect. The aim of the national plan should be to prevent where economically feasible the population from crowding indiscriminately into the already dense metropolitan areas and create some balance between the urban and rural areas.

Israel has illustrated that in pursuing a policy of population dispersal geared to exploiting the natural resources of the country, it is essential to have a strong housing authority that actively cooperates with other government bodies and even housing associations. A lot of credit in Israel's achievement in locating, programing, planning and developing of settlements goes to its housing division which is in close contact with the planning department and the other agencies connected with housing and planning. The lesson to be learnt in this regard is that it is not enough for a government to assume physical planning powers; these powers must be used in a manner that facilitates cooperation and coordination of planning activities. Israel itself

\(^{19}\) Joan Ash, op. cit., p. 83.
suffers from the problem of coordinating decisions of the various ministries in charge of housing and building, industry, agriculture, transportation, labor, and so on. But every effort is made to minimize conflict and this attitude has helped in advancing integrative rather than isolated and independent planning.

In dealing with development planning and housing Israel has produced a most interesting experience. Exceptional labor force and strong entrepreneurship plus large inflows of capital are the assets most frequently cited as contributing to the economic growth of Israel which compares with Japan's. The economies of the two countries, McDiarmid notes, have grown more than 10% a year during the last decade. In 1954 Japan had a per capita gross national product of $232, and Israel $745. By 1967 these have grown to about $714 and $1177 respectively. Since productivity is related to the labor force and it is also associated with housing, the indirect benefits of housing on Israel's labor force cannot be dismissed lightly. It was Israel's policy to adapt housing to economic development by integrating housing programs with the development plans, achieving a remarkable success in this effort. Again the fact that Israel invested on the average about 20% to 28% of its raw investment in housing in recent years and yet managed to attain substantial economic growth signifies the potentials of housing investment that is consciously integrated with development planning.

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Though times change and countries differ, Israel's experience demonstrates both problems and opportunities for countries now seeking rapid economic development. One such country is Ghana, which like Israel has adopted planning as a national policy instrument for socioeconomic progress. Ghana is small, measuring 92,000 square miles in area with a total population of 6.7 million (1960 census). It is urbanizing at the rate of 6.7% with 7.7% of the total population concentrated in a few large cities where housing problems are considered to be acute by the government. The population increase in the urban areas and the resulting housing problems are largely attributed to natural increase and rural-urban migration. (Appendix 1-9 have been provided to furnish information on population growth and urbanization trends in Ghana.) Circumstances like these pose problems of relating housing to planning. And to this attention may now be turned.

21 Between 1948 and 1960 the average occupancy per house in the larger cities increased by about 30% to 19.3 persons per house. (Population Census of Ghana 1960).
CHAPTER IV
EVALUATION OF HOUSING AND PLANNING IN GHANA

In the previous Chapter we saw how certain circumstances prevailing in Israel compelled the country to initiate housing programs that were integrated with the development plan. The effectiveness of a conscious policy of population dispersal in which housing programs were implemented in the larger context of economic development and urbanization highlights the country's achievement. The purpose of the present Chapter is to evaluate the extent to which government-aided housing is effectively tied in with the development plan in Ghana, in order to test the underlying hypothesis of the study. The Israeli experience, of course, provides some of the criteria against which our hypothesis can be tested.

The Seven-Year Development Plan

Despite Ghana's long experience with development planning, it is only the Seven-Year Development Plan 1963-1970 which could be described as the first real plan which

a) set out the policies and objectives of the ruling government;

b) took into account the interrelationships of the sectors of the economy;

c) attempted to provide a national comprehensive development program for both the government and non-government sectors of the economy.  

In order to assist all participating bodies to work out their detailed designs in relation to the national plan, a National Physical Development Plan\(^2\) was set forth. It was intended to translate the policies of economic and social plans into tangible designs of economic geography, allocation of population, labor force, potential industrial locations, urban growth allocations, major transportation corridors, power and water zones and other essential infrastructure. The form of the physical plan provided both a long-range picture of possibilities and a short-range detailed design indicating the status of all current projects and immediate future recommendations.

Preparation of annual plans was to be the occasion for the actual realization of the policies of the seven-year and perspective plans. This function was the most important continuing assignment of the Office of the Planning Commission. The annual plan would attempt to guide the growth of production, to maintain overall stability and the desired pace of general economic activity in the country, to allocate the scarcest resources and to influence the allocation of the national income in a manner which was most conducive to the further growth of the economy itself. The skill with which the essential elements in the annual plan would be related would in the final analysis determine how fast the economy of Ghana would grow. An emphasis was, therefore, placed on the importance of coordination of the elements of the plan.

