SERVICE SECTOR AS A RESOURCE FOR THIRD WORLD HOUSING

by

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A MASTER'S REPORT

submitted in partial fulfillment of the requirements for the degree of

MASTER OF ARCHITECTURE

Department of Architecture

KANSAS STATE UNIVERSITY

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1932

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PART ONE 1. INTRODUCTION

1.1 Background

The purpose of this study is to explore the potential of the "service sector" as a resource for housing in Third World countries, and its development into a major housing organizing institution, providing housing to its beneficiaries through the sharing of resources. Service sector can be described as an economic and political subdivision of society comprised of employer institutions, both public and private.

The massive poverty in the Third World countries is considered the major obstacle thwarting their overall development. These less developed countries, a combination of inadequate financial resources and unprecedented rates of population growth, constitute more than two thirds of the total world population. These countries have to re-evaluate what they possess and how that can be utilized to balance against what they do not possess. The process of tackling problems in these parts of the world and devising approaches towards their solution, require sensitivity to local conditions, socio-economic and political systems, and resources. Identification of local resources and their exploitation need to be integrated into the overall development process.

In the past, housing has been considered as a consumer good and not a productive good, and was thus separated from other development activities. It was identified as a social problem whose solution would be achieved by economic development (UN 1976a). Recently, housing has become recognized as a package of shelter and services that has diverse economic and social characteristics. It can be a good tool for macro-economic development, besides offering social benefits.

The housing industry in developing countries can contribute to economic

^{1.} Service sector should not be confused with the "Services Sector", which as a sector of production, is composed of those branches of economic activity not included in agricultural or industrial sectors (World Bank 1980).

development through stimulating saving by all socio-economic segments of the society, as well as increasing gross national product, using indigenous and locally available building materials and techniques, and providing employment and training for unskilled workers. The great advantage of the housing and construction industries is that they are labor intensive, and also naturally protected against competition from imports (Stretton 1978).

The economic and social benefits from improved housing can be impressive. These benefits not only have a favorable impact on the lives of people, the richest resource of any country, but also provide a means for the development of underutilized local resources. The twofold advantage of enriching the human as well as material resources and improving overall quality of life require that the housing policy component should be an integral part of a well-conceived development policy.

Added to shelter and basic infrastructure support are the issues of primary health care and education. The improvements of housing conditions will be seriously constrained, as Blitzer et al. (1981) point out, without a literate population which has ready access to medical facilities along with a clear understanding of the needs for improving sanitation in and around their dwelling environments, and maintaining any new technologies introduced.

Regardless of the type of production, housing construction competes for scarce resources. The already meagre financial resources of the majority of developing countries can be a major obstacle in establishing a vigorous housing program. Nevertheless, the housing policy objectives can be achieved gradually by organizing and channeling the resources which are available.

One of the basic characteristics which distinguishes developing nations from advanced, industrialized countries is the nature of balance between the functional domains of different sectors involved in the development process. The 'socio-political systems of developing countries rely heavily on the public sector. Yet the scarcity of resources does not always leave the public sector capable enough to perform all its duties in the most efficient way. The private sector is profit oriented, thus limited in scope to only the affluent section of the society, which in developing countries is usually very small. Its capabilities are confined by the current level of economic development, and it is not fully developed in countries with per capita income of less than \$450 per annum (World Bank 1975).

Scarce economic resources and lack of organized institutional structure require sharing of resources between people and governments. There seems to be a strong need to develop other sector to supplement the functioning of the public sector in areas where the non-availability of sufficient resources is incapacitating.

For this study the service sector includes larger businesses and industries, all levels of government including health and higher education, and large semipublic agencies. The recipients of housing provided by the service sector are the employees of the participant employer institutions.

Service sector as described above, has been referred to by various terms in the past, depending upon the type of housing and related facilities and the context in which such housing was provided. The institutions involved in provision and maintenance of such housing had an important role in identifying the type of the housing provided. New communities founded by employers to provide housing for their employees have often been referred to as company, factory, industrial, or mining towns. Employer-provided housing at smaller scales in established urban centers has been described as company housing, worker or employee housing, government or industrial housing estates, and on occassion as institutional housing.

This study deals with the provision of housing by the service sector as a group of housing suppliers, irrespective of the economic activity or operative control of individual firms, or the form of housing. For the purpose of this study the service sector is taken to comprise only formal institutions having access to adequate physical and financial resources, and located within large urban areas. It excludes all those employer institutions which either because of their activity or location are obliged to have their own housing, such as defense establishments. At this stage no attempt has been made to include rural employer institutions into this category, since the housing situation and problems in rural areas distinctly differ from their urban counterparts. A detailed description of the scope of housing participation by the service sector and its eligible recipients is provided in the following chapter.

1.2 Organization of the Report

The report has been divided into three parts. The first part serves as an introduction, with explanations about the scope and basic concepts employed in this study. The purpose of this part is to establish the structure.

In part two, the role of the service sector in providing housing and services is discussed in detail. The first chapter deals with housing situation in general. The later chapters discuss the role of the service sector as a useful and practical instrument for the supply of housing, and evaluate its feasibility as a housing provider. The secondary discussion provided in the last chapter considers the impact of service sector housing upon the physical and social fabric of the society.

The third part sums up the discussion and is composed of conclusions and recommendations as to the application of this concept as a policy for meeting the housing requirements of the developing countries.

2. CONCEPTUAL FRAMEWORK

2.1 Service Sector

Service sector is defined as a sector involved in the provision of housing, where the suppliers are the employer institutions, and the recipients are their respective employees. The provision of housing characterizes the employer institutions as a homogeneous group, because of its control over production, management and maintenance of employees' homes and dwelling environments. Besides providing basic shelter and services, service sector housing includes infrastructure support, primary health care and educational facilities for employees and their families.

Employment characteristics can determine the size and scope of participating service sector at any given time and place. Therefore, the classification of employer institutions can be used to define the parameters of the service sector as a supplier of housing. To determine the scope of housing thus provided, the service sector can be classified on the basis of following parameters:

Economic Activity:

Formal economic activities, characterizing large scale operations, capital intensive technology, frequent reliance on overseas resources, corporate ownership, etc., as established by the International Labor Organization (ILO 1972). All economic activities within International Standard Industrial and Occupational Classification are included in this category.

Location of Activities:

Larger urban areas (communities over 100,000 population), or areas within easily commutable distance by mass transit.

Type of Administrative Control:

Employer institutions in all three types of operative control: Public,

Semi-Public and Private.

Type of Employment:

Participation is established on two kinds of norms within this category.

Employment type: includes organizations with regular full time employees as well as seasonal employees.

Housing requirement: includes organizations carrying out activities which do not require compulsory housing as part of working requirement.

Size and Resources:

All levels of government irrespective of the number of employees, including health and higher education.

Large industrial and commercial organizations relying on capital intensive techniques, with a concentration of more than 100 employees within one location i.e. urban area of more than 100,000 inhabitants.

Large organizations relying on labor intensive technologies with a concentration of more than 200 employees within one location.

2.2 Housing Recipients

Recipients and beneficiaries of housing provided by the service sector have been defined as regular full time as well as seasonal employees. Eligibility for housing thus provided includes employees and their families.

2.3 The Third World

The term "Third World" refers to a political categorization, and includes all areas of the world which are industrially less developed. This classification makes the Third World a heterogeneous group of developing nations with some common denominator of varying degree, based on the level of industrialization and development.

As the definition implies, Third World is a relative term, quite broad in application. To regard the Third World as a single economic entity is in sense schematic and arbitrary. Although the developing nations of Africa, Asia and Latin America do have differences, in terms of natural resources and level of economic development, the commonalities between these differences justify their categorization as Third World countries. Massive absolute (and relative) poverty, shortage of capital, lack of enterpreneural capacity, heavy dependence on export of a small number of primary products, low levels of living, high fertility rates, low health standards and illiteracy are normally considered as general characteristics of Third World countries (Seldon 1965).

Though with a varied balance of control over productive capital between public and private ownership, this mass of developing countries dependent on mixed economy, is currently described by the popular expression Third World. And however inadequate or misleading these politico-economic terms may sound, they are so universally used that it becomes impossible to avoid them.

The fundamental division in the world is between the countries with a capitalist system and those with a Marxist socialist system. United Nations experts make distinctions between these groups by dividing the world into countries with "centrally planned economies" (socialist), and countries with "market economies" (capitalist), and by subdividing the latter into "developed market economies" and "developing market economies". Third World, for the purpose of this study, refers to the developing countries of Africa, Asia and Latin America, with developing market economies (see Appendix A).

PART TWO 3. HOUSING SITUATION -AN OVERVIEW

Housing is not merely physical shelter but is comprised of a number of facilities, services and utilities which link a family to the community. Any discussion of the housing situation requires an understanding of the factors which create the need for housing. The housing requirements on a global scale or in developing countries are generally referred to as housing need, which is primarily a function of both net population growth and age distribution of the population. (In contrast, the housing situation in developed countries is defined by housing demand, which is the interaction of population growth and economic variables.)

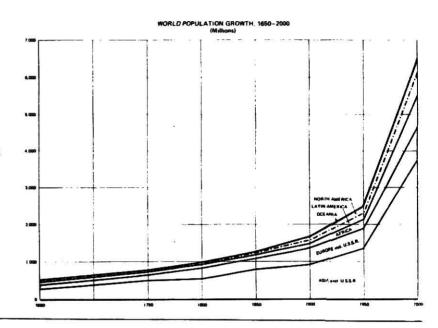
The inadequacy and relative poor quality of much of the housing in the Third World countries in part can be attributed to the rapid growth of population in those areas. The world population, which was estimated to be 4.0 billion in early 1976, is expected to reach over 6.5 billion by the end of the century. The United Nations estimated that given current trends of population growth, world population should stabilize at about 10.5 billion within a century and a half. Ironically, most of the burden of housing humanity falls on the poorer economies, who boast about 75 percent of world population today—and their share is expected to increase to 86 percent by the time population stabilizes (Stokes 1981).

As a result of improvements in health and nutrition, recent population growth in Third World countries has increased rapidly. The impact of age distribution in this rapidly growing populace is yet to be felt. The portion of the population in the household-forming group of ages 25 to 44 will increase by 600 million during the last two decades of the century. It should be further realized that in the Third World, the number of people in this age group who will be looking for homes will increase by more than 72 percent at the end of the century (Stokes 1981).

Geographical distribution and movement of population exert added pressures on housing in areas where land and building materials are already at premium. Since 1950, world urban population has been increasing at unusually high rates of four to seven percent per annum. This growth is strikingly high in developing regions where, from 1970 to 2000, the urban

Fig. 3-1
World Population Growth

(Source: World Bank 1973, Trends in Developing Countries; reproduced)



population will triple and will constitute 65 percent of total world urban population (UN 1976a). Demographers expect that by year 2000 half of the world population will be living in cities. Although large urban agglomerations are considered to perform more efficiently in terms of land use and provision of services (Blumenfeld 1979), the rapid growth of urban populations, as a result of natural increase as well as rural-urban migration, create great discrepancies between the urban population's obvious needs and the cities' limited capital to fill those needs. The extensive infrastructure required for large urban concentrations of population is not as critical for lower density rural living. Moreover, out-migration results in under-use of nation's housing stock and related facilities in places abandoned by the migrants.

According to World Bank (1975) projections, by 1980 some 550 million people in developing countries—or 25 percent of their population—were living in cities, and this number was expected to rise to nearly 1.2 billion by the year 2000, when about a third of the population of developing countries would be urbanized. Until the 19th century, cities have been consumers of human population and cities with more than one million population were a rarity. But the trend has been drastically reversed ever since, and by the end of this century there will be twenty six cities with more than ten million inhabitants. There has been no historic precedent for such large urban agglomerations, and their internal organization and supply of basic necessities for life may pose problems of a nature which have not



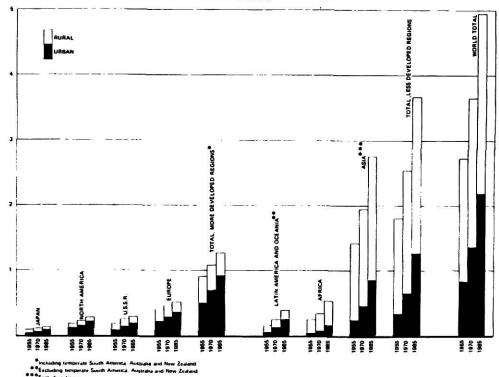


Fig. 3-2 Urban and Rural Population of Selected Countries. (Source: World Bank, Trends in Developing Countries, 1973; reproduced)

been fully envisaged yet. The rural areas in developing countries may in fact be poorer, but human concentrations in urban areas, not having the proper range of spaces and services can be dehumanizing.

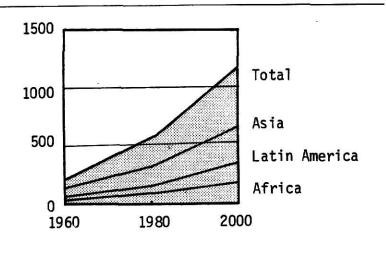
It was estimated by the United Nations (1965a), that for the period 1960 to 1975, total housing requirements in developing countries, resulting from net addition to population, whether from natural increase or migration; from loss of dwelling units to the housing stock through obsolescence or demolition; and from the backlog of housing need consisting of people inadequately housed or without housing at the time such need was established, stood in the neighborhood of 390 million dwellings. An annual output of more than 27 million dwelling units was required by 1975, and a housing

Fig. 3-3
Estimated Urban Population of Developing Regions (in millions).

