

**PROCEEDINGS:  
ASIAN CONFERENCE ON  
LOW INCOME SHELTER  
AND HOUSING  
FINANCE**

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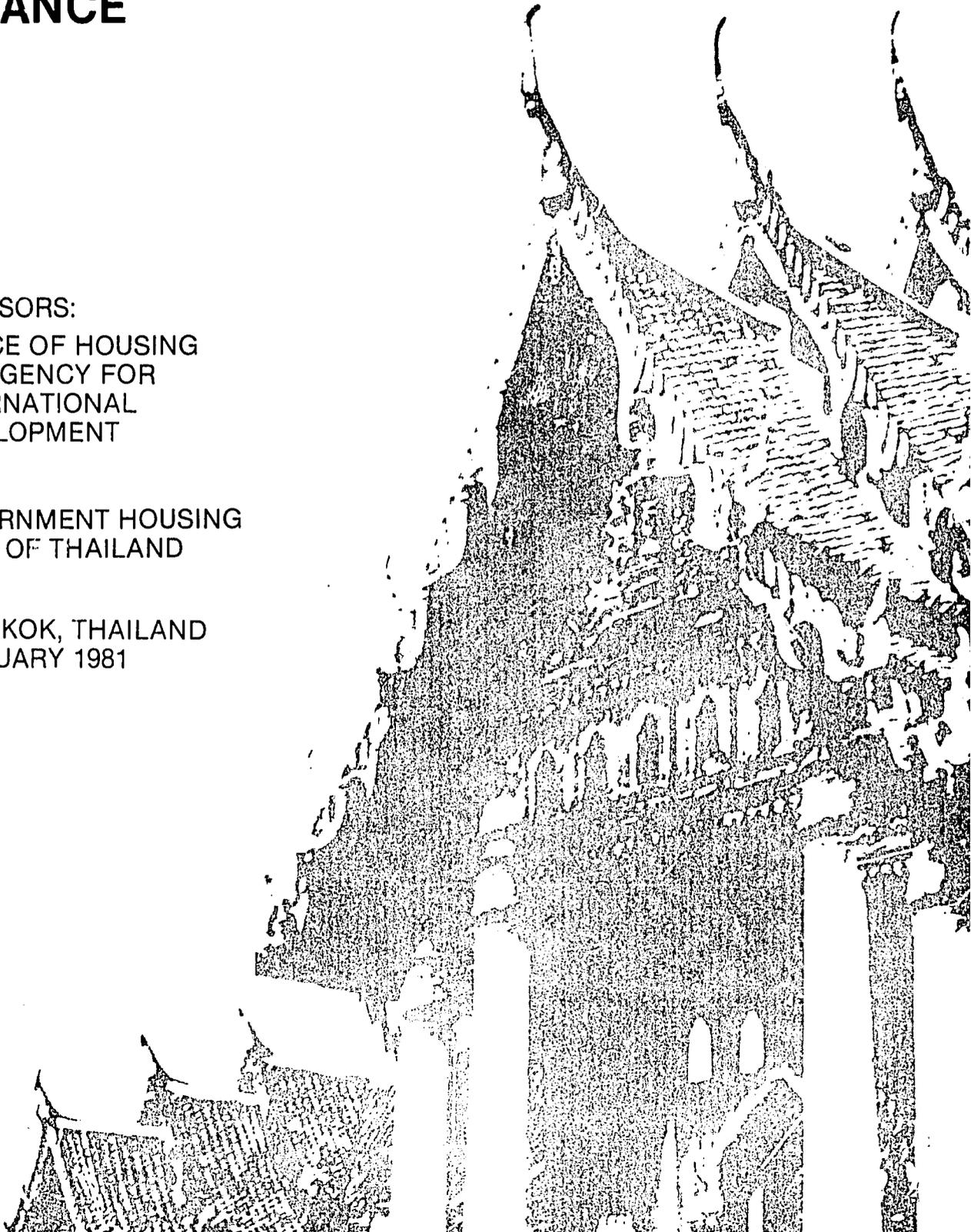
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BANGKOK, THAILAND  
FEBRUARY 1981



Proceedings:

ASIAN CONFERENCE  
ON  
LOW-INCOME SHELTER  
AND  
HOUSING FINANCE

February 15-19, 1981

SPONSORED BY:

U.S. Agency for International Development  
Government Housing Bank of Thailand

Ambassador Hotel & Convention Centre  
Bangkok, Thailand

## FOREWORD

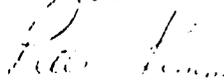
The Office of Housing is pleased to present the proceedings of the Asian Conference on Low Income Shelter and Housing Finance, held in Bangkok, Thailand, February 15-19, 1981. This was the second conference relating to shelter finance and production that the Office of Housing has co-sponsored in the Asia region, with the first being in September, 1976.

There has never been a time when it has been more important to develop solutions to the problems of providing shelter to low income households. As world population soars, especially in the urban areas, the need for economical shelter multiplies dramatically. Compounding these problems are worldwide sluggish economic growth, high interest rates, and rapid inflation.

More than 120 senior officials of government ministries, housing authorities, and housing banks from eight Asian countries participated in this conference. Also taking part were senior officials of U.S. finance and investment institutions, the Office of Housing, and international organizations concerned with shelter issues. The leadership and motivation demonstrated by the conference participants was most impressive throughout the week. With these resources, it should be possible to resolve the shelter problems which are so pressing in many Asian countries.

The Office of Housing wishes to express its appreciation to the Royal Thai Government and to the Government Housing Bank, which co-sponsored the Conference, for their support and generous hospitality.

Sincerely,



Peter M. Kimm  
Director  
Office of Housing

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Message

of

His Excellency General Prem Tinsulanonda

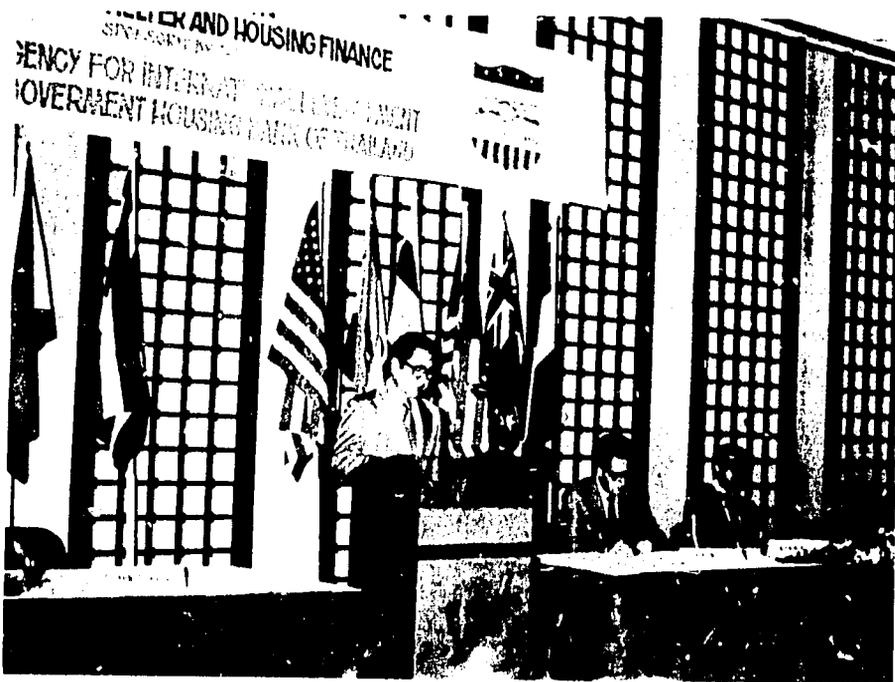
Prime Minister of Thailand

It is with great pleasure that I welcome you to Thailand to participate in this conference. My appreciation goes to our own Government Housing Bank and the U.S. Agency for International Development for collaborating on this important event.

I am very pleased to note that in your deliberations this week, particular attention will be devoted to the problems facing the poorer people of our countries. It is with them that the need for adequate shelter and more sanitary living conditions is the greatest.

Thailand is at present preparing its Fifth Five Year Development Plan. In this plan we will be intensifying our efforts to address the shelter needs of the poorer people of Thailand. We view the development of a housing finance system that is attentive to the needs of lower-income groups as an integral step toward adequate shelter for all.

To all of you, I extend my sincere best wishes for a fruitful conference and enjoyable stay in Thailand.



OPENING SESSION - Conference on Low Cost Shelter and Housing Finance. Dr. Amnuay Viravan, Minister of Finance, Royal Thai Government, opens the conference.



Mr. Burton Levin, Charge d'Affaires, U.S. Embassy to Thailand, delivers welcoming remarks.

## WELCOMING REMARKS

Dr. Annuay Viravan  
Minister of Finance  
Royal Thai Government

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I am most pleased to officially welcome you to the Asian Conference on Low-Income Shelter and Housing Finance. I would like to express my appreciation to the U.S. Agency for International Development and our own Government Housing Bank for collaborating on this important event.

The issues that you will be addressing in the coming days offer no easy solutions. The need to provide systems that make adequate shelter available to all the people of all our countries cannot be overstated. The need is real, and it is immediate.

I am gratified that your governments have chosen to send such a high level of representation to take part in these deliberations.

As all of our countries are seeking financial resources to develop our economies we should look to the housing sector as providing an opportunity to put the productive capabilities of our people to good use. The positive economic effects of housing investment are numerous and reach to all parts of our national economies.

In your discussions this week I urge you to consider not only the social and political obligations we have to further enhance the quality of life of your poorer people, but to deal with the hard financial realities that face our economies.

The provision of housing to the low-income earners need not be a drain on our scarce resources. Consider these positive features that I alluded to earlier:

- Housing investment typically has a low-import component, which assures that the economic stimulus provided by the expenditure remains within the domestic economy.
- Housing construction is a low-technology, labor-intensive activity that offers employment for unskilled and semi-skilled labor and easier entry into the market for local firms.
- Housing investment is linked to other domestic industries, such as building materials and household furnishings that offer similar opportunities for employment.

And perhaps most importantly housing finance systems can, if developed and managed effectively, mobilize new savings from the household sector of our economies that is least adequately served by other financial institutions. Therefore, the capital used to finance housing may not necessarily represent a diversion of funds from the investments required in other sectors.

This conference occurs at a particularly important time for us, as Thailand is about to embark on its Fifth Five Year Development Plan. The Plan deals directly with our desire and need to reduce both external and internal deficits in our economy. Clearly, mechanisms will be sought and systems installed that can limit these problems by mobilizing domestic resources that have been heretofore untapped.

Concurrently, we are about to initiate a study of our own housing finance system. This study is being guided by a steering committee headed by Ministry of Finance. This study will identify ways that our housing and finance institutions can work together more effectively to make the target of our housing development plan a reality for the poorer people of Thailand.

The experience of the people assembled in this room is various and vast. We can all learn from each other, but only a collective will as compelling as the need that is evident in the cities and towns of Asia and the world can make adequate shelter and services a reality for all our people.

Finally, on behalf of the Royal Thai Government I would like to extend our warmest welcome to all the conference delegates and our sincerest best wish that this gathering will further enhance the spirit of cooperation that exists among us.

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## WELCOMING REMARKS

Mr. Burton Levin  
Charge d'Affaires  
U.S. Embassy to Thailand

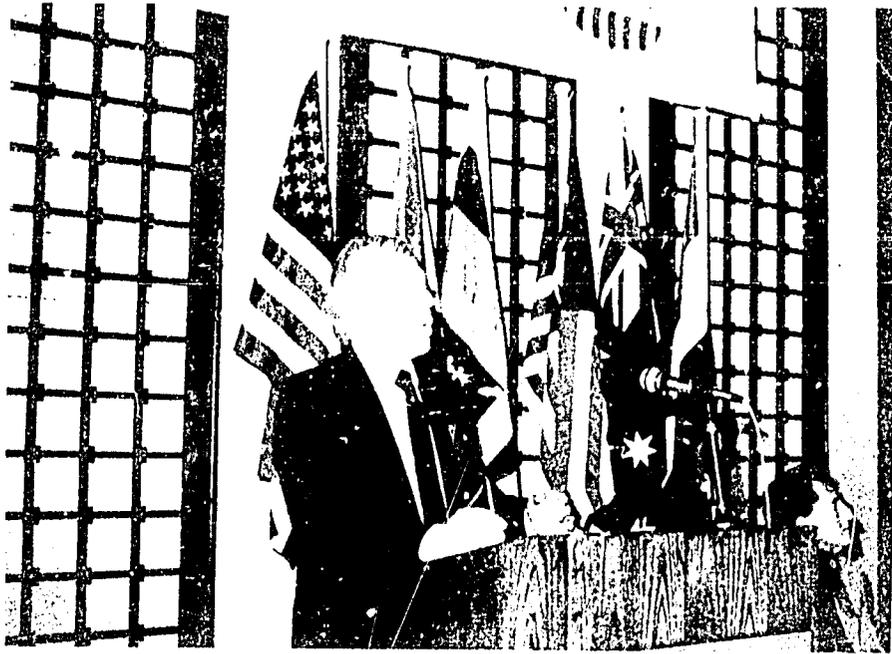
On behalf of the U.S. Government it is my pleasure to welcome you to the Asain Conference on Low-Income Shelter and Housing Finance, co-sponsored by the Government Housing Bank of Thailand and the Office of Housing of the U.S. Agency for International Development.

I first came to Asia about 27 years ago. Since that time essentially rural nations, with small capital and provincial cities, have been transformed to industrialized societies benefitting from and yet plagued by rapid urbanization. As a witness to this transformation, I am convinced that the countries of this region, and indeed of the world, must deal with three major interrelated problems if they are to provide a decent life to their citizens. These problems are population control, urban planning, and urban housing.

The size and importance of this group gathered here is significant of the increasing attention given by our governments to one of these problems, that of urban housing. I am very happy that my government, through the AID Housing Guaranty Program and the Office of Housing, has, for 20 years, been deeply involved in working on this problem with the leaders of developing countries throughout the world. Part of this effort is the \$50 million housing guaranty that has been authorized for Thailand.

Although I am no expert on the problem, it is impossible not to notice the housing problems that must daily be faced by the burgeoning populations of our cities, both great and small. When I am told that by the end of the century the majority of the world's population will be city dwellers, I am impressed by the immensity of the problem, it is true, but also encouraged by the dedication of those of you who must come up with solutions and who, as part of your continuing effort, will join in the discussions to be held during this week.

The emphasis of your Conference, as I understand it, is on the sharing of experiences, in which you will discuss your programs, your successes, and your innovations. May I, in conclusion, offer you my greetings and my best wishes for the success of your deliberations.



Mr. Peter Kimm, Director, Office of Housing, U.S. Agency for International Development, discusses the severity of urban shelter problems throughout the world, at the Opening Session.



Mr. Manasakdi Intarakomalyasut, Managing Director, Government Housing Bank of Thailand, welcomes delegates to the conference.

## WELCOMING REMARKS

Mr. Peter M. Kimm  
Director, Office of Housing  
U.S. Agency for International Development

It is my pleasure to join with the Government of Thailand in welcoming you to this Housing Conference. This is only the second such conference that the U.S. Agency for International Development has sponsored on housing in Asia but I am impressed by the representation I see before me. It indicates that the topic we will address this week, "Low-Income Shelter and Housing Finance," is of real concern to us all. More than that, we are aware that it will affect the quality of life we hope to achieve in our own countries. We of AID are sponsoring this conference with the Thai Government in order to learn more about your experiences, and to provide you with the opportunity to learn more about what is going on elsewhere. We hope that this exchange of views will equip all of us to face more effectively our sometimes awesome responsibilities.

The severity of the urban shelter problem is known to everyone here. The cities of the world, and particularly the cities of the developing world, are growing at a dizzying rate. Between 1950 and 1975, the urban areas of developing countries absorbed some 400 million people; between 1975 and the year 2000 the increase will be about one billion people. Here in Asia, the problems of rapid urbanization are indeed severe. With the developing world's greatest concentration of urban areas, the region is experiencing severe strains on land, materials, and infrastructure. While population growth rates for Asia are somewhat more stable than in other parts of the world, the absolute size of the urban population is staggering. In 1975, for example, the urban population of India exceeded the combined urban population of Argentina, Brazil, and Mexico, the three largest countries in Latin America.

The incredible size of this urban population is exacerbated by a high incidence of poverty. It has been estimated that 50% of a typical city's people can fairly be described as poor. Efforts to reduce poverty must therefore address the problem of poverty in the cities. Again, in Asia, the size and extent of the problem is substantial for of the 24 countries in the region, 12 of them, according to a World Bank definition, are within the lowest-income group.

The combined ills of rapid, unmanaged growth and poverty-level incomes are evidenced in proliferating squatter settlements and in overburdened basic urban services such as transportation, education, and health. The Office of Housing of the U.S. Agency for International Development has spent 20 years in the development of bilateral shelter programs in some forty countries attempting to define and address some of these issues.

Beginning in 1961 with the Latin American Housing Guaranty Program, AID has acknowledged the increasing need for shelter solutions. Through our U.S. Government-backed guaranties, we had, by 1968, succeeded in assisting various housing institutions construct more than 40,000 units of housing in fourteen Latin American countries. By 1969 the Housing Guaranty Program had expanded worldwide so that today we have \$1.4 billion worth of authorized

projects around the world. The history of the Guaranty Program is not without its twists and turns, its occasionally rocky detours to accommodate the lessons learned and changing world views. Though we are, by no means, at the end of the road, we have gathered a great deal of experience and have a better understanding of the world shelter dilemma than we had 20 years ago. One very important lesson learned is that no one magic formula can hope to offer a solution to a problem of such magnitude that it affects the lives of millions of people everywhere. For that solution we must all work together, must all share our own unique experiences, and adopt what has proven to be useful elsewhere to suit our own culture, values, and priorities.

Despite the enormity of the problem and the difficulties we all know have been encountered along the way, I, for one, am optimistic. The provision of decent, basic shelter for all is possible in the foreseeable future if the appropriate allocation of resources can be made. It will require holding standards and costs to the level affordable at the poverty line. It will also require a shifting of many national housing policies away from conventional, highly subsidized "solutions" which do not meet a sufficient part of the need. It will require the most national use of the available resources.

I am convinced that the goal of providing basic shelter to all is achievable by every country represented at this meeting. It will take time, although most countries can probably achieve this goal in this century. It will certainly require a great effort but the problem is not insoluble, it is not a bottomless pit.

The principal ingredient needed to do the job is the will to do it, and this will can only be produced by the national decision-making process. Most of us present here are senior housing officials, sitting near the top of this process. I believe it is our responsibility first to clearly understand the options available, and then to make these options understood at the highest levels in our governments, where final decisions are made. It is our hope that the work of the next few days will better equip all of us to meet these responsibilities.

## WELCOMING REMARKS

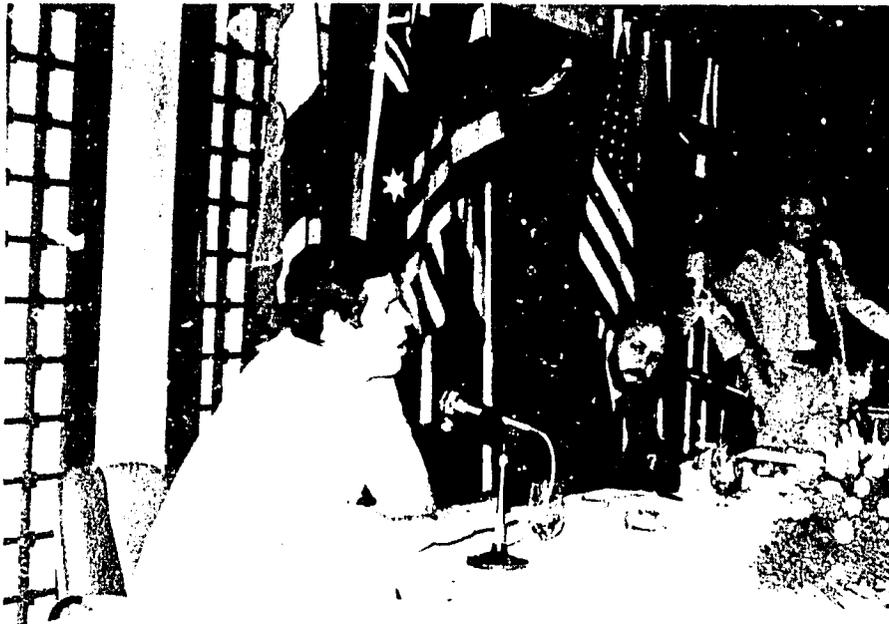
Mr. Manasakdi Intarakomalyasut  
Managing Director  
Government Housing Bank of Thailand

It is my great pleasure to welcome all of you to Thailand and the Asian Conference on Low-Income Shelter and Housing Finance. Personally I am honored to be here with such a distinguished group of housing and finance experts. I am confident that your contributions to this conference will result in a more critical evaluation of the housing and housing finance policies directed to the lower-income groups of all of our countries. I am grateful to the U.S. Agency for International Development for collaborating with us on this conference. I would also like to record my warm appreciation to all of you for gathering here to discuss these most important and pressing issues. I would also like to reiterate my sincerest gratitude to His Excellency the Minister of Finance and the Charge d'Affaires of the U.S. Embassy for sparing their time in welcoming the participants at this special occasion.

I am hopeful that our discussions here will build on the spirit of cooperation that exists in our Asian community and that we will continue to meet and discuss issues of mutual concerns.



Mr. Sean P. Walsh, Assistant Director, A.I.D. Office of Housing (Bangkok) provides an overview of the conference.



Dr. Richard T. Pratt, U.S. housing finance economist, addresses the conference on issues in low income housing finance. Shortly after the conference, Dr. Pratt was appointed Chairman of the Federal Home Loan Bank Board of the United States.

## OVERVIEW OF THE CONFERENCE

Mr. Sean P. Walsh  
Assistant Director, Office of Housing  
U.S. Agency for International Development

I would like to add my personal welcome to those already expressed. I am delighted to welcome so many old friends and have this opportunity to make new acquaintances. The purpose of this conference is to bring together senior officials in housing and housing finance from Asia and the United States to exchange ideas and discuss problems relating to the financing of housing for low-income households. These problems transcend national and cultural boundaries. I firmly believe that we have a unique opportunity during this brief gathering to learn from each others' experiences and to share in the lessons learned in each of the countries represented. I think we would all agree that the world of the 1980s will present unprecedented challenges to policymakers in developed and developing countries in providing a decent standard of living for their citizens. The Office of Housing is committed to the goal of assisting developing countries to provide all their citizens with the opportunity to secure decent shelter. Our task, and yours, however, will become increasingly difficult as nations throughout the world face the realities of increased energy costs, rampant and persistent inflation, and high interest rates.

The resources which once would have housed a nation will prove adequate to finance housing construction for only a fraction of those in need. In a world of finite limits, a world where financial as well as physical resources are constrained, it will become increasingly difficult to attract the volume of capital required to fund even modest housing programs without innovation and the design of financial instruments which can compete in the world capital markets. We face the future as a challenge which must be met by creative and dedicated people meeting together, as we are here at this conference.

At the Agency for International Development we are committed to supporting and assisting countries to develop programs which will be effective in reaching low-income households. The Office of Housing of AID has been instrumental in facilitating low-income housing development throughout the developing world.

As Assistant Director of the Office of Housing in Asia, I have had the opportunity over the past five-and-a-half years to meet many of you and to become involved with a number of AID-sponsored projects in Asia. My office is responsible for the administration of AID's Housing Guaranty Program, which Peter Kimm discussed in his opening remarks. The Housing Guaranty Program will be outlined in detail later in the program. I would like to summarize what we have been doing in Asia. Here in Thailand, in particular, we have a \$50 million Housing Guaranty Program authorized for low-income housing. This AID effort is designed to assist the National Housing Authority of Thailand to implement its new policy emphasizing core housing and squatter upgrading projects. We have also been providing technical assistance to the National Housing Authority for several years. Another activity in which we have been involved here in Thailand is the integrated improvement program for the urban poor, which is intended to combine social and economic programs with the provision of shelter for the poor.

The AID Office of Housing has also been active in the Republic of Korea for nearly a decade. The initial programs were administered through the Korean National Housing Corporation. Later programs were implemented by the City of Seoul and most recently are being developed with the Korean Housing Bank. A total of \$130 million in loans have been authorized for low-cost housing in Korea, along with substantial technical assistance. This program has assisted in the expansion of the Korean National Housing Corporation program from approximately 5,000 units to over 45,000 units per year.

This past January we approved a \$100 million program in Sri Lanka, of which \$25 million has been authorized. This program will assist the Government of Sri Lanka carry out its five-year housing program and provide improved shelter for rural and urban low-income families. One of the next projects which we hope to undertake is here in Thailand with the Government Housing Bank. The goal of this project would be to assist in mobilizing domestic funds for housing and increasing the volume of loans granted to low-income households.

In sum, while AID has become active in Asia only in the last few years, it has had experience going back some 20 years in other parts of the world, notably in Latin America. The Office of Housing's activities in Latin America, Africa, the Middle East, and Asia have given us the depth and breadth of experience that enable us to assist in the resolution of a country's housing problems not only with funds, but with some significant worldwide expertise. The Office of Housing's purpose is to assist and support domestic housing institutions implement and, if needed, develop programs which will provide the basis for sustained housing programs and systems. Our goal is to work closely with national finance and housing officials to create programs which will be successful in meeting each country's needs.

We are gratified by the response of our invitation to the conference. The large number of delegates attending from so many different Asian countries is testimony to the high level of interest and concern about the financing of low-income housing. Although we have no magic solutions to offer, we hope that the conference brings some insight into the various opportunities and options available to housing and housing finance agencies. The conference is structured to provide presentations on major topics in the plenary sessions with subsequent discussion in both the plenary and small discussion groups.

The interchange of ideas is one of the primary objectives of the conference and we hope that you will feel free to raise questions and comments either in the formal discussions or informally. The speakers will be available throughout the conference to discuss particular issues of concern to you. With your participation, the Asian Conference on Low-Income Shelter and Housing Finance will be a worthwhile and stimulating forum.

I would, in closing, like to express my personal thanks to the Government Housing Bank of Thailand and its Managing Director, Khun Manasakdi, for their support in sponsoring this conference.

## ISSUES IN LOW-INCOME HOUSING FINANCE

Dr. Richard T. Pratt  
Chairman  
Richard T. Pratt Associates  
U.S.A.

A number of us will be making comments in the course of the conference, both people from the United States and yourselves. I think one of the primary benefits from this conference is getting you together to talk to one another. As you begin to talk to one another and discuss housing problems in your country you are almost certainly going to find that someone somewhere else has had the same problems as you have and has tried many of the same solutions. If we can find out between us what seems to be working, what doesn't seem to be working, maybe we can save some time, save some money, and get on with the business of providing housing and housing finance.

I would like to take just a few minutes and help introduce you to one another in terms of what your countries look like and some of the factors that are associated with the provision of housing and housing finance in your individual areas. Housing finance, of course, is just one activity that is carried on in the major economies of your country. It is competing with all other activities in the industrial, agricultural, and other sectors for very scarce funds. It is an activity which is taking place in what is a very rapidly changing world, both in the developing and developed nations.

I would like to spend a few moments reviewing some basic demographic and economic statistics. The first graph entitled "1978 Population" gives us some idea of the great variation that we are looking at in this part of the world. Of course when India is put on the same graph, it tends to dominate the scale. That is just like my saying that the combined assets of Richard T. Pratt Associates, my company, and the World Bank have now reached seventy billion dollars. That's a true statement, but it may not give you a lot of insight into the size of Richard T. Pratt Associates. The population graph shows the tremendous variations among the countries in this region.

Turning to Exhibit 2, you get an idea of the population growth rate. The underlying factor which creates the need for housing is the population growth rate. We often do much of our planning and work in housing and housing finance based on these demographic figures. Sometimes that is useful, sometimes it is not useful. We talk about housing demand in terms of the number of people, but everyone sitting in this room understands that housing demand is also very closely associated with the resources that are available.

As we go through this conference I think that a comment that is well worth keeping in mind is that everyone is somewhere. We talk about housing shortages, but everyone that is living is living somewhere. The critical questions are, where are they living now relative to where they might live and how do we get them from where they are to where they might be? Something that affects that greatly is the population growth rate which shows substantial variation from country to country. As you can see from the population growth

rates from 1970 to 1978, no country was under 1%. At 1% a country will double in size in around 70 years. At 2%, around 36 years, and so on up. As you know, one of the major factors we see in the world today is the substantial difference in population growth rates between what might be called the major industrial nations and the developing world. One of the hallmarks of industrialization and increasing income is a reduction in the rate of population growth. Many of the major industrial countries of the world today have reached the point of zero population growth and, in fact, will be facing population declines. So their problems and their orientation are different from yours.

If we look at countries like Pakistan, Thailand, Philippines, New Guinea, and Malaysia, which are in the range of 2.5%, we are looking at the population doubling somewhere in the 20 to 30-year category. This gives us some indication of the magnitude of the problem of staying even, let alone making progress, in the provision of shelter. And frankly, there probably are countries for which things clearly are going to deteriorate before they even begin to improve. However, that does not mean that problems cannot be mitigated by the creation of a good housing finance system.

If we look at Exhibit 3, we see urban population as a percent of the total population. And all of us are aware, especially in the field of housing finance, that the problems of financing the urban household are quite different from those of the rural household; especially in the parts of the world where the climate and circumstances permit, self-help rural housing may be relatively satisfactory.

When we move to the urban area, we run into a problem simply in the number of people that are living in one place. The question of housing finance which exists in rural areas is how to provide some assistance in the provision of an actual house. In the urban area, the financing problem expands dramatically and the issue is how to get the capital equipment and capital structure in place to allow the people to live there. This, of course, interfaces with public health education, safety, and all of these other factors, but now the financing problem becomes not just how do we help someone or provide financing for the construction of their house, but how do we assure that the financing is there and the resources are there to provide the infrastructure which is necessary.

The problem we see throughout the world is that the urban population as a percentage of the total population is increasing rapidly, creating the capital demands which are associated with housing finance. We see a very broad range in Asia, from Nepal where only approximately 5% of the 1980 population is urban, to Singapore with 100% urban population.

Exhibit 4 shows the average annual growth rate of the urban population with most countries running between 3% and 4% per annum. At 4% the urban population is doubling in less than 20 years; at 3% the urban population is doubling in about 24 years.

Up to this point we have examined demographic figures, the population, the people who exist and who will exist in the cities. The other question is how much income is available. We would all like to have decent, safe, and sanitary housing and we would like to have large, spacious plots. Of course in the world in which we live this is tempered and controlled by the income which is available. Looking at Exhibit 5 we see per capita GNP, which indicates the wide variations that again exist in this part of the world, just as in other parts of the world. The lowest four or five countries have per capita Gross National Product under U.S. \$200 per year. At the other end of the scale, Hong Kong and Singapore have very high levels of income. We see a country like Korea which has had an incredible period of economic development in the last 20 to 30 years gaining rapidly in real per capita GNP income. It is going to be this income, a portion of this income, which is available for housing. The housing must necessarily be related to the income that is available for it.

Exhibit 7 shows the average annual rate of inflation. The schemes we put together for housing finance are often wrecked before they really begin to function because they don't properly take into account the level of inflation which exists in our various countries. I think that some of these may be conservatively stated. It's relatively hard in some cases to measure inflation, but we can see that for 1970-1978 that the lowest rates were in the range of 5% to 6% per year, which I would guess everyone of you would be totally delighted to have at this time. I don't know, there may be some country here that has an inflation rate that low or lower. The United States would be happy, very happy, to be there. We see rates ranging up in the range of 20%. Remember that at a 10% rate of inflation the price level doubles about every seven years. One of the problems that we have had in housing finance systems, especially as we have tried to let house purchasers pay for their houses over extended periods of time, is that the finance which is put out for the building of the house represents a real sacrifice, a real use of resources, but as these people start repaying the funds, the funds are worthless and provide no new housing.

Inflation when combined with a long-term housing finance scheme which doesn't recapture real dollars is nothing more than a method of providing a small number of housing units to the lucky few who then are not asked to repay the fund for their housing. I think we are seeing an interesting metamorphosis in the world. I won't comment extensively on developed countries because that's not the issue except to say that this is probably the single biggest problem in developed countries' housing finance in the world today. We had a long period where developed countries had very low inflation and they developed housing finance schemes which borrowed money on a short-term basis for a few months at a time and lent it out for a 30-year period. In a stable economy this was a wonderful system that provided the best housing in the world in some of the developed countries. But as inflation has increased, these countries have come to see the same kinds of problems that you and other countries in the world have.

A loan is made at maybe 8% interest with money which costs 6%; however the loan stays on the books for the next year and the next year and pretty soon the money costs 10% but it's still invested in 8% resources. Then it costs 12% and then it costs 14%. The biggest and most successful thrifty industry in the world has

probably been the savings and loan business in the United States, but it is facing a critical period for precisely the same reasons that you have lived with. I hope we spend some time and you share your ideas with us on how to help people pay for this housing over time but still insure that the money we get back is sufficient to provide another housing unit at the time that we get that money back.

If we turn to Exhibit 8 we see another equation in the housing finance scenario. What is the savings of the people in your country? We can talk about two basic uses of all income that is available. People either consume it or they save it and we know that the poorest people in all countries probably consume everything that they earn. Savings is a luxury that they simply can't afford. If you don't earn more than it takes to live, there can be no savings. As economic circumstances improve somewhat, there is the possibility of savings. The question then becomes how will savings occur and how will it be allocated. I think that just as inflation and other factors have caused problems, that savings either can be relatively high or relatively low in a country; therefore, the money available for housing can be relatively high or relatively low depending on the system and the incentives which we give.

If we run a country in such a manner that when the country has 15% inflation we take funds from the workers and invest them in 3% government obligations or in social security funds which earn very low interest rates, what have we done to the person's incentive to save? People understand economics whether they have ever been to school or not and the people who are involved in housing finance and the people who are working in your countries know what is savings and what is taxation. One of the real problems in housing finance is making sure we don't confuse taxation with savings. Savings is money which is put aside from current consumption and on which people can be expected to earn a fair return on their funds so that the real value of that money is maintained and they can use it for housing or they can use it for deferred consumption of one type or another. Schemes which encourage nonconsumption but which then place these funds in uses which do not account for inflation will fail. They have always failed, they will continue to fail, and we will not have funds available for housing.

We see in the gross domestic savings as a percent of gross domestic product substantial variations in the year 1978 with most of the countries appearing fairly high--in fact, very high by developed countries' standards. I will welcome your comments on how these savings occur and where they are channeled and how they are used. These figures would indicate that in some countries people are putting away large amounts of money relative to their income, at least for purposes of deferred consumption, which would include housing of one form or another. One of the problems that has occurred in developed countries is with the inflation and a tendency to have paid less for money than the inflation rate. This suggests that savings have been dropped to very, very low levels. We see many of the world's major industrial countries with savings of 3% and 4%, which is extremely low given their wealth. It has been largely a function of problems of inflation and institutions not reflecting the realities of the situation.

Exhibit 9 shows external public debt as a percent of gross national product. We know that housing finance is just one of the competing demands on financial resources that are available. One of the factors that will affect the amount of money available for housing finance and also your capacity to borrow on an international basis will be the amount and level of funds that are owed to outside sources.

Exhibit 11 gives an indication of the levels of poverty and those who are below the poverty line in this part of the world. You can see that it is broken into urban households, rural households, and total households. Again we will be dealing primarily with the urban household and the problems of the urban household and financing the urban household. You can see that in East Asia and the Pacific that there were over 4.0 million households below the poverty level in 1980. That is expected to grow to 5.7 million by the year 2000. In South Asia, a population of almost 14.0 million is expected to grow by about 250% to more than 32.5 million by the year 2000. These figures raise many questions: What will be the proper role of housing for these people? What programs can we provide which will allow them to have the best housing that is possible within the budgets that are available? What role should housing play relative to their other needs? How important is housing? How unimportant is it? What other benefits can it provide?

We cannot hope to answer all of those questions during the three days of the conference, but I am confident that through our discussion with each other we will gain a better understanding of the range of possible solutions.

- - -

#### EXHIBITS:

#### COMPARATIVE DEMOGRAPHIC FINANCIAL AND ECONOMIC INDICATORS FOR SELECTED ASIAN COUNTRIES

The data for the accompanying graphs were taken from the World Development Report, 1980, and Shelter, publications of the World Bank.