The coordination division of the Office would need all the authority of the Planning Commission to ensure both that in the formulation of their plans and projects all agencies were aware of the relevant plans of other agencies and consult them properly and, no less important, that one agency did not necessarily hold up the development or production activity of another agency through failure to provide a previously agreed service or commodity.  

In organizing this inter-agency coordination it was recognized that effective systems of programing for the fulfillment of development plans must be devised. The administration had learned that owing to lack of coordination a construction site, for example, was often occupied by idle workers because materials had not arrived or because one group had to wait for another to finish their operation first. The examples were many and always the explanation was that insufficient attention had been paid to the rule that "it is as important to plan when to do a thing as what to do." A particularly serious result of this inattention to timing and programing was the waste of scarce capital resources. The administration pointed out, "much of the waste involves a loss of foreign exchange as well."

Accordingly, the Programing Division of the Office of the Planning Commission was implored to bear the responsibility of working for the elimination of "such waste."

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3 Ibid., p. 293.
4 Ibid., p. 294
Plan Administration: Departmental Machinery for Coordination

The Seven-Year Development Plan indicated that every department and ministry of government would have a planning officer who would generally be its deputy head. The planning officer would be responsible for the coordination of the activities of his agency with that of other agencies, as well as generally for the efficient performance of its other planning responsibilities, thereby ensuring that the objectives of the plan were brought to bear constantly on all departmental activities.

Planning officers would be concerned with the setting up of an adequate statistical system in their agencies and the reporting of information to the Central Bureau of Statistics; they would be the channel through which the new idea of factually-based administration would filter into all those areas where administrators then either acted on hunches owing to an unnecessary absence of data, or might not worry to ascertain available facts. It was admitted that administrators would obviously be required to use judgement and experience always.

But in a modern administrative system the occasions on which judgements have to be made on a basis of inadequate information should be relatively infrequent, while in many cases the availability of factual information regarding cognate fields increases the possibility that non-statistical judgements will be right when they have to be made. 5

In brief, the country recognizes the importance of coordinating planning activities as set out in the development plan; it attempts to provide machinery in the administrative system to achieve integration of plans. It is against the background

5 ibid., p. 295.
of these unique features that we shall attempt to evaluate the relationship between housing and planning in Ghana.

**Housing in the Seven-Year Development Plan**

As pointed out in Chapter I the Seven-Year Development Plan recognized the economic and social importance of housing in the national economy and gave an explicit outline of what may be described as an implied housing policy. It was stated that eventually the economy of the country must be able to provide decent housing for each family as a matter of right. For early in 1962 when the National Planning Commission was initiating its work on the plan, the housing problem came into perspective against the broad background of national development. The need for adapting housing to economic development was recognized and, housing was to be treated as an integral part of the overall national development plan.

For the purpose of this study, the relation between housing and development planning will be evaluated in two main areas of government action:

a) Government-aided housing in connection with a Resettlement Scheme;

b) Government-aided housing in selected cities and towns in Ghana mostly undertaken by the State Housing Corporation. Public participation in housing, as outlined in the development plan, was to occur in two main areas. Thus, like the Israeli situation, the government had the power, the resources, and an opportunity to use housing as a profitable instrument for economic development through planning.
The Volta Resettlement Scheme

The Volta Resettlement Scheme forms part of a multi-purpose river development project in Ghana, involving the damming of the Volta River to generate hydro-electric power. In this operation 70,000 people living in 739 villages ranging in size from hamlets to important towns in the Volta Region had to be moved to 52 new settlements. The resettlement is treated as an exercise in positive economic development planning on a regional basis designed to improve the economy of the area. Briefly summarized:

The introduction of industries into new towns fits perfectly within a regional framework and conversely can only be brought about by regional planning. This is because of the combination of materials, transportation, labor and power which is necessary in order to establish industries at their right places. In effect this is the very formula for the positive location of new towns in proper geographic relationship to natural resources, transportation, agriculture and manpower, with electric power conducted to the select new town sites.

Thus, the development of the area in question is phased into the overall national development plan. Housing programs are coordinated with other development schemes in agriculture, industry, transportation, etc., so that they would mutually reinforce each other. Whether the resettlement scheme will prove to be an economically worthwhile activity or not may be studied through future research. But for the time being, it

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illustrates a positive effort to adapt housing to economic development by linking it with the national development plan.