(Source: World Bank,

Housing: Sector Policy Paper;

1975)



program providing eight to ten dwellings per 1,000 inhabitants was called for in that region. If compared with annual output of industrialized countries, the formidable nature of this task can be recognized. In 1960, only ten industrialized countries attained an output of seven or more dwellings per 1,000 inhabitants, and among them only the Federal Republic of Germany (10.3) and the Soviet Union (14.0) produced more than ten units per 1,000 of their population (UN 1960). But the growing scarcity and rising costs of housing resources, and consumers' inability to pay an increasing percentage of their income for shelter, have resulted in a decline of housing construction. By 1980, the Soviet Union was building less than ten units per 1,000 inhabitants per year, and the waiting lists for new homes were longer in 1980 than in 1970 (Stokes 1981). It seems clear that developing countries must give greater attention to their housing and urban development needs, and to the mobilization of necessary economic resources to achieve a significant impact on their housing conditions.

The United Nations' "World Housing Survey 1974" has concluded that the majority of countries of the less developed regions were able to accommodate their inhabitants in the existing stock at the rate of between 1 and 1.5 households per unit. It appeared that the housing shortage was not quantitative but qualitative, and that where information was available, the stock was composed of a high percentage of housing units which were marginal and others which were unfit for habitation (UN 1976a:48).

It appears that the vast majority of city dwellers find some form of housing, be they miserable hovels of very poor, or the spacious dwellings of the rich, but for most the quality of shelter services remain minimal. The problem becomes acute particularly in large cities where slums and squatter settlements often account for one third to one half of the population. Access to adequate livelihood, primary health care and education is usually difficult and infant mortality is higher in those areas, reflecting the conditions of their living environments.

In contrast, the financial and material resources of the people requiring minimum shelter services are more than often minimal. Even building mud and thatched houses on a self-help basis can not help improve the quality of living due to lower densities and subsequent higher costs of services and infrastructure required for such type of settlements. In most cases there are vast disparities between the housing services that are required, and the personal incomes that are available to pay for the housing. Poor housing and living conditions are manifestations of poverty and the only stable and long term solution for improving housing and living conditions is to improve the economic base of the poor. This raises the fundamental issue concerning the distribution of wealth. Ironically, most Third World countries exhibit a

high degree of unequal distribution of wealth among their population, which in turn emphasizes the need for resources transfer in the form of subsidies. The housing costs which otherwise could not be borne by a large segment of the population are met by the public system of revenue-raising, which in turn is oriented towards redistribution of wealth, and lessening income inequality through direct and indirect subsidies. However, in most developing countries the housing organizing institutions are typically undeveloped making the subsidy system prone to be skewed towards upper-income groups, and in very large low-income cities it becomes even more difficult for the poorer segments of the population to be reached.

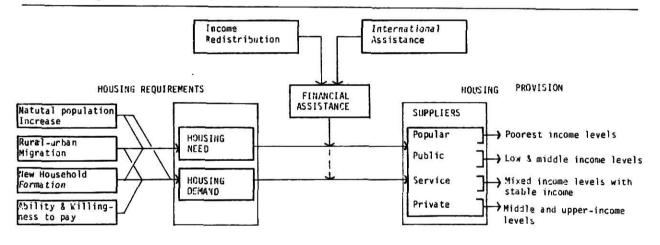


Fig. 3-4 Housing Supply Process

Both the United Nations (1976a) and Blitzer et al. (1981) agree that many Third World countries have the wealth and resources to considerably improve the housing and living conditions for a large number of their population, but lack effective mechanism for distributing wealth more equitably. Housing, its infrastructure and related community facilities, account for ten to thirty five percent of total national investment in fixed capital. Institutional channels and methods become particularly necessary for making such large financial resources available to all income groups. Moreover, the population must be made aware of the relatively plentiful resources which can be obtained locally or are possessed by the people, such as abundant supplies of certain materials, like sand and gravel; people's motivation to satisfy their priority needs; individual savings; individual skills, energies and time; and organizational structure of formal production activities in the private as well as public sectors. These resources could very well be used to supplement governments' efforts in improving the shelter services for their people. The availability of such

resources vary from place to place and from time to time, but the key factor lies in making the system open enough to utilize such opportunities. In this millieu, the organized institutional structure of the service sector, and its access to human, material and financial resources makes it a logical choice to participate in providing housing to part of the population. Moreover, in the case of service sector, the recipients and their housing requirements can easily be determined, thus making its operations non-speculative and well defined, resulting in efficient use of available resources.

4. SERVICE SECTOR HOUSING - A SURVEY

4.1 Service Sector in the Past

The history of providing residential accommodation to employees, in return for their services, is almost as old as that of hiring people for their services. Egyptian hieroglyphic inscriptions dating as far back as 4000 B.C. record a sit-down strike by workers building the pyramids. As a result, attempts were made to construct a model town by Pharoahs in exchange for a tomb for their souls (Aronovici 1939:xi). However, employer-provided housing did not take its present shape until after the Industrial Revolution began in late 18th century.

Providing shelter has been a major concern for man, but housing problem, per se, took a new form when society changed from an agrarian based lifestyle to an industrial mode of living. The agricultural revolution of the eighteenth century greatly enhanced the productivity of a farm worker, creating a surplus labor force in the agricultural sector. Simultaneously, newly developing industries created a demand for human workers to operate machines. These industries acted as magnets, widely attracting workers in search of increased wages, especially those whose jobs were threatened by the agricultural revolution.

Factories were started where either the raw material was found or the human populations were located. This created a shift of population from rural areas to industrial centers. Industrialization and urbanization went hand in hand. In England and Wales, where urban growth related to industrial development was first experienced, the portion of urban population was 16.94 percent in 1801, which increased to 38.21 percent by 1861. By 1901, the urban areas contained 72.05 percent of total population, and by 1911 it had reached 80.1 percent (Ashworth 1965:8). With this swiftly changing phenomenon of urbanization, the factory set the pace of life in urban centers and became the nucleus of the new urban organism. As Duff (1961:11) has put it,

the Industrial Revolution produced the factories to house machines which made the money. The machines required the operatives to tend them and housing of the operatives was a matter of making the provision at the minimum cost.

The greed of industrialists to produce more and make more money left a strong impression not only on the process of town making but also on history in general. The nineteenth century became, "the most villanous page in history," as Bernard Shaw described it.

By, or before, the middle of the nineteenth century, in England, and throughout the Europe as well, industrial areas were being developed in locations where,

... financiers and organizers of labor seized upon the new means for rapid fortune making; factories were built upon any available site to meet the expediency of the moment; housing was run up for the-workers as closely related to factories as might be; crude, ill-planned and ill-constructed, paying no regard to spatial conditions or amenity, and inhuman in the last degree; destined in time to typify a return to barbarism at the instance of commercial greed (Hiorns 1958:318).

Housing the working class became a profit making venture. An absolute minimum of shelter and services were provided to accommodate the ever increasing number of factory workers in close proximity to their employment. The physical and social environments of their residential quarters were not much different from those of their employment, where most of their time was spent. A typical work day consisted of more than sixteen hours and working conditions were deplorable. Upper-income classes were much better off. They enjoyed spacious and luxurious living quarters with all the amenities of that time. According to some historians, the working class as well,"... could have afforded better homes, if some had been available, for they shared generously in the prosperity of the period" (Wade 1959:118). In general the production of housing was carried out without any controls or regulations, and no regard was given to the unhygienic or unsanitary conditions of the dwelling environments. The majority of workers and their families worked and lived in inhuman conditions.

Working class housing was provided not only by commercial investors but also by the employers who hired the workers for their factories. Employers built settlements only in the immediate vicinity of their works and usually if they were located in very densely populated areas. Much of the housing provided by employers was related to industrial and mining operations located in remote and sparsely populated areas, to attract and retain workers.

Initially the quality and conditions of working class housing were equally deplorable everywhere, and housing estates developed by employers were no better than those built by speculative builders. The earlier industrial settlements containing iron-works, built by large local employers in South Wales illustrate this point. Later, however, exceptional towns and estates appeared that had

been built by individuals or a firm. These communities usually had better than average houses for workers, and paved, spacious streets and walkways. The community facilities, though varied from place to place, usually included social and recreational facilities, company stores, and in some instances, a local newspaper run by the employer institution.

Some of the earlier settlements developed by the employers, combining economic necessity with corporate philanthropy, included Marple (1790) and New Lanark (1799) in England. Marple was not very successful financially, but New Lanark, established by industrialist-reformer Robert Owen, succeeded as a social experiment without injuring business. With the indulgence of its employer, New Lanark provided greater comfort and happiness and became something more than a community of compact living.

Other notable examples developed in England and Ireland included Wolverton, Crewe, Grimsby and Swindon, all developed by railway companies, and Nent Head near Alston (1825), Bessbrook (1846), Bromborough (1853) and Copely near Halifax (1870's) developed by mining and manufacturing industries. Cook Taylor, an observer of the period's manufacturing villages of Lancashire,

... was able to contrast the strong sense of community which he found at Turton and similar places with the extreme non-intercourse which he considered the greatest evil of large towns such as Manchester (Ashworth 1965:122).

Saltaire, founded in 1851 as the relocated site for spinning mills from Bradford, was more distinguished because of its scale and the attention it attracted. The whole town took twenty years to complete and provided residential accommodation for three thousand workers and their families. The Manchester Guardian in its issue of 21st September 1853 reported,

The architects are expressly enjoined to use every precaution to prevent the pollution of the air by smoke, or the water by want of sewerage, or other impurity. . . . Wide streets, spacious squares, with gardens attached, ground for recreation, a large dining hall and kitchens, baths and wash-houses, a covered market, schools and a church; each combining every improvement that modern art and science have brought to light, are ordered to be proceeded with by the gentleman who has originated this undertaking (Ashworth 1965:127).

In addition an accident infirmary and dispensary, a factory canteen providing food at subsidized rates, a 14-acre park and alm houses for the poor were built and endowed by the employer. Most of the finances were provided by its founder, but the public also participated in the venture by providing subscriptions for some of the public buildings. By 1870, this town had almost all the equipment, which in the next forty or fifty years, all towns would gradually realize that they must provide for themselves.

Another full-scale experiment in community planning, of that time, was Bournville, near Birmingham. Started in 1879, it was an outcome of a wider conception than Saltaire. Nearly fifty percent of its residents were employed somewhere else than at Cadbury Brothers Limited, which founded the community. Later, a Bournville Village Trust, and then in 1919 a Bournville Works Housing Society, were formed to help employees to buy houses, financed by the company. The town of Bournville was neither a purely commercial venture, nor an outcome of sheer philanthropy, but it successfully exhibited the role employers could play in meeting the common needs of society.

One notable housing undertaking by the service sector, in a slightly different form, was Port Sunlight established by Lever Brothers Limited, in 1888. Although Port Sunlight was not as successful as those earlier ones mentioned, Ashworth (1965:134) cited the contributions which the firm made:

. . . no interest was charged on the capital outlay, no overheads were charged in respect of salaries and office accommodation for the estate management department, and in the earlier years temporary losses on income account were accepted, although rents were adjusted to keep such losses to a minimum.

More than twenty years after its foundation,

the firm considered itself amply recompensed by the improved quality of its labour, and certainly the growth of the business suggests that its expenditure on the village was no drag on its prosperity.

By that time the public sector also became involved in providing housing for its employees. Birmingham Corporation's housing for its water works employees in Elan Valley, in the early 1900's is one example of such undertakings.

The small scale of urban activities and their effective control were the two main features in all these communities for their planned and successful development. Their workers' high quality of living conditions stood in sharp contrast to the teeming slums of ordinary industrial towns. But later, as the communities grew larger or they passed from their original ownership, their model characteristics were allowed to decay. When the industrial settlements in established urban centers like Middleborough, Swindon and Crewe etc., as well as virtually new settlements including Bessbrook, Bournville and Port Sunlight passed beyond the control of any single private body, they became subject to the incidence of spontaneous influences like most new towns.

In the United States, the history of participation by employers in providing housing is relatively new, and mostly restricted to company towns located in remote areas. These tiny towns created to support a variety of industries were owned and operated by the particular companies. In the early twentieth century, scores of such communities were developed and later abandoned by companies dealing in lumber, coal and copper mining and chemical industries in

western and midwestern states. These communities were built wholly to support the operations of a single company. In most cases all the property was owned and erected by the company, which also provided most of the public services. These company towns offered varying degree of physical, social and recreational facilities for workers and their families.

Some notable employer-provided communities in the American West include Port Gamble, Washington (1853), Scotia, California (1880's), Bonner, Montana (1880's), Crannell, California (1909), Mount Harris, Colorado (1914), Litchfield Park, Arizona (1917) and Pullman, Illinois. Most towns which developed after 1920's were responsibly planned and managed, and such communities as Ganerco, New Mexico, Hiwatha, Utah and Mount Harris, Colorado became noted as model mining towns (Allen 1966:51). Employees working at the Albuqurque and Cerrillos Coal Company preferred to live and pay rents in the employer-provided town of Madrid, although they owned houses in nearby Cerrillos, because Madrid early had the conveniences of electricity and water in the homes. The town was later abandoned, however, as the market for coal eroded, but has recently started reviving again.

Other towns like Carbon, Wyoming (1868), Hanna, Wyoming (1889), Potlatch, Idaho (1906) and San Manuel, Arizona (1954) were not fully owned by the companies. The company either built or sold the houses to employees, or the employees built their own houses on land leased or bought from the company. In Roslyn, Washington (1880), workers could lease ground to build their own houses and at its peak the town had a population of four thousand inhabitants. In Sunnydale, Utah, a waiting list was maintained for employees who were interested to move in because of better housing and facilities available in the company owned town (Allen 1966).