EXHIBIT 1

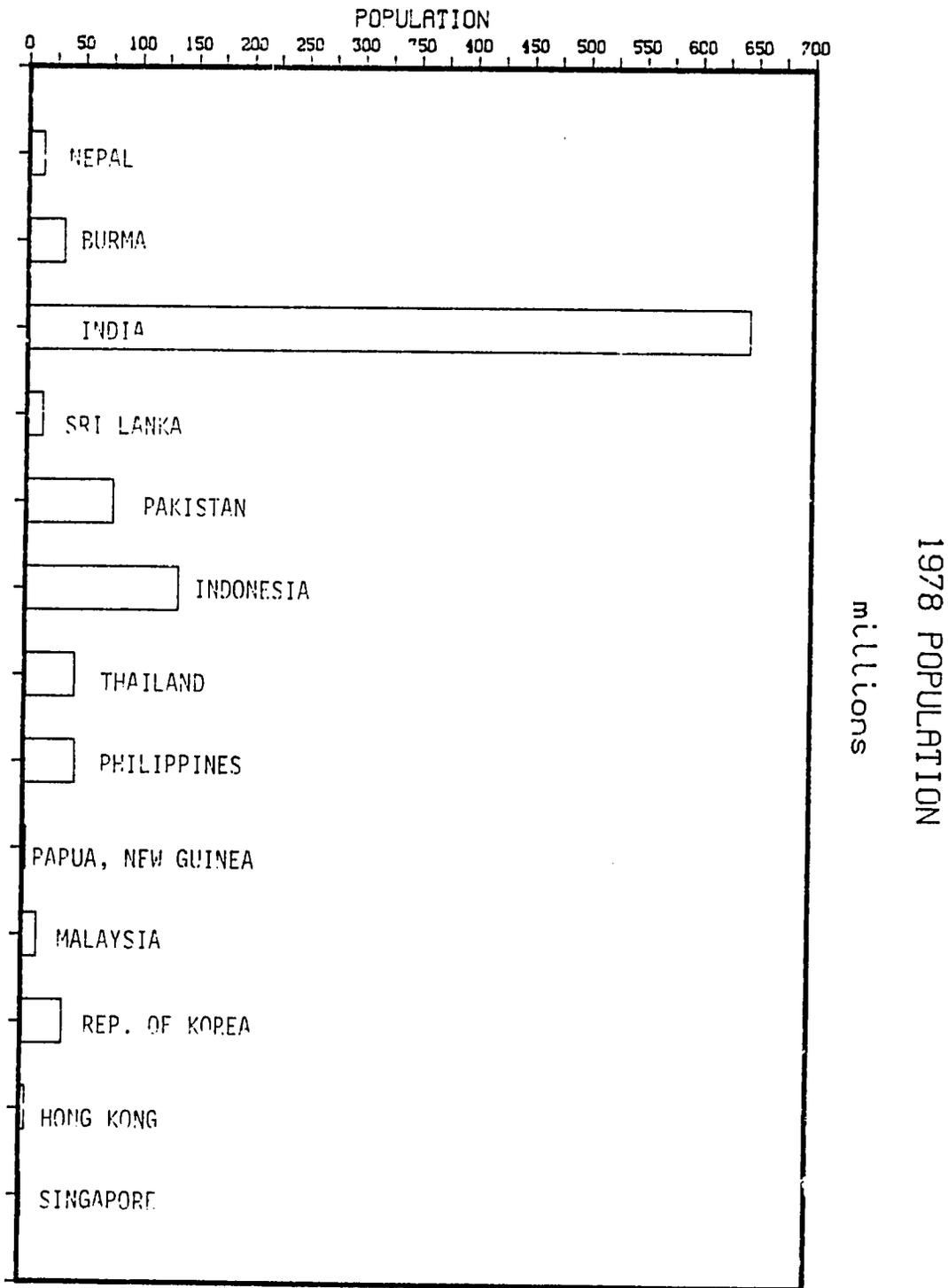
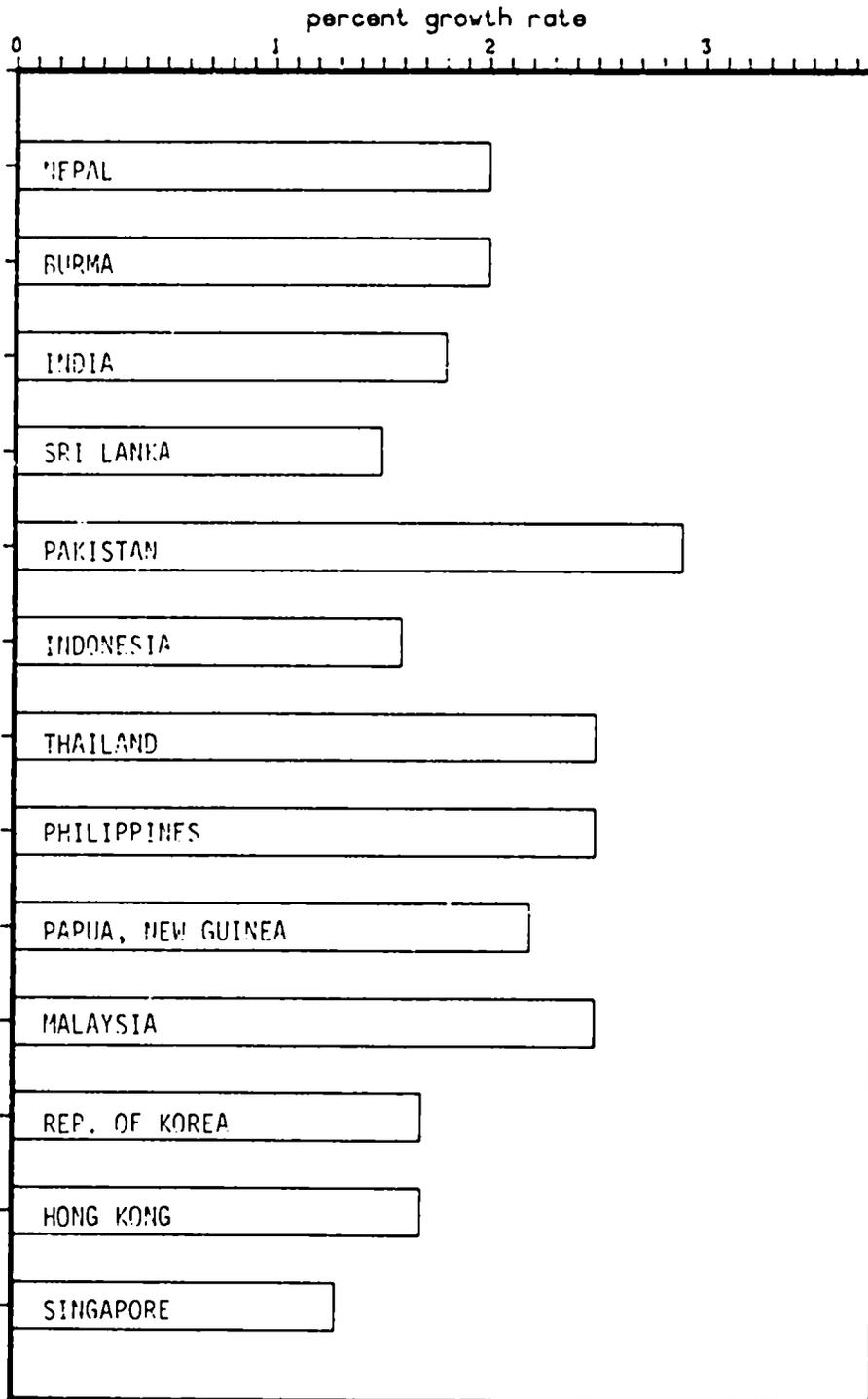
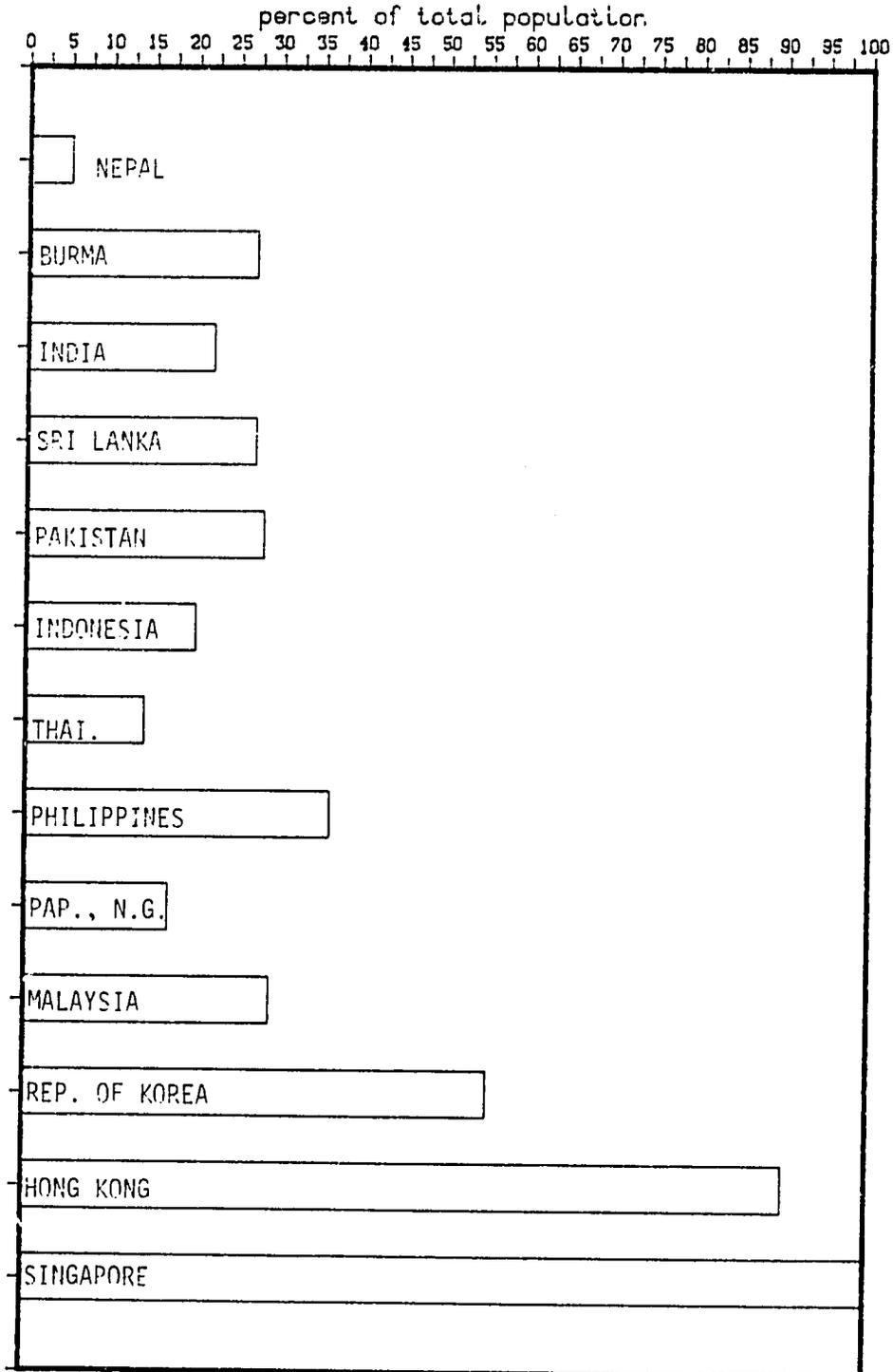


EXHIBIT 2



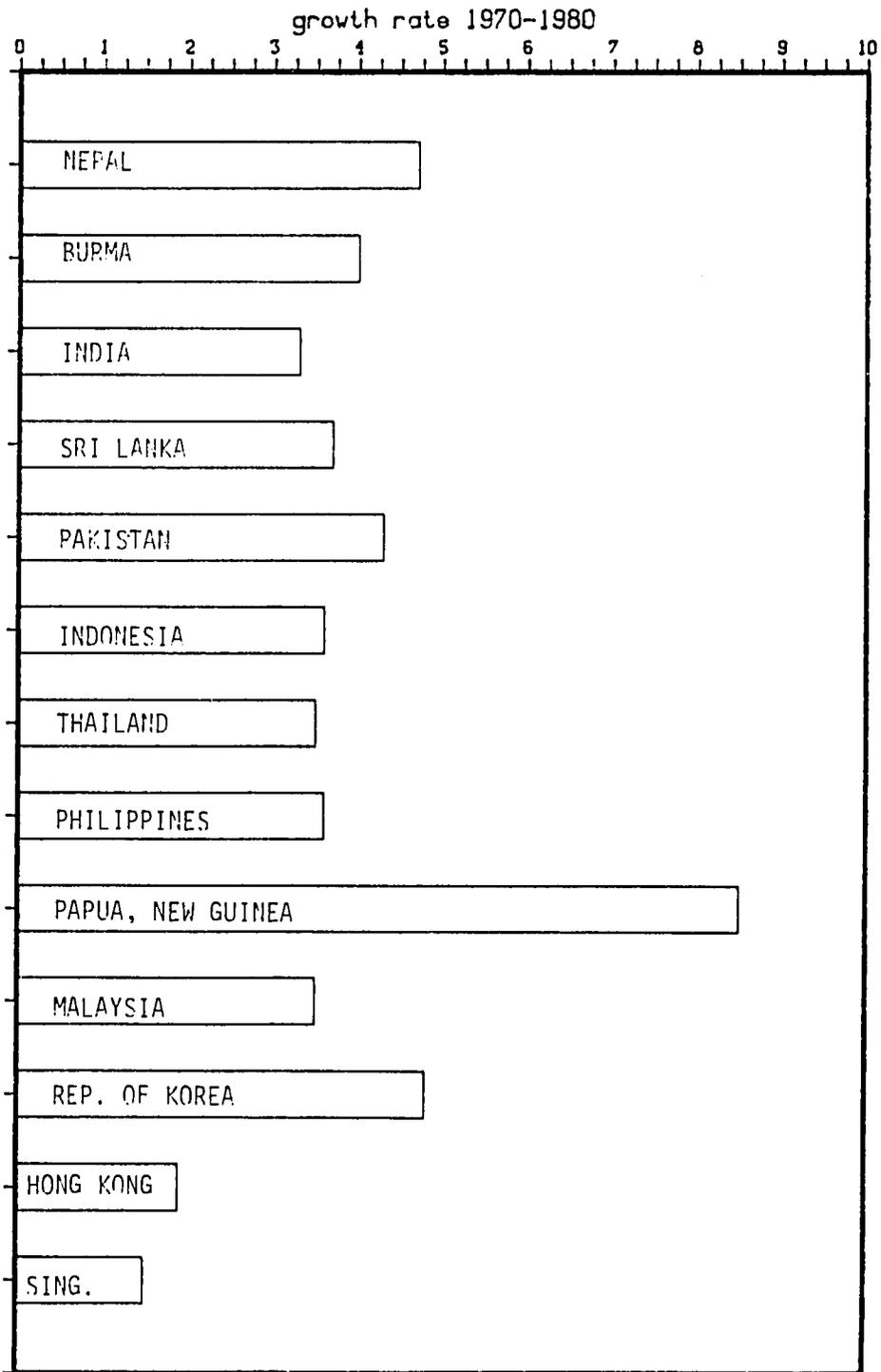
POPULATION GROWTH RATE  
1970 - 1978

EXHIBIT 3



URBAN POPULATION AS A % OF TOTAL POPULATION  
1980

EXHIBIT 4



AVERAGE ANNUAL GROWTH RATE, URBAN POPULATION  
1970 - 1980

EXHIBIT 5

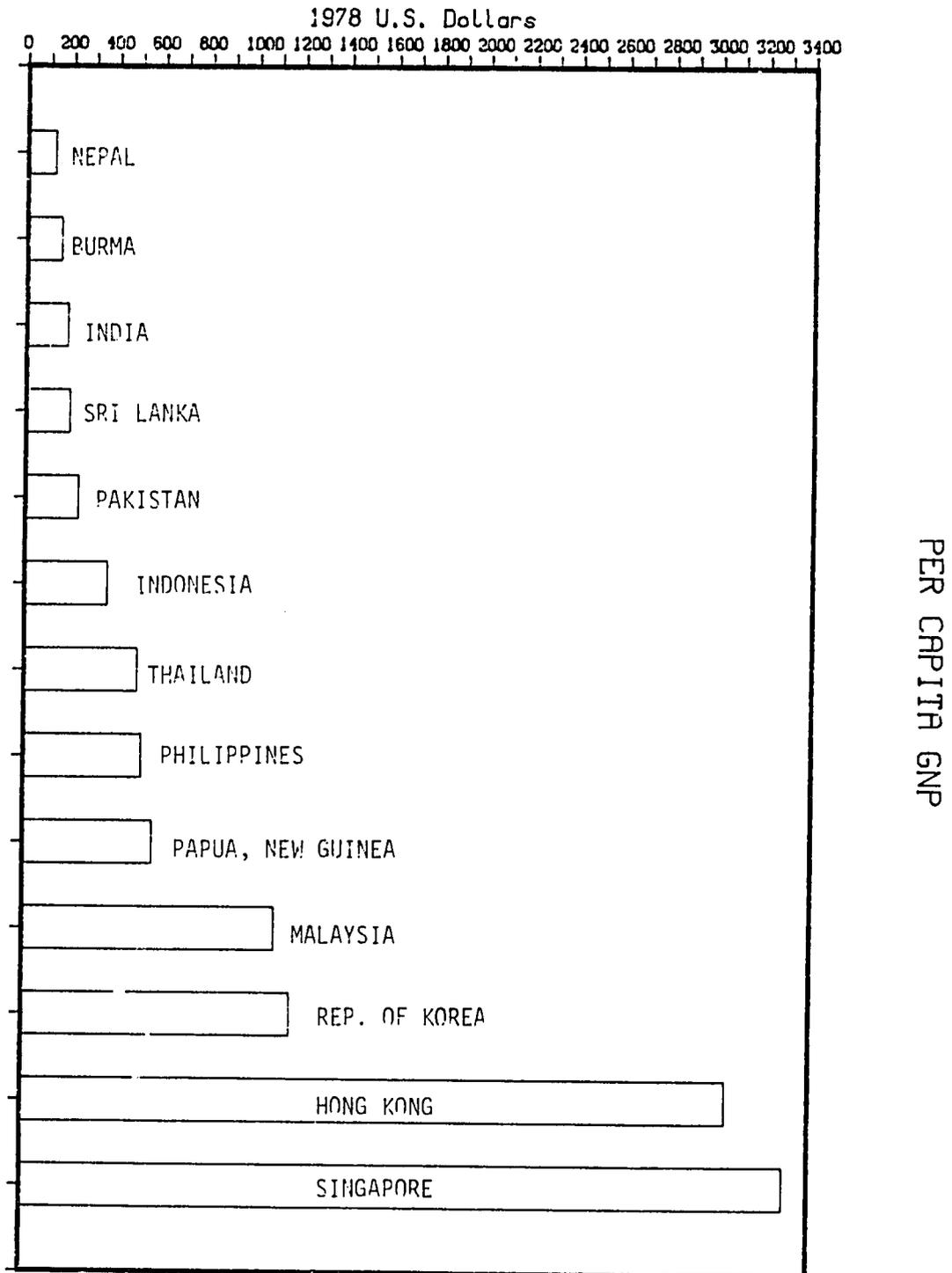
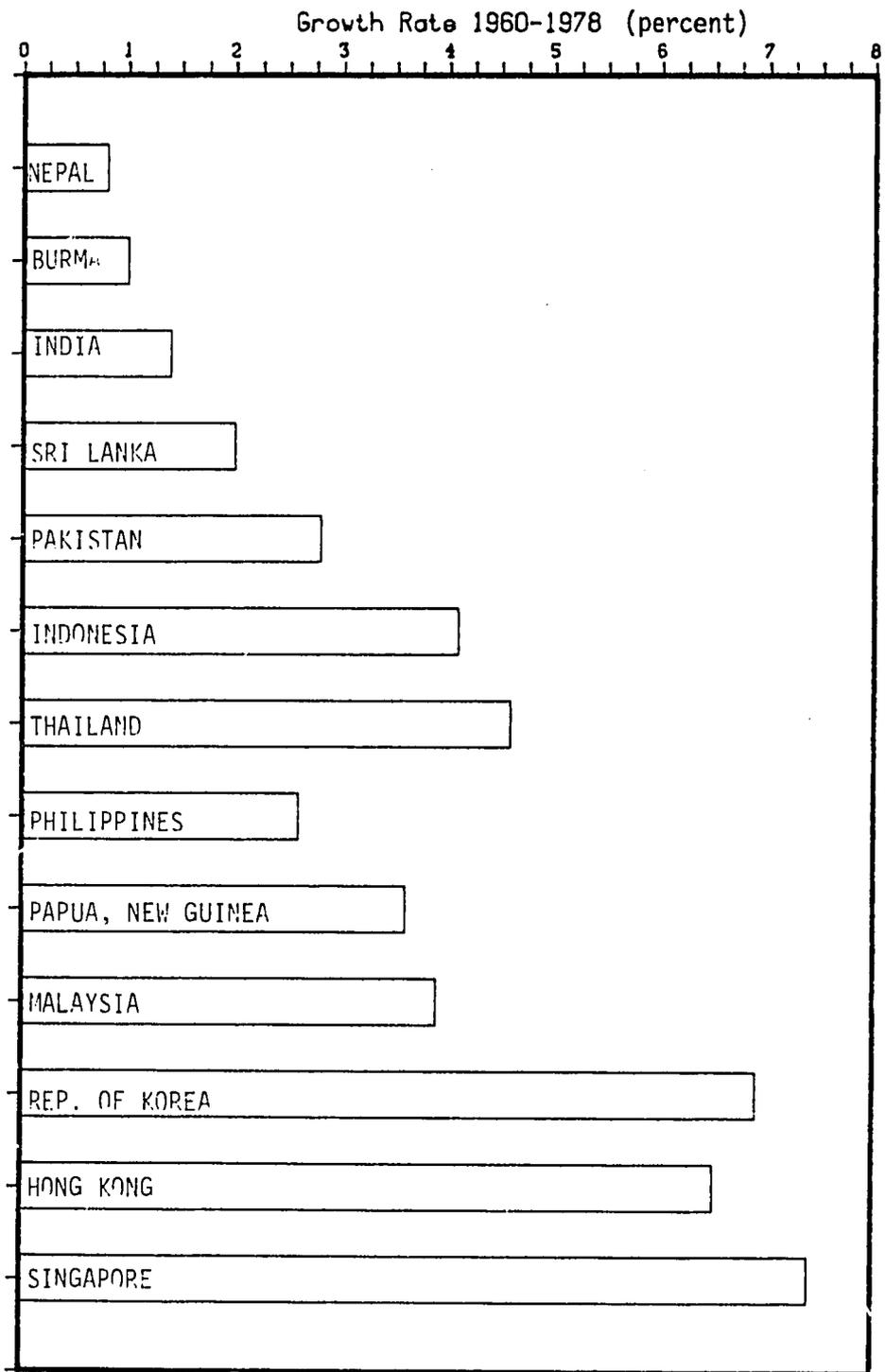
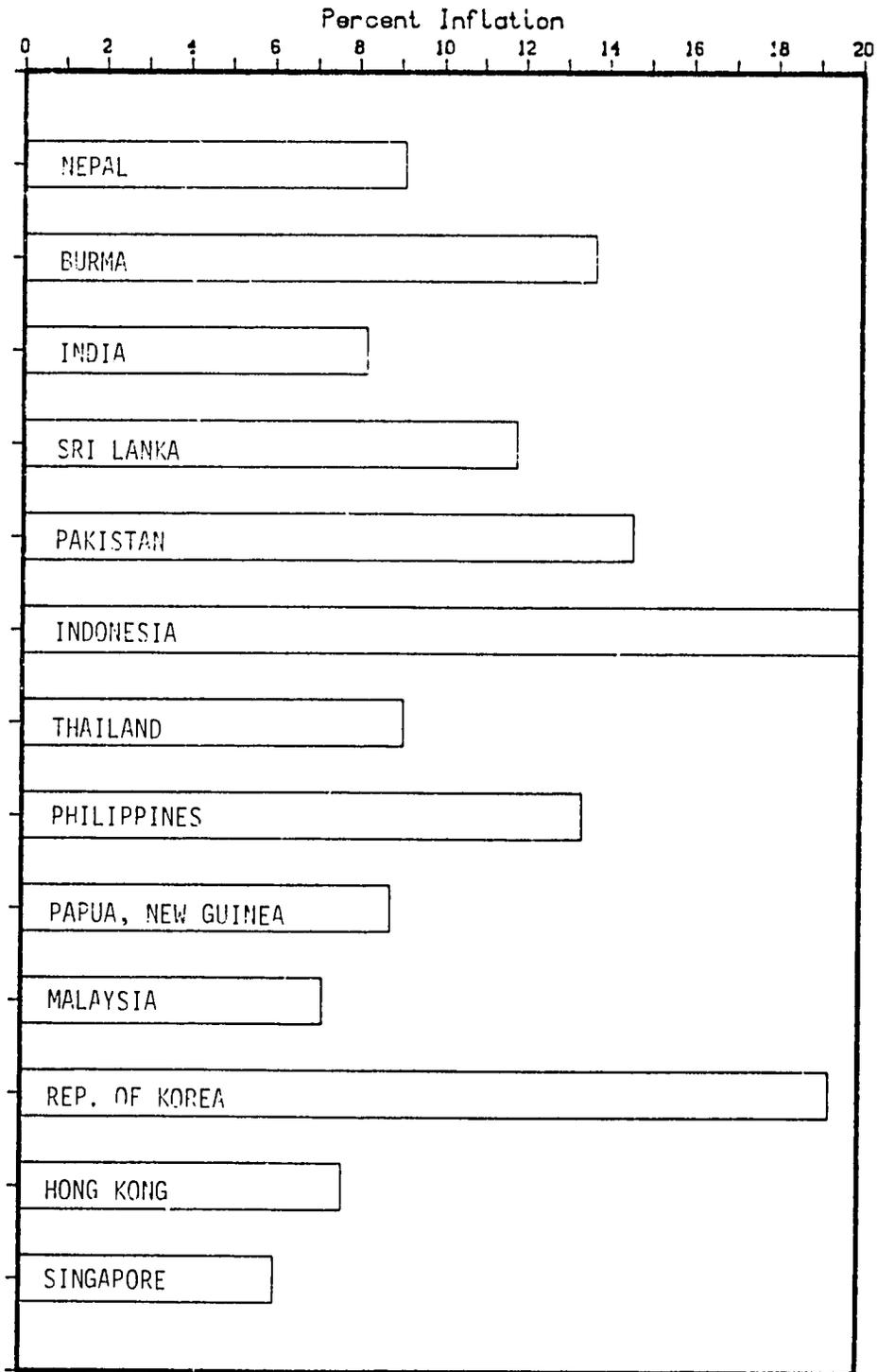


EXHIBIT 6



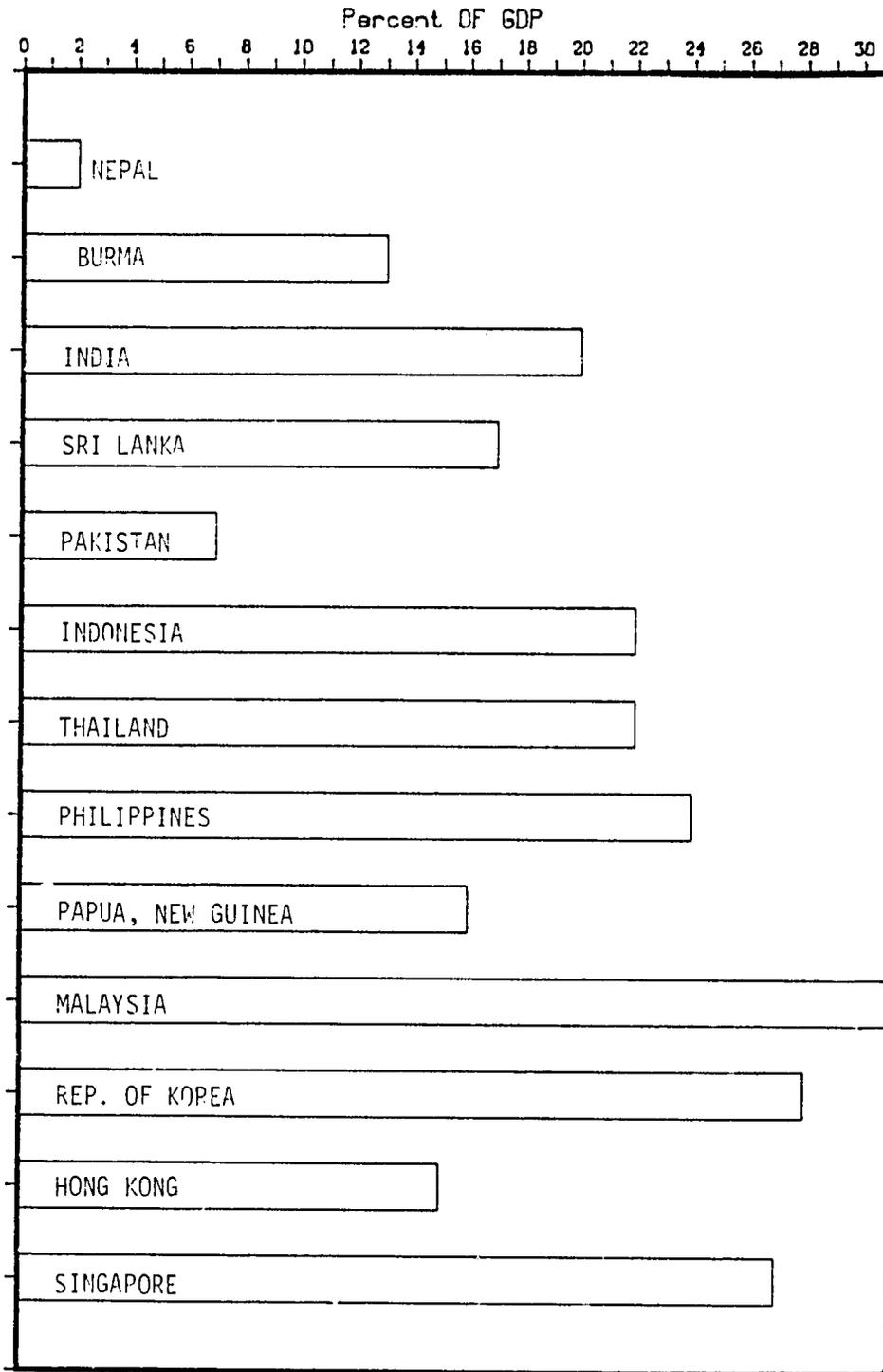
AVERAGE ANNUAL REAL GROWTH IN PER CAPITA GNP  
1960 - 1978

EXHIBIT 7



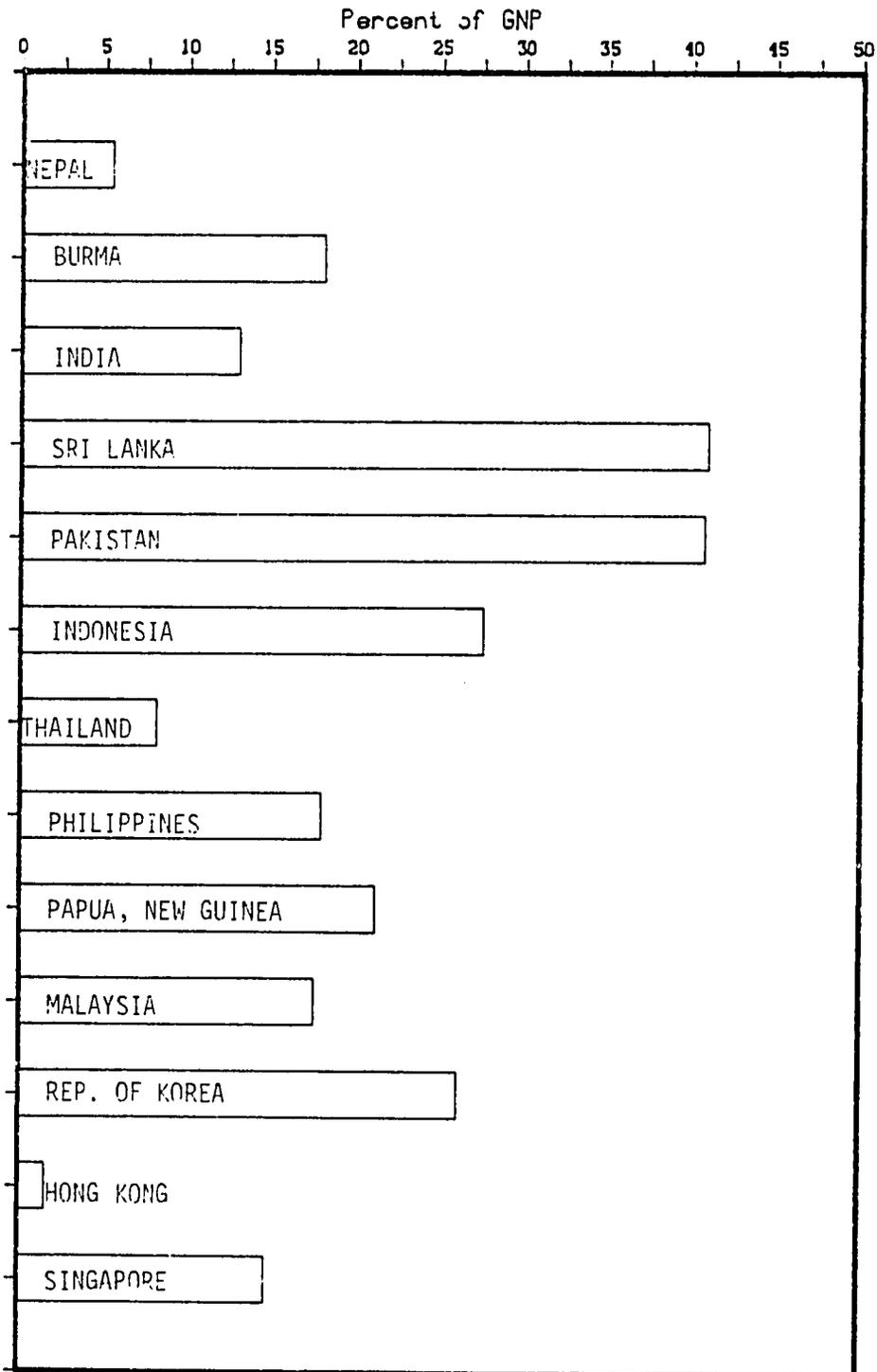
AVERAGE ANNUAL RATE OF INFLATION  
1970 - 1978

EXHIBIT 8



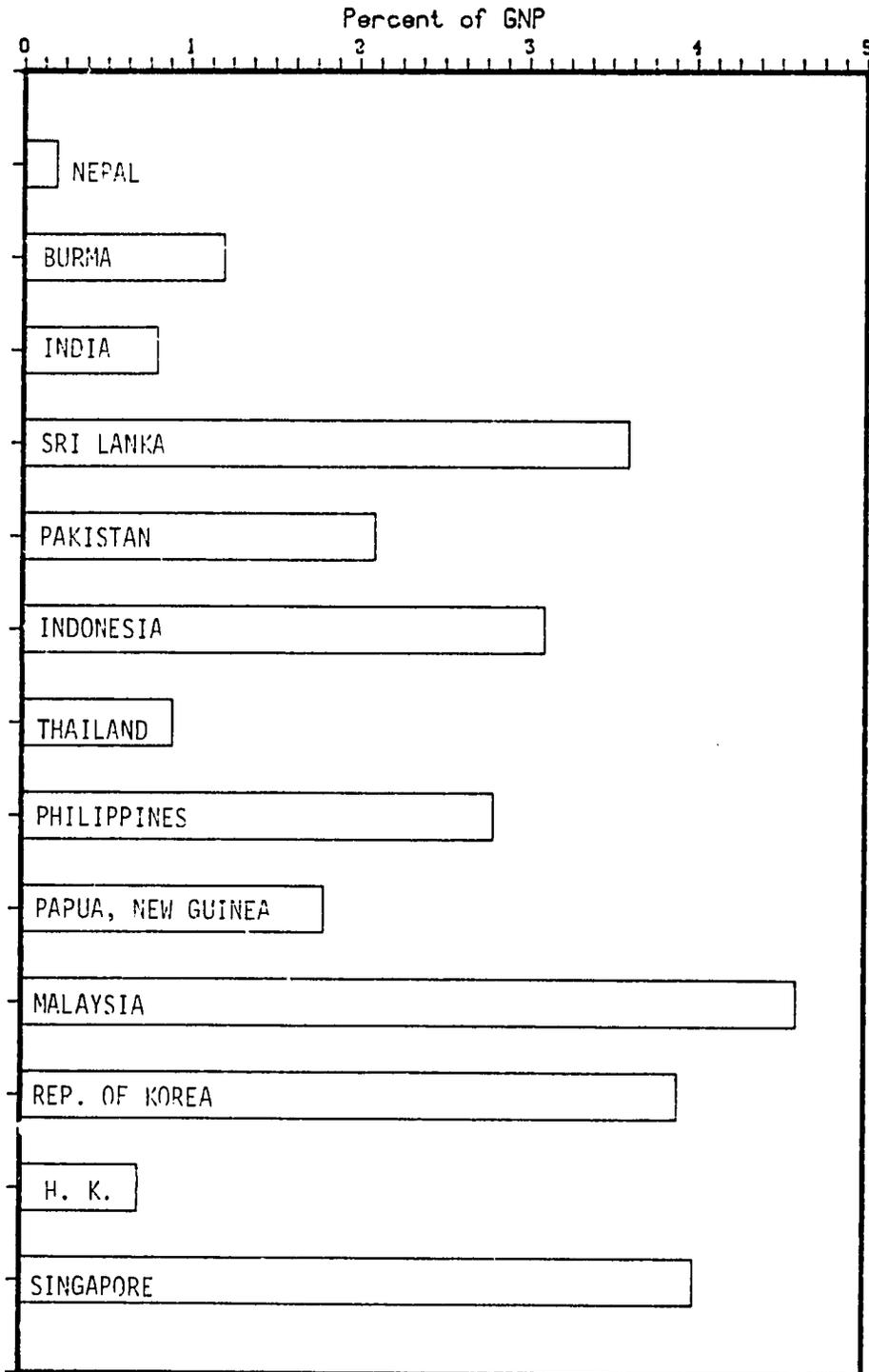
GROSS DOMESTIC SAVING AS A % OF GDP  
1978

EXHIBIT 9



EXTERNAL PUBLIC DEBT AS A % OF GNP  
1978

EXHIBIT 10



EXTERNAL DEBT SERVICE AS A % OF GNP  
1978

EXHIBIT 11

PROJECTED GROWTH IN THE NUMBER  
OF HOUSEHOLDS IN POVERTY IN ASIA  
1980 - 2000  
(thousands of households)

	INCREASE OR DECREASE									
	<u>1980</u>	<u>1990</u>	<u>2000</u>	<u>1980 - 1990</u>		<u>1990 - 2000</u>		<u>1980 - 2000</u>		
				<u>No.</u>	<u>Avg. Ann. % Change</u>	<u>No.</u>	<u>Avg. Ann. % Change</u>	<u>No.</u>	<u>Avg. Ann. % Change</u>	
Urban Households										
East Asia and the Pacific	4155	5111	5744	+ 956	+2.09	+ 633	+1.17	+ 1589	+1.63	
South Asia	13970	21255	32555	+7285	+4.29	+11300	+4.36	+18585	+4.32	
Total Asia	18125	26366	38299	+8241	+3.82	+11933	+3.80	+20174	+3.81	
Rural Households										
East Asia and the Pacific	12553	11719	9872	- 834	-0.69	- 1847	-1.70	- 2681	-1.19	
South Asia	48799	41036	32709	-7763	-1.72	- 8327	-2.24	-16090	-1.98	
Total Asia	61352	52755	42581	-8597	-1.50	-10174	-2.12	-18771	-1.81	
Total Households										
East Asia and the Pacific	16708	16830	15616	+ 122	+0.07	- 1214	-0.75	- 1092	-0.34	
South Asia	62769	62291	65264	- 478	-0.08	+ 2973	+0.47	+ 2495	-0.20	
Total Asia	79477	79121	80880	- 356	-0.04	+ 1759	+0.22	+ 1403	-0.09	

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SOURCE: SHIELTER, The World Bank, September, 1980

INVESTMENT REQUIRED TO PROVIDE EACH HOUSEHOLD  
LIVING IN POVERTY IN 2000 WITH A  
BASIC UNIT OF SHELTER  
(Billions of 1975 U.S. Dollars)

	<u>In Urban Areas</u>	<u>In Rural Areas</u>	<u>Total</u>
East Asia and the Pacific	8.0	8.0	16.0
South Asia	25.0	20.0	45.0
Total Asia	33.0	28.0	61.0

SOURCE: SHELTER, The World Bank, September, 1980

MOBILIZATION OF SAVINGS AND INVESTMENT  
FOR HOUSING - A GLOBAL VIEW

Mr. Norman Strunk  
Secretary-General  
International Union of Building  
Societies and Savings Associations  
Chicago, Illinois, U.S.A.

While my background has been with the savings and loan business in the United States, having served on the staff of the United States League of Savings Associations for over 40 years, I now represent the International Union of Building Societies and Savings Associations. A brief descriptive folder outlining the purpose and program of the union has been provided to you.

We have members in over 50 countries from all parts of the world including Malaysia, Singapore, Korea, and the Philippines. Virtually all of the building societies in Australia and New Zealand are members of the union. While I am at this meeting, I look forward to recruiting institutions in Thailand and Indonesia into the membership of the International Union so that we may have a more complete roll call of the countries in this part of the world.

My study of home-financing systems throughout the world extends years back into the period when my principal energies were devoted to the savings and loan business in the United States. During this time I have observed that home-financing arrangements in each country are different in varying degrees. Although there are similarities among various types of institutions, as I will describe to you, differences between types of institutions in different countries are both fundamental and appropriate.