Housing in Selected Cities and Towns

One of the major goals of the Seven-Year Development Plan was to alleviate housing problems existing in selected cities and towns. It was estimated, for instance, that in order to provide for the expected increase in urban population during the plan period a total of 25,000 new dwelling units should be constructed in the major cities and another 35,000 units in the towns and municipalities. This "housing program" was expected to cost a minimum of about $130 million of which $90 million would be required for strictly commercial housing and $40 million for low-income housing. It was to be the responsibility of the government to ensure that an adequate flow of finance was made available for construction.

The plan noted that the rapid flow of rural people into urban areas since the end of the second world war had resulted in the creation of a number of satellite towns and villages around the major cities and also to the increased over-crowding of slum areas within those cities. It was, therefore, proposed that "under this plan a definite policy will be evolved for the development of sub-urban towns and villages as initial reception

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8 Office of the Planning Commission, Ghana Seven-Year Development Plan, 1963-1970, p. 194. It is assumed that a housing problem exists in Ghana, particularly in the cities, Our focus, however, is on the relationship between government-aided housing and planning.
centres for immigrant labor in the larger cities."\(^9\) One would expect, therefore, that an opportunity somewhat similar to the Israeli situation existed in Ghana and that housing programs could be adapted to economic development. But this did not occur, largely because there was a missing link between planning and housing as will be demonstrated in the following discussion. It is perhaps by examining the role of the State Housing Corporation in the housing field that the relationship between planning and housing can be understood and evaluated.

The Role of the State Housing Corporation

The State Housing Corporation was established in 1955 to increase the availability of houses in the country. It is in the main responsible for

a) selection of sites and planning of housing estates;
b) construction of housing estates, and houses, and
c) management and maintenance of housing estates, and hire-purchase houses. The Corporation has been given ample powers as listed under its instrument of incorporation to provide practical solutions to existing housing problems.\(^{10}\)

However, it functioned without a housing policy under the plan period. A housing policy would normally consist of the formulation by the government of goals and targets for the housing of the population on the one hand and of the development of machinery for the realization. Without a housing policy no housing programs could, of course, be developed. In fact, the

\(^9\) Ibid., p. 195.

\(^{10}\) Report of Effah Commission, p. 308.
Effah Commission reported that there was no planning of the Corporation's activities.\textsuperscript{11} In contrast to the Israeli experience, housing in the main towns was not guided by any clear-cut policy and program. Nevertheless, housing activities were undertaken by the Corporation because it had the power to do so. The possession of its own powers side by side with the powers vested in authorities and departments responsible for land use planning, the provision of essential services and utilities, led to continuous conflict resulting in unsatisfactory selection of sites, improper planning in time and place throughout the country. Let us look at examples of what the Chief Physical Planning Officer of the Planning Department described as "improper Housing Corporation Developments."\textsuperscript{12}

a) "Unauthorized Housing Development Aerodrome Traffic Zone".

For purposes of the revision of the Master Plan (for Accra), the Physical Planning Department requested the Housing Corporation to submit all layouts. It was then noticed that the Airport Residential Area fell on land already zoned for use of the Airport. On inspection it was discovered that the area had been built upon, already.

Meanwhile the Civil Aviation Authorities requested that the construction should be discontinued. A meeting was convened by the Chief Physical Planning Officer, attended by officials of Housing Corporation, State Construction Corporation, Ministry of Lands, and a representative from the Civil Aviation. The meeting

\textsuperscript{11} Ibid., p. 98.
\textsuperscript{12} Ibid., p. 331.
decided that i) Ghana Housing Corporation should stop all
development works; ii) It should negotiate with the Department
of Civil Aviation regarding the use -- other than residential --
to which the structures in their existing stage of development
could be put; iii) Secretary was to convey the above decision to
the Housing Corporation.

b) "Unauthorized Development at South Labadi (Accra)"
The Planning Department's comment was, "this develop­
ment is too close to the sea and may suffer physically during
high tides in the future." It was further indicated that corro­
sion of building materials may affect the structure and lead to
high cost of frequent repairs and replacements.

c) "Unauthorized structures near Cantonments Police Station."
It was pointed out by the Chief Physical Planning
Officer that "these houses were built on low lying ground where
recent quarrying operations had taken place." For this reason,
the land was subject to flooding and roads may have to be raised
and consolidated at great expense.

In summary the Chief Physical Planning Officer stated in
his memorandum to the Effah Commission that although the Hous­
ing Corporation did not employ a qualified planner it did not
avail itself of the expertise advice from the Planning Depart­
ment. For this reason housing developments were not always
guided to the appropriate areas, and were not often based on a
survey and analysis of local conditions, and on data defining
the housing demand in particular areas. Moreover, by acquiring
land without prior consultations with the Planning Department
which it was expected to do, the Corporation could not avoid
freezing land beyond the possibilities of immediate development. The inevitable result was that land that could otherwise be immediately used in the national interest was frozen to await housing development in the distant future.