Grass Creek (1883), a coal mining city of Utah provides an unusual example of company town. The town was owned and operated by the Church of Jesus Christ of Latter-day Saints, which also owned the mining company. Sunnydale, Utah and some other towns like New Cuyama, California and Winton, Wyoming had municipal form of governments to operate and maintain their communities.

However, despite exceptions like these, company ownership and control became nearly synonymous with economic and political oppression of employee-residents. The general provision of housing and community facilities through company owned housing in the United States did not approach the improved living-condition improvements of the employer-provided housing in industrial Europe.

4.2 Service Sector in Modern Times

With the advancement in industrialization and subsequent economic uplift, provision of worker housing changed forms. In most industrialized countries, housing directly provided by the employers, became limited to a few privileged high ranking executives. With the exception of Japan, and to some extent France as well, service sector has kept itself aloof from participating in housing provision for its employees, leaving investors in the public and private sectors to make their debut in this field.

In Europe, there had been considerable housing activity before and after the second world war. Nearly every country has some form of subsidized housing policy by public authorities. Germany has built about one and a third million working class apartments since the war, and the same is true of the bulk of other Western European countries. Holland provided housing for about twenty percent of its population in the post-war period which is more than any other country. According to Wheaton et al. (1966:8), "Her favorite method is by thirty-year loans, at the interest-rate of government bonds, to cooperative housing societies of working men or clerks, who are going to live in the houses when finished." Municipal housing is also provided for still lower-paid workers but is regarded as residual. In contrast, Britain, which has also systematically tackled the post-war housing problem, emphasized the role of the State in the finance, provision and legal control of housing. Local authorities were encouraged to build housing. They now own and supervise over thirty percent of the nation's housing stock. However, estates called "Development Areas" are set up for employees through government action. Industrial estates developed under industrial control and ownership provide roads and sewers, and arrange for gas, water and electricity; to be provided for the housing of workers, all conforming to predetermined plans for such developments.

France also has a vigorous participation by the public sector in its housing programs. Major emphasis is given to worker housing, though not directly by the employers. Employers with ten or more employees are required to invest the equivalent of one percent of annual wages paid in housing programs (UN 1972).

Italy has a long tradition of legislative action to stimulate housing construction, and its housing programs are related to the objective of relieving unemployment. Mandatory contribution from the employer is supplemented by funds from the government and employees, and the collections are, for the most part, distributed through government agencies. The interesting aspect of the Italian system is its redemption scheme, whereby tenants can eventually acquire ownership of the housing (see Sweet and Walters 1976).

In Spain, all industrial, commercial and banking institutions with more than fifty employees are obligated to build housing for a certain percentage of

their regularly employed personnel. The National Housing Institute provides matching funds to the employers, upto fifty percent of the cost of land and construction, which are repayable over fifty years, without interest.

Japan which lost over one sixth of its housing stock in World War Two, provides an excellent example of service sector participation to help rebuild and meet its shelter needs. During the 1930's, because of increased industrial expansion and rapid growth of urban population, the inadequacy of accommodation for industrial workers became acute, the Japanese government intervened by providing loans to employers for factory related housing. The initial efforts were limited to some extent to the exploitation of migrant labor, just as in the early stages of the industrial expansion in Europe. But as was seen later, the scope and services of employer-provided housing increased, and the proportion of young people living in houses provided by the employers in the city of Tokyo shot up from 4.2 percent in pre-war days to 19.4 percent by 1966-68 (Hiorns 1974). By the mid 1970's, the contribution of the service sector on a national scale accounted for ten percent of the total housing stock (Drakakis- Smith 1981). National Geographic, in its issue of March 1974 (McDowell and Ward 1974) observed that without company aid many Japanese could never afford to own a home. Big concerns often buy tracts of land, sell them to employees at bargain rates, and later help them in financing and building homes. Under company paternalism benefits go even beyond to the extent of arranging marriages by the personnel department, and providing convenient day-care centers for the offspring in workers' recreation centers.

In addition to employees' housing financed and built through companies' direct control, local public bodies build groups of houses with the aid of loans from housing finance institutions, then sell or rent to industrial companies requiring housing for their employees. In spite of the huge capital demand of other businesses in Japan, housing has been successfully financed at relatively low rates, and is gradually increasing with the consolidation of the housing finance system.

In the Third World region, lack of information makes it difficult to identify the type of housing investors. Data from scattered sources indicate that the service sector has actively participated in supplying housing in these parts of the world, especially in areas formerly under British or French colonial rule.

In Malaysia, during 1971 to 1975, more than forty eight percent of the budget for all categories of public housing was allocated for "Institutional Housing" for employees of different ministries and departments, which accounted for more than thirty three percent of the total housing built during that period. In addition, the housing division provides loans for government employees through arrangements with a consortium of banks in Malaysia. In the private sector, large rubber estates, mines and similar other places of employment provide housing for

their workers, which is controlled and regulated under the Workers (Minimum Standard of Housing) Act of 1966 (see Hai and Sendut 1980),

In Islamabad, Pakistan, over ten thousand houses have been provided for federal government employees by the Capital Development Authority alone (Pakistan Government 1979). Government housing estates for employees exist in all major cities, and additional employee housing is provided by some government and semi-government departments. Government employees who could not be provided with employee housing are reimbursed with a housing allowance in proportion to their salaries. However, the number of employees provided with government housing is not very large and is falling behind over the years.

In large cities, commercial and industrial enterprises have provided groups of houses for their employees from their own funds. Loans for house building are also available to employees of large business concerns and banks at minimal rates. In remote areas, industrial and other employer institutions in the formal sector provide housing and related facilities tied to the jobs. In some instances like the steel mill near Karachi and the Engineering College at Taxila, housing for employees was provided even before the operations could be started. It would be interesting to note here that the housing colony at Mangla, built by the contractor for its construction crew, was given to the government after the completion of Mangla Dam, and is now being used as a military reservation. Employer-provided housing and related amenities are usually of high standards, and the higher unit costs involved may be one of the reasons that many of the employees are not reached.

In Middle Eastern countries the oil boom and consequent influx of immigrant labor greatly increased the need for housing, and now most of the workers are housed by their employers. In Saudi Arabia, Iran and the Gulf States, employers have built new communities providing improved facilities and services for workers and their families. In Saudi Arabia employers are required by law to provide housing for immigrant workers or to pay a rent allowance which amounts to more than twenty five percent of employees' salaries. The Aramco Oil Company has built a medium-sized city providing housing for five thousand workers and their families. Similarly in Iran, before the 1979 revolution, oil and gas producing companies had provided and maintained housing communities for their workers at their production centers.

According to the United Nations "World Housing Survey 1974," in Turkey and Venezuela, governmental enterprises—such as steel mills—have built housing and commercial facilities as a result of public-private cooperation. And in Mexico all industrial enterprises with more than one hundred employees are required to make investments in housing as a means of establishing a relation—ship between residence and place of work. In Brazil, the National Housing Bank's loans are derived from an eight percent levy on all pay-rolls, which is destined for social security and other welfare purposes. In Chile, mandatory

contribution is required from all employers in the form of one percent tax on wages and salaries, and five percent tax on profits of businesses and industries to be utilized for housing and other welfare projects. In the Congo, the Ivory Coast and Senegal, taxes on employers are used as a way of collecting funds for housing (see UN 1976a).

Housing cooperatives have been used in promoting subsidized housing all over the world. In some Asian and Latin American countries, housing cooperatives have developed as a major tool to implement housing policy, especially for industrial workers. However, housing cooperatives are not being discussed here because of its basic difference in financing and maintaining the housing provided through the service sector.

4.3 Motives for Housing Investment

The rationale behind the service sector investment in housing shows various motives. The forces creating the need for employer-provided housing changed with the economic and industrial development, and varied from place to place. Economic, social and political factors contributed to the decisions of the investors. Although more than one of these factors was present at one time, they are being discussed here in the three respective categories.

4.3.1 Economic Motives

The foremost objective of a commercial enterprise is to make profit on its investments. The newly developing industries in the early stages of Industrial Revolution created a huge demand for workers' housing. The owners and founders of industries made use of the opportunity to invest in housing. These investments yielded direct and indirect returns for the employers.

Economic factors also contributed to the decisions of where to locate the industries, and the subsequent settling of industrial communities. Moving industrial operations to remote areas and furnishing housing for employees, enabled the employers to avoid conflict with competitor industries in hiring and retaining workers for their factories, and also to make use of workers' families and children for cheap and often free labor (see Ashworth 1965; Mumford 1961). In the early 1900's, similar motives led to the establishment of housing for textile and mining workers in Japan. In developing countries and other areas of acute housing shortage, employers can benefit from attracting the best suited workers by providing housing.

Company and factory towns become an economic necessity when the nature of operations dictates that it be isolated from populated areas. Explosive and obnoxious plants, mining and drilling operations and other industrial activities dependent upon specific locations for their operations require that housing and facilities be provided for all employees as absolute necessities.

4.3.2 Social Motives

Housing provided by employers on philanthropic and voluntary bases is included in this category. Victorian model towns founded by industrialists are well known for their reformative aspects. In the eighteenth and nineteenth centuries, the apathetic attitude of society towards the appalling housing and living conditions of industrial workers led to the foundation of industrial communities by enlightened industrialists. These industrialists recognized their housing responsibility because of their economic and political position.

Various examples of corporate philanthropy can be found in post-war Japan and France, where economic and political conditions contributed to the voluntary provision of housing by the employers.

4.3.3 Political Motives

Historically, housing provided by employers allowed political gains and controls over workers by the employers. Often, political considerations also motivated the service sector to provide housing for workers. Political considerations have also contributed in the public sector provision of housing for low-income workers.

In contemporary society, political and legal structure of controls and incentives contribute to much of the employer-provided housing (see Sweet and Walters 1976; UN 1976a). Mandatory housing finance programs, in developing as well as developed countries, require employers of certain categories to invest a portion of their income on employee housing. Fiscal policies, tax incentives and labor laws also attract investment capital toward employee housing, particularly in countries having high taxation and social programs for workers.

4.3.4 Reasons for Decline

In contrast to the continued development of the service sector in the industrialized societies of France and Japan, employer-provided housing in the United States has gradually diminished. Allen (1966) cites several reasons for the decline of company towns in the American West. These factors include diminishing returns from employee housing, development of transportation and other infra-

structure, increased and improved supply of housing in the private sector, development of cities and changing attitudes of companies and employees towards employer paternalism. The past experience with the employer-provided housing may also be one of the contributing factors.

On the other hand, the lower levels of economic development in most developing countries emphasize the need for increased paternalism on behalf of the employer institutions in the public sector and the private sector until housing becomes culturally feasible.

5. ECONOMICS OF EMPLOYEE HOUSING

The crux of the housing problem is economic, and essentially, the solution to the problem depends upon the establishing of a stable relationship between incomes and housing costs. How to bring these factors into harmony is a matter of discussion, and depends upon balance of the structure of authority or control over deciding, building and managing housing and related facilities. If it is known who is controlling which operations in the supply of housing in a given place and time, it can be predicted what is going to be built, for whom, and how it will be used. In the light of this hypothesis, it becomes rather easy to analyze the cost and benefits of housing provided by the service sector.

The capabilities of the service sector can be integrated into overall housing programs, providing housing and shelter services, and organizing infrastructure support for its housing settlements. The option for investment in housing by the service sector vary over a wide spectrum ranging from the very basic provision of houses fully owned and controlled by the employer institutions, to providing finances for employees and assisting them in building their own homes, and organizing community facilities through cooperation with the private sector and public agencies. However, there are two basic categories with respect to the ownership of housing:

- a) employer ownership of housing;
- b) employee ownership of housing.

This study only deals with the service sector housing in the form where housing is tied to the job and authority to build, control and maintain employees' homes and services lies with the employer institutions. The parameters of the economics of housing provided under this concept, and its advantages to the urban society are discussed below.

5.1 Financial Resource

The concept behind the provision of housing by the service sector is based

on its capabilities in two areas of housing finance:

a) By providing financial capital: the ability of employees to pay for housing.

b) By organizing a housing finance system: the capacity of the participant employer institutions to organize and distribute the capital for financing housing.

The two capabilities are discussed below separately.

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5.1.1 Housing Economics

The economics of employee housing i.e. the ability of the service sector to provide housing in relationship to the income of employees depends upon three parameters:

Income of the household (I)
Capital cost of the shelter services (C)
Economic rent (R)

These three elements are discussed below.

The ability of a household to pay for housing is determined by following the technique used by Wakely et al. (1976) for estimating the cost of urban housing. The argument is set in a theoretical framework, although it is based on observations of the real situation with particular reference to the situation in developing countries.

- 5.1.1A Income of the household (I): The first and basic parameter of housing economic equation for employee housing is the income of a household. A household may be defined as that group of people, related or not, who live and eat together. In the case of employees, it is assumed that the household is formed around the person employed, and the position for which salary is drawn represents an employee-household. The salary of the head of the household is the basic income of the household. Therefore,
 - I = total annual household income = annual salary for a position.

All incomes given to the employee, inclusive of any housing or rent allowance, should be included, but direct taxation is excluded.

a) Household income and housing requirements: The housing requirements of a household depend upon its income and number of persons. The ability of a household to pay for housing is dependent upon its income. Therefore, in this case thebasic relationship is between salary for a particular position, and the amount of housing and services expected or desired for the household in a particular income level. Typically, the housing requirements of a household which vary with its income are composed of three parts as shown in Fig. 5-1.