The system which has been created or which has evolved over time in any country must relate to the characteristics of each country--its culture, its governmental system, its political heritage, its economy, its social institutions, the nature of its business enterprise, and the structure and operations of its financial institutions. An attempt to create an exact prototype of a savings and loan association as it exists in the United States in any one of your countries would probably fail. The establishment of an exact copy of the Korea Housing Bank or the Malaysian Building Society in any other country in this part of the world might not be entirely wise, although its chances of success would be greater than if you were to try to create an exact copy of the savings and loan system in the United States. The various types of institutions, as they have evolved around the world, can and should be studied by those concerned with improving the standard of housing for their people. Adaptations can be developed, taking the parts of each which are best compatible with the characteristics of your country.

In this connection, let me take some time now to briefly describe the thrift and home-financing institutions as they exist today throughout the world. I will do this by grouping the various types of institutions. First, let me describe the building societies in Great Britain, where the specialized private sector thrift and home-financing institutions originated. We find prototypes of British-type institutions throughout the English-speaking world,

with variations as they were adapted to each country's cultural, political, economic, and financial patterns.

In Great Britain, the societies are all mutual or cooperative in nature; that is, they are owned by their depositors and controlled by a board of directors elected annually by the depositors. The board of directors selects the general managers, who then select and direct their operating staffs. They operate under a basic law passed by the Parliament. Their books are examined by chartered accountants whose reports are available to the depositors, the public, and government officials. The principal government contact of the societies is the chief registrar of friendly societies. There is no central reserve bank to which they may turn for funds, nor is there deposit insurance.

Today there are some 270 building societies in Great Britain, the largest institutions operating nationwide and having hundreds of branches. Their resources total US\$125 billion. In the early 1950s there were about 800 building societies in operation. The number has shrunk as a result of many mergers. There have been a few failures, among the smaller societies, primarily due to dishonesty and lack of alertness on the part of the board of directors. In such cases, the large societies have stepped in and made certain that no depositors suffered a loss.

In comparison with institutions in other countries, the system in Great Britain has remained almost a single-purpose business. Its only source of funds is savings deposits. Only recently have the building societies in Great Britain begun to develop term certificates on which the interest is paid at a rate somewhat higher than the rates paid on passbook-type savings.

Building societies rarely borrow money from commercial banks or other sources, and very little effort is exerted to secure funds from what would be called large depositors. British building societies invest almost exclusively in home loans. In a few cases they make loans secured by commercial real estate or large groups of flats.

Building societies in Great Britain account for about 45% of the family savings and do from 80% to 90% of the home lending. All of their mortgage transactions are written on variable mortgage plans, with the societies having a broad authority to lower or increase the mortgage rates as it becomes necessary to adjust rates paid to depositors. The British building societies operate on a spread of less than 1% between their effective cost of money and the lending rate they charge on loans. There is no more successful system than the one in Great Britain.

Institutions similar to those in Great Britain operate in South Africa, Zimbabwe, Australia, Jamaica, Kenya, Ireland, and New Zealand. There are three institutions in Zimbabwe and 11 in the Republic of South Africa which operate nationwide. There are 142 permanent building societies in Australia and 59 in New Zealand. The societies in Australia do not operate nationwide but have offices only within each state, but the states are large geographically in contrast to the comparatively small states in the United States. In Kenya, Ireland, Australia, South Africa, Zimbabwe, and New Zealand the building societies operate with variable-rate mortgages in a manner almost identical to that in Great Britain.

The savings and loan business in the United States was initially patterned after and has many things in common with the British building societies. Our system has developed unique characteristics, however, because of the size and nature of the United States and our governmental system which encompasses state and local governments as well as the federal government. Our system, in fact, is quite complex, with some associations receiving their charters from the state government and thus subject to state law and control, and others from the federal government and subject to federal law. Some companies are owned by stockholders; others have a mutual form of ownership, similar to that of the British building societies. About 75% of all savings and loan resources are in mutual institutions. However, there is a trend towards the conversion from mutual to stock ownership.

While our largest institution in the United States has over \$13 billion in assets, with more than 100 branches throughout the State of California, most of the savings and loan associations in the United States are relatively small. Over half of the 4,500 institutions have assets less than \$80 million, which means that they have fewer than 40 employees. In the United States the savings and loan associations account for 37% of what we call over-the-counter savings--that is, savings in depository institutions--and have been responsible for the past few years for over 50% of home lending.

Savings and loan associations in the United States invest about 80% of their funds in mortgages or residential property. Some institutions have concentrated a significant proportion of their loan portfolios in new home construction, providing the interim construction financing to large builders. Construction financing, while involving a higher degree of risk than home mortgages, can provide yields of 30%, 40%, or more. Other institutions have devoted a considerable portion of their resources to financing commercial and recreational building.

The institutions in the United States have a wide range of deposit instruments. They can borrow money from the Federal Home Loan Banks and from others. They may secure funds by the sale of commercial paper and both secured and unsecured bonds in the capital markets. In the past few years some of the larger associations have gone into the Eurodollar market for funds. Beginning last month, institutions throughout the United States have been permitted to offer interest-bearing checking accounts, make consumer loans, and offer credit cards like the commercial banks.

In the early 1930s Congress provided a central reserve banking facility for the savings and loan business known as the Federal Home Loan Banks. To eliminate any public concern regarding the safety of their money deposited in savings and loan associations, Congress also created the Federal Savings and Loan Insurance Corporation, which is parallel to the Federal Deposit Insurance Corporation which insures the deposits in commercial banks. Deposits are now insured to \$100,000 per depositor. Thus, in the United States there is no question as to the safety, availability, and liquidity of the money deposited in savings and loan associations.

In Canada there has been an interesting evolution since the first building societies were founded in the mid-1850s. By the 1870s these institutions had developed into a conduit for the investment of British funds into

Canadian residential mortgages with the resultant neglect of the savings deposit side of the business. With changes in interest rates on both sides of the Atlantic, this ceased to be a viable means for the investment of British capital and these institutions came close to disappearing. They were reborn as trust companies, proprietary or capital stock in nature, but doing business as building societies or savings and loan associations have done for many years, receiving funds essentially in the form of family savings and investing them essentially, but not exclusively, in home loans. They have virtual monopoly of the trust business in Canada. The same institutions engage in real estate brokerage, have checking accounts, and make consumer loans in lending and investing.

The Canadian institutions make home mortgage loans for maturities of one to five years, but with amortization schedules stretching from 25 to 30 years. The interest rate on the mortgage is renegotiated as the loan matures and if it is not paid off. Canadian institutions balance this maturity structure on their mortgages with maturities on term savings deposits on the liability side of the statement. They have been most successful in living with the ups and downs in interest rates and in passing much of what we would call the "interest risk" to the mortgage borrowers.

In the United States, in the absence of a variable or renegotiable mortgage, this risk is absorbed entirely by the institution itself, with unhappy results currently with respect to profit and loss statements. Many of our associations suffered operating losses in 1980. This will reoccur in 1981.

The American-style savings and loan system was exported to South America with a great deal of help from the U.S. Agency for International Development beginning in the early to mid-1960s. In some countries there is one important difference. In about half of the South American countries which have been most prone to high rates of inflation, systems of monetary correction or currency adjustment have been installed.

In some South American countries mutual-type institutions predominate. In others the capital stock form is most common. These institutions operate under government supervision and housing credit banks with a system of deposit insurance as in the United States. They are generally limited to loans on small and medium-sized houses. As you can see from the "International Fact Book" that has been given to you, the development of the savings and loan system in South America has been a great success story for both AID and for the savings and loan concept. This development should make it feasible for the average family in most of the Central and South American countries to realize the dream of most families throughout the world--to have decent shelter and to own their own home. Today, there are about 250 such institutions in South and Central America with total resources of US\$30 billion. It is all a development of the past 18 years. I will have at the conclusion of my talk a slide presentation relative to the development of the savings and loan system in Bolivia.

In continental Europe, the systems are quite different and very complex. Let me start first with Germany, where the institutions are known as the Bausparkasse or Savings Banks for Housing. There are 30 of these institutions, most of which operate throughout the Federal Republic of Germany. Some are private and others are so-called public because they are sponsored by a

municipality or state government. They are confined to making second mortgage loans, and their savings program deals exclusively with families which enter into a contract to save a certain sum over a period of a few years and thus accumulate a downpayment on a home, known as the Contract System. The first mortgage loans are made by the savings banks and insurance companies which either own the Bausparkasse or work closely with it. A family in Germany will frequently secure funds for the purchase of a home from three sources--a first mortgage from a savings bank or insurance company, a second mortgage from the Bausparkasse, and then a short-term loan from a commercial bank if the downpayment and savings programs have been inadequate.

The other day we received a translation of an official German document promulgated in 1938 during the Hitler period which, in effect, suggested that there were ample funds from the regular financial institutions for first mortgage lending, but a severe shortage of funds for second mortgage lending. By the decree of the Hitler Government, that role was assigned to the Bausparkassen. They were told to make only second mortgages. The same system emerged from the ashes of World War II. It works very well today. I do not think anyone would start out and create such a system but, as I said at the outset, financial institutions must be created to fit the needs of the people and to fit within the existing system.

I think what happened in Germany was that severe competition between building societies and the other financial institutions developed which the Hitler people summarily settled by limiting the building societies to an area that the other financial institutions did not care to serve, the more risky second mortgage loans.

In France, a somewhat similar system exists known as deferred credit institutions (Les Societies de Credit Differe). These institutions date only from 1952. It is described in the green cover booklet published by the International Union entitled "Savings and Lending for Homeownership." The same system exists in Algeria and other African countries with a strong French orientation and, to a somewhat similar extent, in Egypt and Turkey.

Elsewhere on the continent of Europe home finance is handled by mortgage companies that are privately owned and which secure funds for lending by the sale or issuance of bonds in a variety of ways. Thus, funds for lending come from the capital markets and are channeled to home borrowers through mortgage companies that also finance commercial and industrial property.

In smaller countries around the world one finds one or more types of these institutions or combinations of them. The Commonwealth Development Corporation helped in the creation of building society-type institutions in countries with an English colonial background. Examples of this are the Malaysia Building Society in Kuala Lumpur, the Singapura Building Society in Singapore, and the Hong Kong Building and Loan Agency, though each has evolved into something quite different from the typical British building society.

In Hong Kong the Association does not attempt to attract funds from the public through deposits but resorts to the sale of notes or bonds and obtains short-term credits from commercial banks. It does a retail mortgage business but not a retail savings business.

The Malaysian Building Society is the largest single provider of housing credit in Malaysia. It is 40% owned by the government and, by law, devotes all of its considerable resources to housing credit. Its board of directors is appointed by the government and several directors are Government Ministers. The Employees Provident Fund, the social security system for both private and public sector employees, provides funds for long-term home loans and about 40% of the Society's lending in the past few years has been to its Low-Cost Housing Finance Program. Thus, the Society is used, as I will discuss a bit later, as a vehicle by the government for the granting of subsidized housing loans to low-income families.

Most of the home financing in Korea is undertaken by the Korean Housing Bank, which I can best describe as a large government-owned savings and loan association with savings deposits and the sale of housing bonds as its principal sources of funds. Its resources are devoted almost exclusively to financing the home construction industry. The bank has more than 100 branches and resources of US\$1,200 million. In 1979 it provided for the construction of 86,000 housing units.

This involvement of the government in the creation and operation of a thrift and home-financing institution is found in Greece, where the National Mortgage Bank of Greece is a government-owned instrumentality. It attracts savings deposits and makes regular home loans and also lends government funds directed to mortgage lending.

Essentially the same type of system was created in Israel. The Tefahot Israel Mortgage Bank was initially created as a government instrumentality. It later became a mixed-ownership company. It has secured its funds from the government, from private capital markets, including the United States, and from a saving deposit program. It makes both regular and government-assisted home loans. It is interesting that this institution also serves as the lending agent for Israeli corporations that provide funds for house purchases by their employees.

In various countries of Africa governments themselves have created thrift and home-financing institutions. In Nigeria we have the Federal Mortgage Bank of Nigeria which is government-owned and controlled. This institution developed from the Nigeria Building Society. The Liberian Housing and Savings Bank was created by the Liberian Government. It is wholly government-owned but privately managed.

In Jordan there is a housing bank with mixed public-private ownership which secures about one-third of its funds from deposits. In addition to residential financing, it makes mortgage loans on commercial properties and finances the building industry.

Of course here in Thailand we have the Government Housing Bank and the Government Savings Banks with large branch networks which secure a portion of their funds from the savings of individuals.

From this broad and quick survey, one, of course, must come to the conclusion that I suggested at the outset--that there is no single system of thrift and home-financing credit, nor necessarily any best system. Based upon the experiences of these institutions over many years in all parts of the world, I might suggest a number of what might be called fundamentals in connection with effective home-financing systems.

First, it is not necessary to have the central government organize, own, and operate these savings and home-financing institutions. In many cases it is best not to have the government own or be too closely involved in the operation of the institutions. However, it is essential that there be a firm commitment by the government to the success of the institutions that are created and to the devotion of a considerable portion of the financial resources of a country to home financing and housing in general. We have had that type of commitment in the United States. Home financing has been the largest single use of long-term credit in the United States, including the U.S. Government.

In Brazil, the resources of a compulsory savings program instituted in that country in 1964 have been channeled to the National Housing Bank, which, in turn, has invested enormous sums of money in the home finance system in that country. Another example is Malaysia, where a considerable portion of the country's social security and retirement funds, both of public and private employees, have been channeled to home finance through the Malaysian Building Society.

Quite a number of years ago I visited in the Philippines. The savings and loan system had been developed there shortly before, and my visit was used to try to convince the Philippine Government to create a type of federal home loan bank system and to make a commitment to channel savings capital into home-financing institutions. Unfortunately, this commitment to the private sector was never realized in that country.

The government can help in a variety of ways. It can use tax policy. It can provide funds directly or indirectly to the system, such as through the Federal Home Loan Banks in the United States or through government savings programs as in Brazil, Greece, and Malaysia. It can give strong support to the system as in Korea. It can protect the thrift and home-financing institutions against competition from other financial systems which may be older, stronger, and well established. It can provide direct subsidies to these institutions.

Probably the most effective means of government help is through the tax system. The best illustration of this arrangement is found in Germany, where funds accumulated for downpayment on a home in a building society are subject to certain tax credits. In other countries the interest paid to depositors by these institutions is exempted from government income tax.

For a number of years in the United States, and in a few other countries throughout the world, we have had an arrangement wherein savings and loan associations are allowed to pay a somewhat higher rate of interest on savings than other institutions which attract savings from individuals and small corporations. The building societies in Great Britain enjoy a unique system with respect to the taxation of interest paid by them which gives them advantages over the banks. Governments can help by providing guarantees of housing bond issues by mortgage credit institutions. Systems of deposit insurance, as in the United States and South America, are of course very helpful to assure the public that their deposits are safe in these institutions. However, the government may act to assure their success; a commitment by the government to the success of these institutions is vital.

Second, it has been shown that specialized home-financing institutions: private, public, or with mixed ownership, provide the most effective vehicle for dispersing government funds to lower-income families. This is a system that is used in Malaysia and Greece. It has been used by the AID and various governments throughout South America. In the United States practically all of the housing-subsidy programs that have survived various administrations and experiments are now funneled through the savings and loan associations or commercial banks. Our institutions thus constitute what we call a "delivery system" for government credit programs. It is a much more effective and efficient system than having the bureaucracy involved in the distribution of these funds to builders or those interested in purchasing a home and in the time-consuming detail of mortgage servicing.

Third, it is important that, to a considerable extent, these institutions be required to specialize in creating credits for the housing sector of the economy. Experience throughout the world shows that when given a choice between the making of home loans or providing credit for other real estate or for commercial purposes, there is a tendency to take funds away from the housing sector for investment in what likely will be a more profitable venture.

As outlined in the booklet, "Housing Finance and Homeownership," published by the International Union and furnished to you (the one with the red cover), some type of government help is needed for people to be able to finance homes. Individuals will never have as strong a credit standing as a business firm or a government agency. Families will always be pushed to the end of the line and will have to pay a high rate of interest for housing unless there are institutions created especially for the making of home loans. The high percentage of ownership in the United States, England, Australia, and Germany is not due solely to the relative prosperity of these countries but to the fact that there have existed for generations special institutions, encouraged and supported by the government, whose resources were almost entirely directed to making loans to families for the purchase or construction of homes.

Fourth, in this modern age there must be ways to live with inflation and volatile interest rates. Historically, the savings and loan system in the United States has been most successful, but during the last few years has experienced a serious squeeze on earnings because it did not develop a system to adapt the home mortgage loan to inflation. Basically, two systems have been used. One is the variable-rate mortgage, such as that perfected by the building societies in Great Britain, or the short-term renewable, renegotiable mortgage, as developed in Canada. These systems are now being used to a limited extent in the United States. An alternative system is that developed in South America and used in Israel calling for monetary correction and currency adjustment. The German system has been immune to this problem, incidentally. The Bausparkassen in their special financial niche historically have paid 3% on their contract savings and made loans at 5%. Of course this is for the second mortgage and the downpayment savings program. Those saving for a downpayment are willing to accept only a 3% return because this entitles them to a 5% loan. The institutions which grant the first and third mortgages are subject to the vagaries of the money market.

Fifth, I might say that it is evident, particularly from the experience in South America and in the newer and smaller countries, that given the opportunity and a government that is sensitive and committed to making housing available to people of very modest incomes, specialized institutions can thrive. It is important that home-financing systems include a savings-deposit program. Efforts must be made to encourage people to save even very modest amounts as part of a housing finance program. People will save a portion of their monthly or weekly income for the purpose of eventually owning their own home and homeownership does spread throughout the country. I know that many feel that in countries around the world populations are too poor, that people do not have enough money even for an adequate diet. This is no doubt true with regard to a large portion of the population, but those who move into cities to find employment become a part of the "cash" economy. There are powerful incentives on the part of the families in all parts of the world to enjoy the comfort and security of homeownership. Many will do what is necessary if that possibility is a realizable goal. This is no better illustrated than in city after city throughout Central and South America. To prove this point, I would like to conclude this presentation by a slide film produced a few years ago by the International Union which tells the story of the savings and loan system in Bolivia.



Mr. Norman Strunk, Secretary-General of the International Union of Building Societies and Savings Associations, with Sean Walsh and Philip Gary of the Office of Housing, A.I.D.

## PANEL DISCUSSION

Dr. Richard T. Pratt, Moderator

MR. HARRY SORENSON, General Manager, Perth Building Society, Australia:

I was interested in Norman Strunk's global review, particularly his film clip on Bolivia. Now I wonder if there is any way of accelerating the development of these savings and loan institutions. You have to have some motivation. It seems there is probably a need for mixed ownership because the promoters of these institutions have got to live themselves. They have to be paid and as we've seen it takes time to develop this. I have been most impressed with the rapid development of the system in India over the last three years, and I am sure we are going to hear a bit more about it later in the program. But, there needs to be some motivation and a determination of what kind of assistance governments can provide.

In Australia we don't provide tax incentives to savers, neither do we provide tax relief on mortgage interest to borrowers. But there is one area of government assistance, and that is the provision of a home savings grant payable to people who are first-time home purchasers, which is measured by the size of their savings over a three-year period. This program certainly has stimulated the flow of savings into thrift institutions specializing in housing finance. Simply, the Australian system is that there is a one-dollar for a three-dollar grant for monies saved in a building society, funds that are going to be used to assist in the purchase of a first home. That is one positive area of government assistance. How do you encourage an organization to get off the ground in the first instance, because it's going to be some time before they're showing the fruits for their endeavors?

MR. PETER KIMM, U.S. AID:

In Latin America the U.S. Agency for International Development played a catalytic role as we went into different countries and provided assistance of one sort or another in the initiation of the system. The assistance was in several different forms. In some countries technical assistance was provided by individuals, many of them from the U.S. savings and loan private sector, who would advise both the private and public sectors of the particular country in which they were working on the U.S. savings and loan experience and after a period of time on the experience of other Latin American countries. The second form the assistance took was long-term loans which helped provide capital to the institutions in business in their initial years while they were still in the early stages of collecting that capital. We have on the program tomorrow Ernesto Wende from Bolivia whose savings and loan system was the subject of the slide show. We think that Mr. Wende will tell you in some detail what happened in Bolivia and what forces caused it to be. I would stress the use of the word catalyst--that is the role AID played to introduce something that made things change a little bit. The basic forces, the accumulation of the capital, the organization of the institution, were in response to Bolivian cultures and traditions.

Let me give you a perfect example of a public-spirited person who is not unique to Latin America. I have observed in Latin America that many of the institutions were organized by truly public-spirited people, sometimes with an interest in the construction industry, but more often than not, people who were looking for a way to help their fellow man. They could see in the savings and loan system a way to do this. They devoted their time--a great deal of it without cost. They employed staff from their own resources and helped the institution get developed. That is particularly true in the case of the mutual institutions. There have been many of them throughout Latin America.

In the case of the capital stock associations there was a profit motive; they could buy stock and invest their own funds in the stock of these institutions with the hope that ten years later the stock would be worth more than they invested. In the case of Mr. Wende, here was a young man that saw in the AID program and in the home finance program a way to help the people in Bolivia. He started the system in Bolivia as a way of helping the people in that country to achieve a higher standard of living. Mr. Wende has about nine or ten savings and loan associations which he helped organize. He can tell you what motivations these savings and loan executives in Bolivia had to get their associations started. I tell you in great part it was the result of public spirit on the part of well-to-do people who wanted to do something to help their fellowman. They used the savings and loan system to do that.

Mr. Wende, can you comment on this without taking away from your talk tomorrow?

MR. ERNESTO WENDE, President, Central Savings and Loan Association of Bolivia:

Thank you for this opportunity. I am going to give you a preview of my talk tomorrow. It is not always one thing that moves you to do something. In my case, first I was motivated by a great President of the United States, John F. Kennedy. Together with the Latin American countries, he undertook a program to help Latin American countries to develop. Through this program the United States committed itself to support the development of Latin American countries with technical assistance and some funding. And, of course, the Latin American countries committed themselves to undertake a series of reforms to permit the development of Latin American countries. The important thing about the program was the fact that the United States was willing to support the Latin American countries with technical assistance and resources to help themselves.

But these resources were not enough and they were not the important ingredients to help the Latin American countries to develop. The most important ingredient was the willingness of the Latin Americans to help themselves. That is the solution of the problem which could not be accomplished by technical assistance alone or by financial resources coming from abroad. The main effort was really in the hands of the Latin American people. I think this was to be a revelation because frequently we think in terms of technical assistance and foreign assistance as something that is going to perform a miracle by changing the situation overnight.



Mr. Young Moh Chung, President, Korea Housing Bank, describes housing finance mechanisms in Korea.



Mr. Harry Sorenson, General Manager, Perth Building Society, raises a question during a panel discussion.

The solutions are really in our hands; they depend on what we are ready to do, how much are we willing to change and modify our ways. So, I had that in mind, I was really impressed by the AID program. I was really impressed, but I was looking for some way to make it work. One day I heard that there was going to be a conference in Lima, sponsored by the Agency for International Development. This was the first Latin American savings and loan conference, so I went there and I was very deeply motivated by what I heard. Many of the things I heard I didn't understand yet because I wasn't in the savings and loan business, but I got the main idea and after the conference I gathered a group of sixteen people who were interested in developing the community. I called them one Saturday to my home; they came at 3:00 and they went back to their homes at 2:00 in the morning. They were so excited about what they could do to help to organize an institution that was going to be able to provide long-term financing for people who do not own a home. That was the beginning of the Bolivian savings and loan system and from then on we have spread all over the country and everywhere we went we found people who were motivated to help the community, people who had had some resources of their own. They were not poor people, but they were willing to help create this institution.

DR. PRATT:

A country represented here that I would like to hear from in this regard is Korea. They have looked at many of the problems of housing finance and have developed what, in my judgement, are workable solutions. Could I induce a member of the Korean delegation to address the group?

MR. YOUNG MOH CHUNG, President, Korea Housing Bank:

We have made great progress in our current developments in the past 20 years and of course we have made a great accomplishment, but in the way of making that kind of accomplishment, we had a lot of obstacles and troubles in the development of our economy. I would like to mention the kind of obstacles we have had in the development of housing finance. In developing countries development of new projects and expansion of industrial facilities always require an enormous amount of investment. A weak government-financing capability coupled with a low national savings ratio results in a situation in which the country is unable to meet the financing requirements. The social development sector, like housing, is destined to suffer an acute funds shortage which is mainly blamed for sluggish project implementation.

Another matter which is at issue is the cost of raising funds and the level of interest rates on loans in an inflation-ridden economy with a low level of capital formation on the one hand and huge investment demand on the other. Interest rates on loans and on deposits tend to be high; however, the social welfare aspect of housing for low-income families calls for low interest rates and longer-term repayment periods. This results in poor profitability due to the negative spread between the cost of raising funds and interest received. Further, affordability, which may be translated into the ability of target income groups to pay monthly payments, raises another issue. To meet affordability requirements, the housing loan should be made over a longer repayment period of low interest rates and be especially tailored to the income levels and paying ability of the families to make the monthly payments. There should be, however, a measure to fully cover the above-mentioned negative

income spread. Another problem is concerned with the fact that the user of a prolonged loan repayment period causes a slower turnover of the loan portfolio. This impedes the additional formation of loanable funds.

The main purpose of the Korean Housing Bank is to raise funds from private capital markets by offering various deposit instruments and to supply funds for housing construction. The Bank suffers many difficulties competing with commercial banks as it has been given no special incentives to raising funds. In an effort to raise additional funds available for housing finance, high interest bearing debentures were once issued. The negative spread caused by the high interest rates above the average yield on housing loans was subsidized by the government at times. However, we have not utilized the issuance of debentures except in times when funds have not been available. The debentures have played only a small role in fund raising. The Bank has had additional difficulty in obtaining subsidies from the government. The Bank offers a special instrument of contracted savings deposits under which an individual who intends to build or purchase his own house must subscribe to one of the various types of schemes. He will be able to obtain a loan if he meets the requirement of accumulating a certain number of monthly payments. The funds formed by the means of a variety of fund-raising instruments are made available to individuals and private building contractors.

Regarding interest rates on deposits and loans, the interest rate on one-year time deposits is 19.5%. The standard rate on loans stands at 20% per annum. The interest rates on housing loans range from 15.5% to 18.5%. These rates are consistent with the policy that interest rates on housing loans should be lower than the rates charged by commercial banks. This being the case, housing loans funded with private capital suffer a loss. The result is poor profitability unless measures are taken to compensate for the loss. In practice, up to the present, the loss has been covered by a considerable profit earned from the public housing construction loan operation. The public housing construction loan program is funded through the issuance of housing bonds. These loans bear interest rates of 15.5% to 18.5% per annum. The bonds bear interest rates of 12% per annum.

Affordability is another issue with which we have had to deal. As economic development has proceeded, per capita income has risen. But still much of the population suffers from poverty and cannot afford to pay the cost of housing. The Bank has set up various schemes, but we can't provide housing loans to the poorest people. They can't afford to meet the payments.

In summary, interest rate spreads create a difficult problem. The lack of funds and the affordability issues are also substantial obstacles to the provision of housing. The government has discussed this with me. We have a very aggressive house construction program which will begin this year, but still the troubles we are facing will not be solved very easily.

MR. H.U. BIJLANI, Managing Director, Housing and Urban Development Corporation, India:

Dr. Pratt, you mentioned something about having the magic formula for combatting inflation, but in your speech you kept it to yourself. Perhaps in the course of our discussions you will share your magic formula with us.

I was very impressed with your discussion of the prevailing poverty in the developing nations. You very clearly brought out the issue of what these people have and what we can give them. One has to think of a large number of people who live around the poverty line and who perhaps cannot save anything. I look forward to examining the savings programs which could be developed. When we in India looked at savings programs, we looked at the middle- and upper-income groups where saving is possible. However, in the Asian countries, this group of people is barely 10%. The remaining problem concerns 90% of the population. Of these nearly 50% live at or below the poverty line. Have these people any hope? Or do we shrug our shoulders and say that we'll sweep this problem under the rug and that there is no future for them because they cannot save?

I would like to know further whether it can really be said that these people cannot save, that they have no potential. For example, one large factor is the labor which these people can provide. In the field of shelter labor alone constitutes 25% to 30% of the cost of construction. Let us have a close look at the shelter which these people occupy in the different countries. Those of us who have visited the squatter settlements and talked to these people would know that each one of them pays about a dollar and a half to someone as protection money, for only a verbal assurance that he will not be removed from that stinking pigsty of a slum. If he can pay this amount for mere existence in the slum, I am sure that he has the potential of contributing at least one-and-a-half times that amount towards the shelter that we can provide.

DR. PRATT: I think those are the issues that are the interesting ones. I think some of the work that Mr. Kimm and his organization have done in Egypt relates to this question. When we first went into Egypt we found that what was designed as low-income housing was really middle-income housing from the colonial period. This is housing we would all like to have. The units were about 100 square meters. The combination program which AID worked out with the Government of Egypt called for houses which were closer to 10 square meters. Payments were in the range of \$8 to \$12 per month, which reached very low-income people. The issue that Mr. Bijlani raised is the essential one: where are the people now? If they have no shelter, then even the most modest shelter which improves their life and raises their standard of living is a substantial improvement. They are paying for what little they have now and we must ask ourselves if that is the best we can provide for what affordability they have.

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## HOUSING FINANCE AND LOW-INCOME SHELTER IN THAILAND

Mr. Manasakdi Intarakolmalyasut  
Managing Director  
Government Housing Bank of Thailand

The problems of financing low-income housing are faced by housing finance agencies and institutions in all countries. They are particularly acute in developing countries due to the rapid rate of urbanization which has occurred since 1970. In many Asian countries the average annual rate of growth of urban population from 1970 to 1980 was between 3% and 5% per annum. Households which had provided for themselves in a rural environment could no longer do so after their migration to the cities.

Neither the urban planners, the private and public construction industry, nor the mortgage lending institutions have been adequately prepared to cope with the tremendous pressure that the burgeoning urban population has put on the capacity of a country to produce and fund housing. The critical question which must be faced today is what is the most appropriate response of housing finance agencies.

In most developing countries the government first attempted to fund massive public-housing projects and, at the same time, offer heavily subsidized rents or mortgage interest rates to home purchasers. In addition, building standards on these projects frequently were so high that private sector developers of middle-income housing could not compete. In too many cases there has been little or no cost recovery. In a world of high inflation and high interest rates, government soon faced the harsh reality that they could not continue to fund heavily subsidized housing programs without diverting a disproportionate amount of resources from needed industrial development.

In Thailand, the rising cost of land, labor, materials, and capital for housing has placed severe strain on the productive capability of the housing sector. In 1979 and 1980, the Government Housing Bank increased its loans outstanding by more than 30%, but still had a backlog of demand for housing credit. As in other countries, the borrowers are hurt more severely by the limited availability of housing credit and the rising cost of housing.

There are two major formal institutions in Thailand which provide housing facilities, the National Housing Authority and Government Housing Bank. The activities of these two agencies complement each other. The National Housing Authority constructs and finances public housing for low-income families under a hire-purchase plan. In this capacity they are directly involved in the provision of low-cost shelter. The Government Housing Bank participates in a more indirect fashion; it finances middle-income housing and lends funds to the National Housing Authority to be used for some of the low-income housing projects. We are involved in one low-income housing project--Building Together--a self-help program. The Government Housing Bank is providing the financing for the building materials loans to the participants in the program.

The role of the Government Housing Bank is a significant one. Housing markets are not separate and distinct, but form an integrated whole. Programs which have an impact on one segment of the market will also affect other segments. For example, a housing finance scheme targeted at the low-income segment may have limited success because the dwelling units ultimately end up in the possession of middle-income families. We feel the programs which do not view the housing market as a whole, which address only the needs of the low-income segment while ignoring the equally pressing needs of middle-income families are not likely to achieve their goals. Unless the demand for middle-income housing is considered, housing units will tend to be allocated by market forces to those with the greatest ability to pay and the poor will once again be left behind.

The primary concern of the Government Housing Bank is to help people to have proper shelter without creating a system whereby the financial burden on low-income families is too heavy. The Government Housing Bank supports the housing industry by making loans to developers for land development and home construction and ultimately to the home purchaser for the mortgage. We also finance the purchase of existing homes and new homes for which the Government Housing Bank did not provide the construction financing.

Despite this high level of activity in lending to developers, the Government Housing Bank remains a lending institution for the home purchaser. Developers are charged 18% interest on their loans, while middle- or low-income families are charged 14%. From 1977 to 1980 the amount of loans to individuals increased from 151 million baht to 463 million baht. There has also been a significant increase in loans for building repairs and extensions, from 29 million baht in 1977 to 508 million baht in 1980.

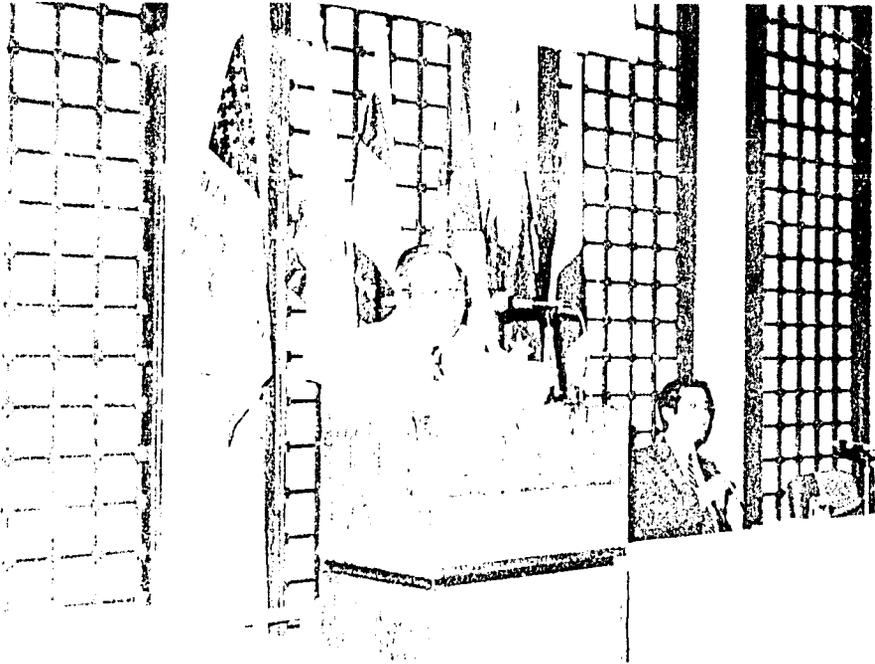
In the future, there will be an even greater necessity than in the past to coordinate the activities of the various institutions in Thailand which provide housing funds. There also will be a need to integrate international assistance and financing into the comprehensive national plan. Programs could be developed which would provide the incentives necessary to encourage the private sector to share our mission by building low-cost housing units. At the current time, private sector developers are reluctant to construct low-cost housing because the profit margins are so much less than those on middle- and upper-income housing.

Other financial institutions which do not currently participate to any significant degree in financing housing could be encouraged to become involved. Programs could be developed which would offer the required incentives to increase the level of activity of these institutions. International organizations could support efforts to make housing finance systems more effective by providing the initial capital--as the seed money--for low-income housing projects. With the present cost of funds in the world capital markets, it is difficult to take advantage of the programs that exist and still offer affordable rates and terms to borrowers.

We perceive the role of the Government Housing Bank in the future to be the central coordinator of housing finance activities in Thailand as well as the primary mortgage lender. In this capacity the Government Housing Bank could attempt to bring together all of the existing and potential participants

in the mortgage market. The Bank could also act as the liaison between the international organizations and financial institutions in Thailand. If such a level of coordination and cooperation could be achieved, we would have moved far along the path toward achieving our goal of providing housing credit for all of our people who are desperately searching for their own homes.

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Mr. Jaru Srichalumpa, Deputy Governor of the National Housing Authority of Thailand, makes a presentation on housing finance and low income shelter in Thailand.



Drs. Cosmas Batubara, Minister of Housing, Indonesia speaks on housing policies and finance in Indonesia.

THE NATIONAL HOUSING AUTHORITY'S ROLE IN LOW-INCOME  
SHELTER DEVELOPMENT AND HOUSING FINANCE

Mr. Jaru Srichalumpa  
Deputy Governor  
National Housing Authority of Thailand

As a rule, housing conditions deteriorate with the uncertainty of security of land tenure. So we would find squatter housing or low-income rental housing with no or only yearly contractual rental agreements in the worst conditions. Even in low-income neighborhoods with some security of tenure, such as in government land, where families build their own shelters of relatively good quality, more incentives for investment and maintenance can be justified. Since Thailand is largely still an agricultural based economy, land and the ownership of it has always been a dominant goal of most families. Hence in Thailand, only 8%<sup>1</sup> of the total population are renters, while in urban areas 47% need to rent despite their desire to be owner-occupants. This situation is the result of an unsatisfactory housing market and the maldistribution and limited access to housing production factors.

Apart from the few households that have access to employer-provided accommodations and public housing, most have to rely on individual efforts to find shelter in the marketplace. Savings or other forms of inherited wealth become the most important factor in finding an alternative to renting. For a low- or middle-income household the cheapest alternative for becoming a homeowner is to secure the right to occupy (rent) a plot of government or private land and to build a home with whatever savings the household has accumulated. For the higher-income household, the least amount of savings required must be enough to make a downpayment for a developer-built housing unit where both the land and the house could be mortgaged to a housing-finance institution and monthly payments made on a long-term basis. Unfortunately, only those households with incomes above the 80th percentile of the urban income distribution (US\$500/-month) would be able to afford the monthly payments required. Most developer-built housing with prearranged long-term financing is not aimed even at middle-income earners.

For those who could gain access to renting a piece of residential land, the standard of the shelter they could build depends on the amount of savings they possessed. While their regular incomes may be substantial, income alone cannot contribute to their initial standard of housing attainment. A family with a regular income of US\$400 per month could add \$3,700<sup>2</sup> (or 35 m<sup>2</sup> of shelter

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<sup>1</sup>1976 Housing Survey, National Statistical Office, Bangkok

<sup>2</sup>Assuming a monthly payment of US\$40 over 20 years at 14% annual interest rate.

built with permanent materials) to what savings it already possessed and increase its initial housing attainment standard enormously. However, no such opportunities existed for the urban majority who must rely on borrowing from informal sources such as family members, friends, money lenders, or group saving ("share")<sup>3</sup> schemes.

In Bangkok alone, the demand for new housing units each year is estimated to be some 40,000 units, some two-thirds of which should be eligible for whatever mortgage financing may be available. In addition, there are approximately 300,000 existing renters, many of whom will be seeking opportunities to becoming homeowners. Therefore, the total demand for long-term housing finance is much greater than the supply provided by the Government Housing Bank, National Housing Authority, credit financiers, and commercial banks combined. If we take into consideration the total housing demand of other urban areas which collectively contain about the same number of households as Bangkok, then the situation is even more serious. Furthermore, the above-mentioned urbanites represent only 20% of the country's population. When the needs of the other 80% residing in rural areas are also taken into account the total magnitude of the task ahead is truly enormous.