What may be inferred from the several points raised by the Chief Physical Planning Officer in his memorandum is simply that cooperation with the Planning Department would have ensured that areas selected for housing would conform to the requirements of the Master Plans. It is not unreasonable to assume that the nation might have suffered some economic loss because housing development frequently did not conform to Master Plans of the national development plan. It is contended that the relationship between planning and housing has been too weak to prove effective mainly because the administration has not provided certain essential conditions that would tie housing to the development plan.

First, the Housing Corporation has undertaken housing developments haphazardly both in time and place mainly because it functioned without the benefit of a conscious housing policy and program. At best the Corporation tried to consult with bodies like the Ministry of Lands where acquisition of land was concerned and with the State Construction Corporation where building works were concerned. Even the procedure for acquisition of land was awkward. According to the existing approved procedure under the development plan, the officials of the Corporation were

13"Acquisition of Land for Housing Estates." Letter from the Chairman of the State Housing Corporation to the Principal Secretary, Ministry of Works and Housing, (Dated 15, August, 1966, Accra).
expected to search for sites and then make preliminary enquiries at the Ministry of Lands and the Department of Physical Planning for formal approval of the Permanent Site Advisory Committee. On a number of occasions such a procedure undoubtedly proved frustrating because a concise program had not been drawn up to guide the Corporation as to what land should be available at its disposal, where and when it should be developed and so on.

In brief, because the country lacked housing programs that could be geared to meet, no matter how marginal, the demand for government-aided housing in the main towns and cities, integrated decisions concerning acquisition of lands, physical planning, house building, etc., could not be taken by the interacting government bodies. The most rational decisions could be taken only on the basis of an adequate interplay between the authorities concerned with physical planning, construction, housing, on the one hand, and the authorities and agencies in charge of the overall national housing policy on the other.

It may be noted that in Ghana physical planning is the responsibility of the Department of Physical Planning lodged in the Ministry of Economic Affairs. Several problems in connection with land acquisition are under the supervision of the Ministry of Lands and Natural Resources. Housing itself is under the Ministry of Works and Housing but through the State Housing Corporation. In the past, the degree of cooperation, as has been demonstrated above, among all these participant bodies in charge of housing and planning has not worked too well. This is, fortunately, recognized by the administration.
In a recent paper on housing policy the Ministry of Works and Housing indicates that...

it is essential to bring together the planning of government agencies presently responsible for housing, to prepare a consolidated annual housing program and budget, to arrange for the sharing and strengthening of technical services, to provide for large site development...

In the same paper it is also proposed to set up a Housing Advisory Committee to provide necessary guidance in the formulation and effective implementation of housing policies.

In comparison with the Israeli experience, an essential step is now being taken in Ghana to utilize a housing policy to formulate housing programs. But whether housing can be used as a machinery for population dispersal or not will depend on local circumstances. To use housing as an instrument for economic development is one thing; but to use it, as a tool for population dispersal is something else. It may or may not be practical for Ghana to follow a population dispersal policy in which housing can play a critical role. The immediate relevance of the Israeli experience, to begin with, is the fact that the planning process ensures that housing developments are planned as part of the development plan.

Conclusion

In evaluating the relation between housing and planning in Ghana it emerges that while housing in connection with the Volta

Resettlement Scheme was planned to support the economy of the region, housing developments in cities and towns were frequently in conflict with physical planning. Understandably enough, for lack of advanced planning several projects were not consciously adapted to economic development, but rather resulted in unnecessary costs, examples of which have been cited. Now that the beginnings of a housing policy\(^{15}\) are quite apparent, the relationship between housing and planning requires much greater definition.

It will be the task of the next and concluding Chapter to offer some steps that could be taken to ensure that housing developments tie in much more effectively with the development plan. It is only by integrating housing with the development plan that the economic benefits of housing can consciously be attained in an organized manner. Indeed, such is the reason which has led, under the Seven-Year Development Plan, to an implied policy which aims at ensuring that in those locations where new economic activities are expected to develop and bring together large numbers of working people, adequate housing will be available to meet the requirements of the working force. The Plan\(^{16}\) explicitly emphasizes that a sufficient number of housing units is an important element of work productivity on account of their physical properties and their situation.


CHAPTER V
THE PROSPECT FOR RELATING HOUSING
TO PLANNING IN GHANA

Assuming that the improvement of housing is now accepted as a desirable constituent and objective in economic and social development programs, it has been argued that since housing, urban, and regional planning constitute some of the elements of development planning, they can no more be allowed to operate in isolation than any other major activity. Therefore, in order to use government-sponsored housing programs as an effective instrument for socioeconomic development, these must be integrated with development plans. Based on documented research it has been demonstrated that housing can contribute to worker productivity. If the planner expects housing projects to yield "external economies", expenditure of funds, design, location criteria, should make maximum effort to coordinate housing programs with other development projects.