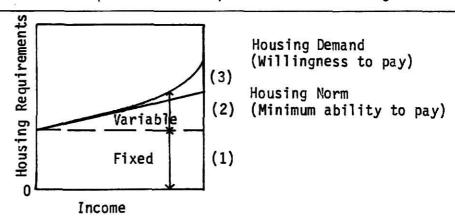


Fig. 5-1 Relationship of Income and Housing Requirements.

The first part comprises of basic minimum needs in terms of space and services required for human living irrespective of income levels. The second part is variable and represents those needs which tend to expand with income. The third part represents demand for extra housing services, for which the household is willing to spend to attain certain comforts and strive for higher social levels.

- 5.1.1B Capital cost of the shelter services (C): The second parameter is the initial cost of the housing. The housing requirements of a household as related to the cost of dwelling unit can be divided into two categories:
 - a) Space needs: amount of space required, open and covered areas, etc.
 - b) Housing standards: amount and quality of services, building materials finishes, amenoties, etc.

For a given amount of cost of construction, the interrelationship of these two factors can be expressed as shown in Fig. 5-2. A balanced and workable combination can be derived by adjusting either of the two factors, depending upon housing requirements of various income levels.

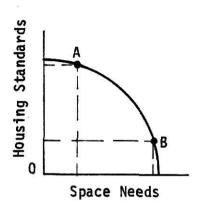


Fig. 5-2 Relationship of Space Needs and Housing Standards for a given cost.

a) <u>Space needs</u>: For a given standard, the space needs of a household i.e. the floor area required are related to income and size of the household. The first step is to determine the size of a household for a given socio-economic group. Size distribution of income which represents a relationship between cumulative percentage of households to cumulative percentage of their total incomes, is a convenient way of establishing the characteristics of a household for a given income group. The percentage distribution of households of a given size falling within a given income level can be ascertained from the demographic data.

The next step consists of relating the floor area required to the number of persons in the household. The area required for a household is proportional to its size as shown in Fig. 5-3. A minimum amount of facilities is required for even a one-person dwelling, and the area requirements increase with the increase in number of persons. It follows that the area per person decreases with the increase in size of the household and is represented by a curve as shown in Fig. 5-4.

The relationship between the size of a household and its space needs can be expressed as follows:

$$Area = k + b(N - 1)$$

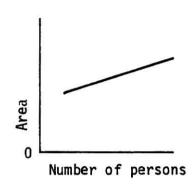
Equation 1

where

k = floor area needed for one person

b = floor area per additional person

N = number of persons in the household.



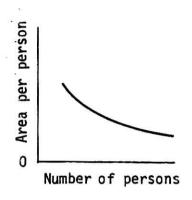


Fig. 5-3

Fig. 5-4
Relationship between number of persons and area

The relationship between income of a household and its housing requirements is already shown in Fig. 5-1. If income of the household is also taken into account the space needs of a household can be expressed as follows:

$$A = (k + b(N - 1)) + yI$$

Equation 2

where

A = floor area required for a household

I = total income of the household

y = a factor related to income and representing the variable portion of housing requirements in terms of space needs.

b) Housing standards: The relationship between income and housing standards follow the same pattern as that for space needs, and already shown in Fig. 5-1. The cost of construction varies with the housing standards and can be indirectly related to the income level. It can be reasonably assumed that the housing standards vary with the income levels resulting in higher per unit cost of construction for the upper-income levels and vice versa. Therefore:

$$a = 1 + wI$$

Equation 3

where

a = cost of construction per unit of floor area

I = total annual income of the household

w = a factor related to income and representing the variable portion of housing requirements in terms of housing standards.

The capital cost 'C' of a dwelling unit is determined by market forces and conditioned by particular economic and social policies related to employee

housing. Whatever parameters are used to define the cost of a dwelling unit, it will be found that the capital cost 'C' is composed of a part which is independent of such parameters, and a part that varies with them, mostly in a linear fashion.

The capital cost of a dwelling unit can be expressed in a simplified form as:

$$C = (K + aA)(1 + z)$$

Equation 4

where

K = the fixed element of the total cost

a = cost per unit of floor area

A = floor area required for a household

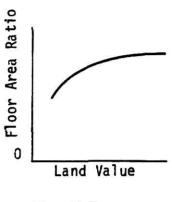
z = a factor representing those elements of the total cost which
 are proportional to the building cost.

The capital cost covers:

- The cost of land inclusive of all developments in utilities and infrastructure (if applicable), and fees related to its acquisition or transfer.
- The cost of the building itself, including materials and labor charges.
- The fees for the design and management of operations.

1)Cost of land: The land area required for a dwelling unit can be determined by the space needs--floor area and open area-of a household, determined on the basis of its income. The cost of land for a dwelling unit is comprised of the area of land occupied by the dwelling unit plus the proportional share of area utilized in providing roads, open spaces, services and facilities.

The land area occupied by a unit is a function of allowable density, maximum covered area and floor area ratios. Generally, the laws governing the use of land allow floor area to be constructed as a ratio of open land--floor area ratio--depending upon the value of urban land. The value of land, usually, is a function of its location with respect to neighboring activities, physical condition of site, availability of services and amenities, the laws governing control and use of land and demand for that land. High density areas of more valuable land allow higher floor area ratios, while in low density areas floor area ratio decreases effecting the cost of land per dwelling unit. Therefore, it can be concluded that the maximum floor area allowed to be constructed on a parcel of land is proportional to the cost of land. This concept is illustrated in Fig. 5-5.



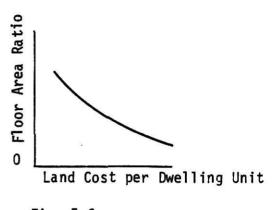


Fig. 5-5

Fig. 5-6

Relationship between Land Cost and Floor Area Ratio

The availability of services and facilities also contribute to the overall cost of land. A parcel of land with developed services and infrastructure support will have a higher cost than undeveloped land. Provision of housing by the service sector includes provision of services and community facilities as well, and their cost is included in the cost of land for each unit. The total cost of land covers provision of land, utilities and services, roads, parks, community facilities, landscaping and streetscaping etc., and can be expressed as a proportion of per unit cost of floor area required for each household.

2) <u>Cost of building</u>: The cost of building depends on the following four factors:

The price of materials: affected by type of building, standard of quality, building and safety codes, etc.

The wages and productivity of labor: affected by technology of construction, skills required, social norms, etc.

The builders' overheads and profits: affected by market conditions, local norms, etc.

Taxation and finance: affected by market conditions and government policies.

For a given standard, the cost of building relates to the floor area constructed. As discussed before, the area requirements of a household form a part of its housing requirements and can be related to its income. For a given standard, the cost of materials and labor grow with the area but not in direct proportion. For instance, addition of an extra covered space will

require only two or three walls, and a door and windows all not directly related to the size of the space. Moreover, connection to services can be fed from the same installations. The builders' overheads and taxes, on the other hand, tend to be related to the subtotal of cost of construction.

Similarly, certain operations, like setting out, scaffolding, connections to utilities, etc. are individual events and their cost is independent of the built-up area, or the amount of material consumed. Therefore, it can be said that whatever the standards used, the building cost comprises of a fixed portion, and a variable portion which varies with the area, mostly, although not necessarily, in a linear fashion.

- 3) Fees: Fees for design and related professional services tend to be proportional to the total cost, however, this percentage of the cost of construction tends to decrease as the overall project size increases.
- 5.1.1C Economic rent (R): The economic rent 'R' can be defined as the sum of recurrent payments required for covering the initial cost and the running costs of a dwelling unit. It comprises of the following four elements:

the amortization of initial capital cost; the interest on such capital;

the cost of recurrent relairs and maintenance;

the cost of management and profit.

The amount required for amortization can be expressed as a percentage of capital cost, and can be calculated in several arbitrary ways, resulting ir either a constant or a changing rate of amortization each year.

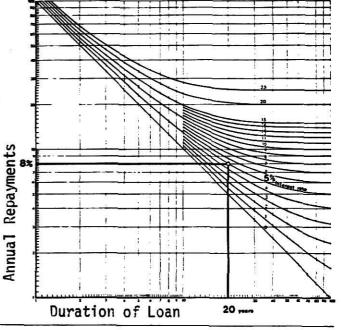
The interest to be paid on capital represents the remuneration of that capital and is determined by complex inter-play of market forces. In addition, the period of loan and guarantees against risk on investment on the part of borrower determine interest rate. Employee-households, because of their guaranteed position at work, which is considered to be continued indefinitely, present a different picture from ordinary borrowers. In case of capital invested on a housing unit borrowed against a secure position, the useful life of the physical structures and facilities determine the duration of loan for the purpose of establishing economic rent. In turn the quality of construction materials and standards and annual upkeep will determine the useful life of a house, which may extend beyond the normal work life of an employee.

The expenses involved in the maintenance and management can be combined

Fig. 5-7

Economic rent (R) as a function of interest rate and duration of loan.

(Source: Wakely et al., Urban Housing Strategies, 1976; reproduced)



with the capital cost in a single value referred to as "cost-in-use", which consists of its initial cost converted into its annual value, and of annual maintenance and management expenses, which are particular to houses occupied by households other than owners. Therefore, economic rent can be, reasonably, expressed as a function of interest rate and duration of loan as illustrated in Fig. 5-7.

- 5.1.1D The ratios of housing economics: The three parameters of housing economic equation: I, C and R, can be brought together in the form of ratios of the annual income of the household. The two basic ratios are:
 - a) The capital cost as a ratio of annual income

C:I

b) The percentage of annual income devoted to annual repayments

R : I

R/I = p = share of annual income devoted to economic rent.

Another ratio can be established between the economic rent and the capital cost.

c) The annual economic rent related to the capital cost

R: C

R/C = r = annual economic rent as a percentage of capital cost.

Taking all these factors into consideration the relationship between annual income of an employee-household and the percentage of income required to support the housing provided for it can be calculated as follows:

1) Annual income of the household is established (I).

2) Housing requirements in terms of floor area are determined for a given standard on the basis of the size (N) of the household (A = (k + b(N - 1)) + yI).

3) The construction cost per unit of floor area is determined on the basis of income level (a = 1 + wI).

4) The capital cost is determined on the basis of area provided for eacq household (C = (K + aA)(1 + z)).

5) The capital cost is related to the annual income in number of years (c = C/I).

6) The useful life (d) of a dwelling unit is determined for a given standard.

7) Interest rate (i) is established by current market for money.

8) Economic rent (R) is determined as a function of duration of loan (d) and interest rate (i).

9) Percentage of income required for housing is determined as a function of capital cost expressed in number of years of income (c) and economic rent (R), (p = R x c).

The procedure to be followed to obtain the values is illustrated in the example provided in Appendix B.

The share of income required to be spent on housing determines the ability of the recipients to pay for housing. In case of partial inability of the prospective recipients, especially among low-income households, to meet their housing expenditures, the service sector and the government have several choices to bring these expenditures within the households' budgets. The employers have a choice to:

increase incomes;
reduce housing costs by adjusting the relationship between housing
 standards and space needs;

tax upper-income households to compensate for additional expenses of lower-income households.

The government can provide assistance in lowering the housing cost to employee-households by:

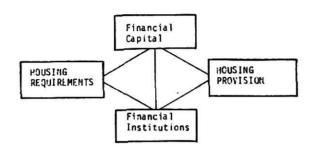
providing direct financial assistance to employer institutions; relating interest rates of housing loans to income levels; reducing interest rates for housing loans.

In employer-provided housing the basic parameter—the income—is controlled by the employer, within the context of labor policies and employment conditions. When housing becomes a part of remuneration for employees' services, the quality of worker housing becomes a variable of their salaries. The employer has a choice in either determining the amount of salary or the quality of housing and related facilities, within the income—housing requirements relationship as. shown in Fig. 5-1. The housing policies will directly influence the quality and quantity of housing provided by the service sector, and must recognize the fundamental inequalities between the ability to pay and the quality of accommodation required by households in different income groups.

5.1.2 Housing Finance

Housing finance may be defined as money provided by any source other than the residents or builders of the dwellings for the construction or purchase of housing (UN 1976a). Some form of housing finance is required for the provision of almost all housing built in the world today. The presence of a well developed housing delivery system and the availability of financing play an indispensable role in the complex process of production and distribution of housing.

A housing finance system refers to the financial institutions themselves, to their legal status and administrative proceedings, and to the relationships and markets which link them. It is important to remember that a housing finance system predominantly organized by private enterprise can not grow beyond the scale permitted by current levels of economic development. Furthermore, the private finance sector is usually not able to serve the majority of households in a poor country. A public finance system, therefore, has a more important role to play in a less developed country than in a more developed country. Similarly, subsidies, either to the owner or renting household, to the builder or to the local or national housing authority, take on a significant role.



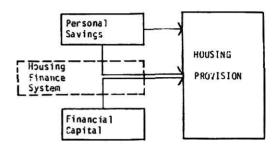


Fig. 5-8

The role of financing system in provision of housing.

Fig. 5-9

Housing Finance Process

The availability of credit facilities for long-term financing depends upon the following criteria:

The availability of capital for investment;
The securities that borrowers can provide against credit;
The guarantees provided by government for lending money;
The organized institutional network for distribution of credit facilities;
The inter-institutional linkages for flow of capital.