Housing finance, as a means of improving the housing attainment standards of the people, is still at a rudimentary stage of development in Thailand. The most active institution remains the Government Housing Bank, which has expanded its volume of loans enormously during recent years. Between 1978 and the end of 1980 the annual rate of increase in the number of loans to individuals were 64% and 84%, respectively, totaling 31,000 loans during the three years.

The National Housing Authority of Thailand (NHA), established in 1973, is another major body involved in raising standards of housing attainment for low- and middle-income families. The NHA directly intervenes in the market and produces housing for rent and, recently, mostly for sale on long-term mortgages or hire-purchase schemes. Since its inception, about 25,000 housing units have been sold which require the NHA to service mortgage loans ranging from US\$2,500 to US\$20,000 per hire-purchase contract.

Within the limitations of the NHA's capacity to participate in the housing market, by the end of fiscal year 1981, NHA would have initiated 25,000 more housing starts in Bangkok and 6,000 units in ten secondary cities. Moreover, during the Fifth-Five Year Development Plan (1982-1986) NHA expects to develop and, in the process, extend housing loans to 50,000 more households in Bangkok and 7,500 households in 25 medium-sized cities, exclusive of the slum-upgrading program which affects existing communities.

So far, the foremost constraining factor limiting the NHA's contribution to the market is one of management rather than financial or physical

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<sup>3</sup>This is a game involving several trustworthy participants pooling monthly contributions in which every member would acquire the pot once. The highest bidder on what premium one is willing to pay wins the monthly pot first; the last pot would accumulate the highest amount of premiums as a proxy for interest accrued.

resources. Apart from developing projects that must suit the particular demands of the target groups in various geographical locations and coordinating the program and actions of various participating authorities necessary in establishing self-sufficient communities in terms of employment, physical and social infrastructures, NHA also has to act as a housing finance institution. NHA has to arrange loans at varying costs and lengths of maturities and lend long term, usually 15 to 20 years, of up to 90% of the value of the property sold. Servicing the loans, enforcing contractual commitments, et cetera, is a specialized function which NHA would like to transfer to the proper housing finance institutions.

Presently, with the cooperation of the Government Housing Bank (GHB), NHA is working toward transferring its long-term finance responsibilities to the GHB. In effect, NHA customers would obtain mortgage financing from the GHB, which means that NHA could sell its projects for cash, so that its future financial requirements would be much less complex with only short-term construction loans needed. In this way, a more solvent NHA requiring less borrowing would be able to concentrate its efforts and resources in developing more housing units; in short, a more logical division of labor between the NHA and GHB will be the result.

Apart from the above-mentioned short-term improvement of the current situation, a more difficult and underlying problem in the housing finance sector has yet to be addressed. This concerns the mobilization of funds for housing finance. Established ways such as mass participation of potential home buyers or directly tapping public savings and competing with other financial sectors for funds have never seriously been considered. In the past, both GHB and NHA have relied heavily on foreign and domestic loans, mostly medium-term commercial ones. Housing investment where the foreign exchange component accounts for less than 20%, makes little sense in utilizing foreign loans.

Through the initiative of the NHA, via a World Bank/NHA loan project, UNDP funding is being provided to carry out a housing finance study by consultants under the supervision of the Ministry of Finance, the Central Bank, the Government Housing Bank, the NHA, and the National Economic and Social Development Board. The study's terms of reference are to assess the current situation of the housing finance sector, estimate the current and future demand for long-term financing, and recommend the strategies and actions required for institutional development to improve accessibility to housing finance for low- and middle-income households, including those residing in areas other than the largest urban centers. The latter is particularly important since it is the priority of the current government and of the 1982-1986 Fifth Five-Year Economic and Social Development Plan to stimulate or provide incentives for a more equitable distribution of economic and social opportunities outside of the primary city of Bangkok, which is still some 40 times larger than the next largest city.

The process for procedural refinements and institutional development cannot be expected to be realized quickly, but it is hoped that the right foundation would be laid for future developments of the housing finance sector. We believe that a healthy market, where many individuals and institutions are active, is more efficient in delivering housing supply to the marketplace than any one institution such as the NHA. Across-the-board access to housing finance will be a positive step towards that goal. We see, therefore, that the role of the NHA would be to remain a developer, monitoring the market closely and intervening discreetly within its capacity in the low-income subsector of the market which is not performing satisfactorily.

## HOUSING POLICIES AND FINANCE IN INDONESIA

Dr. Cosmas Batubara  
Minister of Housing  
Indonesia

First of all, allow me, on behalf of the Indonesian Delegation and on my own behalf, to express my gratitude to the Government of Thailand and the U.S. Agency for International Development for their kind invitation to participate in this conference and to address this meeting.

We feel very fortunate to participate actively in this conference, which will be a forum for exchanging views and experience and which will strengthen understanding, friendship, and cooperation among all the nations of the developing countries in Asia.

This conference is also important because it will discuss the problem of shelter and housing for the poorest among the poor, who are now still living in inhuman conditions, in our countries. They are our fellow citizens and human beings and have, therefore, also the right to live in healthy houses and in a better environment.

The problem of housing for the low-income group, which is still the majority in all developing countries, is also one of the main problems in Indonesia. And you all know that there are still too many persons and families in our country who are still living below the poverty level. The Government of Indonesia is aware of this and is doing its utmost to find an optimum solution to this problem.

The problem of low-cost housing is, as you all know, a very complicated problem and it is not so easy to find a solution which will give satisfactory results. And you will all agree that we cannot ignore it because it will become worse and more difficult to tackle.

Allow me to illustrate the magnitude of the housing problem in Indonesia with some statistical figures based on the recent figures from the population census. For a population of 147 million, growing at an annual rate of 2.3%, at least 676,200 housing units are needed (if we assume that a family consists of five persons and that the number of families are growing at the same rate as the population growth), of which approximately 120,000 units will be in the urban area. To the above figures should be added the number of housing units that should be constructed to replace the existing unhealthy shelters and to house the families still living in unsatisfactory conditions and those eager to move. Easily we come to a total of approximately one million units of which approximately 200,000 units are in the urban area. Besides that, more than 80% of our population are living in the rural area in unhealthy conditions without sanitary facilities.

Recognizing the importance of low-cost housing and the seriousness of the problem, the Government of Indonesia has, for more than 25 years, tackled the housing problem in Indonesia, starting with undertaking research and studies and the construction of experimental and demonstration houses, as a sound base for formulating the housing policy and programs. Gradually, especially after 1965, when more funds could be made available, the government changed its policy from software into hardware and more houses are being built. And to

formulate and implement the housing policy and programs, the government first of all established the necessary institutional machinery, i.e. the National Housing Authority, for the formulation of the policy and programs, and the National Housing and Urban Development Corporation (PERUMNAS), a government corporation, for the execution of the housing programs for the low- and middle-income groups of the population. After that the financial institutions described below were established.

The importance of the construction of low-cost housing is now recognized because its social, economic, cultural, and educational aspects are influencing national development, and also because it triggers the development of the supporting industries, such as the building-materials industry, the industry for furniture and household utensils, and the construction industry, thereby creating employment and giving a better income for the people working in those fields of activity.

Please allow me to give this meeting a quick overview of the housing program in Indonesia. The construction of low-cost houses by the government or with support of the government in the Five-Year National Plans will be developed in all the capital cities of the provinces and other cities which are important for the socioeconomic development of a region. In the Second Five-Year Development Plan (REPELITA II) 73,000 housing units have been constructed by the National Housing and Urban Development Corporation (PERUMNAS). During REPELITA III 120,000 units will be constructed by the PERUMNAS and 30,000 units by the private sector with support and/or loans from the government through the National Housing Bank. For this fiscal year 1980/1981,  $\pm$  24,000 units will be the responsibility of PERUMNAS and  $\pm$  6,000 units of the private sector.

Due to the difficulty in obtaining land for low-cost housing in the big cities, PERUMNAS is compelled to start the construction of three-story (walk-up) flats in those cities. The construction of 10,000 units in Jakarta, Surabaya, Medan, and Bandung are planned in REPELITA III.

The houses built by the government or with the support of the government are mainly for those of the low- and middle-income groups and with a secured monthly income such as government employees; however, the social and political condition in the country requires that houses should be made available also for those with an unsteady daily income such as the taxi drivers, tricycle (becak) drivers, street peddlers, food sellers, etc. Therefore, the houses built by the government or with government subsidy should be very modest, which means that the housing standards are still relatively low.

The minimum standards for the modest house are two bedrooms, 36 m<sup>2</sup> floor area, and a plot of 60 m<sup>2</sup>; for the core-house in a sites and services project, the minimum standards are one multipurpose room, 15-20 m<sup>2</sup> floor area, and 60 m<sup>2</sup> plot area.

The maximum standards for a modest house are three bedrooms, 70 m<sup>2</sup> floor area, and 200 m<sup>2</sup> plot area. The modest houses are semidetached (coupled), row (terrace) single- or one-story (maisonet). For the three-story walk-up flats the floor area is 36 m<sup>2</sup>.

The private developers, members of the association named REI (Real Estate Indonesia), who are receiving government subsidy, are also building modest houses of 45-70 m<sup>2</sup>. The construction cost of the houses built by PERUMNAS varies from US\$30-60 per m<sup>2</sup>, while those built by the private developers varies from US\$60-80 per m<sup>2</sup>.

According to the government's policy, the monthly rent or installment paid by the occupant should not be more than 30% of his monthly income.

Keeping in mind the limited earning capacity of the population and the relative scarcity of funds that could be made available by the government, self-help and mutual-help activities of the community in low-cost housing are promoted and supported by the government. For that purpose, the State Savings Bank, established in 1974, has been given the additional task of being the Housing Mortgage Bank (BTN). The Home Ownership Loan Scheme was introduced. In this scheme, the BTN gives loans up to 90% of the total cost of a house (including the cost of the land), at an annual interest rate of 9% repayable over 5 to 20 years. While the BTN is mainly for the low-income group, the Housing Finance Corporation (PTPS), established in 1980, is providing loans to the Rp. 200,000-Rp. 700,000 (US\$300-1,100) income group for the construction of houses costing not more than Rp. 22 million (+ US\$36,000) including cost of land. Loans are given at 18% interest repayable over 5 to 15 years.

Besides the loans provided by the BTN and the PTPS, the government is stimulating house construction by the following measures:

1. Government banks provide loans for housing developers up to 75% of the construction cost (cost of land not included) at 13.5% interest per annum.
2. The Minister of Finance has issued a regulation giving tax exemption for the sale of houses not exceeding Rp. 5 million (+ US\$8,000).
3. By the Foreign and Domestic Investment Law, tax exemption and tax holiday are granted to developers and real estate of low-cost housing.

The sources of funds for the implementation of the government's policy on housing finance are mainly public funds provided in the Development Budget. For the PERUMNAS the government has budgeted for the financial year 1979/1980 a sum of + Rp. 31 billion (+ US\$51 million) and + Rp. 26 billion (+ US\$43 million) in 1980/1981. Besides that, PERUMNAS is also operating with short-term loans from the government banks at 13.5% per annum and long-term loans from international funding agencies at 4-9% per annum.

Funds of the BTN are obtained from the excess reserve funds of its own and liquidity loans from the Central Government Bank (Bank Indonesia), besides the public funds provided in the budget. The bank is functioning also as an intermediary for private developers for obtaining loans from government banks by providing Commitment letters for Home Ownership.

The Housing Finance Corporation (PTPS) is a private institution operating as a limited corporation with capital provided by shareholders. The main shareholders are the Bank Indonesia, insurance companies, real estate companies, and also foreign institutions such as the International Finance Corporation (World Bank). Another function of the corporation is to accumulate funds by issuing Housing Bonds and by accepting savings from persons planning to build their own house.

Besides the establishment of the institutions above, the government is supporting also the proper functioning of the real estate and the establishment of nonprofit housing organizations such as housing cooperatives, by creating a favorable climate for the development of those enterprises. Tax exemptions or reductions, low-interest loans, and other facilities to accelerate housing construction are among other incentives provided by the government to attract private enterprise.

Another program besides the low-cost housing and sites and services program implemented in the urban areas is the Kampung Improvement Programme (KIP), which was considerably successful during REPELITA I and II.

During REPELITA III KIP will be implemented in 200 cities, i.e. 150 small cities, 9,000 Ha; in 40 medium-sized cities, 4,000 Ha; and in 10 big cities, 2,000 Ha. The main objective of KIP is the improvement of the quality of life of the community living in those settlements. External financial support from international organizations and funding agencies contributed to the successful implementation of the program.

Last but not least, allow me to conclude my statement by giving a short description of the Rural Housing Program in Indonesia. This program emphasizes the provision of extension services which help the rural population to raise their skills and techniques to improve and restore their own house and surroundings. The program consists of the following activities:

1. Housing rehabilitation, which is primarily concerned with improving health and social aspects of the existing house;
2. Improvement of the environmental sanitation and provision of water supply; and
3. Provision of training, information, and technical guidance.

During PELITA I and II, the program has been implemented in respectively 22 and 1,500 villages, and in PELITA III it will cover 6,000 villages.

This is the broad outline of the Government's Housing Policy and Programs. Further details will be given during the discussion. And I do hope that this meeting will enlighten us with suggestions to improve our efforts in the future, so that by the year 2000 there will be a better housing situation in our countries.

UNITED STATES INTERNATIONAL HOUSING  
FINANCE ASSISTANCE

Mr. Peter M. Kimm  
Director, Office of Housing  
U.S. Agency for International Development

Earlier this morning, I spoke of AID's 20-year involvement in bilateral shelter programs. The principal vehicle for our development assistance has always been the housing investment guaranty. This is a unique AID activity in which funds from the U.S. private sector provide long-term financing for low-income shelter and urban-upgrading programs in developing countries. The U.S. Government underwrites these transactions through the provision of a full-faith-and-credit guaranty that will compensate U.S. lenders for losses. Maximum interest rates to lenders reflect the current cost of money in the U.S. capital market. The term of the loan has generally been for 30 years with up to a 10-year grace period. Loans are typically made to developing country housing institutions which then lend to individuals qualified by income and need.

Operating since 1961, the U.S. Housing Guaranty Program has made AID the largest bilateral lender among world donors for shelter and related community facilities and services. Total projects authorized represent \$1.4 billion in loans worldwide. The Office of Housing has averaged \$150 million annually in new authorizations over the past three years.

A Housing Guaranty Program is initiated at the request of the host country which approaches the appropriate AID Mission or U.S. Embassy. The requesting country and AID then work jointly to begin the process of project identification, authorization, and implementation. The Housing Guaranty Program has changed substantially since its inception in Latin America. Then the focus was on the building industry through an initial \$10 million demonstration program. Because of its success in producing 42,000 units of housing in four years, the scope of the program was broadened in 1965 by the U.S. Congress. This was largely due to the realization that built solutions could only be part of the answer to the shelter dilemma. Thus, the Office of Housing was directed to examine credit institutions in both the public and private sectors to encourage the financing of low-cost home mortgages. It was asked to promote greater investments of private capital in the housing market and to encourage, at the policy level, reforms which would make for a more stable housing finance system. At the same time, we did not relinquish our efforts to assist local building industries with the idea of expanding their capacity to build and among other things generate additional employment opportunities.

We contributed to the development and strengthening of numerous housing finance institutions operating throughout Latin America today. I believe that our most significant accomplishment during that period was to assist in the development of the skills and institutions which currently make up the multibillion-dollar savings and loan industry there. It was a truly collaborative effort between government and private enterprise in the United States and government and private enterprise in Latin America. During the conference Ernesto Wende will describe the experience of one Latin American country in establishing a housing finance system.

In 1969, the Housing Guaranty Program expanded yet again, reflecting changes going on within the United States as well as overseas. In that decade American awareness of developments abroad increased greatly. No longer were we a nation apart, but one very much involved with the world community.

The issues of ballooning world population rates and growing limits to natural resources were gaining more and more public recognition. As a result Congress assigned to the Office of Housing \$130 million in new authority to work on a global shelter initiative to include the regions of Asia, Africa, and the Near East.

In the decade of the seventies, the reality of world interdependence was brought home forcibly by growing trade competition with other countries, the energy crisis, and the emergence of the developing nations as a politically viable bloc. More than ever the United States realized that the welfare of the developing countries would impact upon its own well-being and that of the rest of the world. Problems of development abounded. Some I mentioned this morning. An overwhelming one was, simply, sheer poverty. In attempting to address this problem, the U.S. Congress in 1973 set forth its new directions mandate under which AID, and consequently the Office of Housing, was to focus on the poor majority of the population in developing countries.

Prior to this our programs had been financing mortgages which averaged \$6,500, requiring a family income of about \$250 per month to repay. Now, programs were to be aimed at those below the 50th percentile, with loans averaging perhaps \$2,000. Our goals were still to establish healthy housing credit and finance institutions, to assist governments in defining and analyzing their shelter needs, and to encourage the construction of appropriate pilot shelter projects. But, because we were targeting our efforts to low-income persons, the kind of housing we produced had to be adapted to meet the standards of affordability of this group. This meant developing upgrading or sites-and-services approaches in addition to our standard core housing and low-cost housing unit solutions. The instrument for carrying out these projects continued to be the housing guaranty. The terms of the loans were the same as was the manner of repayment. Only the product had changed.

Since the new directions initiative, we have financed \$800 million worth of low-income projects, more than half of the \$1.5 billion dollars in guaranty funds authorized since the start of the program. In addition to targeting for the poor, we have, during the last several years, sought to expand the scope of the shelter program to include not only their physical needs but also related social and economic needs. This has meant support for community health and education services and facilities, vocational and technical training opportunities, small-scale business enterprises, child care, and transportation services.

In summary, we have traveled a long and difficult road with the Housing Guaranty Program. Beginning with the financing of housing construction and the development of housing finance institutions in Latin America, we then added programs in Asia, Africa, and the Near East. We targeted our projects for the poor majority and then sought to develop integrated programs which would improve their lives in a more fundamental manner. Along the way we shifted gears, went off in new directions, and expanded our horizons. We learned a great deal in our 20 years of housing experience and picked up many new partners in our ventures.

So, where are we now and where do we go from here? The journey continues. As much understanding of world shelter problems as we have gathered, there is yet much more to discover and do before our final goal, decent and basic shelter for all, can be reached. We know now that it is an endeavor in which all must play their part. The extent of the urban shelter crisis demands participation from public and private sector alike. It requires agencies and institutions to accommodate projects to the needs and affordability levels of the poor population being serviced. It requires participation from the poor through the operation of their informal sector economy and their striving for a better life. I believe that together we can make an impact.

One of the most important conclusions is that low-income people have themselves provided the bulk of the housing they need over the past 20 years. They do so through a dynamic process of incremental expansion of their dwellings. The level of investment is enormous, both as a percentage of the income of the families involved, and the gross level of all such investments.

The implications of this for government policy are clear. The existing housing stock has come to be more widely recognized for what it truly is, a precious natural resource, to be protected and upgraded. The destruction of existing houses, no matter how primitive, rarely makes sense.

Also, any workable government program must fit effectively into the process that is now underway. What are the constraints to more adequate shelter for more people? How can government help overcome these constraints? In many countries, the availability of land and basic utilities such as water and electricity are the principal constraints. Is government devoting sufficient attention to these basic constraints?

And always, the question of finance. Where will all this money come from? In fact, the so-called informal sector operates with few financial intermediaries. Families save and invest their savings. Probably one of the areas in which the greatest improvement is possible is to provide greater financial intermediation as part of the process. The incremental approach requires the investment of less public funds, and the greater use of private resources.

As we learn more about the nature of the urban shelter problem, there is more cause to be hopeful. What seems, at first, to be an insurmountable dilemma can, in fact, be overcome if we can first define the magnitude of the problem. Recently, the Office of Housing completed work on a study designed to estimate more precisely than had ever been done before the minimum shelter requirements in the five countries of Central America. Our approach was to define as "basic" that bundle of goods and services which, from experience, had been judged necessary by low-income consumers. With the premise that the urban poor were willing and thus able to spend on certain shelter requirements, we then attempted to analyze the order of magnitude of the effective demand for investment in basic shelter, the amount of housing which could be purchased at these investment levels and the approximate size of an investment matching effective demand in the macro-context of the region's economy.

Our analysis concludes that a shift in resources of from 1% to 2% of GNP in Central America would provide decent minimum shelter for the

36 million people expected to be living in the region in the year 2000. Such a shift in allocation of resources is well within the capacity of the economies concerned.

Similar analyses are now being undertaken in other parts of the world, and will become an integral part of our approach. We expect that the findings will be similar, but not equal. More precise analysis and more realistic measurements and estimates lead to greater optimism, or at least to less pessimism.

The U.S. Agency for International Development expects to continue its shelter activities in the years ahead. We do not expect to be able to finance the world's housing deficit. We do expect to be able to provide resources, human and financial, to undertake important projects as we work to assist in the ultimate resolution of the world's shelter problem.

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Mr. Bryce Curry, President of the Federal Home Loan Bank of New York, U.S.A., addresses the conference.



Mr. H. U. Bijlani, Chairman and Managing Director, Housing and Urban Development Corporation, India speaks on low income shelter and housing finance in India.

THE ROLE OF GOVERNMENT-SPONSORED FINANCIAL  
INSTITUTIONS IN THE HOUSING SECTOR

Mr. Bryce Curry, President  
Federal Home Loan Bank of New York  
U.S.A.

My assignment this morning is to discuss the role of government-sponsored financial institutions and the provision of housing in America. In my country we have many different programs of housing; we have housing insurance programs, guarantee programs, and programs that involve huge subsidies or huge assumption of contingent liabilities. These programs are designed basically for that sector of our society who simply cannot qualify for ordinary private financing. The two or three institutions that I want to mention are the Federal Home Loan Banks and our two national secondary mortgage market associations, the Federal Home Loan Mortgage Corporation and the Federal National Mortgage Association. Also I will try to tell you a little about our participation in the AID program.

At the outset perhaps I should try to place my comments in perspective. I have done quite a bit of traveling throughout the world and I know that Americans are willing and often quite eager to discuss their culture and their institutions wherever they go. Indeed, we have been accused, from time to time, and I think with some justification, of believing that what works in our country works elsewhere in the world. I make no suggestion, but I do think, however, that if by this exchange of information we can pick up a point from here and there that will aid us in our common objective of trying to provide housing for our peoples, then this conference will have been worthwhile.

My country, at least up until the present time, has placed very high social, political, and economic values on housing. I say up until the present time because we are having some policy discussions today in which many people are asserting that housing has been babied a little bit too much and that we have gone too far in allocating funds to the housing sector. The creation of the Federal Home Loan Bank in 1932 is reflective of those housing priorities which I just mentioned. We had in place that year a system which Norm Strunk described yesterday, a system of savings and loans which was imported from England about a century earlier. The worldwide depression in 1932 seriously jeopardized the continued existence of these thrift and home financing institutions. Home owners could not repay loans on schedule; lenders therefore were unable to return funds to depositors as they were demanded. What the banks urgently needed was a system of reserve institutions or reserve banking system not only for a short-term emergency needs but to assist in maintaining a more stable flow of funds into the financing of homes. Even during periods of normal economic growth, lenders who borrow short and lend long may experience serious imbalances between their deposit flows and cash needs. In other words, they accept deposits on a short-term basis and lend those funds out for 20 or 25 or 30 years. The existence of the FHLB or the reserve system for the savings and loan institutions has largely taken care of that problem and I anticipate that it will certainly be able to do so in the future.

Another and perhaps longer-range objective of the creation of our system was to actually increase the flow of funds into housing. The bank system would be able to issue debt instruments to institutional and other purchasers who would never think of making or purchasing a mortgage loan. Since the system was established in 1932 we have in fact issued in excess of \$170 billion in bonds and discount notes. And most of that money has actually been relent in the housing market by the savings and loan associations which are stockholders of our banks. The real impact of this system, however, cannot be measured solely in terms of the dollars in which I am quoting. The ability to obtain credit if needed permits our member home financing institutions to manage their cash flows in a much more efficient manner. In our country all housing construction and most permanent home financing are made pursuant to commitments which run from 30 days to 18 months or sometimes longer. Many lenders can make these commitments freely even though they do not anticipate coming to the bank to obtain part of the funding. They know, however, that if their calculations should be wrong, if their cash flows fall below projections, they do indeed have a reserve system to come to, and I think in and of itself this is very conducive to home construction and to housing sales in our country.

The structure and operation of these Federal Home Loan Banks is relatively simple. In 1932, our government created a federal board and authorized that board to charter up to 12 of these banks located throughout the country and in fact to have a significant say in the management of those banks. Twelve were established and initially they were capitalized by the U.S. Government. That capital has been long retired so that the banks today are wholly owned by savings and loan associations and savings banks. Only those lenders who are engaged in economical home financing are eligible to become members of this system. Members are required to purchase stock in the banks equal to 1% of their home-mortgage loans and they hold today in excess of \$5 billion in stock of the 12 banks. As previously noted, the principal source of our loanable funds is our borrowings in the capital markets; this currently totals about \$43 billion. Other sources of loanable funds include capital and retained earnings of approximately \$6 billion, and we may loan out a portion of our time and demand deposits, which now total about \$10 billion.

My good friend Peter Kimm has mentioned briefly the participation of the Federal Home Loan Bank of New York in the AID housing program. I might elaborate on that briefly. The Housing Guaranty Program was first initiated in 1961. In those earlier years, I think it was somewhat difficult to find sufficient capital to find the guaranties that AID was prepared to issue. In 1966 our government authorized savings and loan associations to make loans throughout the world up to 1% of their assets provided those loans had the benefit of the AID guaranty. Here again, because of the nature and complexity of the program and the size of the loans, very few associations ever became active, I think only one or two if I remember correctly. Several years later, in order to facilitate the flow of funds from the American savings and loan business to the developing countries of the world, the Federal Home Loan Banks were authorized to originate these loans and sell participating interests to associations throughout the country. Because of the prior association with the program of the New York and the Boston Banks, the program of origination was limited to these two banks. The Boston Bank subsequently withdrew from the market so that the New York Bank has been the only Federal Home Loan Bank in the last five years to facilitate this movement of capital. My recollection is

that between Boston and New York we have advanced about half the total funds under the Housing Guaranty Program. In New York we have around \$340 million, and we have sold participating interests to more than 300 associations throughout the United States.

I think that in terms of the American savings and loan business, it is going to be very difficult to induce them to continue to participate in the program on a long-term, fixed-rate basis. They have suffered tremendously, and are suffering today because those are the kinds of loans they have been making through the years. All of a sudden their deposit costs have gone up and they are unable to adjust the yield on assets, and this is creating some problems. I think so far as the savings and loan business is concerned, and this may be true throughout the capital markets, that unless this program is converted to some type of variable rate scheme, it may be more and more difficult to obtain funds.

Let me very briefly mention two other institutions which, like the Federal Home Loan Banks, are private institutions, at least in the sense that there is no government capital and no government support for their operations. First is the Federal Home Loan Mortgage Corporation, a corporation that was chartered and capitalized in 1970 by the 12 Federal Home Loan Banks. This corporation is engaged in the purchase and sale of mortgages to even out the flow of funds between capital surplus areas and capital deficit areas; it also buys mortgages and creates pools and sells bonds to institutional investors, thereby increasing the flow of funds into housing. It acts much as a true secondary market in that its sales and purchases have been about equal since it was created 10 years ago. The Federal National Mortgage Association has operated primarily in the government-insured, guaranteed market and not so much as a secondary market but as a primary market. That corporation today owns about \$50-odd billion in mortgages. Its sales do not equal purchases so it is not quite a secondary market but it does facilitate the flow of funds into housing in our country. I think I should stop there and perhaps later on if there are questions I can elaborate further.

GOVERNMENT-SPONSORED LOW-INCOME SHELTER  
AND HOUSING FINANCE IN INDIA

Mr. H.U. Bijlani  
Chairman and Managing Director  
Housing and Urban Development Corporation  
India

The theme that I will propose to unfold before you will begin with a topsy-turvy sort of a world, a world which at places is almost bulging at its seams--not only because of the population explosion, but because of the the economic conditions that prevail at those places which makes the situation even more difficult.

If the answer is to be found to these two problems, the population and the economic situation, then the touchstone or the key word to any housing program has got to be affordability. When we use the word affordability, normally we associate the word only with the individual who is going to buy the house or who is going to own the house, but more important is the affordability of the government. What can the government offer or what can the government afford, especially in the context of many pressing problems which different countries are facing? What affordable shelter can be, and what it has been in my country, is the information that I propose to share with you this morning.

The Housing and Urban Development Corporation (HUDCO) has been in existence for 10 years. It was set up by the Government of India in 1970, and since then we have financed about 1,400 human settlements, with a project cost of over 1,000 crore. HUDCO's contribution has been over 670 crore. The scheme will house a population of over 4 million. Recently we have also entered the field of rural housing, which I personally feel is so important, especially when nearly 80% of our population resides in rural areas. What the situation is today and how we try to handle it are a few things that I will present.

In this topsy-turvy world-- the world which has been drawn on the scale of population rather than on the land that every country covers--you will find India and China, especially in the ancient region, almost bulging at the seams. No wonder that every third person in the world is a Chinese and every seventh person in the world is an Indian.

Much to the annoyance of many technologists, we in India normally do not use factory-made houses or prefabricated houses. When you have to produce thousands and thousands of houses almost every month, perhaps the logical course according to modern technology would be prefabrication, but there are two major factors to contend with in the prefabricated industry. Prefabrication consumes the materials that are so scarce, especially in the developing world. For example, cement or steel in many of the developing countries are imported or just not available. Besides scarcity of materials adding to the cost, prefabrication also is not labor intensive, and labor is

one force that is available in most of the developing countries in abundance. The capital cost of the equipment of the industry again adds to the prices.

The foremost factor which would inhibit the widespread use of factory-made houses is the limitation on the transportation of the finished goods. It is only within a certain distance that you can transport the finished goods at a reasonable cost. As the price of petrol goes up, month after month, every prefabricated component will cost more and more. One, therefore, would talk about on-site prefabrication rather than factory prefabrication. On-site prefabrication has the advantage of using local materials available in the region. One must also consider how profitably one can use it. Extensive research should be carried out, as it has been in my country, on how to best produce a house.

On-site prefabrication is possible in both urban areas and in rural areas. Moreover, it is cheap and easier to accomplish, and, back to my original point, it is affordable.

In looking at the income distribution of the population in India, we find that 75% of the population is what we call economically weaker--families that earn less than 350 rupees per month. About 48% of the population live around what one calls the poverty line. Although it would be difficult for these people to save, it is quite possible that they may be in a position to contribute labor (or save a little bit because even they are perhaps paying something for the shelter they are occupying). Perhaps within that capacity we can improve a shelter by upgrading and providing potable water and sewage facilities. These factors can improve the environment, and that to my mind is the first priority for both the urban areas and rural areas.

After the upgrading of the urban slums, one facility that can be provided to the poorest of the poor is sites and services. For the last couple of years in HUDCO we've been doing this on a very large scale. The funds provided are based on what we call a differential rate of interest. That is, the poorer the recipient, the lower the rate of interest and the longer the return period, thus providing all of these facilities within a person's affordability and paying capacity. The sites and services program is financed by HUDCO at a low interest rate of 4%, returnable in 20 years. For a site within 2,000 rupees cost, with roads, water supply, sewage system, and electricity, a person pays between 10 and 12 rupees (a dollar or a dollar-and-a-half in the United States) per month. This incidentally is a price which he pays in any case to some muscle man or to some politician merely for the verbal assurance that he will not be removed from his slum or from his squatter settlement where he has put his shanty or his small hut.

Another category of shelter is a skeletal house - a roof, two high walls, and a core consisting of sanitary arrangements. This sort of a shelter can be provided again at a price of about three or four U.S. dollars per month. In other words, for the person with a monthly income ranging from 200 rupees to 350 rupees, one can see that we can provide a large

number of varieties of shelter. For that portion of the population which has at least 600 rupees a month, we provide what we call a simple shelter, which again is a growing concept.

In developing these sorts of human settlements, all of us in almost all developing countries face the task of reducing the cost of construction of the structure, which, of course, is very important. The body of research that has been done has largely focused on reducing the cost of the structure. What we sometimes forget is that just under 50% of the cost of shelter is for the development of land, utilization of land. Hardly any research has been carried out in most other places on how best land can be used. The result is that many planners almost fritter away the costly land that is available in the urban area. On the land itself, one can save a great amount of money if it is put to an intensive use, if the layout is such that it takes into consideration the life-style of the people, especially in climates that are hot and humid. One can observe that most of the activities of these families are performed outdoors and not inside the house. Therefore, if one can provide community spaces with houses around them, then perhaps the land can be put to an intensive use and the services can be provided more efficiently.

When we look at the amount of money that we spend, we have to wonder whether the planner and the engineers really work out the alternatives to find out whether they have really been able to save on the length of the water lines, the size of the water lines, the quantity of water which these people use. Invariably one finds that the building bylaws or the regulations have been drawn up largely for the higher-income groups. Take, for example, the standards of 40 gallons per day per family or per person. Now if we look at the life-style of many people, we find that consuming that much water is not possible. They would not be able to afford to spend that much on water. Therefore, it is necessary that when one designs a layout especially for the economically weaker sections, one works out whether the water supply lines, the sewage lines, and the other infrastructure facilities have been designed for maximum utilization.

The research that has been done in different countries on saving on the cost of the structure shows a reasonable shelter can be provided within the affordable capacity of the poorer people. But one must consider finance, because all financial institutions do not get money at a low rate of interest of 4% or 5%. For example, in HUDCO besides a small equity that we get from the government, there are many borrowings that have to be done at the market price. We borrow from the life insurance corporations, we borrow from the general insurance corporations, we start our own debentures, and all these things would cost around 10.5% to 11%. In other words, you have to balance your expenditures and provide a mix somewhere. In the differential rate of interest system, you give these funds to the poorest of the people at 4% or 5% returnable in 20 years. As you go up to the low-income groups you provide funds at 7% rate of interest returnable in 15 years; then you go to the middle-income group, for whom you provide at 9.5% or 10.5% and the return period goes down to 12 years. When you go to the higher-income groups, it's around 11.5% or 12% and the return period can

come down to 10 years. The point was made that when financial institutions loan out the money today for a period of 15 or 20 years then the value of that money or that fund decreases; and that is absolutely right.

At HUDCO the mix and the return has been arranged in such a manner that immediately after two years of functioning the repayment of the loan that we offered jumps up to 35% and we have been able to retain this return period. Unless its money rotates, the financial institution is going to be in difficulty. I am also happy today that if the loans are guaranteed properly then the return is also guaranteed. Up until now in HUDCO we have not had a single default, and I hope we continue to be in that happy position.

HUDCO money produces not only the housing facilities but also goes toward property development and provides funds for developing large stretches of land where the services can be provided and the plots can be developed. These lots can be given to people who in turn can find money from different resources or from their own sources and put up the houses themselves. We also offer what we call the commercial system or commercial financing. The rate of interest on these loans is 14%. In other words, in this basket of financing, if you carry out a mix you end up with an average portfolio yield of about 8.5%. If your borrowing is down to about 9.5%, the amount of subsidy which the government has to pay or the organization has to absorb is very limited. It is an affordable margin for any government when the mix is of this nature.

It is also seen that if you provide 30% of your funds for the weaker sections and another 25% for the low-income groups, this 55% of funding will produce for the poorer people 85% of the houses and the remaining 45% of the funds produce the remaining 15% of the houses. That shows why social housing should be done on this scale. Nearly 90% of the people belong to the lower-income groups, and the institution is doing real social housing only when the number of dwellings, units, or number of plots it produces are also in that proportion. Because then alone one can say that the job has been well done.

Recently HUDCO, besides urban housing, has entered the field of rural housing. In rural housing the Government of India provides sites to the landless. The landless having been provided with sites, it is an effort of HUDCO to bring about programs where these people can put up their own houses. When we go to the rural areas we leave the urban technology behind us.

I would like to end up with a note of caution and a note of criticism which one often hears when you go into this sort of shelter program. It is the elite among us, the planners, the architects, and the engineers, who often feel that the approach of using local materials, putting up low-cost housing, or sites and services produce an environment which may be incongruent to our dreams or desires of having garden cities and an idyllic environment in rural areas. Now this may be so, but when one comes down to the realm of reality and looks at the abysmal poverty, one thinks of a thousand things to reduce the cost so that one can provide affordable

shelter which will make the poor man more proud of his poverty than the rich man is of his wealth. And as nature explores many paths to reach its goal, I feel so should man.

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HOUSING FINANCE AND MORTGAGE MARKETS  
IN THE PHILIPPINES:  
A CASE FOR STRATEGIC PLANNING

Mr. Florencio B. Orendain  
President, National Home Mortgage Finance Corporation  
The Philippines

This discussion will first make a brief review of the planning environment, the housing situation, and problems in the country, particularly from the standpoint of finance, which lies at the core of its serious and worsening housing backlog.

I would also like to discuss two developmental strides taking place in the country on housing finance, namely:

- (1) The introduction and development of the secondary mortgage market system, through the National Home Mortgage Finance Corporation; and
- (2) The establishment of the Home Development Mutual Fund, a nationwide savings program for housing finance among all employees, government and private, with matching contributions by the respective employers.

Central in the discussion, of course, will be the planning thrust advocated for housing finance in the Philippines, to make its shelter program a meaningful effort to solve a seemingly formidable problem.

#### Economic Background

The 48 million population of the country, comprising some 9.6 million households, suffers from a dwelling shortage of about 1.8 million units that would cost some ₱90 billion, a deficiency estimated to increase by more than 200,000 units annually.

The housing shortage traces back to several causes, largely financial.

The number one cause is the lack of savings, the basis of home-building both by individuals and the government. The prevailing low income of the people, and the deterioration in purchasing power caused by inflation, cannot allow for support over the more immediate essential needs. Only 7% of the population are able to save, 93% are dissavers. It is estimated that some forms of government assistance are needed by 89.2% of Philippine households to be able to enjoy the basic amenities of decent shelter.

The government's income, on the other hand, which has to be supplemented with foreign borrowings to support essential services and developmental efforts, cannot spare much for mass housing. Of the ₱39.9 billion national budget for 1980, only about ₱640 million has been allocated for housing development, although almost doubled to ₱1.1 billion in 1981.



Mr. Florencio B. Orendain, President, National Home Mortgage Corporation, Philippines, speaks on housing finance and mortgage markets in the Philippines.



Mr. Susil Sirivardana, Deputy General Manager, National Housing Development Authority, Sri Lanka, addresses the conference.

Direct construction of housing units by the government had by 1978 totaled only some 25,000 units. Aggravating the inadequate savings are the inflation and home-building cost spiral, pushed up not by land cost but by prices of materials, rising by about 15% annually with the oil crisis and demands from other construction sectors. Home-building costs are also influenced greatly by the very high margins that contractors and developers have to compensate for their costly money, low work volume, and slow turnover of completed inventories.

Compounding the problems of savings and costs are the meager and prohibitive housing credits. Housing loans may be available only at interest rates of 18 to 21% per annum, with short payment periods and strict security requirements, affordable only by the more affluent. It is estimated that not more than 15% of the population can afford a 9% interest rate, payment in 25 years, on base loans of ₱20,000 for the rural and ₱50,000 for the urban areas.