A case study has been presented to illustrate how a developing nation, recognizing the necessity for and socioeconomic benefits of housing, has consistently integrated housing programs into its development plans. Although it is not possible to isolate the economic impact of housing on Israel's impressive development, it is equally hard to ignore the fact that the country has succeeded in using housing to support other developmental tools through conscious integration of plans. A lot of
empirical evidence has been produced to show the extent to which housing features as a supporting and integral device in the economic development of Israel.

Using several criteria based on Israel's experience and against the background of the Seven-Year Development Plan, the relation between government-sponsored housing and planning in Ghana has been evaluated.

It has been found that although the importance of adapting housing to economic development through planning is recognized, several housing activities undertaken by the State Housing Corporation are often in conflict with the appropriate plans, particularly at the local level. The failure to relate housing to planning, the study has suggested, could be attributed to the fact that the State Housing Corporation operates without a program that would synchronize its activities with development planning.

Secondly, an effort to coordinate interdepartmental functions in connection with housing and land use planning has been lacking. This explains, by and large, why matters concerning criteria for constructing various types of housing, locational considerations, implications for spatial planning whether in the regional or local context, etc., are hardly articulated and carefully phased into the development plan.

The objective of this Chapter, therefore, is to offer suggestions for improving the relationship between public housing projects and the development plan. Before undertaking this task, however, it is considered useful to examine a new program of
planning, recently adopted by the country. The objective is to study the extent to which this program of planning facilitates or fails to secure integration of housing projects with development planning. Figure 7 on the following page is designed as a skeletal representation of the structure of the new program of planning for Ghana.

**Practical Program of Planning for Ghana**

According to this document, the Ministry of Economic Affairs, formerly the Planning Commission, is the central planning agency responsible for the following functions:

1) Control of development
2) Physical planning
3) The formulation and revision of development plans, including the reconciliation of sector and sub-sector programs in these plans
4) Relations with Economic Committee for Africa
5) Servicing of National Economic Committee

The document recommends that if the central planning agency is to be able to carry out its responsibilities for preparing

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FIGURE 7  SKELETAL DESCRIPTION OF THE STRUCTURE OF PRACTICAL PROGRAM OF PLANNING FOR GHANA

SOURCE  DESCRIBED FROM A. WATERSTON, "PRACTICAL PROGRAM OF PLANNING FOR GHANA" 1966
overall plans, the formulation of sector programs must be left to operating ministries and departments.

For the latter purpose, the document recommends that the most effective medium would be a programing unit established in each ministry or department to act for its organization much in the same way as the Ministry of Economic Affairs acts for the government as a whole.

Programing Units

A programing unit, as stated above, is considered the virtual counterpart of a central planning agency for the government by the nature of its organization. Its main functions are as follows:

1) to set standards and criteria for the operating departments in question or other units to follow in preparing and carrying out projects;

2) to formulate the overall development program and the recurrent budget for its organization on the basis of directives from its head;

---

2 See *Ibid.*, pp. 5, 6. The current practice is for the MEA to prepare a comprehensive annual development plan cum multi-annual sectoral programing limited to the "most important sectors of agriculture, mining, power, highways, railways, ports, education, health, as shown in Figure 7. Thus sector programing is a calculated way of looking ahead to ensure orderly development of an economic sector or branch. The period of a sector program may vary. Within each longer-term sector program, it is possible to formulate a so-called "rolling program" of, say three years. The three-year rolling program would add another year at the end of each year so that it would retain the three-year period always as it "rolled forward" in time. Annual plans would provide useful data for updating sectoral programs. But it is visualized that "when conditions stabilize" in Ghana the establishment of more comprehensive multi-annual guidelines both in the form of medium-term and longer-term perspective plans will become possible.
3) to prepare alternative development policies for the consideration of the organization's head after consulting the various operating heads of departments or other units;

4) to set standards for operating departments and units to follow in reporting on the progress of projects and on the basis of reports from operating units, it should prepare regular, timely, and reasonably complete reports and evaluations of its organization's overall program;

5) it should coordinate technical assistance program for its organization, and act as the liaison for its organization with the central planning agency.

**Inter-Ministerial Planning Committee**

In order to effectively provide for liaison and mutual consultations, the heads of all programing units have been constituted into an Inter-Ministerial Planning Committee, chaired by a high official of the central planning agency.