The remuneration for lending money to investors is based on a similar criteria depending upon economic conditions, monetary policies, lending practices of financial institutions and their future objectives. The determining factors include:

Overheads and profits for lending capital; Cost of organizing finance system; The term of the loan; The inflation expected over the duration of loan; The demand for capital in various investments; The securities to guard against risk as seen by lending agencies; Availability of replacement capital (costs for banks to borrow).

According to "World Housing Survey 1974", "developing countries of Asia and the Far East have been hampered by a lack of institutional facilities for

savings and for long-term finance" (UN 1976a:74), and same is true for bulk of the developing countries. Credit available to individuals in developing countries is restricted to those considered to be good risks and tend to be short-term, expensive and require equity deposits. In the absence of institutional means of savings and securities, personal savings take the shape of nontangible securities, like children's education. The responsibility to mobilize financial resources possessed by individuals falls largely on governments, and the service sector can be developed to stimulate housing construction.

The service sector guarantees a steady income for a household. This encourages the availability of loans on more favorable terms—longer payment periods, low interest rates and smaller equities. The financing system in the service sector, especially among the industrial companies, is typically most organized, and is used in providing housing related to employment in remote areas (see Chapter 4). Moreover, the service sector represents a relatively low—risk and trustworthy borrower, and have enough securities in the form of investments in its operations, to borrow money for longer terms and at lower costs, than does an individual household.

In addition, the service sector has access to a wide range of capital sources for housing finance. Countries having mandatory housing finance programs for employees, provide public assistance for employers to secure finances for employee housing. Apart from funds allocated for housing development, other sources of capital, which can be made available to the service sector for housing purposes include:

Foreign and local finances available for industrial activities; Private financial and lending institutions' funds; Family savings in the institutional system, including pension funds, superannuation and/or social security contributions from employers on behalf of employees;

Financial assistance by the government for employee housing and related development;

International financial assistance for housing and related development.

Arrangements utilizing personal savings in the institutional structure like pension and superannuation funds etc., provide substantial financial capital at little financial burden to the borrower. Singapore represents such an example where the public sector has successfully mobilized these funds for housing purposes (Drakakis-Smith 1981).

Besides the availability of financial capital, the presence of interinstitutional linkages is the most important component of a housing finance system.

As discussed earlier, finance system for investment in industrial activities is in most cases well established. On the other hand, housing finance system in most of the Third World lacks organized institutional structure, especially, for individual borrowers. To develop a single-purpose lending system exclusively for housing finance before actually putting a housing program into operation requires substantial financial and professional resources, as well as time, all contributing to the costs of delivering housing. Moreover, some economists claim that these single-purpose lending institutions should be avoided in countries where the capital market is weak (see UN 1972). The service sector and its institutional structure are capable of being utilized in distribution of funds for employee housing. It provides a direct liason between an employee-household and the employer on one hand, and links between financial institutions at various levels, on the other. The organized institutional network available in the service sector can be utilized for distribution of financial capital for housing until an exclusive housing finance system can be developed.

5.2 Potential Benefits of Employee Housing

Employee housing owned and controlled by employer institutions is a form of centrally organized housing and, generally, centrally organized housing projects, especially those administered by public agencies, tend to cost more in terms of initial construction as well as maintenance costs. These projects require extensive administrative structure, utilize high priority and often non-renewable resources, are non-incremental with the needs of occupying households and do not make use of non-physical rewources possessed by people (Turner 1976b; UN 1976a). To the contrary, housing supplied by the service sector offers several advantages, which normally are lacking in other forms of centralized provision of housing and related facilities.

5.2.1 Benefits to Employees

The benefits to employees from employers' assistance include availability of capital for housing finance and savings in interest costs. In areas of well developed finance systems, it provides the ability to secure financing among those who are poor credit risks, and would otherwise be unable to borrow money on their own. Although employer paternalism may not always be liked, but as will be discussed later in Chapter 6, employer assistance to secure housing finance is greatly appreciated by employees.

5.2.2 Benefits to Employers

The employer also derives benefits from housing provided to employees. Adequate housing is a strong inducement in the recruiting of new employees. Personnel practices in Japan are highlighted by an interfunctional coordination of housing policy with national employment, manpower and labor market policies. Begining compensation to employees is low, but the fringe benefits encompass housing and family allowances and have contributed to employees' loyalty and productivity (see McDowell and Ward 1974; Sweet and Walters 1976).

High rents and sales prices for housing could not only deter prospective employees but could be reflected in wage demands. Reasonable proximity to the place of work means less absenteeism and tardiness, all contributing to the increased productivity of the workers.

5.2.3 Cost Efficiency

Cost efficiency can be achieved, both in terms of building materials and construction techniques. Typically, housing industry is the least developed industry in developing countries. The service sector, being profit oriented in its purpose, but providing housing without any direct monetary benefits represents a highly cost conscious housing supplier. Promotion of housing through the service sector should result in reduction of housing cost through economies of scale by mass production processes and development of building materials producing industry. Multiplier effects include promotion of research to reduce costs of housing production and delivery. Benefits of expansion of knowledge in this field are to be experienced in housing produced in other sectors as well, resulting in overall reduction of housing cost.

5.2.4 Maintenance and Management

Maintenance costs are notoriously high in publicly owned and administered housing projects, and unless kept up, the buildings often deteriorate very rapidly. Several instances of bankruptcy or demolition of publicly owned housing projects can be found in both developed and developing countries (see Turner 1976b).

The employer institutions already own and operate work premises, and have arrangements for their plant maintenance. Because of established maintenance networks, additional expenses on maintenance and management of employee housing will be comparatively smaller. Moreover, the type of occupants, their tenure and relationship with their living environments is nor expected to generate extensive vandalism, as is often experienced in public housing projects, reducing the maintenance cost of employee housing.

Turner (1976a:32) criticizing the ever-larger pyramidal structure of centralizing technologies cited the Ashby's Principle of Exquisite variety, "If stability (of a system) is to be attained, the variety of controlling system must be at least as great as the variety of system to be controlled." The high costs of hierarchic systems create disproportionate dependency on borrowed capital, resulting in exceeding reasonable limits of what most occupiers can pay for their housing. However, the employer institutions tend to restrict the administrative structure within manageable limits. The scale of operation of the service sector is divided at two levels: providing link between the individual employer and the employee-resident; and between the employer institution and the financial institution. The closer relationship between the recipient and the provider tends to eliminate the mismatches between the priorities of a household and its housing services.

5.2.5 Industrial Decentralization

Industrial decentralization policies generally serve as a tool for reducing the regional inequalities in income distribution. In addition, they tend to restrict the rural-urban migration which, poses serious threat to the provision of basic services to ever growing urban populations in developing countries.

Mandatory provision of housing for workers eliminates the need for locating work places in large--and few--urban centers to take advantage of housing and community facilities available at those locations. New employment nuclei can be created in areas of underdeveloped economic act-vity, creatong a balance in income and population distribution. However, the success of programs controlling urbanization depends upon the inter-functional coordination of these programs into national economic policies and national and regional development priorities.

5.2.6 Location

Location of housing projects with reference to other urban activities effects the provision of services and facilities to the residents. Housing in the public sector is often located, depending upon the availability of land, on political or economic motives. Typically, public housing projects are located at periphery locations, and families relocated to those locations face severence of their previous means of income and additional expenses on transportation. The economic condition of employee-households is independent of their location. Service sector housing can be located without causing adverse consequences on the financial abilities of the residents.

At the same time the spatial interaction between place of work and residence generate regular flows of people creating demands on transportation and other

infrastructure. Common movement patterns can be utilized in economically organizing mass transit facilities either through the public transport system or by the employer institutions themselves.

5.2.7 Flexibility to Grow

The housing needs of an employee-household are related to its income. The needs grow with the income which is expected to grow over time. Service sector housing tied to the job has unique capability to provide housing services in proportion to income. The households may be moved from lower levels of dwelling units and housing services to higher levels with the increase in income, in proportion to their housing requirements.

5.2.8 Services and Facilities

United Nations (1976a) indicated that the provision of utilities and basic shelter services is highly desired in improving the quality of housing in less developed countries. Housing programs concentrating on supply of housing units alone, or subsidy programs which do not address provision of these facilities require additional measures to provide these services. In the absence of well organized and integrated housing programs provision of services by institutions independent of those providing housing, can be seriously hampered. Similarly social, educational and health facilities form an indispensable part of a comprehensive housing program. Provision of housing along with related facilities and services by the service sector results in improved quality of living environments without additional institutional measures.

5.2.9 Quality of Environment

Effective control of housing settlements and enterpreneural prestige and interest in housing projects is inclined to generate housing environments of architectural taste and quality. The nature of controls in managing and providing housing environments allow greater involvement by designers and administrators in the quality of appearance of individual units and public areas to improve the character of these environments.

6. IMPACT ON RELATED ISSUES

The views generally held about service sector housing, especially against the employers' paternalism, or difficulties in inducement for investment by the industries, are not true representative of the situation in most developing countries. These views are generally the outcome of past experiences with the employer-provided housing in industrialized countries with different social, economic and political backgrounds. The implications of worker housing organized by employer institutions are discussed below with respect to their economic, political and social impacts, in reference to developing countries.

6.1 Industrial Growth

It can be rightly feared that industrial growth may be hampered, especially among non-socialized industries, by diverting funds from investment in industry towards housing. The possible pitfalls could include lessening of enterprises' inducement to invest both in new and expansion projects, or increase in product prices by the effected industries. However, this kind of argument is a representative of the concept of housing as a non-productive economic activity. By treating housing sector as an industrial sector, the industrial growth can be stimulated, especially in producer goods industries, and multiplier effects on employment can help increase the economic level of the populace in general.

At lower levels of economic development, mandatory housing finance may be necessary to induce growth in related industries, especially in non-industrializing areas where private investment in housing at large scales is still underdeveloped. These lower stages of industrial development in the Third World countries are comparable to initial stages of industrial development in the nineteenth century Europe, and responses to the housing problems of that era could be repeated as well. Industries generate housing need by attracting people through creation of job opportunities, and logically are obligated, at least partially, to respond to the housing needs of their employees.

The type and location of industries play a pivotal role in creating demand for housing. In most developing countries, basic and heavy industries are

normally located in remote areas, or on the outskirts of large urban centers. Transportation and infrastructure are not highly developed, and labor is cheap and plentiful. Both these factors make it easier to locate factories where production materials and infrastructure are readily accessible. Since labor can be conveniently relocated to factory sites in remote areas, it is not unusual to find worker housing nearby provided by the employers. Service industries are typically underdeveloped in countries at early stages of industrialization, and in instances, where such industries operate at large scales, are highly capital intensive. Thus the cost of providing housing for a relatively small number of employees as compared to huge financial investment for total operations, is not expected to cause heavy burden on their finances.

Economic conditions also effect investment patterns in housing. When the capital available for investment is limited, the choice of investment is restricted to the most profit bearing industries. The decisions to invest would be dependent upon the profit generating capability by either industry, or any combination thereof, within relevant political and economic considerations. In the case of a steady demand for housing, financial capital will be attracted towards the housing industry. The quantum of that demand also reflect upon the economic well-being of the generating populace. When conditions for housing are unfavorable, other industries would be preferred by the investors, creating a general need for housing. However, as has been discussed earlier, the populace in steady employment is, to some extent, capable of meeting most of their housing needs from within their current income. Provided with the means to utilize their financial resources, a considerable amount of reasonably standard housing could be generated without disturbing industrial growth.

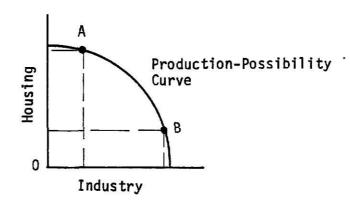


Fig. 6-1 Choice of investment: Housing versus industry.

The balance of investment in different types of industrial, commercial and production activities, provides a challenge for the economist and the sociologist. In simpler terms, when housing is viewed as a productive component of industry instead of as a social service, it becomes a means to eradicate poverty. The finances diverted to housing and related facilities to employees, can be justified on the basis of increased production in the construction and housing industries. Drakakis-Smith has supported the position that an increase in the production output of residential buildings will induce an expansion of the entire system of industries. Moreover, investment in housing, both in the public and private sectors, is viewed as an economic safety valve which, whilst providing employment and general economic stimulus during periods of stagnation, also furnishes opportunities for expenditure curbs in times of inflation (Drakakis-Smith 1981).

In extreme cases where employees' salaries are so inadequate as to generate sufficient housing and shelter services, it can be inferred that financial resources are lacking for industrial investment as well. In these situations, foreign assistance is often inevitable, and is usually provided through transfer of respurces from high-income countries to low-income developing countries on developmental and/or income distributional grounds (see Todaro 1977). Although international agencies recognize the increased demand for their capital for urban housing provision, they do not envisage their active participation in mass housing construction in near future (World Bank 1975), thus limiting the foreign resources available for urban housing. (For details of investment patterns of international agencies see Appendix C.) Moreover, the utilization of foreign capital is more than often restrained by political and economic constraints. Foreign aid available for investment in the public sector is rather than economic consideramostly governed by political decisions. tions. Provision for employee housing can easily be incorporated into such investments, as has been experienced in countries like Turkey, Pakistan and Venezuela.

Developed countries with market economies, as well as the international agencies dependent upon these countries for their finances, tend to promote investment in the private sector of developing countries. Housing industry developed by employer institutions in the private sector will be able to be benefitted from foreign capital, which otherwise could not have been used for housing.