While the Philippines could boast of an advanced and well-distributed banking system, consisting of about 2,500 units in 1978, only a few have been inclined to write home mortgages. Financial institutions give low credit priority for housing loans because of the work required by their retail nature and because of their long-term, low-yield demands, while banks themselves are borrowing short and at high interests for their lending operations. Traditional sources of long-term funds such as insurance companies, trusts, the Social Security System, the Government Service Insurance System, and even thrift banks, are investing in short instruments. Thus housing loans share an average of only 6% of total credit allocations, compared to 34% for our agriculture and 19% for manufacturing.

Other handicaps of housing finance are:

The paucity of a supportive housing credit policy that will assure steady fund sourcing as against the competition of other sectors. Housing does not enjoy the priority given to other sectoral activities, like export development, food production, energy, and natural resources development. Neither does Central Bank give special benefits to long-term financing like housing credits.

The absence of an investment policy that should treat housing as a tool of development and not simply a dead-end expenditure, hence relegated to a social concern.

The tax and risk freedom features accorded to our housing instruments are still below requirements for open market competitiveness, considering that most financial instruments are at present overloaded with such features.

Incentives for contractors and developers are extremely poor with the high cost of financing, low housing volumes, and slow turnovers, which also account for the erratic and inadequate production and/or supply of construction materials.

The complicated and uncertain government regulations on housing. There are, for instance, no less than nine regulatory agencies involved, from acquisition, development, and construction of homes.

#### National Shelter Program

Before 1978, the housing program of the government consisted of segmented, uncoordinated, patchwork, albeit well-meaning, efforts of several

agencies, like the People's Homesite and Housing Corporation (now the National Housing Authority), the Home Financing Commission (now the Home Financing Corporation), the National Housing Corporation, the Presidential Assistant on Housing and Resettlement Agency, the Tondo Foreshore Development Authority, and the Presidential Committee for Housing and Urban Settlement.

In 1978 the Ministry of Human Settlements was organized. The Ministry is charged with the task of providing direction in the delivery of services to the people to promote their eleven basic needs, to wit: food, water, shelter, clothing, livelihood, medicine, education, energy, mobility, ecology, and sports and youth development.

Shelter, therefore, has been elevated to a national concern, under a specific Ministerial responsibility. The Ministry of Human Settlements, consequently, has been given supervisory authority over government agencies involved in housing, such as: the National Home Mortgage Finance Corporation; National Housing Authority; Home Financing Corporation; Human Settlements Development Corporation; Human Settlements Regulatory Commission; and the National Housing Corporation.

The Ministry has evolved a national shelter program that takes a total-systems approach to the country's housing problem, and features seven components, namely:

- (1) the development of a national shelter program that will target 100,000 homes every year;
- (2) the development of a national savings program for home finance;
- (3) the inventory of shelter resources, financial or otherwise, from the government and from the private sector;
- (4) the mobilization, organization, integration, and rationalization of marketing, production, and financial shelter institutions;
- (5) the operation of a secondary mortgage system;
- (6) the development of indigenous home building materials industry; and
- (7) the development of a continuing policy research for shelter.

The shelter program seeks to convert all existing policies and financial constraints into shelter resources, by proving the viability of the shelter proposition not only in social but also in economic terms.

Under no other time in the country's history than under the present dispensation, under the leadership of President Ferdinand E. Marcos, have the shelter efforts of the government been given more impetus, resources, and rational prosecution, so as to achieve substantial effect.

Model housing projects, called BLISS (Bagong Lipunan Sites and Services), are being put up in cities and municipalities. They are provided not

only with essential facilities but also livelihood components for greater viability. Various ministries and agencies of the government cooperate and contribute their facilities, even resources, in setting up the BLISS projects. They are designed to radiate their example and communal progress to their surrounding communities.

Urban renewal and land reform are pursued with resolute vigor, thanks partly to loan assistance from the World Bank.

The National Housing Authority, principal construction agency of the Ministry, attends to building social housing units and renewal of blighted urban areas.

The Human Settlements Development Corporation, the Ministry's corporate arm, recently infused with greater capitalization, handles the development of new townsites and settlements.

The Home Financing Corporation, revitalized with corporate resources and purposes, insures and guarantees housing credits for home-borrowers, developers, and community associations.

The National Home Mortgage Finance Corporation, the agency for housing finance, operates and develops the secondary market for residential mortgages and catalyzes the development of an appropriate financial infrastructure for the national shelter program.

The Home Development Mutual Fund carries out the national policy to motivate the employed and other earning groups to better plan and provide for their housing needs by membership in an integrated, nationwide savings system for such purpose, with contributory support from the employers.

#### National Home Mortgage Finance Corporation

The National Home Mortgage Finance Corporation (also called the Mortgage Corporation or NHMFC), a government-owned financial institution, was made operational in 1979 with the primary purpose of developing and operating a secondary market for residential mortgages granted by public and private lending institutions.

The secondary mortgage market is a new thing in Philippine finance. Its introduction embodies the resolve of the government and national leadership to tackle the serious housing problem with better economics and system. The objectives are to optimize the utilization and raise the level of public funds and resources committed to housing, increase the leverage of credit that financing institutions allocate for home-building, and help in making home-building more affordable by the lower-income groups.

The system adopted in the Philippines is patterned after American models but adapted to local conditions. It has to interface with domestic financial regulations and market forces.

The secondary market scheme is, in brief, a trading system for home mortgages. The paper pertaining to these transactions is bought and sold

in the financial community. Such trading constitutes the secondary home mortgage market. The primary market refers to the mortgage origination. Mortgage trading generates greater flow of investible funds to home-building, which may otherwise go to other sectoral activities.

Mortgage buying has a recycling effect upon the housing loan capability of lending institutions, thus increasing the leverage of their funds allotted for the purpose. They are consequently enabled and encouraged to grant more housing loans, with the confidence of being able to pass on the risk, and getting their loaned amounts and liquidity back in a short time by selling the mortgage loans to the mortgage banker.

The purchased mortgages are exchanged for funds of investors, usually with long-term funds like investment and financial houses, which get the mortgage yields without the trouble and overhead of origination and funds management. The funds thus generated are plowed back to home-lending, usually through the buying of mortgages from lending banks.

Introducing the novel scheme of a secondary mortgage market makes it necessary for the agency to provide central initiative in all phases of the market cycle. Thus it has opted for the system where it is the sole buyer of mortgages originated by participating banks; the warehouse for purchased mortgages; and the dealer with investors and other fund sources in generating funds out of the mortgages.

This system further enables the agency to adopt into the mortgage loans that it buys better affordability features for the home-borrower, such as low interest, long-term payment, and liberal requirements.

The mortgage buying or banking operation is done only with financial institutions, public and private (commercial and thrift banks, investment, and financing houses), accredited to participate in the agency's Home Financing Program. Accreditation is made on the basis of application and satisfaction of institutional standards.

On request of an accredited institution, the agency makes a firm and forward commitment to purchase an allocated block (volume) of home mortgages originated according to the agency's lending criteria, delivered according to stipulated delivery schedule. Actual purchase is effected upon delivery of the mortgages. The originating bank, however, continues to service, under fee arrangement, the payments on the mortgage loans.

All aspects and phases in the mortgage banking transactions--from criteria, requirements, systems, procedures, and documentation--have been fully manualized, for uniformity and guidance of participating financial institutions and home-borrowers.

The purchased mortgages are then warehoused by the Mortgage Corporation for maturing and/or dealing in its fund generation operations.

A current and initial fund generation scheme developed by the agency is the public sale of interests in a pool of purchased mortgage loans. The mortgage pool is administered under trust by a trustee bank, the Development Bank of the Philippines, for the benefit of interest-holders. The interests

are sold by means of the Bahayan Mortgage Participation Certificates, which share in the earnings of the mortgage pool in the form of stipulated interest and yields on investment.

Fund generation or sourcing is a crucial operation as it will determine the agency's ability to carry out its mortgage banking operation in support of its Home Financing Program and construction targets for the national shelter program.

The secondary mortgage market, initially developed in early 1979, is now strongly on-stream and has established its competitive presence in the Philippine financial community.

After a cautious period of foundation-setting, adopting systems and targets to conditions and practices obtaining in Philippine finance, mortgage-buying surged at the last quarter of 1980 to more than ₱200 million worth of home mortgages granted by 11 financial institutions, public and private.

This was complemented by sales of Bahayan certificates worth ₱152.8 million, as against the Central Bank flotation authority, given in the latter half of 1980, for ₱200 million.

The strong trading start registered augurs well for the secondary market operations, demonstrating its ability to support the 1981 construction target of 20,000 homes, to be supported by a mortgage-buying volume of ₱1 billion. And also the 1982 target of 30,000 homes.

#### Home Development Mutual Fund

The Home Development Mutual Fund (HDMF) has been established by statute as a savings system for housing finance among government and private employees with counterparting support from their employers. It started on a voluntary basis. The employee-member volunteers to save 3% of basic salary every month into the fund, and his employer is obliged to contribute an equal amount.

Success of the fund, however, whose administration was transferred to the Mortgage Corporation in March 1979, has led to the national policy of making its coverage mandatory on all employees and employers.

The salient features of the amended fund are:

- (1) Mandatory coverage for all employees also covered by the Social Security System and Government Service Insurance System, a potential of 8 million members, and the employers.
- (2) Matching contributions by the employees and employers, however, shall be graduated, to wit: 1% of basic monthly pay in 1981; 2% in 1982; and 3% in 1983 onward.
- (3) "Basic monthly pay," however, shall be computed at not more than ₱3,000.00.
- (4) The fund shall be a corporate, self-governing entity. Its eleven-member Board of Trustees shall have the Minister of

Human Settlements as Chairman, and five members representing the employee and employer groups.

- (5) The fund, provident in concept, shall be wholly owned by the members, the contributions and earnings accounted individually, portable and payable to each member upon termination of membership.
- (6) Membership term shall be 20 years, except when earlier terminated by retirement, disability, death, and other causes.
- (7) A member may apply for a housing loan, either from the fund or other related sources. Housing is its primary investment.
- (8) Coverage may be waived or suspended for employer or employee groups with superior provided and/or housing plans, or by reason of nature of employment, condition of business, and other justifications.
- (9) The fund may be treated as a substitute retirement plan under Labor Law requirements.
- (10) Administration expenses shall be limited to 2% of the net fund asset of the previous year.

After 20 years or 240 months, the member gets back all his personal contributions, plus those of his employer, plus earnings.

In addition to the provident or multiplied savings feature, the member is entitled to apply for a housing loan of not more than P80,000 payable in 25 years at 9% interest per annum. A married couple who are both members may combine their loan entitlements. Loan size is determined by monthly paying capacity reckoned at not more than 25% of gross family income, based on that of the member plus not more than two other household members undertaking as co-borrowers. An P80,000 loan will require a monthly payment of about P700.00. For those who could afford to pay for a bigger loan, arrangements may be made to secure the excess portion as open housing loan.

The housing loans will not be serviced at this initial stage directly from the fund, but will be obtained under the Home Financing Program of the Mortgage Corporation, from the network of participating financial institutions.

Considering the graduated contributory scheme and phased implementation of coverage, it is projected that in 1981, the HDMF monthly collection, starting in March, will be P42 million or P420 million up to year's end; in 1982, P109 million monthly or P1.3 billion for the year; and in 1983, P183 million monthly or P2.2 billion for the year.

Despite the spin-off of the HDMF from the Mortgage Corporation, the symbiotic relationship will continue. The latter will support the housing program of HDMF for its members, and the latter will invest its funds in the Bahayan certificates.

## Strategic Planning for Housing Finance

With due consideration given to the planning factors discussed above, the Mortgage Corporation, as an agency for housing finance, has chosen strategic planning as its major planning mechanism/technique.

Strategic planning is the process of making decisions which will tend to optimize the organization's future position despite random or organized changes in its environment. It recognizes the simultaneous application of two processes in planning, namely marketing process and planning process.

The following discussion outlines the specific plans that the Mortgage Corporation resolves to undertake in its corporate lifetime as dictated by its corporate mission, goals and objectives, and prescribed nature of operation.

### 1. On the corporate mission

The Mortgage Corporation operates first and foremost to bring to the Philippines the actual operation of a Secondary Mortgage Market System (SMMS) patterned after the successful systems in the United States but adopted to local conditions and needs.

As a corporation fully subscribed by the government, NHMFC, through its operation, makes the government an active initiator and participant in stimulating a healthy climate for housing finance in the Philippines. Operationally, the system works by developing a national pool of home mortgages which serves as a base for trading in the financial community.

### 2. On the Operationalization of SMMS in the Philippines

The SMMS, being novel and complex as a system, has proven to be a great challenge to the ingenuity of the NHMFC leadership, particularly at a time when the SMMS was just being conceptualized and introduced to the local financial community.

To gain acceptance and credibility for the SMMS, NHMFC initially capitalized on the following actions as a strategy to attract and gain foothold in the market:

- a) Establish firmly the terms and conditions of buying and selling components of SMMS;
- b) Use the firmness of the terms and conditions of buying and selling as the foundation for planning by the buyers and sellers of mortgages;
- c) Translate the plans for the buyers and sellers into concrete terms so that sellers of mortgages can be paid in cash upon delivery of mortgages to the pool and at the same time give buyers of mortgages certainty of return on their investment expressed in yields, maturities, risks, and securities.

- d) Instrument all these commitments to buyers and sellers in banking forms, with the full faith and guarantee of the Republic of the Philippines;
  - e) Use the national pool of mortgages as a profit and loss center so that it can achieve the stability and confidence of private investment with government assuming the risks and expressing policy support towards housing in specific terms as definition of risks, interest subsidy, tax sheltering, liquidity, and fiscal and monetary support.
3. On the Marketing of SMMS

a) Open Market System

NHMFC shall market the secondary market system with all types of financial institutions--government and private--to facilitate its development as the principal financial system for housing finance in the Philippines. This marketing scheme might yet prove motivating and productive in that the combined resources of the government for housing finance in the Ministry of the Budget, Central Bank, the Treasury, Social Security System, and the Government Service Insurance System, as well as in the Ministry of Human Settlements, National Housing Authority, Home Financing Corporation and others may serve as leverage to attract funds from the private financial institutions.

b) Buying System

Translated into concrete terms, the buying system of SMMS is anchored on the commitment of NHMFC to purchase from financial institutions the mortgages granted to the Filipino home-borrowers in packages of at least ₱1 million each. These mortgages are pooled together for maturing and for funds generation purposes under a trust bank, the interests of which become the base of the selling component of the SMMS.

c) Selling System

To support its mortgage buying program, the NHMFC has developed the Bahayan Mortgage Participation Certificate (BMPC) issued against the interest in residential mortgages loans purchased from the originating financial institutions which have met the requirements of NHMFC's Home Financing Program.

The Bahayan Certificates are offered up to a target aggregate volume of ₱1 billion, classified into series A and B earning to the extent of 8.5% and 14% per annum, nontaxable and taxable, respectively. The certificates are issued in denominations of ₱5,000, ₱50,000, ₱100,000, and ₱1,000,000 and shall be payable on a deferred basis from

the issue date--90 days from Series A and 60 days for Series B.

To maintain volume-balance between outstanding certificates and the mortgage in the trust pool, a Sell-Back Option System is provided in the Bahayan issue. Six years after the date of issue, the BMPC holder may surrender it to Trustees Bank and either collect its Sell-Back Price or exchange it for another certificate of the same par value within the Sell-Back Option period indicated in the certificate. Similarly, NHMFC may purchase back certificates anytime before the Sell-Back Option Date upon publication of notice in any newspaper of general circulation for three weeks.

It should be noted that SMMS segregates the role of the many participants in the housing industry and allows for differentiated diagnosis and therapy for each type of participants at different times and therefore allows for better timing and programming.

#### 4. NHMFC Concerns Other than SMMS

To see to it that the secondary mortgage market stays viable as a financial support system to the housing industry, NHMFC has catalyzed the following developments:

- a) Housing ventures, both by government and private enterprise, should be designed within the framework of complete economic viability.
- b) Investment in housing should be recycled so that different participants in the entire financial process are made to participate only to the extent of their respective capacities. To illustrate, it should be established that:
  - 1) Developers should only be concerned with acquisition and development of land, construction of houses, and selling of finished structures.
  - 2) Financial institutions should be concerned only with providing short-term construction finance and origination of mortgages.
  - 3) Concern of investors in housing should be limited only to investment, management of their portfolio, and evaluation of mortgage-backed government securities.
- c) Cost of construction should be brought down to a level where contingencies and uncertainties which are added on to the price are eliminated and turnover of participants in the housing finance process is increased. Ideally, such a condition can bring about the following:
  - 1) low cost of homes

- 2) housing becomes a profitable and economically viable proposition to the participants in the process
- d) A planning system for housing finance should be offered to the government which is designed to provide for a coordinated effort in economic, monetary, and fiscal planning such that the different forms of intervention and support to such a planning system could be consolidated, unified, and controlled
- e) NHMFC should always allow for flexibility in all the systems that it establishes so that desired changes could be effected with relative ease. To illustrate:
  - 1) Government can express yearly the desired housing effort in the regions in a policy decision.
  - 2) Government can express the volume and cost of money that can be moved to the housing sector in specific terms through the SMMS.
  - 3) Government can coordinate and consolidate fragmented commitments of the different agencies and institutions which are at present expressed in unrelated agency programs.
  - 4) Government can plan housing finance in relation to its other concerns such as food, energy, exports, natural resources, education, and others.
- f) Housing costs must be made affordable by a progressively growing number or segment of the population, particularly the lower-income groups.

### Conclusion

A. The Government must recognize that the housing program and finance can succeed only with the following factors:

- 1. Optimum support and participation by the private sector, whose combined resources and technology are far superior to those of the government.
- 2. Framework of economic viability.
- 3. Savings generation and mobilization, savings being the basis for home-building.
- 4. Conviction among policymakers in the validity of the shelter proposition.

B. Government systems must not compete against but rather complement each other--the higher the complementation effected the better for the housing concern and related activities.

C. Housing finance should be the subject of specific planning by economic, fiscal, and monetary authorities, expressed in quantitative terms, such as budget allocations, Central Bank credit, domestic and foreign credits, tax shelter limits, and others. The key is planning translated in government commitments and the free play of market forces.

D. In order that NHMFC can plan the level and nature of its intervention in housing finance with present policies already considered, there is a need to express in more specific terms and amounts the commitments of government to fill the gap between the plan (leading program) and the cost of money obtainable by the SMMS in the open market.

E. Housing finance must eventually decentralize so that municipal, provincial, and regional governments can raise funds on their own to finance local housing needs. Initially, it is recommended that Premyo Savings Bonds, which have very attractive features, be used aggregately as a local housing finance instrument, interfacing with the SMMS at the national level.

F. Government must adopt an interest subsidy program in specific terms as a policy to keep housing finance economically viable to financial institutions to prevent SMMS from being relevant only to a very few or remain as an unattractive investment option to financial institutions. If NHMFC is able to establish leading policies that will make long-term low-cost housing credits available to as many people as possible, there is likely going to be a gap which can only be filled by an interest subsidy either to the borrower or financial institution. If this gap were not seasonably provided for, housing finance becomes unfeasible and the government may eventually have to assume the total burden of home financing, which is likely to be much bigger than the proposed interest subsidy schemes.

G. In the development of an interest subsidy system for housing finance, it is advocated that the lotto be adopted and the government share be allocated primarily for housing interest subsidy. The expected volume from a national lotto may just be enough to support a genuine national housing program and increase level of investment in housing at par with international prescriptions.

H. As the Home Development Mutual Fund develops over the years into a specialized source of big savings for housing, it is recommended that HDMF interface fully with the SMMS and other savings institutions so that the future build-up of resources can immediately be translated today into a massive national program.

### Key Results

The objectives and strategies thus advocated aim to achieve the following key result areas:

1. The elevation of housing from a social concern to a major economic factor, and a take-off base for planning other economic developments.

2. The massive conviction by all sectors and individuals concerned that the shelter program will work out, and the translation of the conviction

into immediate action programs that will remove the defeatist rut of apathy and resignation.

Instead, people will be motivated to save, plan, and work harder.

Wages, hence the affordability level of earners, must be allowed to rise to the highest tolerable limit.

Developers, financing institutions, realtors, and materials suppliers must unleash their respective capabilities and resources for the housing effort.

Finally, government must lead in committing to the maximum to the shelter cause.

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LOWERING UNIT COSTS AS A STRATEGY IN  
THE SUPPLY OF LOW-INCOME RURAL SHELTER

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and

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First, on behalf of the Sri Lanka Delegation, let me extend a warm word of thanks for enabling us to participate and share in this very valuable professional and learning experience and, what is more, a very valuable human experience. For the Sri Lanka presentation we have chosen to deal with rural housing and the specific topic of lowering unit costs as a strategy to increase the supply of low-income rural shelter. The operative words in the statement are lowering costs and increasing supply. The emphasis up to this point in this conference has been on the demand side, of raising funds, channeling funds into housing, and creating institutions to collect and distribute funds. Our experience in Sri Lanka was specifically in the area of supply. We have gone through some very exciting experiences and we thought that it would be more realistic to talk about what we have actually done.

### The Setting

The Sri Lankan rural housing scene is really made up historically of two consecutive programs. The old program was dubbed the Aided Self Help Housing program, and covers the period 1972-77, while the new program covers the period 1977 to the present, and is called the Rural Housing program. The difference in nomenclature is noteworthy. The two programs are related to the periods in office of two governments, the 1970-77 government and, from July 1977, the present one.

The first Aided Self Help (hereafter ASH) housing scheme was started in the suburbs of Colombo at Hekiththa in December 1972. Under the old program 61 ASH housing schemes comprising approximately 2,270 houses were started, mainly in rural and semirural areas. In the history of aided self-help housing, this pioneer program has three main achievements to its credit. First, it successfully tested the validity and proved the acceptability of self-help as a method of low-income shelter; second, it formulated what is yet the ASH housing package; and thirdly, it worked out the management procedures for implementing such schemes.

Relative to the overall housing program of the previous government, which may be put between 7,000 and 10,000 units, that of the current one is both quantitatively and qualitatively different. Quantitatively, the program aims at building 100,000 new housing units during 78/79 to 82/83. Out of this, rural housing accounts for 50,000 units. Relative to both pre-existing and current experience, a state program of this magnitude in housing has made it a leading

sector in development terms. The changed quality lies in many new approaches being generated. Many new shelter issues are being raised and a new spirit of inquiry is in the air.

Before going further, let us familiarize ourselves with the basic content of the present Rural Housing program. It comprises three subprojects, each with its own content.

<u>Subproject</u>	<u>Package of Items</u>	<u>Construction Method</u>
1. Aided Self-Help Housing Schemes	<ul style="list-style-type: none"> <li>- houses and latrines</li> <li>- materials for wells or water supply</li> <li>- materials for internal roads</li> </ul>	- aided self-help
2. Model Villages	<ul style="list-style-type: none"> <li>- houses and latrines</li> <li>- materials for wells or water supply</li> <li>- materials for internal roads</li> <li>- access roads</li> <li>- community and commercial buildings</li> <li>- playgrounds</li> <li>- electricity</li> </ul>	- aided self-help
3. Fishermen's Houses	<ul style="list-style-type: none"> <li>- houses and latrines</li> <li>- water supply</li> <li>- internal roads</li> </ul>	- direct construction

Out of the three subprojects, the smallest in size is the Fishermen's Houses, whilst the largest is the ASH schemes. While both the ASH and the Fishermen's Houses are limited to the phase of construction, the Model Villages is a long-term program comprising dimensions of social and economic development in addition to the construction dimension. It is appropriate to comment here that the Model Villages is called the Village Reawakening Program in the vernacular, and it has captured the imagination of the rural people. This is also the fastest moving project out of the three.

All self-help Rural Housing projects involve the supply of materials at site by the state. In addition, the land, the layouts, the house types and technical advice and supervision are provided by the state. The settler's contribution consists of all the skilled and unskilled labor for infrastructure, and the erection of a temporary store for materials. While the land is given on a nominal lease, at present only about 70% of the total cost is recovered, without interest, in monthly repayments. The rate of repayment is fairly arbitrarily fixed from the centre--currently it is Rs. 50 or \$ 2.70 per month--and is over a thirty-year period.

Low incomes are defined as those earning a monthly income of between Rs. 250 and 550 or \$ 14 - 30. The selection of settlers is done on a list provided by the Member of Parliament, which is then checked for conformity to basic criteria. After the cost is repaid within the stipulated period, the house will

be owned by the settler. The spread of the program island-wide has to be emphasized. In a majority of cases, lands are found from state lands--many developed--while in the balance of cases, land is acquired from private sources. These are the essential features of the program.

Since one of the key issues in the question of supply has been the impact of inflation, a consideration of the general perspective has necessarily to take in the macro-economic scene. The new government initiated a far-reaching package of economic reforms, consisting basically of withdrawal of exchange controls and liberalizing exports and imports, elimination of subsidies and recycling those savings into development, reliance on the private sector to provide the impetus for growth and output, attraction of foreign capital and protection for it, three massive "lead projects" (Mahaweli Development, Free Trade Zone, and the Greater Colombo Development Scheme) aimed at eroding the unemployment problem and raising production, rehabilitation of the plantations, developing foodcrop agriculture, higher interest rates for domestic savings, and a major program of infrastructure development. This package was supported by the World Bank and the IMF.

These potent drives in the macro-economic scene were paralleled by equally strong responses in the shelter sector. The state program of 100,000 houses involved a direct construction component of 23,000 units concentrated mainly in and around the capital city, Colombo. The responses from the private housing sector were as vibrant. The infrastructure program of the state was also massive. This spurt took place in the context of a steady drain of skills to the Middle East, a rapidly rising demand for materials, and increasing imports for the shelter sector. Global inflation compounded this. While this led to an unprecedented "building boom," it also overheated the construction market to a point where prices and costs zoomed within months. For example, between early 1979 and early 1980, the overall costs of the housing program jumped from Rs. 2.7 billion or \$ 150 mn. to Rs. 6.7 billion or \$ 372 mn. in current prices and from 4.7% of total public investment to 14.0% of total public investment (World Bank Report, April 1980).

This would be the point at which to pose the question as to the basic assumption on which the 100,000 houses was conceived. In other words, did the programmers in 1978 envisage anything like the subsequent situation to be the climate in which the program would have to be implemented? With hindsight, of course, it is now possible to discern that the 1978 program was predicated on unlimited and easily available state funds, and general optimism in regard to the supply of building materials and skills mainly from the private sector. It is in the light of this historical and general economic backdrop that we have to examine the actual experiences of implementing the Rural Housing program and the supply of low-income rural shelter.

#### The Years 1978 and 1979

Though the program dates from 1978 and the first program budget was for that year, actual performance was negligible.

Units		Expenditure Rs. mn. (\$ mn.)	Percentage of Allocation
Under Construction	Completed		
1,116	369	31.2 (1.7)	100

The first six months of 1979 were taken up with a significant institutional transition, which proved critical for the program. This was the inauguration of the National Housing Development Authority in April 1979, whose task was to take over and implement the whole construction program of 100,000 houses from the National Housing Department. It was with the new District Managers of the Authority going to their command posts in the periphery in June 1979, that the program had the management wherewithal to stir and move. Particularly for rural housing, with its inherently diffusive, grassroots bias, such an institutional reform proved indispensable.

By mid 1979, the situation was one of the money being there--Rs. 72 mn or \$ 4 mn.--but the houses not forthcoming. In other words, the urgent task at hand was to get the program moving. Though the starts were slow coming, there was a large portfolio of startable projects which lay piled up in the files. The first thing that the authority did was to totally decentralize this program. District managers were given full authority to investigate, plan, and implement rural housing schemes without any reference to the centre. The only intervention by the centre was to give them indicative targets as to the needed starts, which were 200 units per electorate before the year was out. (There are 160 electorates and 168 Members of Parliament.) The cumulative tally at the end of the year is revealing.

Year	Units		Expenditure Rs. mn. (\$ mn.)	Percentage of Allocation
	Under Construction	Completed		
1978	1,116	369	31.2 (1.7)	100.0
1979	13,197	1,524	71.0 (3.9)	94.6

The radical decentralization had paid rich and immediate dividends. The leap in starts was indicative of the response by the rural people and the popularity of the program.

It is important to note that from mid-79 to November-December '79--the months of the national budget--there was total openendedness in the program. This openendedness related to the number of units per electorate--literally no limits were fixed. The feeling was that the program needed urgent resuscitation and the question of numbers was left open. The lackadaisical progress made till then made this appraisal realistic. This accounts for the dramatic explosion in numbers during a few months.

However, this blithe and heady openendedness received a shock with the November '79 budget, when the Treasury sounded an alarm regarding financial constraints. They came out clearly with the position that no supplementary provision or upward revision of overall program allocations--Rs. 778 mn. or \$ 432 mn.--would be entertained and cautioned us about being liberal regarding funds. Shortly after, in February '80, another danger signal was flashed when the price of locally produced cement was equalized with that of imported cement, causing an overnight rise from Rs. 35 per cwt. or \$ 1.9 per 51 kl. to Rs. 85 per cwt. or \$ 4.9 per 51 kl.

The first and immediate response by us to this call for restraint took the form of imposing electoratewise ceilings. A ceiling of 350 rural houses per electorate was worked out and it was to compose all three subprojects. The

deeper and more durable response directly leads us to the subject of this paper--the question of costs and supply.

### Costs Become an Issue

The first serious critical evaluation of the experience up to then was done during the first months of 1980. This was assisted by one of us taking a short respite abroad attending a seminar. We would argue that the leap of the previous months was an essential precondition for such an evaluation to be made. For before that, there was hardly a content and character to the program. It had to grow to the point where it could throw up problems from within.

The evaluation engaged two sets of interpenetrating questions at one and the same time. One was fundamental and theoretical--what is, and should be, the basis of rural housing in contemporary Sri Lanka? The other related to specific problems which were articulated from the field--physical planning based on contours, new house and latrine types which would be authentically rural and functional, problems of sustained material supplies and ensuring quality, and finally, the issue of rising unit costs. All those who had committed themselves and identified themselves with the program were mobilized for this inquiry. This meant a small group of managers, two foreign architects, and a foreign sanitary engineer. Through this evaluation exercise, the issue of unit costs came close to being in the center of the picture.

This had to be the case because all questions of costs have to do with building values and questions of building values have to do with costs. The two sets of questions that the evaluation confronted were closely tied to the source and quality of the building values inherent in the current practice.

The L 2 house type plan has evolved into becoming the mainstream plan from its inception in 72/73. It was very much a product of conventional values--it was basically a box of burnt brick and cement with an asbestos or tiled roof. Apparently either because of the supposed abundance of funds, or because of a not unfamiliar complacency, or because of both these factors, the issue of cost escalation of the L 2 plan never became a serious issue till now. But the moment the kind of searching questions asked in the evaluation began to be broached, and that in the context of financial constraints gathering on the horizon, a confrontation with the issue of rising unit costs was inevitable.

Given below are the cost streams for the L 2 and L 4 type plans, which have been, though a change is imminent, the mainstream plans.

<u>Type Plan</u>	<u>Material Costs for Selected Years Rs. (\$)</u>			
	1973	1978	1979	1980
L 2 (333 sq.ft./30 sq.mt.)	3,500(194)	75,000(417)	15,000(833)	18,000(1 000)
-Costs per sq.ft./sq.mt.	10.50(6)	22.50(14)	45.00(28)	54.00(33)
L 4 (382 sq.ft./35sq.mt.)	-	-	18,000(1000)	24,000(1,333)
-Costs per sq.ft./sq.mt.	-	-	47.00(28)	63.00(38)

These costs include the cost of a detached latrine. The L 4 plan was a direct takeoff from the L 2 and provided a kitchen on the outside.

With a minimum of reflection it was easy to perceive that the problem or the disease lay in the wrong or false building values being used in a rural housing program. When cement prices were soaring, we had chosen to transport it from the port to distant and interior villages, which was wasteful of both building time and money. Was this really low-income housing, or was it low-income only in relation to the much higher unit costs of direct construction? Wasn't the conclusion inevitable that conventional building values could respond only in the negative to the forces of inflation? Given this situation, what were percipient and innovative people in the country at large doing? Wasn't there a clearly noticeable and spontaneous return to the use of traditional materials and techniques? Wasn't there an alternative set of building values which could respond positively to the pressures of inflation?

These questions set in motion a debate on the basis and values on which the Rural Housing Program should be carried on. Conventional wisdom came back on the rebound: the technology of local materials and local techniques had been tried out by the previous government and it had been rejected by the people, our people have passed the stage of accepting mud-based houses, a change in the suggested direction would seriously compromise the program politically, etc. These positions were being held consistently right down the ladder starting with the policymaking levels. It was clear that conditions were not yet ripe for breaching them. Therefore two courses of action were decided on: first to sustain and whenever possible to intensify the debate; second to launch out on a minority program of experiments with local materials and techniques. A precondition for this experimental program was to identify a Member of Parliament who would volunteer to do something unconventional. That is the reason why it could not be tried out more widely than was actually done.

### The Experimental Program

The Gallenikanda Aided Self-Help housing scheme in the Matugama electorate in the Kalutara District is the first of these experiments. Fifty-two low-income houses are being built in a settlement that is about four decades old. With the active support of the Member of Parliament and the settlers, it was decided to use the traditional construction material techniques of the area as well as design a new house type with a more rural character. A 425 sq.ft. or 39 sq.mt. house was designed. It was estimated to cost Rs.12,000 or \$ 667 in March '80 and now it is costing around Rs. 14,000 or \$778. The main construction material is a yellow local rock, which is bonded with mud mortar and tien cement plastered. The rock is called "ketagal" in the vernacular. The design embodies verandahs both at the front and rear, and spacious rooms. The scheme was planned in January and construction began on February 7, 1980. By the end of the year, 14 houses had reached roof level, while the rest were in varying stages of construction. While the standard L 4 is costing Rs.63 per sq.ft. or \$38 sq.mt., this much bigger and better house is costing only around Rs.33 per sq.ft. or \$20 per sq.mt. The roof is of asbestos.

The Ratnodagama Model Village in Wevegama in the Uva-Paranagama electorate in the Badulla District is the second experiment. The site is a steep tea estate in the high tea country and is extremely rocky. Again with the support and cooperation of the Member of Parliament and the settlers, it was

decided to break the rubble on the site itself and build the conventional L 4 house with rubble and mud mortar with cement plastering. Of course the walls would be almost double the size of burnt brick. The roof was asbestos. The 126 houses were started on January 5, 1980, and were completed and declared open on January 17, 1981. Using burnt bricks would have been unusually expensive here because of heavy transport costs, and what is more, then the rubble available from excavating foundations would have been wasted. A guesstimate would put the conventional costs at approximately Rs. 25,500 or \$1,417, whereas the alternative costs is Rs. 17,000 or \$944. The costs per sq. ft. are Rs. 65 and Rs. 43, respectively, and the cost per sq. meter is \$39 and \$26, respectively.

A single experimental mud house was built at the Marthagramam Model Village at Periyakunchikulama in the Mannar electorate and District. Another new house plan incorporating most of the Gallenikanda features was used. The house was made of rammed earth blocks with mud floor and plastering and tile roof. The house is 490 sq. ft. or 45 sq. mts. and the material cost was Rs. 13,600 or \$755. The cost per sq. ft. is Rs. 27.75 and the cost per sq. mt. is \$16.77. All the 50 other houses are of the L 1 (revised for Jaffna) type and each of them using cement-sand blocks cost around Rs. 18,000 or \$1,000 per sq. ft.; the conventional house costs Rs. 46 per sq. ft. and the cost per sq. mt. is \$22. The house was completed in October 1980.

The next in the experimental series was another single mud house at Wewsirigama Model Village at Kalalagama in the Hiriyala electorate in Kurunegala District. This was a late addition to the 31 L 2 type houses. The traditional wattle and daub technique was used and with a new type plan. The house is 221 sq. ft. or 20 sq. mts. and has a small veranda, two rooms, and a kitchen. The roof is tile. The cost was Rs. 8,400 or \$466. The cost per sq. ft. is Rs. 38 and the cost per sq. mt. is \$23.

The fifth experimental house was another single mud house in Sandungama Model Village in Mahapthanagama in the Hambantota District. Once again this was an ad hoc addition, and provided an opportunity for experimentation. This, too, was made of wattle and daub with tile roof. It was 245 sq. ft. in size and had a veranda with two small rooms. The cost was Rs. 9,761 or \$542. Per sq. ft. it costs Rs. 40; and the cost per sq. mt. is \$24.

All the above costs were only for materials.

A few other special advantages accruing from this technology may be noted. Instead of the outside supplier of materials, here we have the settler himself acting as either collector or maker of materials. Hence he is the direct benefactor in the material supply operation also. He is paid an incentive for this, calculated at one-third the cost of the equivalent for conventional materials. Then there is a much bigger overall involvement by the settler and his family. There is also a greater utilization of skilled workers from the village. Finally there is either a net saving in building time, or a more harmonious and organic, though not necessarily faster, organization of time.

We used every one of these experimental houses as a propaganda object. Whenever it was in a Model Village, we made a point of showing it to the Honorable Prime Minister, who showed equal curiosity in studying the experimental houses. We believe that these essays in communication came in very usefully a few months later.

This limited experimental program went on apace with the conventional one. Fresh problems visited us in 1980.

### 1980 - Crisis Year

From August '80 the government experienced difficult liquidity problems and the required allocations were not forthcoming from the Treasury. This held up our payments to the Building Materials Corporation (B.M.C.), which is our monopoly supply channel for materials. This meant that the B.M.C. could not pay its local suppliers. This situation did not improve for the balance period of the year and there was a virtual stoppage of supplies for the program. In addition, we had overspent our year's financial allocation. The cumulative tally for the end of 1980 now reads as follows:

Year	Units		Expenditure		Percentage of Allocation
	Under Construction	Completed	Rs.M.	(\$M.)	
1978	1,116	369	31.2	(1.7)	100.0
1979	13,197	1,524	71.0	(3.9)	94.6
1980	17,828	8,422	221.0	(12.2)	170.0

Even apart from these particular financial problems, it was becoming clear that such a heavy and concentrated call on materials caused breakdowns in supplies and also sent up the prices. The last four months of 1980 were hard going. There was a threat posed to the overall program. For now, what was at issue was none other than the sustainability of the program. At the rate we were going, was it possible to complete the balance of 25,000 houses with the remaining funds?

It was now apparent that progressive increases in unit costs simply meant cutting back on the overall balance program. The Treasury position was very firm--not a cent more than what was promised. The choices open were starkly clear: rethink and readjust the program radically, and carry on, or reduce the 50,000-house target.

It was in this situation that the debate was revived with fresh vigor. Conditions seemed ripe now for more sympathetic consideration. There were the positive experiences of the experimental program at hand. There were also the Honorable Prime Minister's favorable reactions to the alternative types he had seen. The evidence was now clearly available for us to show that it was technically possible to build for Rs.12,000 to Rs.15,000 (\$667 to \$833) a bigger and better rural house, instead of the conventional house which costs around Rs.22,000 to Rs.25,000 (\$1,222 to \$1,388).