The functions of the Committee would include the formulation of uniform criteria and standards for preparing projects, sector programs and plans, and for reporting on their progress as consistently as possible. It is at this stage that various proposals submitted by the ministries would be studied, evaluated, and reconciled with one another. This appears to be the finest opportunity for securing integration of programs of national significance.

**Comment on Program of Planning**

From the viewpoint of relating government-sponsored housing projects with other elements of the development plan, the program is rather inadequate. It states that the
preparation of multi-annual programs should be limited to the "most economic sectors or sub-sectors" as shown in the previous diagram. These are said to be agriculture, industry, mining, power, highways, railways, ports, education and health. Housing has not been included.

In effect, no opportunity is provided for the heads of the programing units serving on the Inter-Ministerial Planning Committee to reconcile any major activity of the development plan with a housing project even when it is considered practical in the national interest. What seems to have received insufficient attention is the fact that land acquisition, the formulation of plans for housing, the preliminary site works, and the preparatory work on the provision of services is of necessity a major aspect of the development plan.

The failure to relate housing to local plans, of course, persists. The Ministry of Works and Housing has cabinet as well as parliamentary responsibility for housing and continues to pass on directives to the Housing Corporation.

Need for Pre-determined Plans for Housing Schemes

Since the Housing Corporation still operates without a program designed to match other elements of the development plan there is continual conflict between plans for housing and master plans. For instance, a plan for a proposed housing scheme in

3 "Techie-Nungua Housing Project" - Letter from the Principal Secretary, Ministry of Works and Housing to the Minister, (dated June 1968, Accra)
the Accra-Tema Metropolitan Area did not conform with the master plan for the area. When this was brought to the attention of the Ministry of Works and Housing the necessity for seeking for effective linking of housing estates with local plans was pointed out by the Principal Secretary:

.... The important thing to recognize is that this is a big scheme which must fit into the overall development and the master plan for the Accra-Tema Metropolitan Area.

At that stage it was suggested that the Physical Planning Department instead of the Housing Corporation might assume responsibility for the planning of the housing scheme in question.

In another letter this time from the Managing Director of the Housing Corporation the need for the Corporation to undertake its activities in accordance with pre-determined plans was made much more explicit. It was pointed out that "a constant and valid criticism of the Corporation is that our estates are not developed properly into planned communities". One chief reason for this defect, it was explained, is that, according to the present procedure for selection of sites for new housing, for example, an officer on behalf of the Corporation has to look for "empty lands on which we can build a housing estate." When a "suitable" site is found then the Corporation has to inquire from:

4. The Physical Planning Department has a national office with a network of regional and local planning units in all the nine administrative regions of the country.

5. Letter from the Managing Director of the S.H.C. to the Principal Secretary, Ministry of Works and Housing. (Dated 5th, June, 1968), Accra).
a) Ministry of Lands and Mineral Resources, whether the area in question can be allocated for housing;

b) Physical Planning Department, whether a housing estate on the site would fit into the master plan;

c) Electricity Corporation, whether services can be extended to the area;

d) Site Advisory Committee to approve the selection after the above steps have been taken.

Ample evidence and experience suggests that such a procedure is frequently time-consuming, frustrating and costly. It could largely be eliminated if, in the first place, the Housing Corporation could be provided with a program and specific plans, determined on the basis of appropriate master plans that are already coordinated with the development plan. A starting point towards this goal is for the new program of planning to recognize housing, and for that matter, publicly-sponsored housing as one of the important sectors of the economy to be considered along with the other sectors mentioned in the program.

Investment plans for public housing should constitute a part of the general economic plan for the national economy. In view of the important economic role of housing investment, it is reasonable to expect that decisions on criteria for housing projects would take into account the requirements resulting from central planning of the national economy and also the requirements of regional or local plans. It is suggested that housing be explicitly considered as an important sector in the new

5 Apparently, under the erstwhile Seven-Year Development Plan 1963-1970 housing was regarded as a "non-productive sector" as against agriculture, mines and industry. Ghana Seven-Year Development Plan 1963-1970, p. 253.
program of planning for the country. Such a move will enable housing programs formulated by a Housing Division in the Ministry of Works and Housing to be reconciled with other programs of the development plan by the Inter-Ministerial Planning Committee.

The existing administrative arrangement permits the Housing Division to send directives to the Housing Corporation, and so publicly-sponsored housing projects are quite divorced from central planning. As at 1966 the Corporation had completed 3,323 housing units which constituted about 30 per cent of all dwelling units in cities and towns in Ghana. If such housing schemes are to be utilized as a valuable tool for improving living conditions, then, in so far as it is within the power and ability of the government to do so, they should be considered within the framework of the overall investment plans for the country. It is not enough for the Housing Corporation to sporadically search for sites and then enquire whether these sites are in accord with the master plan, if any, and suitable for housing to be provided there.