In other instances of industrial development in poorer economies, policies that support rapid industrialization along Western lines can create problems in the balance of industry. The classic case of an automated shoe factory in West Africa, illustrates such a situation. It provided employment for fifty highly paid employees, but put five thousand village shoe makers out of work. Mandatory provision of employee housing, by allowing to develop local resources, can be instrumental in regulating the industrial growth without disrupting the indigenous structure of production.

However, after reaching a higher level of industrialization and subsequent economic development, the housing needs of the society could be met through the interaction of market forces. Industries may be gradually relieved of the responsibility of building and maintaining workers' homes and dwelling environments.

6.2 Employment Relationships

Relationship of employer and employee have always been of critical importance in the production process. The development of large scale industry has resulted in impersonal relationships between "master and servants," and service sector housing adds another dimension to the nature and extent of work-related associations between the two, which can be exploited to enhance productivity.

Historically, most of the employer-provided housing has been linked with the iniquitous exploitation of migrant labor (see Drakakis-Smith 1981). This may be true of early stages of industrialization of countries now regarded as economically advanced, but has little bearing on present-day conditions. Political controls, lacking in early industrial societies, now regulate industrial operations and relations. Productivity has been identified as a function of industrial relations, and the knowledge in this field is continuously growing.

Within the scope of this study, it is not intended to outline the norms for employer-employee relationships. However, the consequences of employer-provided housing on these relationships are being discussed below in brief. The effects on relationship between employer and employee are addressed at two levels of interaction: group and individual. The former deals with the employees as a group, while the latter effects employees on an individual basis.

6.2.1 Group Level Relations

Overall economic uplift coupled with growing public awareness, and subsequent control of appalling working conditions, through efforts by reformers like Charles Dickens, greatly alleviated the working conditions of industrial workers. Tremendous improvements in working conditions have been witnessed all over the world since the Victorian era. Workers, irrespective of political systems, now enjoy greater rights and benefits, provided and protected by law.

Working hours which ranged from twelve to nineteen hours a day, have been reduced to less than half. Child labor, which often was free during the industrial revolution, and comprised of children averaging six to seven years of age (see Coppa and Dolce 1974), has been completely abolished from the formal

economic activities. Factories, where life and limbs of workers were always at stake, are now considered the safest places in industrial societies. In the United States, both the death toll and accidental injuries occuring in homes are twice as large as those in places of employment, and fatalities in transportation accidents are almost four times larger than in industrial accidents each year (U.S. 1980; Tarrants 1980). Industrial excrements still plague the earth, but compared to the quantum of the industrial activity of today, are far less hazardows than the uncontrolled industrial pollution of "Coke Towns".

Similar achievements could be achieved in employer-provided housing by the industrial enterprises through systematic attention and development, but except for housing in Japan, it has generally declined in importance in the industrial societies of today.

Much has been said about the inhuman living conditions of workers in industrializing Europe of the nineteenth and twentieth centuries. Similarly, in Japan of 1900's, worker housing and related facilities in textile and mining industries were like detention houses, and were used as means for carrying out forced labor for profit. Quite in contrast, less than forty years later employer-provided housing became an effective component of Japanese housing policy, providing housing at lowest rentals on the basis of space provided, and accounting for a significant portion of national economic activity (Sweet and Walters 1976).

In light of these radical improvements in working conditions and environments and employee housing conditions, the conservative notion of exploitation of labor by giving more controls to employers through employer-controlled housing does not hold true in the contemporary industrial structure. Labor laws govern employment relationship, and rights of employees are protected without disturbing the political and economical balance of industrial operations. Public awareness and legal controls now direct the role of employers as well as industry with repect to employees and the rest of the society in general.

No doubt, housing provided by employers does extend the range of corporate control beyond the work places, but it can not serve as a means for exploitative control. In case of housing sites within established urban centers, where interaction with the rest of the society lessens the influence of employer over the dwelling environments of employees, mandatory housing especially becomes a liability for the employer institution. It provides job security to employees—much needed in labor surplus developing countries—and may serve as a leverage for employees in collective bargaining.

In contrast to the industrialized countries, the state and the employers in developing countries play a greater role than collectively bargaining with employees toward making decisions regarding industrial relations and operations. Labor unions in these countries are largely enterprise based i.e. organized

into autonomous units by companies or enterprises, instead of plant or craft locals. Employer institutions are considered more than mere job providers. Their concern for the workers is expected to encompass the whole employee and not just his work performance. Providing job security and responding to the basic needs of employees through housing provision, the benefits of which extend to the employees' families as-well, can not only enhance the productivity of workers, but also improves the employer-employee relations highly desired in poorer, politically unstable economies. Nevertheless, it is important that the significance of employer-provided housing in extending politically volatile situations beyond the work places be realized, and should be dealt with cautiously.

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6.2.2 Individual Level Relations

A paternalistic approach can effect decision making at personal levels, and can increase the hidden costs of any housing program. Employer-provided housing, like public and municipal housing, provides an artificial security and can seriously effect the mobility of labor. In contrast to developed countries, like in France, where such a move restricting the mobility is opposed by organized labor (see Sweet and Walters 1976), lack of job mobility in developing countries only effects at the individual level. This can be particularly true in cases where government employees are provided with housing, but those in the private sector are not.

The case of an architectural assistant employed with Public Works Department of Government of the Punjab, Pakistan, typifies this situation. After several years of employment with the PWD he managed to complete his education in architecture. After completing his studies, any new job commensurate with his qualifications and experience could bring him two to three times his existing salary. He was unwilling to leave his present position, however, for fear of losing both his house, which was tied to the job and provided reasonable space for a family of six, and his nearby, employer-provided educational and community facilities, of nominal costs.

Similar cases may occur, especially for those who improve their qualifications, but are unable to advance within their present employment. However, cases like this are not common due to the bleak employment conditions in the Third World countries. When housing is provided by a fairly large segment of the employer institutions mobility for workers can be greatly increased.

In developing countries, generally, the employment situations necessitate that workers seek job security, rather than high job mobility. Higher stages of development and greater opportunities for employment will require increased mobility of labor. The role of the service sector can be modified accordingly to incorporate such changes in stages of development and national labor policies.

6.3 Occupancy Patterns

The form of tenure provided by service sector housing has far reaching consequences, and is the most important issue related to housing. On the one hand it effects the growth and fulfillment of the priorities of a family living in employer-provided housing. On the other hand it may unnecessarily inflate the need for housing as a result of changing social patterns.

Employer-provided housing can lower a family's motivation for personal savings to own a house in the future by instilling a false sense of tenured security which really lasts only through the term of employment. Employer-provided housing is indirectly subsidized, and offers housing and related facilities at the lowest cost to employees. Therefore, in principle, it provides an opportunity for a family to accumulate savings over its period of employment in order to own a house later in life.

Provision of housing through the service sector can increase the cost of housing because of its centralized operations. Improving the quality of living through provision of adequate shelter and community facilities can increase the housing expenditures of families, especially those relocated from non-compliance housing. Moreover, other factors like changed lifestyle and peer pressure etc. also contribute to added living expenditures. Suppositions that any family can spend a substantial part of its income on housing become misleading in such cases. Experiences with subsidized housing in the public sector in Britain, the United States and some Latin American countries indicate that families relocated to public housing were forced to increased portions of their incomes on housing and related services, and their standard of living considerably deteriorated after the relocation (see Blumenfeld 1979; Turner 1976a). Besides, in Latin American countries huge publicly financed housing programs have gradually been driven to the verge of bankruptcy due to the failure of government agencies to recover payments from the tenants.

In the case of service sector housing, the space and facilities are proportionate with the salaries, which guarantees a steady return on housing investments. This eliminates the possibility of economic failure of service sector housing, if all the factors have been given due consideration while planning. The additional expenditures on improved housing, however, can effect the priorities and budget of individual families. Yet the benefits of improved living conditions on personal and community life outweigh any increase in household expenditures within reasonable limits.

Improving quality of housing by the service sector is destined to increase the demand for urban housing. The number of households looking for homes will become critical after culmination of their eligibility for employer-provided

housing. Three factors contribute to this increase:

- a) Improved housing conditions as a result of relieving overcrowding in the existing housing stock will add families, who have been squatting or doubling up, to the number of households already in need of housing.
- b) Service sector housing tend to break up the traditional joint family system, especially among people from rural areas, thereby increasing the number of households. Traditionally, even in rapidly urbanizing developing countries, single people looking for jobs move to the urban concentrations first, and it is only after they have secured a reasonable foothold in the new society, that their families join them. The service sector will insure housing along with the employment, and will increase the number of urban households.
- c) Workers retiring from work places in remote areas will have a tendency to migrate to urban areas because of the facilities and services available there.

The number of increased urban households through service sector housing may not be catastrophic, but belittle the efforts of the service sector in meeting the housing needs of developing countries. Abrupt changes in tenure, such as cessation of eligibility due to sudden death or serious illness of the employee, or even worse, layoffs, can undermine the benefits of employer-provided housing. Therefore, additional measures are required to either provide housing benefits to former employees as well, or to expand the latitude of service sector activities, so that the benefits can be extended beyond the normal work life of employees.

6.4 Social and Psychological Issues

The position of employer institutions as landlords, and their control over the dwelling environments of workers, extending beyond the work premises and hours, have often been regarded as a tool for dominance and control of the workers. These controls have sometimes been misused by unscrupulous employers for economic or political gains. Moreover, poorly maintained and deteriorating physical conditions, lack of facilities necessary for communal life and high incidence of crime and other social problems have been publicized as attributes of employee housing, though these are equally true for other forms of subsidized housing as well.

Experiences in the past, especially in the United States and Japan during the early twentieth century, have contributed to the formation of such images of

service sector housing, but in significant instances, the social character of employer-provided housing has been highly regarded not only by outside observers, but also by the employees living within those environments. Even though the employers have not always been the object of affection by the employees, many communities provided by them have provided a closeness of community life and a long lasting community spirit. In early nineteenth century Britain, "... Henry Ashworth's employees at Turton counted it a privilege to rent one of his cottages, 'that it was in fact a reward reserved for honesty, industry and sobriety'" (Ashworth 1965:122). In company towns of America, former residents of Dawson, New Mexico, for example, expressed complete satisfaction with company control of the town. In another instance, a resident of Corbel, California has been quoted by Allen (1966:105):

... In a company town you get to know all of the people, and life is more informal. In a city sometimes you do not know your next door neighbor, and everybody is in a big hurry. In a company town you are more in the outdoors, and in the city you feel shut in.

This description of an American town of 1900's is comparable to an English town of a hundred years before, where an independent observer,

. . . was able to contrast the strong sense of community which he found at Turton and similar places with the extreme non-intercourse which he considered the greatest evil of large towns such as Manchester (Ashworth 1965:122).

Some informal interviews of the current and former residents of government employees' housing estates in Pakistan, revealed that employees take pride in being tenants of the housing estates. Progress from lower levels of housing to higher levels, tied to salary and position at work, is regarded as an achievement and is considered to enhance the social status of employees and their families.

Employer-provided housing is a different form of group living, based on the type of employment and income levels of the employee-residents, than the diversified community living under normal settlement patterns. The common interests of workers and similarities in other walks of life among their families lean more toward establishing closer bonds among residents, than toward creating social tensions. The greater interaction with the rest of the society further reduces the possibility of social tensions among different income groups in case of employee housing situated in large urban centers.

Service sector housing, like other forms of centralized provision of subsidized housing tend to effect the informal structure of society. Linden (1981) and Turner (1976a) have shown that such forms of housing provision may deprive low-income families means of access to informal means of support in the event

of distress. The close relationship found among squatterers safeguard them against lack of material security, a security which is totally lacking in conventional low-income housing projects. Here, the service sector can take a regulatory role, but not without partially disturbing the system, and increasing the cost of housing provision.

7. CONCLUSIONS AND RECOMMENDATIONS

For the purpose of this final chapter, the salient points in the preceding chapters are recapitulated and an attempt has been made to suggest strategies for fruitful implementation of the concept outlined. An attempt is made to present general purpose suggestions, which do not fit precisely the housing policy needs of any particular country or area, but are intended to bring forward the basic components and their interrelationship, essential for any housing program.

As a global conclusion, it can be stated that in countries of the less developed regions, the housing shortage is not quantitative but qualitative. The majority of urban (and rural) households lack access to basic services, such as water, sewage, electricity, etc. and education and health care facilities. Virtually every one is housed, but it is the quality of their living environment which needs improvement.

The conditions of housing, and objectives for improvement, in any area of the world are dynamic and continually changing. On one hand, rapid and continuous changes in age and size distribution of the population are greatly increasing the need for housing. On the other hand, the rising costs and growing scarcity of many basic resources are widening the gap between the ability to provide housing and its costs.

In most countries only a small proportion of population has access to an adequate supply of investment funds for housing. Basically, this stems from the difference between the costs of housing and related facilities, and the income of households who must rely on savings accumulated by others through institutional savers, such as post offices, banks and insurance companies, or on unorganized money-lenders, and they must pay for the use of these funds. The inability or the unwillingness of individuls to pay what potential lenders demand result in diversion of those funds to more profitable investments elsewhere.

The gap between the housing needs of a household and its ability or willingness to pay is a manifestation of unequal distribution of wealth, and financial assistance in the form of direct or indirect subsidies is required to fill the

gap. The higher the inequalities, the greater the need for redistribution of wealth through tax and subsidy systems. In some Third World nations, there simply are not enough resources to generate the wealth to do so. While many other countries, who have the wealth and resources to considerably improve the housing and living conditions of a large proportion of their populations, lack effective mechanisms for distribution of wealth more equitably. Unless the maldistribution of economic power at national and global levels is tackled, even the best designed housing programs can have very limited impact.