When the matter was taken to the Honorable Prime Minister, he needed no special pleading or persuasion. From his own reflections on what he had seen of the alternative houses, he himself had come to believe that the basis of the program should be local materials and local techniques. The point was made that not only were we returning to the source, rediscovering it and developing it, but that we were doing so without in any way compromising the quality or the size--the values--of the conventional houses we had been building up to date. Our alternative position was patently clear. We were not

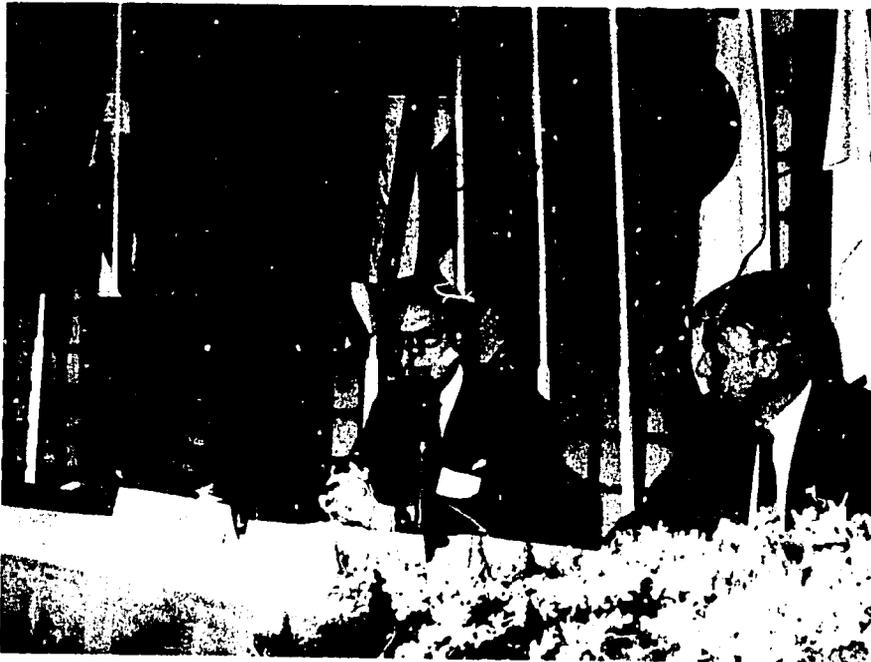
retreating; we were not resigning ourselves to a second best. On the contrary, we were doing what is manifestly right, and should have been done before. We had gone full circle and answered the theoretical question we posed to ourselves earlier in the year.

We would build bigger, better, and more beautiful houses for much less. The benefit to the settler would not only be a more organic and "personal" living space, but also a much reduced burden of repayment. The outcome was that the Honorable Prime Minister decided to radically alter the rural housing policy. From 1981 onwards, it would be compulsory for all rural housing to be of local materials with local techniques.

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Dr. Maurice Mann, Vice Chairman, Warburg, Paribas, Becker, Inc., San Francisco, U.S.A., discusses mortgage finance and financial markets.



Mr. Miner Warner, Vice President and General Manager, Salomon Brothers, New York City, U.S.A., (left) is shown here with Mr. Jonathan Lindley, Executive Vice President, National Savings and Loan League, Washington, D.C., U.S.A.

## MORTGAGE FINANCE AND FINANCIAL MARKETS

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The issue of developing and maintaining efficient mortgage finance systems is not one which is unique to any single country. The critical situation in housing and mortgage finance cuts across the spectrum of developing and industrialized countries. While most countries are not on the brink of a national disaster, it is more than just a calamity when housing output is far short of potential demand, when mortgage lenders, be they government or private, have increasing difficulty in affording lendable funds, and when borrowers, particularly low-income families, find it difficult, if not impossible, to obtain or carry a mortgage.

The core question is how to get enough money into housing to accommodate, on favorable terms, the growing number of families that need affordable housing. Mortgage lending authorities must meet the issue of accessing sources of funds from both traditional and nontraditional sources. Clearly, there is no easy or simple solution.

World economic conditions have intensified the problems of securing adequate funds for housing finance. The major elements of the recent unfavorable economic and financial environment include a marked slowdown in the growth of real economic activity, high and rampant inflation, and high and volatile interest rates. Given these elements it has been difficult for the mortgage finance structure in any country to function successfully, particularly when the structure is based on constructs such as deposit interest-rate ceilings, heavily subsidized mortgage interest rates, and the fixed-rate, fixed-term, fully amortized mortgage.

If we could change the economic and financial environment--eliminate inflation, restore interest rates to low levels, achieve a balance-of-payments surplus--we could return to the traditional methods of mortgage finance. But without such a fantasy materializing, we are going to have to live with existing conditions. As a result, we need to put in place the tools and techniques which make it possible for mortgage lenders to obtain funds and then to shift them into the hands of mortgage borrowers, on appropriate terms. In a word, we have to adapt to the realities of the existing environment and to develop mortgage-finance systems that will work efficiently and effectively.

One major reality is that housing demand in the 1980s will be strong. On inspection of specific numbers projected for potential housing needs, given the low place of housing in the framework of national priorities in most countries, another reality is that it will not be easy to attract funds into mortgage finance. This should not be surprising since housing seldom has an easy time competing on its own for funds. Thus, it is the supply-of-funds side of the financial equation in housing that needs to be addressed. The basic question is, how can the volume of financial resources available in an economy be better directed to satisfy the demand for housing? The answer lies in coming to grips with at least three major issues:

1. The need to increase the size of the available pool of savings in the economy;
2. The need to improve the ability of mortgage lenders to tap that pool, on competitive terms; and
3. The need to develop better techniques to move funds, on favorable terms, to borrowers, especially first-time borrowers.

The third major issue can be dealt with briefly because the subject of alternative mortgage instruments will be discussed later in the conference. Be that as it may, it is imperative that we move quickly toward developing the instruments that can bring funds to mortgage borrowers effectively and efficiently, and on affordable terms. This is no easy task, given the cost of funds to lenders and the high and climbing price of housing. No matter what form new mortgage instruments may take, it is clear that they will have to possess characteristics similar, if not directly comparable, to those of the instruments and techniques used by mortgage lenders to obtain the funds they intend to lend to borrowers. In turn, this suggests that lenders, in raising funds, should consider a wide variety of possibilities with respect to maturity range, rate variability, up-front payment flexibility, equity or asset participation, etc. This will all be to the good if the problem of affordability is resolved, with respect to both the price of the house and the structure of the instrument financing that house.

Turning to the first major issue--the need to increase the available amount of savings in the economy--this is obviously a matter of great national concern. For a host of reasons--including inflation and its unfavorable impact on economic activity and public psychology--savings in many countries are not increasing sufficiently. Economists will tell you that there never are enough savings to go around, or to satisfy all of the needs of an economy. In a nutshell, the pool of savings available to finance plant, equipment, industrialization, and housing is inadequate to finance the present needs for funds.

New policies and programs need to be introduced to encourage more saving under present circumstances. One obvious alternative is to turn to the use of tax and other incentives to stimulate additional saving out of current income. Savers want, need, and should have incentives to save that provide a market rate of interest on their funds, protect principal and assure a real rate of return, and contain sufficient flexibility and variability of both interest rates and maturities, to permit continuous adjustment to changing economic and financial conditions.

The second major issue is the need to improve the ability of mortgage lenders to tap the pool of existing savings, which, hopefully, is destined to become larger, and to do so on competitive and favorable terms, so that additional funds can be transferred into housing. If the pool of savings is indeed increased, by whatever means, it would be of little or no avail to housing if mortgage lenders were unable to stake out a claim on a reasonable portion of that pool.

The need to improve the ability of mortgage lenders to tap available funds takes on additional importance. As background, it should be remembered that mortgage lenders, for the most part, are financial intermediaries that

historically have relied on serving as the link between sources of funds--savers and savings--and users of funds--borrowers. As such, mortgage lenders, principally thrift institutions, depended on a stable base of funds that could be counted on to be available under most circumstances. In the past, thrift institutions depended heavily on direct, personal, over-the-counter types of funds--deposits. In virtually all countries there is a steadily widening gap developing between the demands of mortgage borrowers and the availability of these traditional funds to satisfy those demands. This gap could be closed or, at least, narrowed by use of the national and international financial markets. The financial markets, as we know them, are the money and capital markets, which I would define as including the secondary market for mortgage loans, sold either whole or in part, and the financial markets for secured and unsecured debt, and for the sale of assets through participation certificates. In the future, dependence for housing funds may shift dramatically from savings deposits to such nontraditional, indirect, impersonal sources of funds from a wide range of entities throughout the domestic and international financial markets. The challenge is just how to best use these markets as economically and as effectively as possible, and in the amounts that will be required to serve and service the demands for mortgage financing.

It is crucial that the markets used by government housing-finance authorities or private mortgage lenders to raise funds be widened and deepened quickly and effectively. In so doing, the basic characteristics of these markets will have to be acknowledged. For example, financial markets demand--actually require--that rates paid are market rates and that both rates paid and maturities offered should be flexible and variable under changing economic and financial conditions. And, as suggested earlier, the parameters associated with the funds raised by mortgage lenders will be transmitted to borrowers from lenders.

The various types of instruments that could be used in the period ahead include liabilities such as commercial paper, certificates of deposit, and mortgage-backed bonds, as well as sales of assets such as reflected in a wide variety of passthrough certificates. For example, with respect to the latter, the range of possibilities extends from sales by individual institutions over-the-counter in small denominations to their traditional deposit customers, to sales of larger packages to major institutional investor, either through direct sales or underwritten offerings, to the use of specially created conduits that serve institutions too small to access financial markets on their own.

If government housing-finance agencies and other mortgage lenders can access money and capital markets on the basis of their own creditworthiness they will then be able, given appropriate size and adequate financial strength, to issue a veritable market basket of securities. That basket will include short-term and long-term securities, which will be sold both in domestic and international financial markets.

In order to do all of this, I remind you that the creditworthiness, of individual institutions that want to access financial markets will have to be established. Moreover, market participants--buyers of securities (permanent investors)--will have to be educated and government authorities will have to be supportive. The development of permanent investors is crucial to the whole process if mortgage lenders intend to function more as middlemen--to originate and sell, or to make mortgages and move them into someone else's hands. In addition,

investor enticements will be needed if a successful transition is to occur. The protections must be specific and not generalized; they must be explicit, not implicit so as to expedite the sale of all kinds of mortgages across all kinds of economic and political boundaries.

Among the major sources of funds that should be tapped by mortgage lenders are those that can be attracted from foreign financial markets. The volume of funds raised in foreign markets for transmission into housing in most countries has not been exactly overwhelming. Nonetheless, there is a great deal of potential there, which could be turned into a veritable gold mine. But, again, nowhere is there a better example of the need to develop creditworthiness, the need to educate, the need to market, and the need to provide adequate investor protection.

The Housing Guaranty Program administered by AID is a prime example of the type of vehicle which would enable a housing finance agency in a developing country to enter the U.S. financial market, establish its creditworthiness, and educate U.S. investors. The Housing Guaranty Program has financed a variety of projects, including slum and squatter settlement upgrading, sites and services, core housing, low-cost housing units for sale or rental, and community facilities. The Housing Guaranty Program involves collaboration with a local public or nonprofit private housing institution. The borrowing agency seeks the most favorable terms available in the U.S. financial markets for a U.S. government-guaranteed loan. The U.S. lenders are commercial banks, savings and loan associations, life insurance companies, pension funds, and other institutional investors. A borrowing country which can establish its creditworthiness by meeting its obligation on a Housing Guaranty loan should find the U.S. capital markets more accessible in the future. Initially, it would be difficult for a housing finance authority to secure financing in the U.S. capital markets without a U.S. government guaranty. Once this first step is taken, mortgage lenders in developing countries would be in a position to tap potentially sizable foreign funds that can be attracted to invest in housing, directly or indirectly. This is a strong potential growth area for housing funds.

Another major area of great growth potential as a stable and sizable source of investable long-term funds that could be moved into housing is that from life insurance companies and private and public pension funds. In most countries pension funds have put only a small percent of total invested funds into mortgages and mortgage-related securities. It may not be easy to convince government and private pension fund managers of the appropriateness of investment in mortgages or mortgage-related securities unless they are given a major voice in the form of the mortgage instrument. Perhaps this is as it should be. If pension funds are to provide the retirement dollars with which they are entrusted and if life insurance companies are to put policy premiums into mortgages as investment vehicles, they should have some say as to how the form and terms of the investment are structured.

Pension funds could prove a rich vein to be tapped, either through sale of mortgages and mortgage-related securities or through the sale of various forms of unsecured debt issued by mortgage lenders. The time is fully appropriate and the need clearly outstanding to tap that vein. And, again, we have an example of the need to educate and inform, as well as to market a concept.

Obviously, there is much more to the story of financing housing in the period ahead than I have been able to cover. This is a serious national problem in most developing countries, involving availability, ability, and affordability. Individual homebuyers will never be able to compete for funds on the same footing as government or corporations. Our job, as I view it, is to help make sure that the funds--the savings--are available in sufficient amount, that mortgage lenders have the wherewithal to tap those funds in sufficient volume, that the vehicle is available to transfer the funds to mortgage borrowers, on appropriate terms, and that homebuyers have the ability and inclination to afford the funds. This is not going to be an easy task. But with so many of us here so obviously concerned, I suspect that we are going to do something about it.

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## HOUSING CREDIT AND LONG-TERM CREDIT MARKETS

Mr. Jonathan Lindley  
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Effective housing finance systems in the United States and most other countries enjoying high housing standards have been synonymous with, and dependent upon, the health of long-term capital markets. In the United States, the predominant form of financing for residential mortgages has been 25- to 30-year loans. This symbiotic relationship between mortgage finance and long-term capital markets, however, is changing, and changing dramatically. The long-term capital markets in the United States (and perhaps elsewhere) are going through a significant upheaval. The principal reason is inflation and the generation of inflationary expectations. In a world of constant or slowly increasing rates of inflation, even if those rates are high, long-term debt instruments can be structured to be marketable and capital markets can prosper and function effectively. However, in an economy characterized by volatile and unpredictable rates of inflation, it is difficult to establish or maintain viable long-term capital markets.

The U.S. mortgage markets are a case in point. There is an increasing reluctance by domestic thrift institutions and other mortgage investors to extend housing credit on a long-term, 30-year, fixed-rate basis because of concern about the ability of U.S. government policies to control the rate of inflation. If active primary and secondary markets for longer-term housing finance instruments are to be maintained in such an uncertain interest rate environment, it is critical that new techniques of long-term debt financing be developed to assure investors some degree of certainty about rates of return. Thus, in the United States, we are now experimenting with a variety of means for partially (or fully) indexing interest rates on mortgage loans. For example, many mortgage lending institutions are moving toward adjustable-rate mortgages, where the interest rate can change every six months or every year.

The restructuring of mortgage instruments has been in response to the lifting of price controls on consumer or personal deposit liabilities at all depository institutions. Since most of the net inflow of deposits at thrift institutions has been in instruments which pay market rates of interest, this interest rate movement on the asset side is needed as a protection against interest rate risk. Institutional investors, including savings and loan associations, are also attempting to increase the maturity of their liabilities and decrease the maturity of their assets. A similar process is occurring in the corporate debt market. In the United States, we are seeing more five- to seven-year issues and fewer offerings in the 20- to 25-year maturities at fixed rates. In fact, many of those who would otherwise invest in corporate bonds have been shifting toward equities.

The most important action the government could take to strengthen the long-term capital markets in the United States would be to decrease the rate of inflation and inflationary expectations. This, however, needs to be carried out over a fairly long period of time. It is impossible to eliminate inflation quickly, simply because the problem of inflation has been building for the past

15 years. In addition, even if long-term interest rates were to begin to decline significantly, the demand for long-term credit would increase substantially, thus preventing major reductions in long-term capital rates over the next several years.

There is widespread agreement in the United States that the prime ingredients of anti-inflationary government policies include a monetary policy which balances the objectives of stable interest rates and appropriate growth of the monetary base. In the United States over the last 18 months, the Federal Reserve Board, which establishes and implements monetary policy, has been experimenting with new techniques that place more importance on controlling the rate of growth of the monetary base\* than on the level of interest rates. This policy has had an enormous impact on interest rates in the United States in that their volatility has increased, not declined. While this period of interest rate uncertainty may have been necessary in order to halt an inflationary spiral, the toll on capital markets and economic growth has been significant. Therefore, it is likely that the Federal Reserve Board, after this initial period, will tend to place somewhat more emphasis on the impact of monetary policy on interest rates.

There is also general agreement that an effective anti-inflationary policy requires a reduction of the federal deficit and a decrease in the percentage of Gross National Product that is accounted for by government spending. Excessive credit demand by the government needs to be curtailed. The major policy disagreement will focus on the question of where cuts in government expenditures should be made, not on whether such overall cuts are desirable or necessary.

In this economic and policy environment, many long-term investors are moving away from corporate bonds and towards equities. According to Henry Kaufman of Salomon Brothers, a major U.S. investment banking firm, many large and even some medium-sized companies are now refusing to consider making commitments for corporate bond investments more than three months in advance, which is a radical change in the private placement practice. Private pension funds and state and local retirement funds are also moving away from the long-term corporate bond market and into equities. Estimates made by Salomon Brothers indicate that the net demand for corporate and foreign bonds in 1981 will decline slightly from the \$41.5 billion level in 1980 to approximately \$39 billion. This is especially striking when compared to the rather significant expected increase in the total net demand for credit from \$310 billion in 1980 to \$412 billion in 1981.

The U.S. Treasury is attempting to strengthen the long-term capital markets through its financing activities. Recently, the Treasury announced an \$8.5 billion refinancing, which includes \$2.25 billion of 29-3/4-year bonds. This has been taken as a signal of the Reagan Administration's desires in this area. The Administration is letting the market know it wants to lengthen the federal debt. Of course, any attempt to lengthen the maturity of the federal debt will place additional demands on an already "thin" long-term capital market.

The message is relatively clear. In 1981 the level of long-term debt financing will be relatively low and long-term capital markets in the United

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\*coin and currency in circulation plus bank reserves

States will be constrained until and unless the volatility in inflation can be controlled and inflationary expectations are reduced. More and more long-term investors are switching to equities or to shortening the maturities of their assets. A brief turnaround in the inflationary outlook will not be sufficient to change this attitude. It will take a sustained long-term program of reducing inflation in order to enhance the workings of long-term capital markets in the United States.

On the other hand, long-term debt instruments that are either guaranteed or issued by official agencies of the U.S. government will enjoy a great advantage in this rather "thin" long-term market. In 1981, rates on long-term, government-guaranteed agency and highly rated corporate bond issues are not expected to drop below the 12.5% to 13% level. If rates should drop below this level, potential borrowers should be prepared "to go to market" on extremely short notice. If any rate differentials should exist below the 12.5% range, the opportunity for borrowers to take advantage of such rates will be extremely short term; the time for investment decisions should be measured in days, not weeks.

In terms of the outlook for interest rates in the United States over the next three to five years, given the structural nature of our inflation, there is little hope that long-term rates will subside significantly below the 12-13% range. Indeed, there may be periods of time when long-term rates surge again to the 15-16% range. On the other hand, even if inflation should begin to decline to a 7-9% per annum range in the United States, pent-up demand for long-term borrowing will tend to hold long-term rates up even under the most optimistic assumptions about the future course of the U.S. economy. If the new Administration's longer-term economic policies to encourage economic growth succeed, these policies would encourage a "boom" in long-term real investment and place greater demands on domestic capital markets.

With regard to housing finance in the United States specifically, if the regulatory authorities permit, there will be a tremendous growth of "indexed" mortgage instruments with rates at least partially adjusted periodically to current market levels. If interest rate volatility in the United States continues, very few lenders will be willing to make fixed-rate long-term mortgage loans without a very high "inflation premium."

Whether or not these indexation techniques will spread to other segments of the long-term debt market is unclear at this time. Borrowers can "gamble" by borrowing for shorter terms at fixed rates. The primary determinants of longer-term financing techniques will be performance of the U.S. economy and the effectiveness of economic policies in reducing and smoothing out the future course of inflation.

AN OVERVIEW OF THE DEVELOPMENT OF THE INTERNATIONAL FIXED-RATE BOND  
MARKETS WITH EMPHASIS ON THE GROWTH OF DOLLAR FINANCING

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A. Introduction

1. To be examined: The capital markets
  - a. Historical review of international dollar financing, the development of Euromarkets and relevant U.S. market developments.
  - b. Certain of these markets and some of the mechanical considerations involved in accessing them.
  - c. Future prospects and developments.
2. To be excluded: The bank credit sector
  - a. Syndicated Eurodollar floating rate (over LIBOR) credits either for takedown or for standby. Generally attractive versus U.S. domestic credit (U.S. prime based) because of absence of compensating balances. Can be comparable to intermediate term floating rate note issues.
  - b. Fixed rate bullet bank credits which are periodically available. Can be comparable to unlisted intermediate Europrivate placements.

B. The Euro Capital Markets Today

1. Strictly speaking, it would be more exact to refer to Euromarkets as the international markets. Until 1978, more Eurobond issues were denominated in dollars than any other currency. Briefly, dollar was edged out as leading capital market currency by DM. In first quarter of 1978 aggregate Eurobond issues were 44.9% in dollars versus 45.2% in DM. For the year, dollars represented 52%. In 1980, dollars represented 70%. The dollar has regained its preeminence and the DM % has fallen. Situs of institutional investors and bond market participants only partly in Europe. Significant build up in dollar funds in Middle East and Far East. Existence of certain increasingly important markets, such as yen, largely out of Europe.
  - a. Unregulated markets, primarily the Eurodollar market.
  - b. Somewhat regulated market such as Euro DM sector. Consultations between Bundesbank and German banks which are members of the Capital Market Committee.
  - c. Closely regulated markets and currency use as in Japanese yen market and de facto regulation of Euro-yen.

- d. Unregulated composite currency unit issues, i.e., European Unit of Account, first introduced in 1961 (and several others not broadly marketed such as Euro and (pre-1980 revisions) SDR dominated issues) which in the aggregate are not significant.
2. Interest rate levels in dollars today are higher by 150-600 basis points for comparable maturities versus borrowing conditions in other leading currencies, i.e., Swiss Franc, DM, Dutch Guilders, Japanese Yen. Interest rate differential reflects generally among other factors international investors' preceptions of devaluation risk. Other markets: Euro-sterling; ("Bull dog" issues); U.S. dollar placements tailored for Middle East with some intermediate-size public issues in Kuwait and the Gulf and major intermediate private placements reportedly with Saudi Arabia; occasional placements in such local currencies as Saudi riyals, Kuwaiti dinars and United Arab Emirates dirhams; and access by multi-sovereign entities to markets such as Euro-yen, Swedish kronor, and Austrian schillings.
  3. Adverse experience of dollar-based borrowers in Swiss Franc and DM in early 1970s.

### C. Historical Overview

Certain watershed periods with notable characteristics:

1. (1870-1914) The U.S. after Civil War and until World War I was a debtor nation, a major consumer of capital to finance its economic growth:
  - a. (1870-90s) financing of railroads.
  - b. (1900s) financing of industrials and utilities.
 

U.S. investment bankers placed part of debt issue in developed European capital market. In 1905, in fact, a \$50mm placement was made for a U.S. railroad entirely with French investors by a U.S. investment bank with strong European connections.
2. (1914-18) At the end of World War I, the U.S. emerged as the major creditor nation, and became banker to the Allies and defeated Central Powers. The pre-1914 role of Britain substantially weakened.
3. (1919-1930) U.S. capital market net supplier of funds to substantial number of international borrowers - Canada, Western Europe, but also, Eastern Europe and Latin America, many of which went into default during the Depression.
4. (1930-1945) Period of international capital market inactivity:
  - a. Depression
  - b. Protectionism
  - c. World War II
5. (1945-1963) Era of dollar supremacy. Eclipse of sterling as a major reserve asset currency. Eurodollar banking credit market begins to

develop only at end of 1950s. International capital market borrowers look toward U.S. public market for needs even though substantial amount of issues subsequently traded back into Europe. Volume of international borrowing including Canada came to \$1.374 billion in 1963. Imposition of Interest Equalization Tax (I.E.T.) in 1963 to counteract growing U.S. balance of payments deficit. Effect was to close down functioning dollar bond markets to foreign financing. The first Eurodollar issue in 1963 a \$15 million Italian credit.

6. (1963-1971) Last years of Bretton Woods Agreement. The major historic period of Eurodollar capital market use by U.S. corporations.
  - a. I.E.T. and subsequent restrictions both of bank credit extensions by U.S. banks and direct overseas investment by U.S. corporations served to create the Eurodollar bond markets.
  - b. London replaces New York as major international capital market center.
  - c. Substantial predominance of U.S. corporate issuers, application of proceeds being primarily for financing of overseas interests, including borrowing in Europe to finance European acquisitions.
    - (1) U.S. corporate issuers substantial % of total market. In 1968 being more than 60% of total volume of \$3 billion.
    - (2) primarily debt issues until 1968, then convertible issues growing out of the speculative boom in U.S. stock market.
    - (3) availability of reasonably long debt maturities. In 1967 substantial number for greater than 10 years, and some beyond 15 years.
    - (4) internationalization of borrowers following U.S. stock market decline and reduced U.S. corporate borrowing component.
  
7. (1971-present) Decline of the dollar. Enormous growth in the Euromarkets. Devaluation of dollar and the era of floating interest rates starting August 15, 1971. Subsequent devaluation in 1973. Substantial dollar declines against strong currencies from 1973 through late 1977. Dollar-dominated issues have represented in the past 75%-80% of total volume. The dollar has strengthened recently versus certain other capital market currencies, especially versus the DM. The first quarter of 1978 was the first period when the volume of issues of nondollar denominated issues exceeded number of dollar issues. While Euromarkets grow in size, the U.S. corporate component becomes proportionally smaller. Less than 10% in late 1970s (approximately \$17 billion) volume versus 60% of total 1968 volume. Relative absence of top quality U.S. borrowers (mostly single A and triple B). Relative absence of convertible debt.
  - a. Temporary adverse developments in banking area in Europe in 1974, the year in which the Interest Equalization Tax and related measures were permitted to expire. A microcosm.

- (1) confidence in foreign exchange dealings shook by Herstatt failure.
  - (2) fringe banking collapse in U.K. after property and shipping financial speculative boom.
  - (3) mismatching of maturities by Japanese bank London branches. Development of "Japanese premium" in interbank market and effective withdrawal of Japanese. Japanese return only in 1977.
  - (4) greatly shortened maturities in bond market, subsequently lengthened. From 1975 through most of 1977 major boom in Eurodollar bond issues which was temporarily curtailed because:
    - (a) doubts regarding the dollar as an investment currency.
    - (b) the cost of carry periodically negative.
- b. Effects of the oil price increases.
- (1) creation of substantial new investible funds in official institutions of the surplus OPEC countries (principally Saudi Arabia, Kuwait, Qatar and Abu Dhabi).
  - (2) massive balance of payments deficit financing requirements by major industrialized European states and great volume of government and government-guaranteed bond market financing.
- c. Currencies: Certain market phenomena - the rise and fall of Euro-Canadian dollar financings in mid-1970s. Reopening of Euro Sterling and Euro French Franc. The rise of DM to challenge U.S. dollar dominance, the importance of the regulated yen market for major international governmental borrowers. Periodic government-imposed restrictions in nondollar markets. Volatility of Eurodollar market. Period marketing "windows."
- d. Market conditions: Since 1975 a return to lengthening maturities - out to 15 years in dollars, 20 years in guilders, 15 in Sw.Fr. and DM. Size of issue greatly increased in dollars, up to \$500 million for government credits and \$300 million for major corporate names. In early 1970s \$25 million was a major bond issue. Major growth of the secondary market in dollar instruments. Major new borrowers in Eurodollars - World Bank, IBM.
- e. From 1976, significant growth in the U.S. balance of payments deficit since reversed in 1980. Exceptional nature of dollar, as leading reserve currency of world and principal currency for international transactions. In the world of floating rates central banking institutions are essentially financing the U.S. deficit, rather than allowing excessive appreciation of their respective national currencies so as to undermine respective national export competitiveness.

f. Growth of the "Yankee" bond market - I.E.T. abolished in 1974 following turnaround in balance of payments. Substantial recourse to this market by prime international borrowers \$2.714 billion in 1980, including Canada, and \$1.299 billion in 1980, without Canada. (Canadian governmental securities always specifically exempted from I.E.T.). First issues in late 1974. Virtually all the credits are triple-A-rated government or government-guaranteed credits or triple-A-rated institutions of European Economic Community. New quality borrowers continue to proliferate. Kingdom of Sweden which last borrowed in 1923 returned to the U.S. market in 1977. Most recently the Kingdom of Denmark has filed. Only two corporate borrowers, both U.K. have come to the U.S. public market. This is due in part to the difficulty of complying with registration requirements of Securities Act of 1933. U.S. private-placement market has also been receptive.

- (1) U.S. domestic market always open, unlike opening and shutting of financing "windows" in Eurodollar bond markets and in Eurocurrency markets in recent years.
- (2) by definition, dollars always available.
- (3) maturities for domestic issuers are longer than available elsewhere.
- (4) AID Office of Housing Guarantees are entitled to the "full faith and credit of the United States of America," hence, are U.S. government obligations. Consequently, because of government quality, there is always a market, and maturities available are longer than obtainable in either Eurodollar or Eurocurrency.

g. Unprecedented volatility in U.S. short-term rates dating from switch by Federal Reserve System on October 6, 1979, from focus on interest rate levels to monetary aggregates.

#### D. Mechanical Considerations on Eurodollar Issuance - A U.S. Viewpoint

1. No registration under the Securities Act of 1933. S.E.C. has traditionally indicated that it would take no action on nonregistration of securities offered by U.S. borrowers distributed abroad to foreign nationals so long as offering has been made "under circumstances reasonably designed to preclude distribution or redistribution of securities within, or to nationals of, the United States" and that offering was made "in a manner which results in the securities coming to rest abroad." This is achieved as follows:
  - a. Use of temporary certificates, without interest coupons, for 90 days, then exchangeable for definitive certificates.
  - b. Contractual restrictions in underwriting agreements and syndication documents. Each underwriter and dealer sends to lead manager an "all-sold" telex, that their allocations have been sold pursuant to the contractual restrictions.

- c. Commitment by underwriters and dealers not to offer or sell securities into U.S. or to U.S. persons until 90 days after completion of distribution and to include such restrictions in confirmations to purchasers.
  - d. In the case of Euro private placements, additional precautions are desirable including use of investment letters, as in a Section 4(2) private placement, denominations of certificate being greater than \$1,000 and legending of certificates indicating that they may not be sold in the U.S. or to U.S. persons without registration or availability of exemption.
3. Listing of the issue on one of the two major European Stock Exchanges, London or Luxembourg.
- a. Prospectus requirements by a Stock Exchange with regard to disclosure which are not demanding or detailed compared with U.S. Securities law. However, U.S. issuers, their counsel and underwriters continue to insist on high standards in documentation, that the prospectus be accurate and complete so as to avoid any challenges under general fraud provisions of U.S. Securities law, including Rule 10b-5 of 1934 Act.
  - b. Subsequent commitment of issuer to submit annual reports and financial data and maintain paying agents.
4. Syndication and marketing.
- a. Public issue with or without underwriting group and selling group with Stock Exchange listing.
  - b. Private placement with listing.
  - c. Size and maturity considerations.
  - d. Timing required for issues.
  - e. Commission structure and impact of annual coupon versus semi-annual coupon.
  - f. Emergence of the "bought" deal. Firm bid underwriting.
- E. AID Office of Housing Guaranteed Bond Issues
- 1. U.S. government guarantee programs date in size only from Depression years (1930s). First used by the U.S. government refinancing instrumentality, Reconstruction Finance Corporation.
  - 2. Guarantee programs, particularly relating to housing, have proliferated since 1973 with imposition of restraints on U.S. Agency financing.
  - 3. AID Office of Housing Guarantee program is one of first guarantee programs dating from early 1960s.
  - 4. Basically three rate levels for government obligations - direct Treasury debt, Agency debt and guaranteed debt. Different rate levels

between different guarantee programs, although all are entitled to "full faith and credit of the United States of America." Factors for price variance include:

- a. supply and demand.
- b. technical aspects of guarantee and enabling legislation.
- c. structure of financing.

F. Prospects for the Future

1. Future of the Eurodollar bondmarket - the dollar remains the reserve currency of the world and the market continues to flourish. Growing importance to U.S. borrowers.
2. The future of revised Special Drawing Right issues in light of International Monetary Fund financing objectives.
3. Hardy perennial: abolition of the withholding tax, critical barrier to international investment in debt securities in U.S. domestic market.

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Mr. Ernesto Wende, President of the Central Savings and Loan Association of Bolivia, discusses the evolution of housing finance systems in Latin America with Miner Warner.



Ms. Elaine B. Weis, Senior Associate, Richard T. Pratt Associates Salt Lake City, U.S.A., addresses the conference.

## HOUSING FINANCE IN LATIN AMERICA

Mr. Ernesto Wende  
President  
Central Savings and Loan Association  
Bolivia

I think that you are going through very important days in the development of the financial institutions in Asia. I say this because, in many ways, I compare this conference with the conferences we had in Latin America, except that you are more fortunate, you are richer, you have more experience in banking activities than we had when we started. So, I can assure you that if this situation continues, you are going to be able to build up a powerful, very dynamic savings and loan industry in Asia.

Up until 1959, aside from a few mortgage banks, there were no housing-finance systems in Latin America which could provide long-term credit for housing to the mass market. There was only short-term credit available for the richer families who could afford a custom-built type of house.

Yet, the need for a housing-finance system was great. The expansion of the middle-class, rural-to-urban migration, and the population explosion through the 1950s created a large and growing market for housing. However, the institutional structure of the Latin American financial systems, at that time, was not sufficiently flexible to respond to this particular need.

In Latin America, individual home ownership was common only among the wealthy; home finance was available only on short terms, and construction technology had not passed the stage of relatively high-cost custom building. Therefore, the majority of the urban, middle-class families lived in rented apartments. Attempts to meet increased demand in this segment of the population, combined with the need to recover investment rapidly, because of the lack of long-term financing, resulted in an increase in rents to the point where governments felt compelled to impose rent controls. Under rent controls, the construction of homes slowed down drastically, thus contributing to the housing shortage.

The situation described is further aggravated by urbanization, which is taking place in the Latin American countries at an unprecedented rate. The degree of urbanization in Latin America in the last 25 years is nearly 60%. The intense urbanization is causing the proliferation and growth of squatter settlements called "Villas Miserias," "Callampas," or "Favelas" which are located in predominant locations of Rio, Buenos Aires, Caracas, Lima, and other important cities. Typically, 40% and, in many cases, nearly three-quarters of the population of these fast-growing cities is densely housed in squatter settlements and illegal subdivisions without safe water, basic sanitation, or secure tenure.

This situation, of course, created difficult problems for the authorities. In the beginning, they sent the police or the army to evict these people out of the land they had taken over during the night. However, this was impossible to accomplish, so the people had to stay and these squatter settlements grew more and more.

To mitigate such conditions, many Latin American countries obtained loans from different international lending institutions and foreign governments to build specific construction projects to house lower-income families. The procedure turned out to be less than satisfactory because the construction of homes, based on outside loans, did not provide a scheme which could generate additional resources. Therefore, initiatives to create home finance became necessary.

It was during the late 1950s that the U.S. Government and representatives of the American savings and loan industry became seriously interested in helping Latin Americans to establish savings and loan institutions which could mobilize local financial resources to finance badly needed housing.

Peru was the first country to adopt enabling legislation which permitted the establishment of savings and loan associations. The first savings and loan institution in Peru opened in 1959. After Peru, other countries followed and, today, practically all the Latin American countries have some form of thrift institution. The result has been a spectacular one. Today the total amount of savings generated by these thrift institutions that have been inaugurated or have been established in Latin America amounts to more than \$23 billion coming from more than 34 million savers. So we have proved that Latin Americans can save and can organize dynamic savings and loan institutions.

What have been the ingredients or the factors that helped us to develop successfully this thriving savings and loan industry? During the period 1960-1975, the following important events took place. The U.S. government, through the Foreign Assistance Act of 1961, established the Housing Investment Guaranty Program (HIG), providing for U.S. government guaranty of loans made for housing in developing countries by private U.S. investors under the supervision and control of the United States Agency for International Development (AID).

The Investment Guaranty Program became the main instrument through which the U.S. savings and loan industry has participated in the promotion of thrift and home ownership in Latin America. Likewise, through this program, the American government made available to participating countries financial resources in the form of seed capital as well as necessary technical assistance.

#### Inter-American Savings and Loan Conferences

A very important mechanism which promoted dialogue and interaction across national boundaries permitting the exchange of "know-how," experience, and contacts to obtain financial resources between the representatives of the American savings and loan industry and the emerging leaders of the Latin American systems, has been the organization of the Inter-American Savings and Loan Conferences. The first of these conferences was held in Lima, Peru, in January 1963; since then an Inter-American Conference has been held every year in a different country. The XX Inter-American Savings and Loan Conference will be held next May in the city of Cartagena, Colombia, which you all are cordially invited to attend.

What is the importance of these conferences? The importance of a conference is that it permits and promotes dialogue and interaction. The free exchange of knowledge makes conference participants the most well informed about

housing finance in the world, and therefore more valuable in their communities. To pursue the development of your savings and loan system, it is important to hold conferences on an annual basis.

The other important factor that helped us in developing the inter-American savings and loan industry was the establishment of the Inter-American Savings and Loan Union which we organized in 1964. Its fundamental objective is to: "contribute to the expansion and improvement of the savings and loan systems in the countries where these activities are carried out, and to promote the organization of same where needed, supporting the exchange of information and technical experience, interrelating the institutions with national organizations." The Union today is the most important instrumentality that links all savings and loan organizations in Latin America through the sponsorship and realization of a yearly Inter-American Savings and Loan Conference, training programs, seminars related to the industry, a graduate school, and the publication of literature and studies concerning the savings and loan field.

#### Inter-American Savings and Loan Bank

To complete the Latin American savings and loan structure, the Inter-American Savings and Loan Bank (BIAPE) was organized in 1975. BIAPE already has become an important source of funding for several of the affiliated Latin American savings and loan institutions. As of November 1980 it had capital and reserves of \$40.8 million dollars. The headquarters of BIAPE are located in Caracas, Venezuela.

BIAPE is a financial organization combining public and private loan institutions in the Americas. The objectives of BIAPE are to contribute to the development of the inter-American savings and loan movement by strengthening existing savings and loan systems, and by establishing new savings and loan networks in countries where there are none, to finance housing and urban developments, and to improve housing conditions in the Americas.

One specific purpose of the Inter-American Bank is to develop an international mortgage market. This we have not been able to accomplish yet because of the difficulties of packaging mortgages on an international level created by the problems we face in regard to different currencies, and in regard to different forms and ways of making mortgages by the different countries. Nevertheless, we hope that in the near future we will be able to solve these problems and be able to market mortgages through the Inter-American Loan Bank. So far, the bank is lending its own money and a loan that was obtained from AID. In the future, the Inter-American Savings and Loan Bank is going to be the main instrument through which the different Latin American savings and loan institutions will be able to obtain additional resources to boost their lending activities.

All of the structure of a dynamic, viable, and prosperous Latin American Savings and Loan System has been established. This system in the beginning concentrated on the financing of homes for the growing Latin American middle-class. Today, these institutions are more and more concentrating on financing lower-income families.

When the American pioneers were considering the possibility of establishing savings and loans institutions in Latin America, the idea was almost dismissed on the ground that Latin Americans were too poor to save. The events after 1960 proved that people can save no matter how small their income.