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6 As a nucleus in the Ministry of Works and Housing this Division is responsible for the formulation of national housing policy. It is assigned the task of bringing together annually a consolidated budget for housing in the public sector and also to report on plans and progress in the private sector. Public housing projects can, therefore, be somehow related to housing in the private sector. (See "Housing Policy in Ghana," p. 5).

7 Effah Commission, op. cit., p. 9.

8 This study does not venture to discuss how housing in the private sector could be related to the development plan.
Implications for Spatial Planning

With housing taking its place in the queue with other important sectors for allocations and other claimants for scarce resources and labor, the resulting implications for spatial planning must be resolved.

Planning practice in Ghana recognizes that long-term planning is a fundamental link between physical planning and the entire system of the quasi-planned economy. One of the chief goals of the nation being "balanced" regional development, regional plans have become integral parts of long-term economic planning. A physical plan of a regional economic plan impinges on towns and cities, serving as a basis of the settlements' economic and physical planning program. Thus generally speaking, the whole process of planning is coordinated up and down the hierarchy as conceptualized in Figure 8 on next page. These plans of different levels are related with one another, which establishes more adequate estimates of the entire economy.

The emphasis in this Chapter is on positive planning for housing projects as embodied in a housing program. If the central planning agency can secure concerted action in the production of the development plan, and programs for government-sponsored housing projects, then it should also ensure that plans for housing schemes fit into appropriate master plans for settlement units.

It is suggested that detailed plans for housing be prepared by the local offices of the Physical Planning Department which are units under the central planning agency. In this way
FIGURE 8 INTEGRATION OF PLANS FOR PUBLICLY-SPONSORED HOUSING WITH DEVELOPMENT PLAN

SOURCE AUTHOR'S CONCEPTION
positive planning for housing schemes will produce harmonious physical changes as opposed to costly conflict brought about by lack of coordination. Consequently, the Housing Corporation will cease to plan for housing estates. It will implement its programs already designed to match master plans for cities and towns, or new areas, using appropriate plans as guidelines. The Corporation will, however, manage, administer and maintain housing estates.

That housing projects, if executed in a haphazard fashion with respect to time, place, explicit criteria, etc., would in fact achieve the most desirable result of effectively contributing to socioeconomic progress in a developing country like Ghana is precisely what is being questioned in this study. If publicly-sponsored housing programs are to prove their worth, then they should be followed up with detailed plans that tie them to the development plan. Further studies may shed some light on what types of information are necessary for doing this kind of planning.
A. BOOKS


B. PERIODICALS


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Doudai, A., "Regional Planning and Housing in Israel," Ekistics, (June 1962).


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Nez, George, "Methodology for Integration of Economic and Physical Development," Ekistics, (17), 1964.


C. PUBLICATIONS OF GOVERNMENTS, LEARNED SOCIETIES, AND OTHER ORGANIZATIONS.


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"Capital Formation for Housing in Rapidly Expanding Economies: Some Major Issues," by W.B. Harris and James Gillies.


"Principles Governing Housing Aid to Underdeveloped Countries," by Homer Hoyt.


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World Housing Conditions and Estimated Housing Requirements, (Copenhagen, 1963).


D. NEWSPAPERS

News Item in the Vancouver Province, (1st February 1969)
APPENDIX I  GHANA IN RELATION TO WEST AFRICA

APPENDIX 2
POPULATION GROWTH 1891-1960

<table>
<thead>
<tr>
<th>Year</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1891</td>
<td>--</td>
<td>--</td>
<td>1,473,882</td>
</tr>
<tr>
<td>1901</td>
<td>--</td>
<td>--</td>
<td>1,486,433</td>
</tr>
<tr>
<td>1911</td>
<td>--</td>
<td>--</td>
<td>1,503,386</td>
</tr>
<tr>
<td>1921</td>
<td>1,098,301</td>
<td>1,068,680</td>
<td>2,296,400</td>
</tr>
<tr>
<td>1931</td>
<td>--</td>
<td>--</td>
<td>3,160,386</td>
</tr>
<tr>
<td>1948</td>
<td>--</td>
<td>--</td>
<td>4,117,779</td>
</tr>
<tr>
<td>1954</td>
<td>--</td>
<td>--</td>
<td>4,548,000</td>
</tr>
<tr>
<td>1960</td>
<td>3,400,270</td>
<td>3,326,550</td>
<td>6,726,820</td>
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</tbody>
</table>