Most of the recent studies of urban housing provision in the Third World have recognized three major sources of housing—the public, private and popular sectors (Turner 1976b; Drakakis-Smith 1979). In general terms, the public sector is need-based and its objectives politically motivated; the private sector is demand-based and profit oriented; while the popular sector endeavors to meet the housing needs the poorest households.

Any effort to improve the living conditions of society purely on the basis of housing need would require huge capital outlay, beyond the means of most governments. Demand-based approach, on the other hand, is generally considered to serve only the upper-income groups, which represent a very small percentage of the population. However, a significant portion of society characterized by stable income contains far more potential to pay for adequate housing than is generally recognized. This is especially true for the more fortunate low-income households in formal employment, whose ability to spend on housing does not generate enough demand for the private sector housing, nor their housing needs can be met purely through the public funds. Recognition of the relationship between the steady income of a household and its ability to own and maintain a house signifies a potential demand for housing. The employer institutions who provide salaries and wages to their employees in the formal employment, have the capability to obtain financial resources from institutional savers, and to organize the distribution of such capital through its institutional structure. This allows the service sector to participate in the provision of housing and related facilities.

However, actions in any sector can cause repercussions in the others, and to pursue any actions in the relative isolation of one sector or the other is not advisable. This highlights the need to follow through national development strategies with sectoral policies and programs. The transition of macro-level policies into housing strategies deserves greater attention, as the housing policies can only be made within the context of national resources and priorities. This chapter explores the strategies for housing provision by the service sector by following and reinforcing the national and regional development policies.

7.1 General Aspects of Planning and Programing

Strategies for incorporating the service sector into supply of housing will be insufficient if focused onle at the local level, to bring about a substantial improvement in the living conditions. Social and economic changes will be effective only if introduced at the national level, requiring wide ranging policy measures.

Housing needs can not be addressed in isolation of their socio-economic context. Development of housing and community facilities should be adequately represented in the formulation of fiscal and monetary policies. Like any other policy, housing policy should be future oriented, and objectives and priorities need to be established in the light of present needs and capabilities, and future expectations. Studies by the United Nations (1972) indicate that in developing countries, invest provision which often only governments can undertake such as land development, promotion of the building materials industries and establishment of centralized financial and administrative institutions have been neglected in the past. This situation emphasizes the need of comprehensive housing policies in relation to fiscal and monetary policies. It is preferable to prepare a basic quide plan, with whole series of alternatives at various decision-making points. The comprehensive plan be updated continuously and is a more practical method of master planning, than the regular master plan. The comprehensive housing policy should determine housing needs, goals and priorities, and proceed to build and control the institutions and instruments to meet those goals, rather than policies which merely respond to the most pressing of the current demands.

Next in order of priority is the formation of a clear policy on the volume and allocation of savings and investments for housing and related programs, on the line of already established goals. This can be accomplished by undertaking an adequate analysis of capital requirements in the housing industry, and by making realistic decisions as to the expected participation of various sectors in the supply of housing. Furthermore, it is essential to decide at an early stage how much of the capital from public funds is to be invested directly in housing and community facilities, and how much is to be used to support the producer goods, and the functions of other sectors to induce their increased participation.

Nevertheless, in terms of determining the proper priority to be assigned to housing, the efforts should not be overblown like reaching a certain volume of housing production for which no effective demand may exist, nor, necessarily, to assign a higher rank to housing than for other basic wants.

To improve the housing conditions in developing countries there is a strong need to establish national public bodies responsible for all the activities

related to the provision of housing and community facilities. These bodies are to be responsible for the following functions:

Policy making
Planning and implementation
Administration (supervising and auditing)
Local executive management and coordination
Research and evaluative studies

Intersectoral linkages and investment opportunities can be promoted and administered through these agencies. It should be a part of housing policy to promote, supervise and coordinate financial institutions designed to attract savings, and to provide long-term credit for housing and related investments. International financial investment can be desirably used towards the creation and expansion of local housing finance institutions.

7.2 Formulation of Strategies

The effectiveness of the service sector approach as a resource for housing in a given situation depends upon its relative capabilities in context of socioeconomic and political framework. The level of economic development coupled with the abilities of people to pay for housing, and capabilities of other sectors of housing provision determine the parameters of fruitful implementation of this concept.

7.2.1 Target Groups

Chenery et al. (1974:91) define "target group" as a group of people who are relatively homogeneous with respect to the effect that a given policy instrument might have upon them. The requirement of homogeneity in the definition implies that the groups are based on how the benefits of service sector housing are distributed among them. The eligible recipients of employer-provided housing are identified as the target groups in this study. The eligibility of recipients can be determined on the basis of their employment and housing requirements, and their respective employer institutions. The characteristics of these target groups, before and after cessation of eligibility, can be established on the following criteria:

Income-earning assets and capabilities
Terms and duration of employment
Size and age composition of the households.

These characteristics are decisive in establishing the scope of the service sector, and participation on behalf of other sectors required to meet the

housing requirements of the people.

The percentage of the total labor force in the service sector in relation to the total population of working age establishes the magnitude of the target population. A simple relationship between the size distribution of income and the ability to spend on housing within the target groups can help in determining the need for any financial assistance required to reach respective income groups.

7.2.2 Typology of Countries

For this study, no attempt has been made to deal with the classification of country types or situations, where the service sector approach can be useful, because of the complex relationship between level of economic development and capabilities of different sectors of housing provision. However, as will be discussed later, the options for investment in housing by the service sector can be determined on the basis of two major factors: availability of financial capital; and effectiveness of housing finance system to distribute the capital.

Urbanization and population distribution, labor and employment policies and conditions, and income distribution among population are some secondary parameters, which can be used in identifying and analyzing favorable situations for service sector housing.

7.3 Implementation of Strategies

The mandatory contribution can not be considered merely a tax, but should be considered as in investment in housing. The type of participation and the forms of investment depend upon the capabilities of different sources of housing provision in a given place and time. Implementation of housing finance programs through mandatory contribution require legislative action to encourage or compell the employer institutions to allocate a percentage of wages and salaries for housing. Action is needed at macro-level by the governments for establishment of administrative structure and development of sources of housing finance to carry out these programs at micro-levels by local agencies and employer institutions.

7.3.1 Administrative Arrangements

An effective housing program requires effective administration. Goals and objectives established at national levels should be able to be implemented at local levels. Emphasis needs to be given to fostering institutions capable of

formulating urban development planning and, within that, housing programs. The range of instruments available to carry out housing strategies is considerable. Some areas of government participation and assistance, specific to the service sector participation, are discussed below in detail.

- 7.3.1A Taxation: Taxing practices can induce the participation of employer institutions, either by encouraging them or forcing them to contribute toward housing. Partial or total failure to provide housing for all employees by participant employer institutions should be penalized with added taxes. The weight and burden of taxes can make the incentives available for housing provision, all the more effective. The greater the weight of taxation, the greater the leverage governments can exert by means of detaxation.
- 7.3.1B Land provision and development: World Bank (1975) have observed that most cities have found it necessary to own land that can be used for urban development purposes in order that they may deal with housing and associated community facilities problems equitably. This is particularly true of countries in former British or French colonial systems. Development of land by the government agencies has successfully stimulated private housing in many countries and has been particularly suited to assisting low-income households. Provision of land for service sector housing through land banks or from publicly owned land reserves can serve as a stimulant for effective participation by employer institutions, and can help in reducing the cost of land as well.
- 7.3.1C Housing standard controls: Appropriate building standards can do much to create a safe and pleasant environment, for example by ensuring adequate circulation of air, preventing structural failure or limiting the likelihood of fires, floods and similar hazards. However, if standards are set too high for existing income levels, their primary effect will be to push down the living standards of the poor. It can also lead to malpractices in administrative structure to retain or construct "substandard" housing.

The experience of worker housing in the early stages of industrial development in Europe and the United States is suggestive of the greater role governments must play in defining and enforcing building standards. Policies relying on "average" standards in income and size of households, housing requirements and cost of dwellings are to a large extent meaningless, because they do not represent the fact of diversity in income and corresponding housing requirements. It is, therefore, suggested that minimum performance standards be established by governments, taking into consideration the basic needs, building materials performance and hygienic requirements of living environments. The employer institutions can be encouraged at local levels to provide additional facilities

depending upon particular situations.

Two recommendations for determining the space requirements and quality of services are given below:

a) Housing needs of a household should be determined by dividing households on the basis of their size;

Households comprising of one person. Households comprising of more than one person.

- b) In determining the quality of services, the difference between various income levels should be given due consideration. The standards, like space requirements must be related to income levels, and can result in provision of added facilities to low-income groups without unreasonably increasing the cost of their housing services (see Fig. 5-2).
- 7.3.1D Community facilities: Public agencies have a greater role to play in helping the service sector at local levels. Public participation is required in provision of services and utilities, and in the maintenance of these facilities. While provision of basic facilities along with the housing units is the responsibility of the service sector, their integration into the urban network can not be achieved without public participation. Moreover, enough demand of certain facilities like education, may not always be present to support their provision. These areas not only require close cooperation and coordination among service sector and public agencies, but also provide opportunities for indirect assistance by government. It is recommended that provision of these facilities be considered a responsibility of the employer institutions, but their maintenance may be handed over to respective agencies after commissioning of the facilities.
- 7.3.1E Building materials: The greater use of traditional materials and the adaptation of new technologies to traditional building methods can lower costs, particularly in labor surplus countries. Usually the promotion of building materials industry is a kind of investment which only governments can undertake. Technical and seed capital assistance from government can play a key role in the development of building materials industry.

7.3.2 Financial Arrangements

Inter-sectoral financing and coordination is required to finance the

housing operations in the service sector. Since finances available in other sectors, for example industrial and production activities, will be diverted to housing, integration and coordination in administrative implementation will be required.

Governments should promote financial institutions at local levels to attract personal savings. Personal savings already in institutional savers like social security, insurance and saving, accounts should be mobolized for housing purposes. Sources of financial capital which can be made available for service sector housing include:

Employees' salaries
Employees' savings in employer-employee contribution funds
Government funds allocated for housing and related development
Mandatory allocation of finances for housing loans
International financial assistance
Finances in the industrial and production activities.

Some of the recommended instruments for mobilizing these resources include:

Tax policies: inducing savings and investments
payroll related taxes to employers
property taxes
tax concessions
Bonds and similar other public securities
Public savings plans
Fiduciaries

Housing cooperatives for employer institutions.

7.4 Growth of Program

The options for investment in employee housing, and capacities of the service sector depend upon the level of economic development. With the establishment of housing finance system, availability of capital for housing development and general economic uplift, the abilities of participants as well as the recipients will improve. It is, therefore, suggested that mandatory housing contribution programs be designed to grow with the economic development. There can be several choices available for expansion in this regard. The program can be expanded by

expanding the participant employer institutions.
expanding options for investment.
improving the type and quality of services and adjusting
financial contribution.

OPTIONS FOR MANDATORY HOUSING CONTRIBUTION

PARTICIPATION IN FINANCING	Direct financial contribution by government. Financial contribution by employees for maintenance. Mandatory allocation of funds for loan to finance housing.	Contribution from employees' personal savings. Indirect financial contri- bution by public agencies.	The employer builds housing Contribution from employees' for employee ownership. The employer provides sites Financial contribution by and services for employees employees. to build housing. Payroll related contribution by government. tion to special agencies. Handatory allocation of funds Loans/subsidies to employeesfor loan to finance housing. Housing built through institutional cooperatives.	Contribution from employees' Dersonal savings. Indirect financial contribu- tion by public housing agencies.
OPTIONS FOR INVESTMENT	The employer institution builds and owns housing. In case of non-compliance payment of pay-roll related taxes.	The employer builds housing. The employer builds housing for employee ownership. Loans & subsidies to employees to build housing. Housing leased from agencies Housing built through institutional cooperatives.	The employer builds housing for employee ownership. The employer provides sites and services for employees to build housing. Pay-roll related contribution to special agencies. Loans/subsidies to employees Housing built through institutional cooperatives.	Loans and subsidies to emp- Contribution from eloyees to build housing. Housing built through insti-Indirect financial tutional cooperatives. Acquiring housing built by agencies. Provision of housing through building societies. Pay-roll related contribution to special agencies.
PARTICIPATION IN HOUSING PROVISION	Large commercial and industrial establishments. All levels of government. Large semi-public agencies. Recipients: all employees.	Commercial and industrial establishments. All levels of government. Large professional agencies. Non-profit organizations. Recipients: all employees.	Commercial and industrial establishments. All levels of government. Professional agencies. Non-profit organizations. Recipients based on one or more of following criteria: Income level. Buration of service.	All employer institutions. Recipients based on one or more of following criteria: Income level. Duration of service.
CAPITAL FOR HOUSING	CAPITAL RELATIVELY SCARCE	CAPITAL RELATIVELY ABUNDANT	CAPITAL RELATIVELY SCARCE	CAPITAL RELATIVELY ABUNDANT
FINANCE	RUDIMENTARY HOUSING FINANCE SYSTEM Lack of financial institutions. Absence of adequ-	te linkages among institutions. Lack of satisfac- tory safeguards against financial failure.	WELL-DEVELOPED HOUSING FINANCE SYSTEM Well organized capital markets. Secondary mort- gage markets.	Monetary adjust- ments to protect savings for housing.

expanding target groups.
allowing individual ownership of housing units.
disassociating the housing tied to employers.