To end this part of my talk, it is important to mention that the successful establishment of thrift institutions throughout Latin America is due to four important factors:

1. The American government, which was the catalytic force behind the idea, with the provision of technical assistance and seed capital through the AID Housing Guaranty Program.

In essence the program guarantees repayment to any American investor that is willing to lend money for housing purposes outside of the United States. This program guarantees that investment 100%. Now in Bolivia and all the Latin American countries we are very thankful to this program that provided us with the support, much needed support. We are particularly thankful to Mr. Peter Kimm, who has led this program in Latin America and is now doing so all over the world.

2. The U.S. private savings and loan industry, which, in a very unselfish way, shared its expertise with Latin American counterparts--in particular, the National League, the U.S. League, and the U.S. Savings and Loan Foundation. This is extremely important because you do not find that sharing of information in other industries. It is very difficult in other activities to find a group of people willing to open up their hearts and teach all they know simply to help.

3. A cadre of Latin American leaders who in each country assumed the responsibility of organizing savings and loan institutions. The idea of thrift and home ownership has captivated the talent and imagination of Latin American leaders. They were the missionaries, they were the spirit that spread through Latin America, promoting the concept of thrift and home ownership. They provided the leadership to obtain the needed legislation for the establishment of this type of institution.

4. The millions of savers who have developed confidence in the new institutions and supported them with their savings. The resources that we have mobilized in recent years come from over 33 million savers all over Latin America, small savers, not big savers. People who are interested mainly in obtaining a loan to solve their housing needs.

In speaking about the Latin American savings and loan industry, I think it is good to mention three things because you have been concerned about those three points and I would like to discuss them briefly.

In the first place, you have to realize that in Latin America we have to distinguish between public housing and private housing. Most of the Latin American governments have a type of public housing program and these programs are financed mainly from public funds or from some compulsory generation of resources to finance lower-income groups. With few exceptions, these programs have not been very successful. And they have not been very successful because these programs are usually controlled or directed or influenced by people who have the power to influence, not necessarily the people who need the housing; politicians and strong labor unions have been the ones who finally ended up having these homes although they didn't need the housing. And, on the other hand, we have the private housing, which is usually financed from funds generated through savings that have been obtained through these savings and loan

institutions which I have just described. There is always a national housing authority that supervises or controls the operation of this private institution.

The second thing that I would like to mention is in reference to indexation. I think that Chileans were the first ones to think about this idea of indexation. In Chile, they established an index, which was an average of indexes that represented the cost of living and the wages. As the index increased, they adjusted the unpaid balance of the loan. They did not touch the interest rate but they did adjust the unpaid balance. The Brazilians have adopted a similar scheme. In the case of Bolivia, it was a little different, our problem was different. Our country depends mainly on the export of tin and tungsten; so, our economy is very much tied to what happens to the dollar. We have established an index which reflects the changes that may happen to the peso in regard to the dollar. For example, in 1972 the relationship of the peso to the dollar changed, went up 67%. So, the unpaid balance of the loans outstanding in 1972 were adjusted accordingly; but, at the same time, we also adjusted, in the same proportion, the amount of savings that people, the savers, had in their savings accounts in our institutions. That way, the savings and loan institutions did not lose any money, they adjusted the asset and liability side and we came out even. We didn't lose any money. We have established this scheme because well-to-do Bolivians tend to save their money abroad in American, German, and Swiss banks, and this is one scheme to attract savings back home, by offering them an index which is tied to the dollar. These are the schemes we have developed to cope with inflation and also with the practice of rich Latins of saving abroad.

The third matter of concern is the problem of squatter settlements. These people have moved into choice land in the cities. If the squatters would move to a housing project, they would get complete homes, but they would have to start making payments. Additionally, they would be far from their present places of employment. In the case of Lima, people have moved into those choice places and, with cardboard and plywood, built their shelter. Of course the government tried to oust them, but they were not able to do so. Now the savings and loan institutions are making loans to them for building permanent homes, even though these people are still living on land that does not belong to them. The authorities and the savings and loan associations have come to the realization that these people cannot be moved out and we might as well help them to get established where they are.

Now we turn our story to Bolivia.

#### The Bolivian Savings and Loan System

The Bolivian Savings and Loan System is organized in the same way as are most systems. That is, there is a Central Housing Bank that charters, supervises, and provides financing to the member savings and loan associations. In turn these associations are the ones that receive savings from the public and grant loans to their members to solve their housing needs.

In order to evaluate the merits of our efforts in establishing our savings and loan system, you must be aware of the conditions that prevailed in Bolivia in 1962 when we started organizing it. Therefore, I will begin with a brief description of the country, its geography and its people.

### Sociological and Geographic Factors

Bolivia, within its 1,098,581 square kilometers, contains an incredible variety of geographical contrasts. Between the massive and majestic peaks of the Andean mountains in the west and the lush, tropical flatlands of the Amazon valley in the east, one encounters nearly all of the geographic diversity existing on this planet. However, such diversity also makes it difficult and expensive to integrate the different areas of the country.

Traveling the 600 miles from cool and lofty La Paz, our capital city, to Santa Cruz de la Sierra, our second city in size and importance, one descends two miles in altitude from over 12,000 to less than 1,000 feet above sea level. The only geographical feature not present in the Bolivian landscape is a coastline. Bolivia is landlocked, surrounded by Chile, Peru, Brazil, Paraguay, and Argentina.

A recent national census indicated that Bolivia has a population of 5,570,000 people. Of this population 55% live in rural areas, while only 2,506,500 people inhabit the principal cities. Because of communication and transportation problems imposed by our geography we have been limited to this urban market when considering systematic savings. We find our mission further complicated by a national illiteracy rate exceeding 50% of the population.

Examining some of the most important economic indicators, we find that, during 1962, Bolivian exports totaled only \$86 million. The overwhelming majority of this sum was attributed to the export of unrefined minerals, mainly tin and tungsten. The per capita income of the country during this most inauspicious year barely reached \$120. Ensuing years have brought a great deal of economic progress.

### Impetus for a Home Finance System

It is worth noting that precisely at the time we began the organization of the savings and loan system in 1962, all the savings deposited in private and government banks barely exceeded the equivalent of a half-million dollars. Such a low level of savings deposits in the banks was due not only to the inflationary situation and political instability that plagued the nation in previous years, but mainly to the absence of a savings habit by the Bolivian population.

To further complicate the situation, there was no legal basis in Bolivian law for the establishment of home finance institutions. Therefore, long-term loans, at a moderate rate, for the financing of private homes, was nonexistent as late as 1964.

### Dedication Establishes First Association

A group of 16 people, including economists, businessmen, and lawyers, formed the committee that dedicated itself to carrying forward this cause which contained so much concern and social benefit for the Bolivian community. The committee faced two initial tasks: first the formulation and advocacy of a government decree that would provide a legal basis for the establishment of savings and loan associations; and, second, the promotion of sufficient savings deposits to provide an initial economic base for this new financial entity.

The committee's work started in makeshift offices: first at the home of our president and later at the office of one of our founders. After two years of personal contact and evening visits to labor groups and other organizations, we formed a group of 1,100 savers with a total savings of \$33,000. As there was no legal basis for our association, the deposits were made solely on faith in the organizers.

To obtain our own offices, the founders made the exceptional contribution of \$7,500 to acquire a tiny house at the end of a blind alley. In that house we installed the first mutual savings and loan association, La Primera, meaning "The First."

During its first year of existence, La Primera was open for business only in the evenings, on Saturdays, and holidays. The people who staffed the office, both workers and executives, received no compensation other than the satisfaction of donating their talents and free time to the benefit of their common ideal.

On September 24, 1963, the government of Bolivia issued Supreme Decree 06582. This decree authorized the establishment of mutual savings and loan associations as private, nonprofit, legal entities to receive deposits from their members in individual savings accounts.

The associations could use these funds, along with any others which they were able to finance, to make loans to their members for the construction, purchase, or improvement of homes. The government was not in a position to offer us any financial backing but did provide us with the needed legislation.

In June 1964, our years of effort produced the first fruit when La Primera was inaugurated.

Today, in eloquent testimony to the success of La Primera, its own 22-story office building stands in the commercial and financial center of the city, directly on the corner of the blind alley previously mentioned. This new and modern building will allow La Primera to guarantee optimum services to its members.

#### Caja Central as Overseer

Upon the establishment of the first association in La Paz and branch offices in the cities of Santa Cruz, Cochabamba, and Oruro, it was necessary to develop a central organization. As a result of a thorough study and evaluation of other Latin American savings and loan systems, a new Decree 07585 was approved by the government on April 20, 1966. This legal instrument initiated the Caja Central de Ahorros y Préstamos para la Vivienda--a private, nonprofit organization responsible for the development of a dynamic savings and loan system.

This central organization was opened for business in 1967 with the sum of \$10,000 borrowed from the only existing savings and loan association.

The Caja Central, which I have had the honor to serve as president since its creation, performs numerous functions for the Bolivian savings and loan system. For example, the Caja is empowered to charter savings and loan

associations and to regulate, audit, and inspect their operations. Likewise, it insures all deposits and loans made by the associations and provides life insurance for all home buyers. It is the main channel of resources from international lending institutions and serves as a first step to a secondary mortgage market.

The Caja trains all savings and loan personnel, conducts institutional advertising and any other activities which will result in furthering and strengthening the system. Of course, we also conduct a very intensive lobbying effort to protect the system.

### Significant Growth in Savings and Loan Volume

Savings are the backbone of our system and the key to our success. These savings are received into traditional passbook accounts. From the first deposit of \$33,000 in 1964 until December 30, 1980, net savings amount to more than \$25 million. This amount of net savings represents more than 20% of the savings held by the entire Bolivian banking system.

The diffusion of our loans, made up to 20 years, also represents a success for our system. We have been able to help 12,500 medium- and middle-low-income families to own their homes in La Paz, Santa Cruz de la Sierra, Cochabamba, Sucre, Potosi, Oruro, Tarija, and Trinidad. We have had virtually no repayment problems. The delinquency rate is extremely low in some mutuals, and nonexistent in others.

As of December 30, 1980, the families associated with our system had increased from 1,100 to 105,000 which represents 21% of the families making up the urban population of Bolivia. This steady penetration in the community constitutes proof of the trust gained by savings and loan organizations whose operation, day by day, contributes effectively to form a savings habit among the most diverse income groups: public employees, industrial and commercial employees, teachers, artisans, workers, and farmers.

### Participation in the Secondary Mortgage Market

We have gained the confidence of public and international lending institutions by incorporating mortgage life and FHA insurance into our operations, making Caja Central, by law, the insurer. These types of insurance not only allow us to guarantee internal and external financing, but also allow us to enter the national and international secondary mortgage market. So far, we have obtained financing for a total of \$34 million.

The major part of this sum corresponds to direct loans secured under the AID Housing Investment Guaranty Program. This housing program and its director, Peter Kimm, have provided us with the technical and financial support without which we would not have had the success we are reporting to you today.

A long list of North American savings and loan associations have participated in the above-mentioned guaranty program, but I am particularly pleased to acknowledge the cooperation of the First Federal Savings and Loan Association of Pittsburgh. We also have the permanent backing of the Federal Home Loan Bank of New York and its president, Bryce Curry, the United States League of Savings Associations, the National Savings and Loan League, the U.S. Savings and Loan Foundation, and other institutions. Also important were the loans made by the

Inter-American Development Bank, the Inter-American Savings and Loan Bank, and the Central Bank of Bolivia.

### Aid to the Rural Sector

From the beginning, the Savings and Loan System has given priority to the needs of the middle- and lower-middle income groups, since these two groups constitute the majority of the 105,000 members of the associations. However, since 1978 we have also deemed it necessary to extend our savings and loan activities to the lower-income groups in both urban and rural areas. This is now our policy in all our national housing programs.

Before embarking on an extensive rural housing program, the Savings and Loan System felt it necessary to carry out a regional survey in selected areas of the country. This was done in order to establish pilot projects, since Bolivia is a nation of great climatic, geographical, and cultural differences.

In 1978 the Savings and Loan System began two pilot housing projects, one in the high plateau area and another in the livestock-producing lowlands in the eastern part of the country. The Huancarani Project is located at an altitude of 12,000 feet above sea level in the Department of Oruro, about 270 miles from La Paz. The inhabitants of this community depend on farming and sheep raising for their living. For this project we have instituted self-help methods with the participation of the community. There are 43 separate, single-family dwellings on both sides of the road leading to the city of Oruro. The lands were granted to the peasants by the Agrarian Reform Law, in 1953. The technical assistance for the projects has been provided by the "El Progreso" Association and the Community Development Office of Oruro. These dwellings were built with sun-dried mud bricks, "adobe," a traditional building material abounding in many parts of Bolivia. Housing loans were used to purchase materials not available locally for roof construction, doors and windows, brick or cement flooring. Each dwelling consists of two or three rooms with a total construction area of 500 to 600 square feet. The loans granted in each case do not exceed the equivalent of US\$400.

Rural housing loans based on the borrower's limited income are granted at reasonable interest rates for 10-year terms. Repayment is made twice yearly, an exception adapted to the seasonal cash income obtained through the sales of livestock and agricultural products. Each loan is guaranteed by the agricultural and livestock production obtained by the borrower and the co-signature of another peasant of the community. A loan agreement is drawn up in which the community acts as the warrantor.

An analysis of the benefits derived from the self-help methods indicates the following advantages to the rural home owner:

1. The use of local materials which are less expensive than those brought from the city.
2. Effective use is made of mutual aid by all the inhabitants of the community not only in construction but in obtaining basic services such as potable water, electricity, markets, schools, roads, bridges, etc.

3. Better housing is achieved through mutual aid, considering the limited resources of the rural home owner.
4. Systematic savings habits are promoted to encourage thrift and home ownership.

The other rural housing project is the Villa Lolita Housing Project under the direction of the "Paititi" Association. This project is an experiment in self-help methods. There are 600 lots, each one measuring 3,500 square feet with a construction area of a single-room dwelling not exceeding 300 square feet. Locally available materials such as bamboo, mud, palm thatch, and Spanish tiles are used in the traditional building methods. The loan does not exceed US\$400 as these are families with very few economic resources.

The housing loan in this case is granted in two parts, the first for the purchase of the lot and the second for roof improvement, purchase of doors, windows, and flooring. The loan is based on the total monthly family income of each home owner. Basic services of potable water and electricity are obtained with the cooperation of the local authorities.

A vast rural housing program is underway with the cooperation of the 11 associations with a US\$4 million loan recently obtained from U.S. investors under the AID Housing Guaranty Program. The plan will consist of three kinds of housing loans:

1. Loans up to US\$475--for finishing and improvement of 993 units.
2. Loans up to US\$1,900--for expansions and improvement of 1,773 units.
3. Loans up to US\$4,050--for the construction of 237 basic housing units.

The loans are being granted by the association after information has been obtained on the needs and resources of the future borrower.

The rural population today is holding a very important portion of the entire mass of money in circulation. Savings amounting to an average of \$500 per family are kept under the mattress. So far, no financial institution has been able to capture these savings.

It is necessary to establish financial institutions in the rural areas which are owned and controlled by the peasants themselves. These institutions will be able to finance not only housing but the entire spectrum of needs to help them to finance production and commercial loans.

At present, the Savings and Loan System is undertaking a challenging housing program to assist lower-income families in urban as well as rural areas. This is a difficult task to accomplish since the program serves large groups of families who in most cases have limited incomes. In other circumstances this income is seasonal. Moreover, the cost of providing basic services such as water, electricity, schools, roads, markets, etc., is constantly increasing and the financial resources available are obtained at very high interest rates.

The Savings and Loan System believes that the programs designed to solve the housing needs of the urban and rural lower-income families can be accomplished successfully provided that we can obtain the close cooperation of the Bolivian government, of international lending organizations, and the individual and collective efforts of the families involved.

I sincerely hope that the experiences I have summarized in this report will contribute in some way to the savings and loan systems of this great Asian continent which also pursue a common objective: to help those groups with the least resources to obtain better housing and a better standard of living.

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## ALTERNATIVES TO CONVENTIONAL MORTGAGE FINANCE SYSTEMS

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INTRODUCTION

The housing finance programs which have been instituted in developing countries usually employ conventional mortgage financing techniques. Typically, these programs offer level payment mortgages with high downpayments and below-market interest rates. The limitations of conventional housing finance systems are summarized in Exhibit 1. In essence, these limitations are the result of dealing with a disorganized system by conventional means. Low- and even middle-income households frequently do not meet the criteria established for lending. These criteria are based on those employed in more developed economies and may not be appropriate in a less developed country. In order to devise housing finance programs that will reach a broader spectrum of the population, alternatives to the traditional mortgage finance systems should be considered.

DOWNPAYMENT REQUIREMENTS

In a number of countries it appears that unrealistically high downpayments are required. Downpayments of 40%, 50% or 60% of the value of the housing unit frequently are paid. In many cases, the loans being given to private sector borrowers relative to the value of the dwelling are so low as to reduce the usefulness of mortgage credit. In addition, the required downpayments are beyond the financial capacity of a large portion of the households requiring housing. Loan-to-value ratios are inordinately low because of regulations which do not appear to be supported by delinquency and foreclosure experience and because of the low interest rates generally charged on mortgage loans.

It is likely that in many countries low loan-to-value ratios are employed to ration credit. As an alternative means to achieve the same end, mortgage lenders could relate interest rates to loan-to-value ratios. For example, a 60% loan might bear an interest ratio of 10%, a 70% loan 12%, and an 80% loan 14%.

The reduction of downpayments to more reasonable levels would make housing affordable to a larger segment of the population. The lowering of downpayment requirements without greater risk exposure to the mortgage lender could be accomplished through government guarantees or insurance of mortgage loans or through requiring a co-guarantor on any loan in excess of, for example, 80% of the value of the property purchased. A program of this type could reduce or eliminate the risk to the mortgage lending institutions. Under a government loan guarantee or insurance program a fee should be charged for the guarantee or insurance sufficient to cover administrative costs and expected losses under the program.

## EXHIBIT 1

**LIMITATIONS OF CONVENTIONAL  
FINANCING SYSTEMS**

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HIGH ELIGIBILITY REQUIREMENTS	CONSTRAINTS ON HOUSEHOLD ACCESSIBILITY
<p>A. HIGH DOWN PAYMENT (LOW LOAN-TO-VALUE RATIO)</p> <p>B. COLLATERAL REQUIRED TO BE IN THE FORM OF MARKETABLE ASSETS</p> <p>C. REQUIREMENT OF EVIDENCE OF ESTABLISHED TENURE, USUALLY FEE TITLE</p> <p>D. AN ADEQUATE INCOME AT A SPECIFIED LEVEL</p> <p>E. REGULAR EMPLOYMENT AND INCOME FOR A REQUIRED TIME</p>	<p>A. INSUFFICIENT CASH SAVINGS. SAVINGS HELD IN THE FORM OF TANGIBLE ASSETS</p> <p>B. ASSETS USUALLY NOT IN THE FORM ACCEPTABLE TO CONVENTIONAL LENDERS SUCH AS CATTLE, JEWELRY, AND LAND</p> <p>C. TENURE IS NOT ESTABLISHED, USUALLY SQUATTER'S RIGHTS, TRIBAL SYSTEM</p> <p>D. AVERAGE HOUSEHOLD INCOMES BELOW THE SPECIFIED LEVEL</p> <p>E. ERRATIC OR SEASONAL EMPLOYMENT PATTERN, INCOME PATTERN AND SELF EMPLOYMENT</p>

The risks of making loans with a higher loan-to-value ratio would be reduced by the operation of the market itself. Where housing costs are escalating at a rapid rate, the increase in housing prices reduces the risk exposure of the lender. Exhibit 2 graphically represents the impact of appreciation in house prices on a lender's risk exposure. In the example, a housing unit costs \$1,000 today and a 20% of 10% per year. As the exhibit shows, the loan-to-value ratio declines rapidly. After only two years, the outstanding balance on a 20-year 80% mortgage at an interest rate of 10% is only about 64% of the market value.

An alternative to cash downpayments which could be considered is the value of the borrower's labor. For example, in the Building Together Project in Bangkok, Thailand, it was found that many families eligible for the project could not meet the minimum downpayment of B13,000 on the B65,000 homes in the project. The Government Housing Bank adopted a shadow price for the people's labor of B6 per hour. Since each family committed 1,500 hours of labor, the total value of the labor counted toward the downpayment was B9,000. Thus the families were required to pay only B4,000 in cash, which surveys had indicated was within their ability to pay. If a family had more savings accumulated, they could reduce the amount of financing required. The B9,000 credit would reduce monthly payments under the terms of financing for the project (12% interest over 15 years) by B108 per month, or 3.5% of the average household income of B3,100.

#### Adequacy of Collateral

When the security pledged against a loan is considered inadequate, the lender will frequently demand additional collateral or a co-guarantor. Traditionally this collateral must be money or financial investments such as a contract savings account. Many low-income families do not hold such assets. In many developing countries, wealth is maintained in nonmonetary form. Cattle, jewelry, building materials, automobiles, and equipment may constitute the majority of a poor family's assets. A system could be devised in which these tangible assets could be accepted as security for the mortgage loan. The borrower would assign the goods to the lender until a set amount of payments had been made. At this time the lender would release his claim on the goods.

The incentive to pay the mortgage promptly may be intensified if the family's means of livelihood, such as a taxi or equipment used in home industry, were at risk. Assets such as jewelry, which have cultural and social as well as monetary value, when pledged as security for a mortgage loan could also offer a substantial incentive to pay. The acceptance of alternative forms of collateral could help to lower the barriers to access to mortgage credit for many low-income households.

#### LAND TENURE

A major impediment to the efficient and widespread provision of mortgage credit in developing countries is the existing system of land tenure. The issue of land tenure is particularly relevant to housing finance because

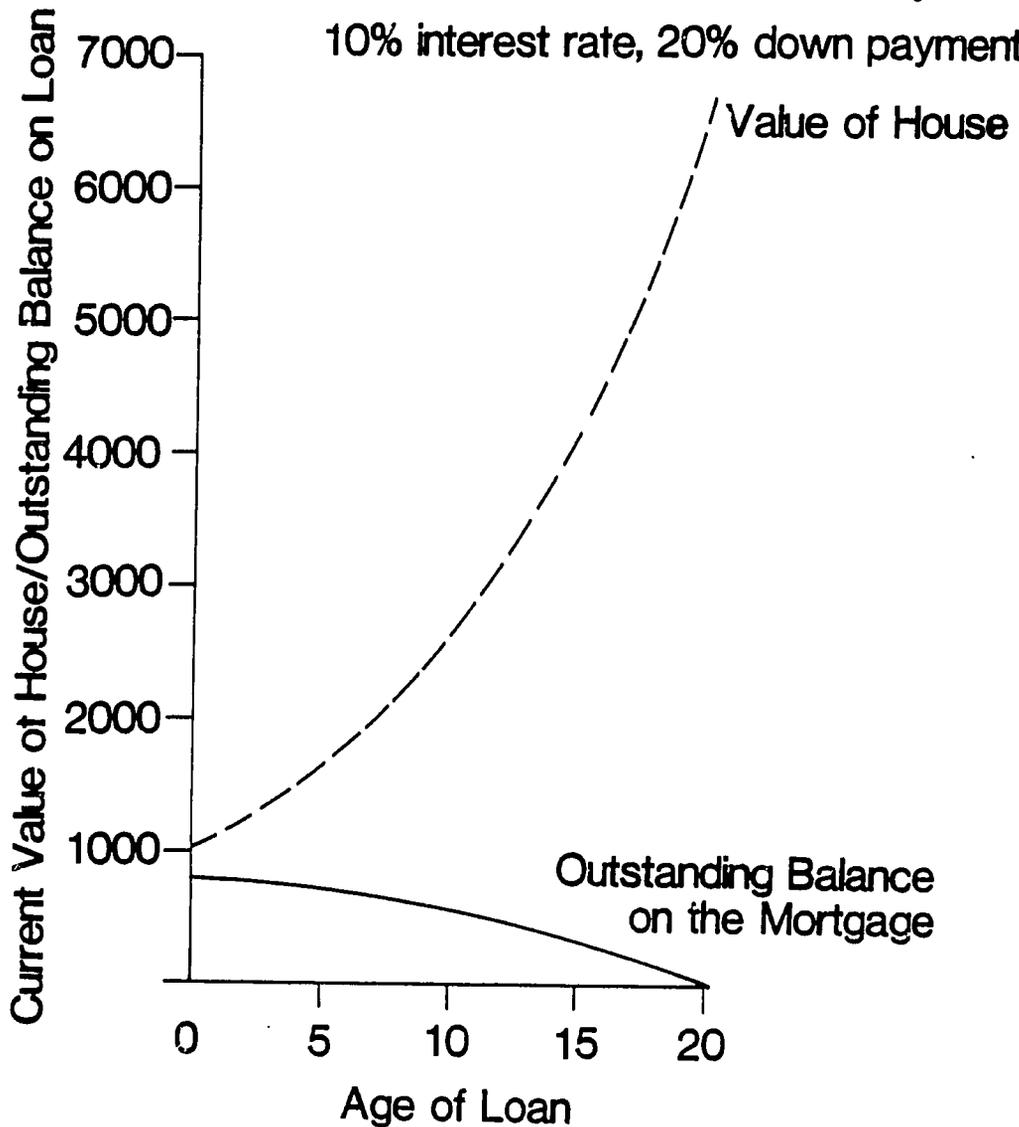
## EXHIBIT 2

### The Impact of Appreciation in Housing Prices on the Risk Exposure of Mortgage Lenders

Rate of Appreciation – 10%, per year

Mortgage Loan – 20 year maturity,

10% interest rate, 20% down payment



a mortgage, by definition, is a claim against real property. Therefore, the prospective borrower must possess some legal rights to real property if he is to avail himself of mortgage credit. Most conventional housing finance programs require that the borrower have a freehold interest in the property to be pledged as security for a mortgage loan and be able to provide the necessary documentation to establish that interest. Freehold ownership is regarded as providing the greatest security of tenure. However, a leasehold estate, or ground lease, if it is for a sufficiently long term--let us say 30, 40 or 50 years--may be considered equally secure, especially if the leasehold is inheritable and the lease includes an option-to-buy provision.

Securing a legal and secure claim to the land for the benefit of low-income households, by whatever legal means, is one of the most important functions of government housing authorities. The tenure issue is especially critical to the upgrading of squatter settlements and the development of new low-income housing projects. Security of tenure is one of the most intensely perceived needs of settlers. A desire common to households everywhere is to build a home on a piece of land they can call their own. In addition, security of tenure is a very important stimulus to a household's investment of time, money, and effort in constructing permanent dwellings on the land they occupy. It is understandable that households occupying land from which they could be evicted with little notice are less than fully motivated to invest their limited resources in building or improving their houses.

It is commonly agreed that the key to releasing the instinct to build is the security of tenure to land. The controversy arises over what form that tenure should take, what financial requirements should be imposed, and what restrictions, if any, should be placed on the land conveyed to settlers. If housing finance systems are to function effectively in reaching lower-income households, who are the least likely to have secure tenure in land, housing finance agencies must be flexible and innovative in structuring mortgage instruments which are consistent not only with the requirements of the mortgage lender and the low-income household's ability to pay, but with the prevalent system of land tenure operating in the country.

#### Granting of Freehold Estates in Government Lands

In some countries, such as Hong Kong, a large proportion of the land is owned by the government. In other countries, such as the Republic of Korea and Japan, government land banks have been created with land held in reserve for future needs. In still other countries where the majority of urban land is in private hands, the government can acquire land for public use only by expropriation. In those cases where the government already owns the land it has been argued that the financial value of the land is of little relevance. Since the government did not pay for the land, it can be given away, sold, or leased at minimal costs to low-income settlers. However, in terms of the net fiscal position of the housing authorities, the revenue lost by not selling or leasing the sites should be considered the equivalent of costs incurred in those cases where the authorities have had to purchase land for housing projects.

The granting of freehold ownership of government land to low-income households presents several problems. In the case of squatter settlements, the granting of legal title to the land is to acquiesce to an illegal action and, in fact, reward people for the illegal seizure of land. Such a move by the government could actually result in an acceleration of the growth of squatter settlements.

The issue of land tenure is very complex in many developing countries. In many countries the system for land registration or recording is primitive at best. For example, in Indonesia it is almost impossible to ascertain the boundaries of a tract of land and the rights of the various owners, creditors, tenants, heirs, and other claimants. Even if a system of land registration is established, the problem may not be resolved. It would be a lengthy and costly undertaking to register the claims of all land in areas where customary or Muslim law have provided the framework for land distribution for centuries. The passage of laws requiring the registration of land titles will not necessarily alter the behavior of families accustomed to traditional land laws. A possible solution would be the use of a form of title insurance in which conflicting claims would be adjudicated, title vested in the most likely owners, and insurance provided against other claimants. Such a system has been used in Singapore.

Another problem is that freehold ownership, unless it is specifically restricted by the deed, imparts the right of alienation. A family in a squatter settlement could reap an immediate cash windfall by selling its plot of land or apartment and renting it back or moving on to another squatter settlement. Even if the deed states that the grantee cannot sell the land for a specified length of time, enforcement of this condition would be difficult. In some Korean and Hong Kong housing projects it is recognized that this type of technically illegal activity is common.

How can this problem be avoided? One possibility is to defer the issuance of title until the grantee builds a dwelling on the lot. However, this alternative may only defer the sale. Another alternative is to establish concurrent ownership with the local housing authority. Both of these alternatives would require enforcement to be effective. The cost of enforcement and the likelihood that such restrictions cannot be enforced effectively cast doubt on the efficacy of any legal restraints to prevent the sale of this land.

Another possibility would be to grant title to the entire tract to an owner's association, cooperative, or some other organized community entity with each member owning an undivided interest in the entire tract proportional to the value of his individual parcel. This solution has been employed in the Building Together Project in Bangkok, Thailand. This "condominium" type of structure would require a high degree of cohesiveness and community organization within the settlement. It has been suggested that in those countries where the communal form of ownership is an integral part of the culture, that communal ownership would be readily accepted by residents. Legislation protecting the rights of residents could reinforce customary practices.

Perhaps the most critical problem of granting title is financial. Urban land in most developing countries is extremely costly. The typical low-income household could not afford to purchase the land, much less build a home on it. For example, let us assume that a family earning \$60 per month is offered a lot valued at \$1,000. The family can pay \$100 as a cash down-payment. If we assume that the family could afford to pay \$12 per month, or 20% of its monthly income, as a mortgage payment and that the interest rate is 10%, it would take almost 10 years for the family to pay for the lot alone.

At the other end of the spectrum, the government could give the land to the family. This course of action is commonly employed in many developing countries. The long-run implications of the wholesale giveaway of government lands can be serious. The first consideration is the financial implication for the housing authority. If the opportunity cost of giving away public lands is disregarded, a significant source of funds for future land acquisition and development would be lost. The relevant issue is not whether or not the government had to pay for the land, but the value of the land in the marketplace today.

Another potentially negative aspect of a free land program is that the settlers have less of a commitment to invest in the property. The temptation to sell the land off and make an immediate high profit would indeed be great, and perhaps irresistible.

The best course of action seems to lie between the two extremes. One alternative would be to value the land at less than the current market value. Since land values may be artificially inflated due to speculation, valuation at below market price may be a valid alternative. The price which is set for the land should be adequate to cover administrative costs and also contribute to the cost of providing services.

A method of valuation which could be used is to establish a fair market rent for the land and discount it at a cost of capital pegged to the rate the government pays for its funds. Assuming land were readily available and the land market functioned efficiently, if the \$1,000 lot used in the earlier example could be leased for \$75 per year and the fair return on land is 10%, the value today would be \$750. The difference of \$250 between the "fair" value and the current market price is due to disequilibrium between supply and demand, speculation, and market imperfections. Financing of the purchase of a lot at its fair market value could be accomplished by using what is called a lot or site loan. The lot loan could be in the form of a mortgage, where the household is granted title and the lender has a lien on that title, or an installment contract, in which the lender (in this case the housing authority) retains title to the land until either the full contract is paid off or the lot loan is converted to a permanent mortgage when the family builds its home. A lot loan is usually a balloon payment loan. The loan is amortized as if it were to be paid off over a long period of time, say 25 or 30 years, but payment in full is required at the end of a short period, say three to five years.

Exhibit 3 presents an example of a lot financing scheme. The "fair market value" of the lot is \$750, and the family can make a \$75 (10%) downpayment; the principal of the loan is \$675. If the loan were amortized over three years at 10%, the monthly payment would be \$21.78, or over 36% of the family's monthly income. However, if a balloon payment lot loan were used, with the \$675 amortized over 25 years, the payment would be only \$6.13 per month. At the end of three years, the family will still have an outstanding principal balance of \$653.54. If the family were not prepared to build at this time, the loan could be renegotiated at the current rates, terms, and conditions for similar loans. However, it is suggested that the amortization period for the renegotiated loan be reduced by the time elapsed from the first lot loan. In this example, three years have elapsed so that the term on a renegotiated loan would be 22 years, not 25.

If at this time the family is prepared to build a permanent dwelling on the lot, they would take out a mortgage loan for the remaining balance on the land plus the cost of construction, and their equity in the land could be used as the downpayment on the mortgage. Let's say that at the end of three years the value of the land has increased by 20% to \$900. Therefore, the family has \$246.46 in equity in the land. If the mortgage lending institutions require a 20% downpayment, the equity in the land would support a loan of \$1,232 with no additional cash required. At the time the mortgage loan is taken down, the lender would have a claim against both the land and the improvements.

#### Granting of Leasehold Estates in Government Lands

An alternative to freehold ownership which could be seriously considered is the ground lease. In urban areas where land costs are prohibitively high, the ground lease may be the most reasonable alternative for providing security of tenure to low-income residents and at the same time reducing the opportunity cost to the housing authority.

A ground lease is a long-term lease on land which can have an option to purchase incorporated into its provisions. The ground lease has a number of attractive features. First, it greatly reduces the cash requirement "up front" while giving the lessee possession of the land and security of tenure. This is one reason why ground leases are popular among commercial developers in the United States. Second, the ground lease provides the lessor, in this case the housing authority, with cash flow to finance other investments. Third, the ground lease gives the housing authority more control over the use of the land than outright freehold conveyance.

If a ground lessee wishes to take out a loan to finance the construction or improvement of his house, the mortgage instrument would not differ significantly from that used for a mortgage on a freehold estate. The mortgagee must require that the leasehold be in force and not be subject to any prior lien or encumbrance which could cause the leasehold interest to be terminated and that the remaining term of the lease not be less than the term of the mortgage. In the United States, lenders generally require that the lease have a remaining term of at least five years more than the term of the mortgage.

## EXHIBIT 3

## FINANCING LAND PURCHASE

I. VALUATION AT FAIR MARKET VALUE

Current Market Price	\$1,000
Fair Market Rent	\$75/year
Fair Return on Land	10%
Capitalized Value of Land	\$750

II. FINANCING WITH A LOT LOAN AND A PERMANENT LOAN  
AT THE END OF THREE YEARS

Value	\$750
Down Payment	\$75
Amortization Period	25 years
Interest Rate	10%
Balloon Payment Due	3 years
Monthly Payment	\$6.13

Outstanding Balance on Lot Loan at the End  
of Three Years: \$653.54

Appreciation in Lot Price	20%
Current Market Value of Lot	\$900
Equity in Lot	\$246.46

III. LOAN WHICH COULD BE SUPPORTED WITH:

No Additional Down Payment	\$1,232
\$100 Additional Down Payment	\$1,732
\$200 Additional Down Payment	\$2,232

### Private Lands

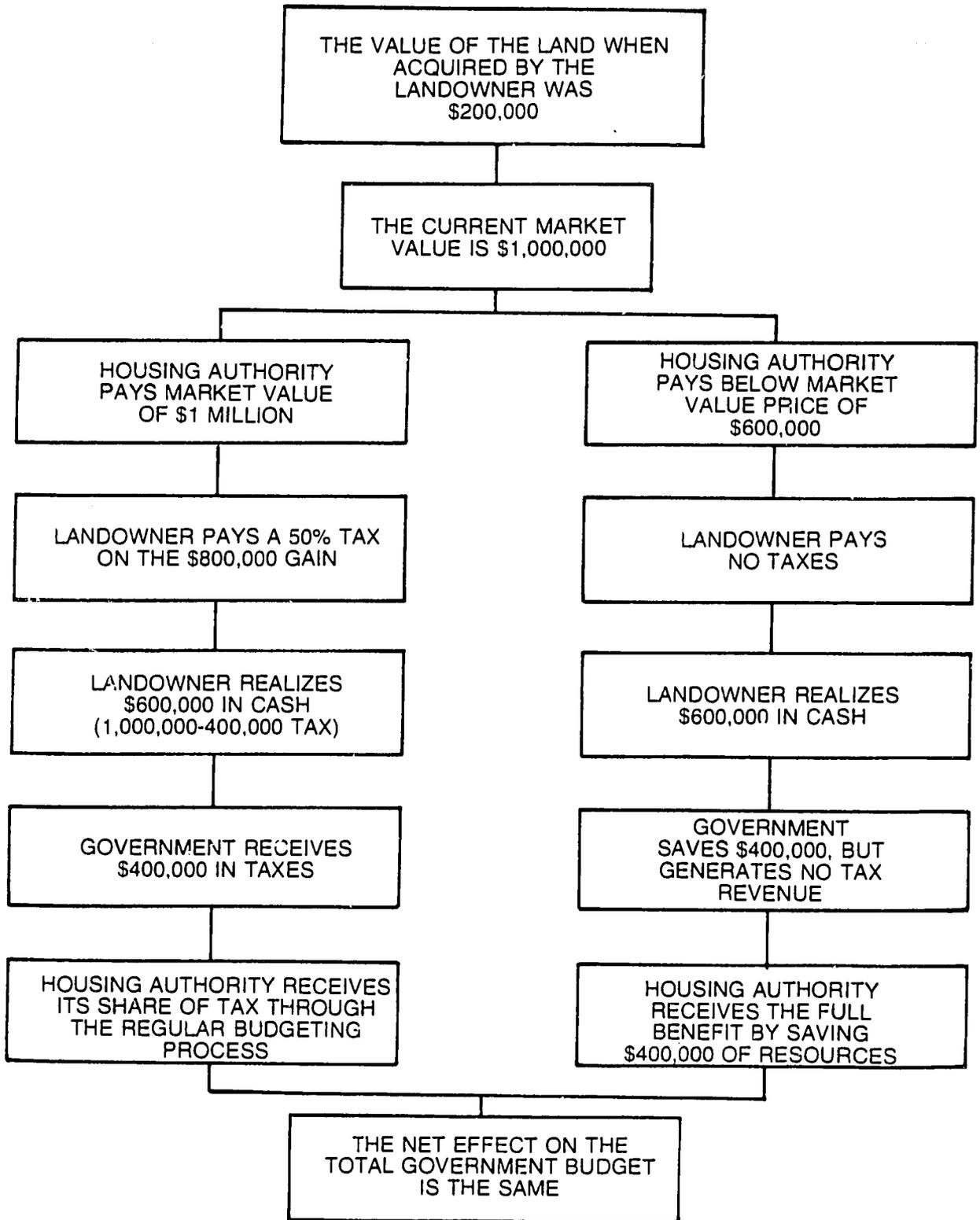
In countries where most of the land for low-income housing development is in private hands, the government must balance the interests of the low-income households which will receive the land against the interests of the landowners. The acquisition of private land by the government or housing authority may be difficult unless they have the right to expropriate the land--the right of eminent domain. Even in those countries where the government has the right of eminent domain, it must compensate the landowner for the value of his property. In many instances, the high cost of urban land virtually precludes land acquisition on a large scale. The full costs cannot be passed on to the low-income recipients, and if they are not, the government will rapidly exhaust the funds available for land acquisition.