APPENDIX 3

E.A. Boateng, Op. Cit., p.II.
<table>
<thead>
<tr>
<th>Town</th>
<th>1898</th>
<th>1911</th>
<th>1921</th>
<th>1928</th>
<th>1948</th>
<th>1960</th>
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<tr>
<td>Accra</td>
<td>--</td>
<td>19,582</td>
<td>38,623</td>
<td>--</td>
<td>135,926</td>
<td>337,828</td>
</tr>
<tr>
<td>Kumasi</td>
<td>5,500</td>
<td>--</td>
<td>20,268</td>
<td>30,000</td>
<td>78,483</td>
<td>180,642</td>
</tr>
<tr>
<td>Sekondi-Takoradi</td>
<td>--</td>
<td>--</td>
<td>9,768</td>
<td>--</td>
<td>44,557</td>
<td>75,450</td>
</tr>
<tr>
<td>Cape Coast</td>
<td>--</td>
<td>--</td>
<td>14,987</td>
<td>--</td>
<td>23,346</td>
<td>41,230</td>
</tr>
<tr>
<td>Tamale</td>
<td>--</td>
<td>--</td>
<td>3,901</td>
<td>--</td>
<td>16,164</td>
<td>40,443</td>
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### APPENDIX 5

**AREA, POPULATION AND POPULATION DENSITY OF THE REGIONS, 1960**

<table>
<thead>
<tr>
<th>Region</th>
<th>Area</th>
<th>Population</th>
<th>Density</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Square Miles</td>
<td>Thousands</td>
<td>Per Square Miles</td>
</tr>
<tr>
<td></td>
<td>Percent</td>
<td>Percent</td>
<td></td>
</tr>
<tr>
<td>Accra CD</td>
<td>990</td>
<td>492</td>
<td>497</td>
</tr>
<tr>
<td>Western</td>
<td>13,150</td>
<td>1,377</td>
<td>105</td>
</tr>
<tr>
<td>(Western)</td>
<td>(9,494)</td>
<td>(626)</td>
<td>(66)</td>
</tr>
<tr>
<td>(Central)</td>
<td>(3,656)</td>
<td>(751)</td>
<td>(205)</td>
</tr>
<tr>
<td>Eastern</td>
<td>7,760</td>
<td>1,094</td>
<td>141</td>
</tr>
<tr>
<td>Volta</td>
<td>8,000</td>
<td>777</td>
<td>97</td>
</tr>
<tr>
<td>Ashanti</td>
<td>9,700</td>
<td>1,109</td>
<td>114</td>
</tr>
<tr>
<td>Brong-Ahafo</td>
<td>14,900</td>
<td>588</td>
<td>39</td>
</tr>
<tr>
<td>Northern</td>
<td>37,600</td>
<td>1,289</td>
<td>34</td>
</tr>
<tr>
<td>(Northern)</td>
<td>(27,122)</td>
<td>(532)</td>
<td>(20)</td>
</tr>
<tr>
<td>(Upper)</td>
<td>(10,478)</td>
<td>(757)</td>
<td>(72)</td>
</tr>
<tr>
<td>All Regions</td>
<td>92,100</td>
<td>6,727</td>
<td>73</td>
</tr>
</tbody>
</table>

Appendix 6

Ghana: Interregional Migration Flows in Excess of 30,000 Persons
(Measured by movement since birth)

APPENDIX 7
POPULATION DISTRIBUTION, 1948

APPENDIX 8
POPULATION DISTRIBUTION, 1960
APPENDIX 9
SIZE OF LOCALITY, 1948 and 1960

<table>
<thead>
<tr>
<th>SIZE OF LOCALITY</th>
<th>NUMBER OF LOCALITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1948</td>
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<tr>
<td>Under 100</td>
<td>7,401</td>
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<tr>
<td>100-199</td>
<td>2,980</td>
</tr>
<tr>
<td>200-499</td>
<td>1,133</td>
</tr>
<tr>
<td>500-999</td>
<td>461</td>
</tr>
<tr>
<td>1,000-1,999</td>
<td>461</td>
</tr>
<tr>
<td>2,000-4,999</td>
<td>181</td>
</tr>
<tr>
<td>5,000-9,999</td>
<td>28</td>
</tr>
<tr>
<td>10,000-19,999</td>
<td>7</td>
</tr>
<tr>
<td>20,000-49,999</td>
<td>2</td>
</tr>
<tr>
<td>50,000 and over</td>
<td>2</td>
</tr>
<tr>
<td>100,000 and over</td>
<td>-</td>
</tr>
</tbody>
</table>