Mandatory contribution, sources of financing and options for investment with regard to availability of capital and financing system are detailed in Table 7-1. Strategies to implement long-range objectives can be prepared and implemented in phases within the context of economic development and financing organizing capabilities. The growth of housing programs in the service sector is discussed below at three stages of development.

7.4.1 Stage I

The service sector is comprised of only large scale employer institutions as outlined in Chapter 2. Mandatory provision of housing and community facilities is recommended to be owned and controlled by the employer institutions in this stage. Failure to make required contribution, wholly or partially, should be taxed. These taxes should go to a special fund, to be utilized by government agencies specially meant for housing and related development.

The government is required to develop institutional channels for coordination between the service sector and other agencies and institutions involved in financing and administering service sector housing programs. Institutional channels to attract personal savings should be promoted. Sources which rely on contribution by employees; like pension funds, social security funds etc., should be mobilized to finance these programs.

At later stages other employer institutions which fall within the formal employment should be included into housing participation. However, depending upon their capabilities their contribution might be restricted to taxing the wages paid in those institutions. These taxes should also go to the special funds for development of housing and related facilities.

It is highly recommended that at later peruods of Stage I, smaller employer institutions be encouraged to form housing cooperatives to pool their resources and obtain finances for housing provision. These institutional cooperatives should be administered through public or semi-public agencies at local levels and regulated at central levels.

The Stage I is relatively short and can last from five to ten years depending upon the socio-economic development and improvements in capabilities of other sources of housing provision during that period.

7.4.2 Stage II

This stage emphasizes the role of individual ownership of housing units by the employees. Housing provided by the service sector is, in principle, being financed by the employee, depending upon the ratio of income to the economic rent of dwelling units. Therefore, logically the employee should be able to own the dwelling unit after credit has been paid back. Furthermore, if the work life of an employee extends beyond the maturation of amortization, the economic rent should be added back to the employee's salary.

The need of a comprehensive housing finance system is to be met in this Stage, coupled with improvements in cost efficiency of housing construction.' It is expected that promotion of organized channels for the service sector development in Stage I will serve as a catalyst in organizing a housing finance system for Stage II. Inter-institutional linkages, secondary mortgage markets and government insurance and guarantees for individual borrowers should be an essential part of the housing finance system.

Individual ownership will reduce the costs involved in administering and maintaining of housing environments and of agencies controlling them. Moreover, private ownership of houses will result in combining the nonmonetary resources of people like motivation, personal time and labor etc., to the efforts provided by the service sector.

This stage is long-term and offers several choices of investment including:

The employer institution itself builds housing
The employer institution builds and finances housing through
 institutional housing cooperatives
The employer institution provides only sites and services
The employer institution provides loans and assistance to
 build housing by the employees
The employer institutions acquires housing provided by other sectors.

7.4.3 Stage III

The conditions in Stage III are largely the outcome of the earlier two stages. Strategies based on various combinations of techniques implemented in the Stage II can be refined in this stage, and action for future outlined. The only proposals which seem to be relevant for the Stage III are to encourage the individual ownership of houses, and to change the relationship of employees tied to respective employers to that of eligible recipients and the service sector participants. The participant employer institutions may discharge their

obligation by making payments to government accredited and supervised nonprofit collective agencies, who provide housing and facilities to eligible employees.

The emphasis underlying the concept of housing by the service sector is on improvements which, as far as possible bring real benefits to all income categories than to just a few privileged. Certainly there are neither instant solutions nor universal strategies for the housing problems of the urban poor. However, there are choices, and any transformation which occurs will have to be strongly linked to wider political, social and economic forces.

7.5 Opportunities for Further Study

While this study is an effort at consolidating the role of the service sector in providing housing for its employees, it is nevertheless general, and hopefully will suggest ideas for further evaluative studies. Studies at microlevel, with particular reference to economic, political and social framework of a particular area or country appear to be more useful for further research.

Comparisons in context of indices of economic development, between the countries having effective mandatory housing programs, and those without, can help in developing typology of situations to allow an evaluation of the range of choice in policy measures which are available for implementing such programs. Moreover, microstudies investigating the relationship of employer-provided housing with labor relations may provide some interesting problems entirely different from those found in housing provided by other sectors.

In short, the concept with which this study is concerned has received little attention in housing literature, and this Report is intended as an initial step underlying the potential importance of this concept, and calling attention to the need of further investigation.

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Appendix A

ECONOMIC SUBDIVISION OF THE WORLD

Centrally Planned Economies

China, Mongolia, Democratic People's Repúblic of Korea, Democratic

Kampuchia, Vietnam.

Europe: Albania, Bulgaria, Czeckoslovakia, German Democratic Republic,

Hungary, Poland, Romania.

America: Cuba.

USSR

Asia:

Developed Market Economies

Africa: Customs Union of Southern Africa; Botswana, Lesotho, Namibia, South

Africa and Swaziland.

America: Canada, United States.

Asia, Israel, Japan.

Europe: All countries excluding centrally Planned economies.

Oceania: Australia, New Zealand.

Developing Market Economies

Africa: All countries excluding Customs Union of Southern Africa.

America: All countries excluding Canada, Cuba and United States.

Asia: All countries excluding Israel, Japan and centrally planned economies.

Oceania: All countries excluding Australia and New Zealand.

Appendix B

COST OF EMPLOYEE HOUSING - A THEORETICAL EXAMPLE

Let us assume that in a particular situation the incomes of employees and the household sizes are as follows:

	Ĭ	N		
	(h/h-income)	(Average)	(h/h-size)	(Average)
(1)	\$ 100 - 200	150	4 - 5	4.5
(2)	\$ 200 - 300	250	5 - 6	5.5
(3)	\$ 300 - 500	400	5 - 7	6.0
(4)	\$ 500 - 900	700	3 - 5	4.0

It has been calculated that at a given time current standards require that minimum amount of floor area and construction cost should be as given below:

```
Area for one person (k) = 150 sft
Area for each additional person (b) = 50 sft
Variable factor for area requirements (y) = 20% (0.2)
```

Cost of construction per unit area (a) = \$1.00Fixed amount of capital cost (K) = \$100.00Variable factor related to building cost (z) = 10% (0.1) Variable factor relating cost with income (w) = 10% (0.1)

Area Requirements:

Cost of construction as related to income

$$a = 1 + wI = 1 + 0.1xI$$

j

Capital Cost

Cost in number of years of income

Percentage of income devoted to rent

Assuming that duration of loan = 50 years interest rate = 10%

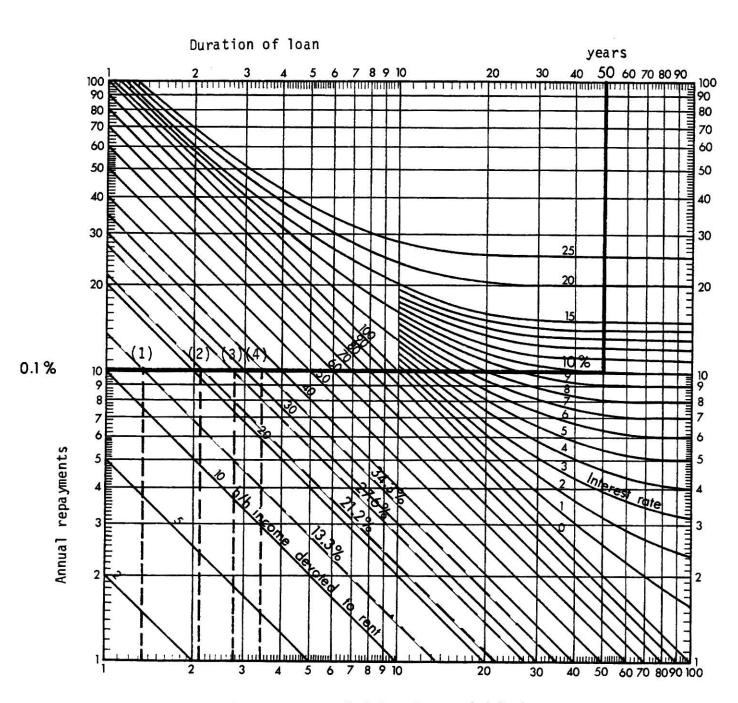
Calculated economic rent from the amortization graph

economic rent = 10.1%

(1) R x C = p

$$10.1 \times 3.39 = 34.23\%$$

(2) $10.1 \times 2.74 = 27.67\%$
(3) $10.1 \times 2.10 = 21.21\%$
(4) $10.1 \times 1.32 = 13.33\%$



Capital cost as a multiple of annual h/h income

Appendix C

INTERNATIONAL ASSISTANCE BY WORLD BANK AND I.D.A. IN FISCAL 1980.

		· · · · · · · · · · · · · · · · · · ·
Projects	US\$ millions	Percentage
Agriculture and Rural Development	3458.4	30.12
Urbanization	348.8	3.04
Transportation	1444.5	12.58
Water Supply and Sewerage	631.1	5.50
Development Finance Companies	817.5	7.12
Education	440.1	3.83
Population, Health and Nutrition	143.0	1.25
Energy	2849.3	24.82
Industry	422.5	3.68
Small Scale Enterprise	260.0	2.26
Telecommunications	131.0	1.14
Technical Assistance	13.0	0.11
Non-Project	522.5	4.55
GRAND TOTAL	11481.7	100.00

Source: World Bank 1980, "World Bank Annual Report 1980, "Washington DC.

Appendix D

LABOR FORCE, 1978

Countries	Percentage of population of working age (15-64 years)	Percenta	Percentage of labor force in		
		Agriculture	Industry	services	
Low-income			8 B		
Countries	55	72	11	17	
Middle-income Countries	55	45	23	32	
Industrialized Countries	65	6	39	55	
Capital-surplus Oil Exporters	51	42	29	29	
Centrally Planned	62	49	31	20	

Source: World Bank 1980, "World Development Report 1980," Washington DC, Table 19, pp 146-147.

1

SERVICE SECTOR AS A RESOURCE FOR THIRD WORLD HOUSING

by

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AN ABSTRACT OF A MASTER'S REPORT

submitted in partial fulfillment of the requirements for the degree of

MASTER OF ARCHITECTURE

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1982

Abstract

This study seeks to provide an assessment of the service sector as a major source of urban housing provision in the Third World, and suggestions as to how the resources available in this sector can be effectively mobilized. The service sector can be described as an economic and political subdivision of the economy comprised of employer institutions, both in the public and the private sectors. For this study, this sector includes larger businesses and industries, all levels of government including health and higher education, and large semi-public agencies.

To think realistically about housing in any context requires understanding of both the nature and scale of different sectors involved in the supply of housing. Most recent studies of urban housing provision in the Third World recognize three major sources—the public, private and popular sectors—but have given little attention to the potential of the service sector as a source for housing provision.

Employer institutions played a major role in improving the living conditions of their workers in Europe during the nineteenth and early twentieth centuries. In present times, Japan and some European countries have relied heavily on the employer institutions in the private sector, for their housing programs. Among developing nations, employer-provided housing is, in some form, represented in the housing programs of several countries of Asia and Latin America.

The underlying concept behind the provision of housing by the service sector is based on the employment relationship: a mandatory financial contribution based on wages and salaries, either contributed unilaterally by the employer or bilaterally by both employer and employees. The establishment of a relationship between incomes and housing costs holds a promise for providing housing and facilities for those in steady employment, without putting extra financial burden on the employer or the employee. The service sector, therefore, contains much potential for meeting the housing needs of a wide economic cross section of the society, particularly of low-income households characterized by stable employment, rising aspirations and an ability to accumulate savings.

In case of employees' housing owned and controlled by the employer institutions, the parameter of housing economic equation are centered on the salary of the employee. In this equation, the household is formed around the person employed, who is represented by the position for which salary is drawn. Housing needs of the employee-household are established on the basis of the employee's income and provision of housing and facilities grow with the income. The difference between economic rent--annual repayment on the initial and maintenance cost of the dwelling--and percentage of income a household is able to spend on housing in any given place and time, determine the amount of financial assistance required for various income groups in that situation.

The recommendations to incorporate the service sector into housing policy as a source for housing provision are suggested in the form of a three tier program. The implementation of each stage depends upon the the capability of housing finance system of a particular country at a given time, to organize the provision and distribution of capital for housing finance.

The first stage is characterized by a lack of institutional facilities for savings and long-term finance. Direct investment in housing by the service sector, and development of institutional channels to finance such housing are recommended at this stage. After establishing an effective institutional mechanism the range of participanr employer institutions can be expanded. Institutional housing cooperatives are recommended for financing housing by smaller emploer institutions at this stage.

The second stage characterizes a well-developed housing finance system, and opportunities exist for various alternatives of direct or indirect investment in housing by the service sector.

The conditions in the third stage depend on the earlier two stages, and a combination of strategies from the earlier stages can be adopted within the socio-economic framework. However, it is recommended that indirect investment alternatives be promoted in this stage to relieve the employer institutions of the onerous task of the work and responsibility involved in disposition of the financing funds. Moreover, the relationship of employees tied to the respective employer is suggested to be changed to that of eligible resipient and the service sector participant. The participant employer institutions may discharge their obligation by making payments to government accredited and supervised non-profit collective agencies, who provide housing and facilities to employees. The emphasis, in the two latter stages, is on individual ownership of the houses by employees.

Although it is possible to make these broad distinctions between different stages, these are only general categories and there may be many overlaps and mixes. The emphasis is on improvements which, as far as possible, bring real benefits to all economic levels rather than serving the interests of a privileged few. There are neither instant solutions nor universal strategies for the housing problems of the Third World countries, and any transformation which occurs will be strongly linked to wider political, social and economic forces.