Alternatives to cash payment to the landowner should be considered. In many countries there is a stiff tax on the "speculative" increase in land values when property is sold. Instead of purchasing the land at a negotiated price, the housing authority could compensate the landowner at a price well below market value, but not tax any increment over the original cost of the land. Such a scheme could be attractive to landowners, particularly those who had inherited their property. The example shown in Exhibit 4 will illustrate this situation. The landowner acquired a tract of land for the equivalent of \$200,000. The market price of the land today is the equivalent of \$1 million. If a 50% tax is imposed on the gain of \$800,000 in land value, the landowner would net only \$600,000. If the housing authority purchased the land and paid the landowner a tax-exempt \$600,000, the landowner would be as well off as if he had sold the land for \$1 million and the housing authority would have reduced its costs by 40%. The net cost to the government as a whole would not be reduced by this approach since the lost taxes would equal the reduction in price. However, unless the tax revenue were specifically allocated to the housing authority, not all of the tax revenues would be realized for housing. The policy at issue in this case is whether tax revenues generated by a land speculation tax should go to the general budget or be channeled into housing. In other words, should housing subsidize other sectors of the economy?

The government could also exchange property with the private landowner. This alternative would not involve any outlay of cash at the time the land is acquired, but may merely defer expenditure to the time when the land traded to the current landowner is required for development. At that time land prices may have increased to such an extent that any benefit gained from the land exchange could be offset by the incremental expenditure required.

In the case of raw land, the government could "joint venture" a project with the landowner. The landowner would contribute the land and the government would install the infrastructure. Well-serviced land can command a much higher price than raw land. When the installation of the infrastructure has been completed, the landowner could be allocated a parcel of the improved land proportional to the value of the raw land contributed plus a fair return on his investment. Thus, the landowner would possess a smaller,

**TAX EXEMPT LAND PURCHASE**



but much more marketable, parcel of land and the government would not have tied up needed cash in land acquisition. Exhibit 5 presents an example of a joint venture scheme.

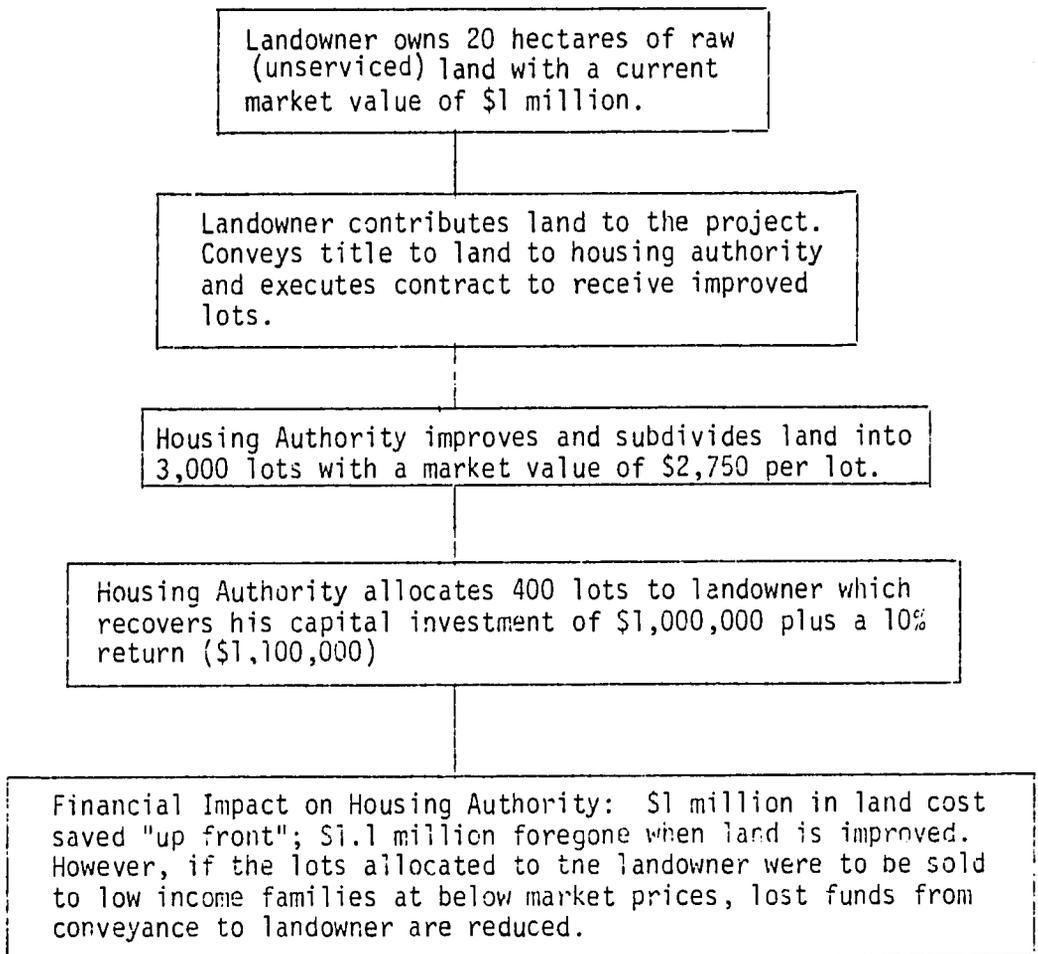
Programs should also be evaluated which encourage the landowner to put the land to residential use rather than holding it off the market or permitting illegal squatter settlements on it. Once again, the government could employ a "carrot and the stick" approach. Developing the land or upgrading existing squatter settlements should be financially attractive to the landowner and/or he should be faced with the implied threat of losing his property or paying a high "non-use" tax if he does not comply.

A ground lease scheme might be appropriate in cases where a landowner leases or grants rights to his land instead of selling it outright. A landowner could be offered a plan whereby if he leases parcels of land to existing or potential tenants and subordinates that lease to any mortgage for construction or upgrading taken out by the ground lessees, the government will provide services to the land, which will be paid at least in part by the lessees. Ground lease payments could be deferred for several years until the lessees have been able to at least begin construction of their homes. In squatter upgrading areas, ground lease payments could be deferred until the upgrading process is well under way. The government could establish a formula for rents which would provide the landowner with a fair income stream. Because the landowner's interest is "at risk" it may be possible to utilize him as a servicer of the mortgages to the families living on the land. The landowner could be compensated for his services as the collection agent. The primary appeal to the landowner would be that upon the expiration of the lease, the improved land would revert to the landowner to be sold at the then prevailing market prices. The prospects of substantial appreciation in the value of his land as it is developed at no cost to himself might prove appealing to the landowner.

### Communal Lands

Communal lands present a different set of problems for mortgage lenders. Since the individual borrower does not own a specific parcel of land, the mortgage lender does not have the land for security on the loan. In western countries, successful forms of communal ownership are the condominium and cooperative. However, lenders require compliance with a fairly extensive set of rules and regulations before they will grant such loans. Because the value of the security pledged by an individual borrower is dependent on the overall design, maintenance, and management of the project, mortgage lenders must be assured that the project is organized in a fashion that would insure the preservation and enhancement of property values. Condominium mortgages are viable instruments if all of the safeguards are imposed and the community organization carries out its obligations. In developing countries, it may be difficult to organize groups effectively unless they already have an existing bond.

## EXHIBIT 5

JOINT VENTURE WITH  
PRIVATE LANDOWNER

### Summary of Tenure Issues

In summary, security of tenure is essential to successful low-income housing projects and the financing of these projects. This security can be provided in many forms. The optimal form is that which is consistent with the social and cultural patterns of the country, is most affordable to the recipient households, provides the housing authority, the government, or the private landowner with a reasonable return, and offers the mortgage lender adequate security for the loan. Housing finance agencies should not insist on first mortgage ownership when it is beyond the means of low-income households without deep government subsidy or is difficult to obtain because of legal barriers. Housing policy should include a rational system of providing land tenure to low-income households through the passage of legislation and the establishment of lending practices which protect the rights of tenants and landowners alike.

### HOUSING AFFORDABILITY

A major constraint on the operation of an efficient housing finance system is the relationship between the cost of the housing available and the financial capacity of households. If a national housing finance system is to function effectively, serving social goals and being responsive to public needs, it must provide loans in some relationship to the financial capacity of the country's citizens.

For example, assume that the average income for urban households in a country is estimated at \$1,500. Exhibit 6 shows the value of housing units that can be afforded on a relatively unsubsidized basis, for downpayments of 10% to 40% of the purchase price and loan terms of 15, 20, and 25 years. This affordability analysis is based on several further assumptions: (1) an interest rate of 12% per annum; (2) monthly payments, (3) 25% of a household's annual income is allocated to housing payments; and (4) an annual household income of \$1,500.

The exhibit shows that the maximum selling price the average household could afford under the foregoing assumptions ranges from \$2,893 for a 10% downpayment and 15-year term to \$4,945 for a 40% downpayment and 25-year term. The table also indicates that housing affordability is more a function of the amount of the downpayment than the term of the loan.

A more rational approach to looking at housing affordability may be based on absolute levels of downpayment rather than percent of selling price. Exhibit 7 provides the same information as the previous table but provides for downpayments of \$500, \$1,000, and \$1,500. It should be remembered that \$1,500 represents a savings accumulation of approximately one year's income. The exhibit shows that affordable housing units range from \$3,104 for a 15-year term and a \$500 downpayment, to \$4,167 for a 25-year term and a downpayment of \$1,500.

The exhibit also provides an additional piece of information. This is the relationship of the selling price of the home to the annual earnings of the employed worker. It is a generally accepted rule of thumb that the value of a home should not be more than 2.5 to 3.0 times the purchaser's

## EXHIBIT 6

## AFFORDABILITY OF HOUSING

THE MAXIMUM PRICE AFFORDABLE BY THE  
 AVERAGE URBAN HOUSEHOLD  
 BASED ON DOWN PAYMENT

## Assumptions:

- \*Interest rate of 12%
- \*Monthly payments
- \*25% of annual income for mortgage payment
- \*1980 average urban household income of \$1500 per year

Term to Maturity	Percent Down Payment			
	10%	20%	30%	40%
15	2893	3255	3720	4340
20	3153	3548	4054	4730
25	3297	3709	4239	4945

## EXHIBIT 7

## AFFORDABILITY OF HOUSING

THE MAXIMUM PRICE AFFORDABLE BY THE  
AVERAGE URBAN HOUSEHOLD  
BASED ON AMOUNT OF DOWN PAYMENT

Assumptions:

- \*Interest rate is 12%
- \*Monthly payments
- \*25% of annual income for mortgage payments
- \*1980 average urban household income of \$1500 per year

Term to Maturity	DOWN PAYMENT		
	\$500	\$1000	\$1500
15	\$3104 (2.1)	\$3604 (2.4)	\$4103 (2.7)
20	\$3338 (2.2)	\$3838 (2.6)	\$4338 (2.9)
25	\$3467 (2.3)	\$3967 (2.6)	\$4467 (3.0)

Note: The numbers in parenthesis ( ) indicate the multiple of housing price to annual income. For example, with \$500 down payment and a term of 20 years, the selling price is 2.2 times the average annual income of \$1500.

annual income. As the total indicates, under the assumptions given, the selling price to annual income multiple ranges from 2.1 to 3.0.

This type of affordability analysis has major implications for housing finance. First, it indicates that if national policy is to be effective in providing housing solutions, the housing units which are to be constructed must fall within a realistic affordability range. Under the foregoing analysis, private housing finance systems can be expected to provide housing finance for units costing from 2.5 to 3.5 times annual household income. In some countries present housing policy is to produce housing units in the public housing sector with a cost beyond the means of even middle-income families.

#### ALTERNATIVE MORTGAGE PAYMENT PLANS

Providing alternatives to traditional mortgage lending instruments in the areas of downpayments, collateralization, land tenure, and planning for affordable housing will help to remove a number of the impediments to the operation of an efficient mortgage system. However, the primary constraint on the widespread use of mortgage credit is the inability of a large proportion of the population to meet required mortgage payments. The fixed-interest, level-payment method of amortization frequently results in loan repayment patterns beyond the capacity of all but the middle- and upper-income segments of the population. Mortgage payment plans can be structured so that payments begin at a low level and increase over time. Plans can also be devised which fit a family's income pattern. Such plans would require more administration than the traditional level-payment loan. Borrowers would have to be educated about the payment pattern and would have to understand that payments will change over time at regular intervals. Employees of the lending agencies would also have to understand the various types of loans and be able to use tables and calculators to determine the payments and balances outstanding. Loan administration costs may increase if alternative mortgage instruments are used.

The financial impact of alternative payment plans should also be considered. Graduated-payment plans assume that a borrower's income will increase over time at a rate high enough to reduce the impact of high mortgage payments on a household's budget. Marginally employed low-income borrowers may not realize such increases. In these cases, the graduated-payment plan may not be the best system. The financial impact on the lending agency is another factor. Graduated-payment plans reduce the cash flow and the cost recovery to the lending agency in the early years of the loan.

Alternative mortgage instruments are just what that term implies--alternatives. They can be used in combination with traditional loan payment plans. The objective of alternative payment systems is to allow more low-income households to qualify for a loan. It is the decision of the policy makers whether the costs of such programs are justified by the benefits of reaching more low-income families through formal credit systems.

### Graduated-Payment Mortgage

One possible alternative is the use of a graduated-payment mortgage. This mortgage incorporates an increasing level of payments over time. Payment increases can be based on a constant monetary increment or a constant rate of growth. The graduated-payment mortgage is appropriate because of real income growth and the inflation existing in most economies. For example, if price increases in construction are estimated at 15% per year, and the general inflation is at least 15% per year, a graduated-payment mortgage with effective payment growth rates ranging from approximately 2.5% per year to 5.0% per year would be conservative.

Let us examine the use of a graduated-payment mortgage on a property which sells for \$2,500. The mortgage requires a 10% downpayment; \$2,250 will be financed over 20 years of monthly payments. Interest rates of 8%, 10%, 12%, and 15% are considered. Two types of payment graduation plans are analyzed. The first is a constant dollar annual increase for ten years and then a level payment for the remaining ten years. The second is a constant annual percent increase of 2.5% per year for the first ten years followed by level payments for the final years. The results of this analysis are presented in Exhibits 8 through 11. These exhibits demonstrate that not only does the graduated-payment mortgage reduce the payments required in the early years of a loan, but it permits the lender to charge more rational interest rates without eliminating lower-income households.

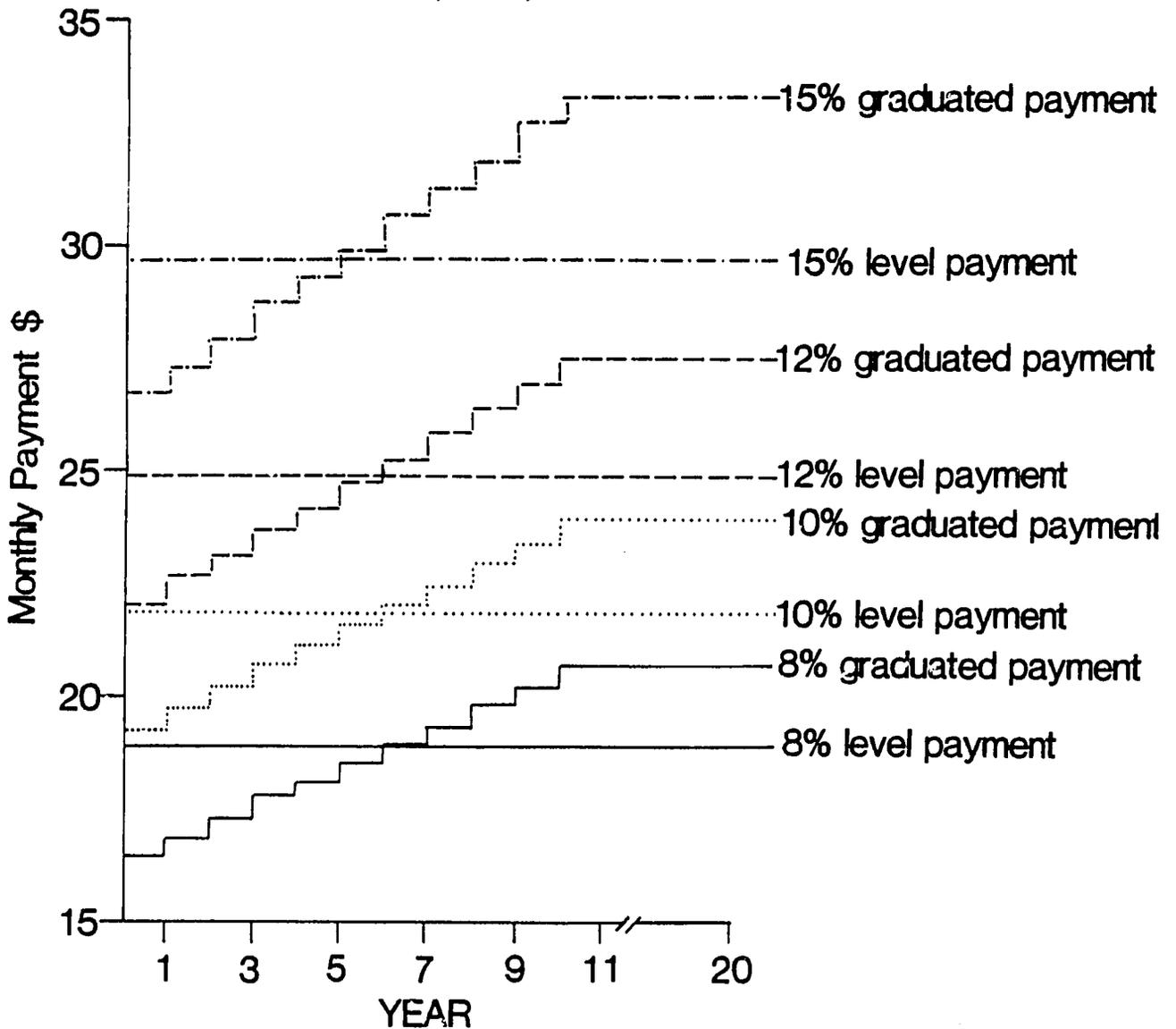
Exhibit 12 relates the level payment and graduated payments at a 12% interest to monthly household income levels, assuming that the family initially earns \$90 per month (\$1,080/year) and can afford to spend 25% of its monthly income on mortgage payments. It is also assumed that annual family income increases at a rate of 5% per year.

As shown in Exhibit 12, a family income growth rate of 5% per year will cause the burden of the housing payment to fall rapidly. With an income growth of 5% the ratio of monthly payment to monthly income falls from 24.4% when the loan is originated to 21.1% in the fifth year and 18.4% in year ten. By the twentieth year the monthly mortgage payments consumes only 11.6% of gross monthly income. The required rate of increase in household income appears reasonable in the context of the current economies of many developing countries.

When the concept of the graduated-payment mortgage is introduced into a project, families become eligible for loans who could not have qualified under a level-payment plan. In addition, the lender can charge higher and somewhat more realistic interest rates. The use of the graduated-payment mortgage at interest rates more consistent with world financial markets than those charged by many mortgage lenders increases the volume of mortgage credit available, provides credit to more lower-income families, and reduces the interest rate subsidy element.

EXHIBIT 8

**Relationship Between Level Payments and Graduated Payments with a Constant Annual Dollar Increase at Interest Rates of 8% 10%, 12%, and 15%**



## EXHIBIT 9

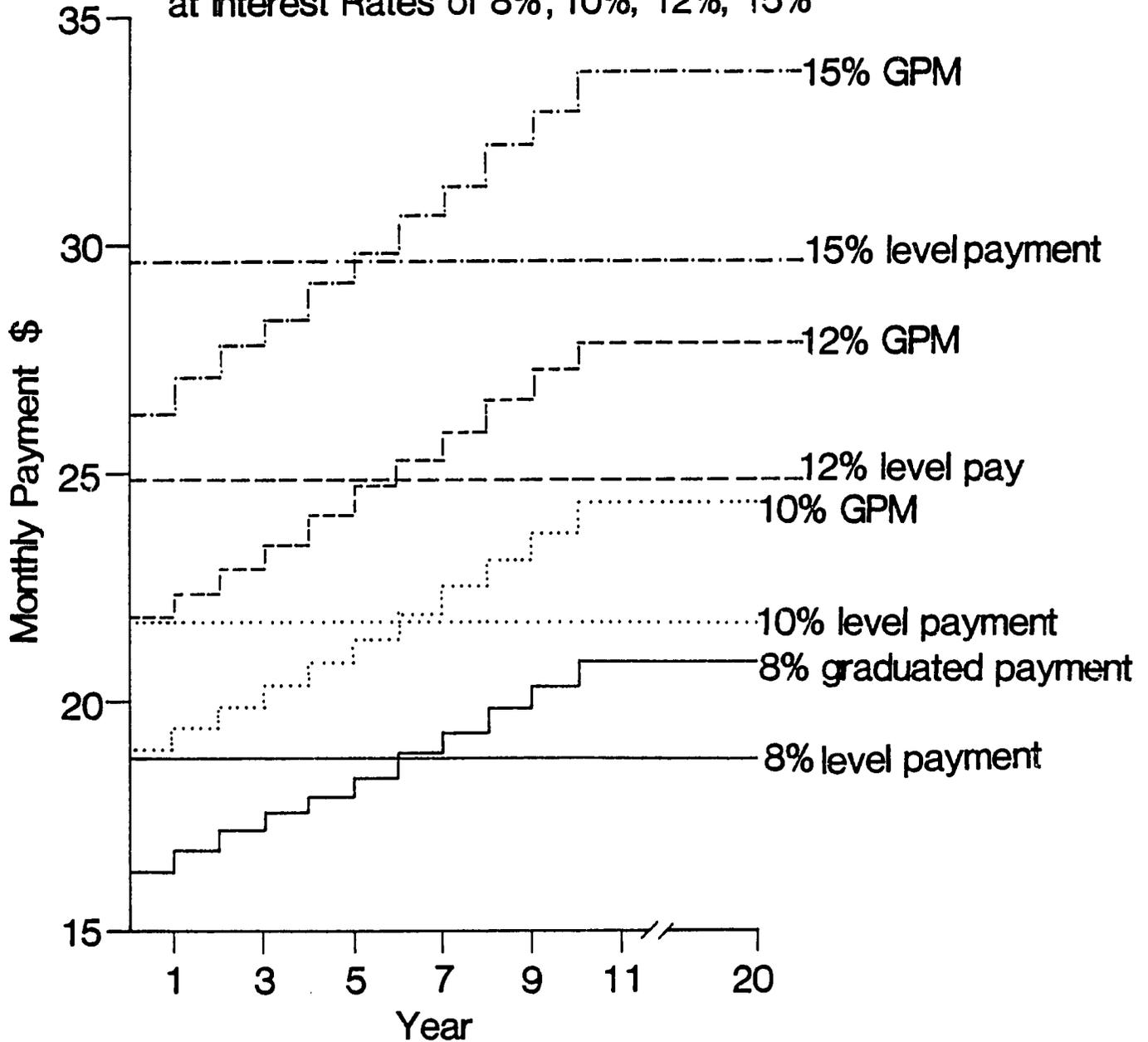
PAYMENT PATTERN FOR A  
GRADUATED PAYMENT MORTGAGE  
WITH A CONSTANT ANNUAL INCREASE  
FOR TEN YEARS FOLLOWED BY  
LEVEL PAYMENTS FOR TEN YEARS

Principal = \$2,250  
Term = 20 years  
Payments = Monthly

Year	Graduated Payment Required at Interest Rates of:			
	8%	10%	12%	15%
1	\$16.45	\$19.13	\$22.00	\$26.61
2	16.86	19.61	22.55	27.27
3	17.27	20.09	23.10	27.94
4	17.68	20.57	23.65	28.60
5	18.10	21.05	24.20	29.27
6	18.51	21.52	24.75	29.93
7	18.92	22.00	25.30	30.60
8	19.33	22.48	25.85	31.26
9	19.74	22.96	26.40	31.93
10	20.15	23.44	26.95	32.59
11-20	20.56	23.92	27.50	33.26
Increase in Monthly Payment Years 1-10	\$ .41	\$ .48	\$ .55	\$ .66
Increase in Annual Debt Service Years 1-10	\$ 4.92	\$ 5.76	\$ 6.60	\$ 7.92
Level Payment Required	\$13.82	\$21.71	\$24.77	\$29.63

EXHIBIT 10

Relationship Between Level Payments and Graduated Payments with a Constant Annual Growth Rate of 2.5% at Interest Rates of 8%, 10%, 12%, 15%



## EXHIBIT 11

PAYMENT PATTERN FOR A  
GRADUATED PAYMENT MORTGAGE  
WITH A CONSTANT ANNUAL GROWTH RATE OF 2.5%  
FOR TEN YEARS FOLLOWED BY LEVEL PAYMENTS  
FOR TEN YEARS

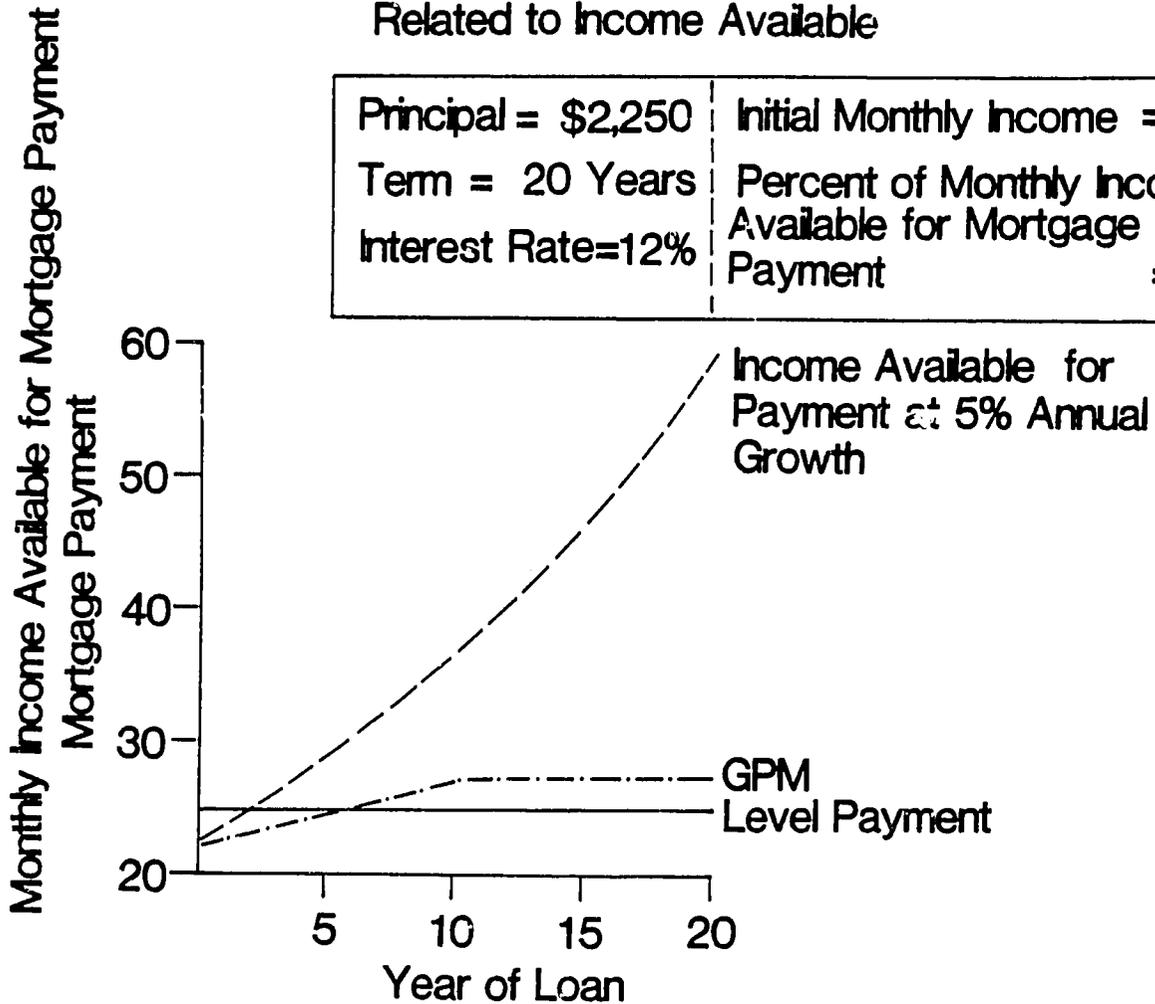
Principal = \$2,250  
Term = 20 years  
Payments = Monthly

Year	Graduated Payment Required at Interest Rates of:			
	8%	10%	12%	15%
1	\$16.26	\$18.93	\$21.79	26.38
2	16.66	19.40	22.33	27.04
3	17.08	19.89	22.89	27.72
4	17.51	20.38	23.46	28.41
5	17.95	20.89	24.05	29.12
6	18.39	21.41	24.65	29.85
7	18.85	21.95	25.27	30.59
8	19.33	22.50	25.90	31.36
9	19.81	23.06	26.54	32.14
10	20.30	23.64	27.21	32.95
11-20	20.81	24.23	27.89	33.77
Level Payment Required	\$18.82	\$21.71	\$24.77	\$29.63

EXHIBIT 12

**Graduated Payment and Level Payment  
Related to Income Available**

Principal = \$2,250	Initial Monthly Income = \$90
Term = 20 Years	Percent of Monthly Income Available for Mortgage Payment = 25%
Interest Rate = 12%	



Year	1	2	3	4	5	10	20
Graduated Payment Required	\$22.00	22.55	23.10	23.65	24.20	26.95	27.50
Level Payment Required	24.77	24.77	24.77	24.77	24.77	24.77	24.77
Income Available 25% of Monthly Income, 5% Annual Growth Rate	22.50	23.63	24.81	26.04	28.72	36.65	59.70

Under a graduated-payment mortgage loan-to-value ratios may be high compared to traditional loan-to-value ratios used by mortgage lending institutions in developing countries. Nevertheless, the loans appear to be adequately secured given the rate of housing price increases occurring in most urban areas. Assuming property values increase only 3.5% per year, a loan which begins at a 90% loan-to-value ratio will never have a loan-to-value ratio higher than 90%. Lenders can be protected from default loss in the early years of a mortgage by the use of mortgage insurance, additional collateral, or a pledged savings account.

#### The Pledged Savings Account Mortgage

The pledged savings account mortgage is designed to reduce the risk of making high loan-to-value ratio loans and at the same time lower the monthly payments required. The pledged account mortgage is a graduated-payment mortgage in which funds are drawn from the pledged savings account to make up the difference between the graduated payment and the level payment. The pledged savings account mortgage can be integrated into the contract or savings for housing schemes employed in many countries.

Exhibits 13 to 16 present the results of an analysis of the use of a pledged account for a mortgage on a \$2,500 property. The property is to be financed with a 20% (\$500) downpayment which will be drawn from the pledged savings account and 20 years of monthly payments. The difference between the graduated payment and the level payment required to amortize the loan over the 20-year term is withdrawn from the accumulated savings of the borrower. The analysis has assumed that the borrower has deposited funds with the savings institution and receives a 6% annual interest rate on a savings deposit compounded quarterly. Only a portion of the 20% downpayment of \$500 which has been accumulated in the savings account is cash to equity, in other words, a traditional cash downpayment. The balance is maintained in the savings account to be drawn down to reduce the monthly payments to the borrower. As the exhibits show, the use of the pledged savings account raises the loan-to-value ratio above 80%. In the case where the contract rate on the mortgage is 8% the loan amount is \$2,198.67 or 87.95% of the property value. In the case where the contract interest rate is 15%, the loan amount is \$2,331.68 or 93.27% of the value of the property.

The amount of savings which must be pledged against the loan after the deduction of the cash downpayment to equity ranges from a low of \$198.67 for the 8% mortgage to a high of \$331.68 for the 15% loan. The total cash which the borrower must accumulate remains level at \$500. Therefore, the borrower, by accumulating \$500, is able to make a higher loan-to-value ratio than he would be able to if he used the \$500 for a cash downpayment. At the same time, he is able to reduce the amount of monthly payment required. As the exhibits show, the monthly payments in the first year are reduced by 20%, thus extending credit to a larger proportion of low-income households.

In the analysis presented, the graduation plan used is the constant dollar annual growth. A constant annual percent growth can also be employed. In many cases the constant monetary increase is more easily understood and accepted by the borrower than the constant percent increase.

The lending institution benefits from the use of the pledged savings account mortgage in several ways. The risk to the lender of extending a high loan-to-value ratio loan is decreased by the pledged savings account. The lending institution also is able to maintain savings balances which it might not otherwise have been able to attract through savings plans not tied to housing. The lender also is able to increase its lending volume by making a loan which it would not have granted under a level-payment loan plan. Another advantage to the lender is that the pledged account can be employed to make up delinquent payments. In the examples given, a lender has almost 11 months of payments accumulated in the savings account at the origination of the loan. The lender may also find the pledged account plan attractive because of the effective yield on the loan is higher than the contract rate. In the examples given, the effective yields are 23 to 51 basis points (1 basis point = 0.01 percent) above the stated contract rate.

The pledged savings account facilitates the achievement of several objectives of housing finance agencies. It increases mobilization of savings, thereby expanding the volume of funds available for mortgage lending. It permits high loan-to-value ratio loans to be made to borrowers while reducing the payments required, therefore increasing the number of low-income families who can qualify for a loan. Since the pledged savings account also provides the lending institution with more attractive yields, the lender may be able to charge lower contract rates.

#### The Variable-Rate Mortgage

The variable-rate mortgage provides another alternative to the fixed-rate, fixed-term mortgage. It is appropriate in countries experiencing interest rate fluctuations which make fixed-rate loans costly to the lending institution, but which are not severe enough to require indexing. Using the variable-rate mortgage, the interest rate which the home buyer pays varies according to some automatic index or is changed by administrative determination. Examples of rates which might be used are the cost of funds to the mortgage lending institution, the cost of government debt, or the interest rate on new mortgages of a comparable quality and term. Frequently, limitations are placed on the extent to which the interest rate may be adjusted upward over the life of the mortgage and the amount of the adjustment which may occur in any single adjustment period. The variable-rate mortgage does not necessarily increase the financial capacity of the home buyer in affording the mortgage finance except as it may induce mortgage lenders to make loans under economic conditions which would prohibit them from making long-term fixed-rate loans.

## EXHIBIT 13

## PLEGGED SAVINGS ACCOUNT

Loan Information:

Property Value	\$2500	Down to Equity	\$301.33
Loan Amount	\$2198.67	Down to Savings	\$198.67
Loan Rate	8%	Total Down	\$500.00
Loan Term	20 years	Graduation Method	Constant Dollar

Payment Information:

Amount Financed	\$2,000.00
Total Interest	\$2,215.06
Total P & I	\$4,413.73
Total Savings Withdrawals	\$ 242.76
Total Net Payment	\$4,170.97

YR	--MONTHLY PAYMENTS --			-- YEAR-END BALANCES --			LTV
	P & I	SAV W/D	NET PMT	LOAN BAL	SAV BAL	NET BAL	
1	18.39	3.68	14.71	2152.19	165.49	1986.70	0.795
2	18.39	3.31	15.08	2101.87	134.62	1967.05	0.787
3	18.39	2.94	15.45	2047.36	106.80	1940.56	0.776
4	18.39	2.57	15.82	1988.33	81.60	1906.73	0.763
5	18.39	2.21	16.18	1924.40	59.38	1865.01	0.746
6	18.39	1.84	16.55	1855.16	40.34	1814.82	0.726
7	18.39	1.47	16.92	1780.18	24.67	1755.50	0.702
8	18.39	1.10	17.29	1698.97	12.58	1686.39	0.675
9	18.39	0.74	17.65	1611.02	4.28	1606.75	0.643
10	18.39	0.37	18.02	1515.78	0.00	1515.78	0.606
11- 20	18.29	0.00	18.29	1300.91- 0.00	0.00	1300.91- 0.00	0.520- 0.000

## EXHIBIT 14

## PLEGGED SAVINGS ACCOUNT

Loan Information:

Property Value	\$2500.00	Down to Equity	\$267.24
Loan Amount	\$2232.76	Down to Savings	\$232.76
Loan Rate	10%	Total Down	\$500.00
Loan Term	20 years	Graduation Method	Constant Dollar

Payment Information:

Amount Financed	\$2,000.00
Total Interest	\$2,938.42
Total P & I	\$5,171.19
Total Saving Withdrawals	\$ 284.42
Total Net Payment	\$4,886.77

## --MONTHLY PAYMENTS--

## -- YEAR-END BALANCES --

YR	P & I	SAV W/D	NET PMT	LOAN BAL	SAV BAL	NET BAL	LTV
1	21.55	4.31	17.24	2195.82	193.89	2001.92	0.801
2	21.55	3.88	17.67	2155.00	157.95	1997.05	0.799
3	21.55	3.45	18.10	2109.91	125.13	1984.79	0.794
4	21.55	3.02	18.53	2060.10	95.60	1964.50	0.786
5	21.55	2.59	18.96	2005.08	69.57	1935.50	0.774
6	21.55	2.15	19.39	1944.29	47.27	1897.02	0.759
7	21.55	1.72	19.82	1877.13	28.91	1848.23	0.739
8	21.55	1.29	20.25	1802.95	14.74	1788.21	0.715
9	21.55	0.86	20.68	1721.00	5.01	1715.99	0.686
10	21.55	0.43	21.12	1630.46	0.00	1630.46	0.652
11- 20	21.55	0.00	21.55	1530.44- 0.00	0.00	1530.44- 0.00	0.612- 0.000

## EXHIBIT 15

## PLEGGED SAVINGS ACCOUNT

Loan Information:

Property Value	\$2500.00	Down to Equity	\$229.99
Loan Amount	\$2270.01	Down to Savings	\$270.01
Loan Rate	12%	Total Down	\$500.00
Loan Term	20 years	Graduation Method	Constant Dollar

Payment Information:

Amount Financed	\$2000.00
Total Interest	\$3728.74
Total P & I	\$5998.75
Total Saving Withdrawals	\$ 329.93
Total Net Payment	\$5668.82

## --MONTHLY PAYMENTS--

## -- YEAR-END BALANCES --

YR	P & I	SAV W/D	NET PMT	LOAN BAL	SAV BAL	NET BAL	LTV
1	24.99	5.00	20.00	2240.91	224.92	2015.99	0.805
2	24.99	4.50	20.50	2208.12	183.23	2024.88	0.810
3	24.99	4.00	21.00	2171.16	145.15	2026.01	0.810
4	24.99	3.50	21.50	2129.53	110.90	2018.63	0.807
5	24.99	3.00	22.00	2082.61	80.71	2001.90	0.801
6	24.99	2.50	22.50	2029.74	54.83	1974.91	0.790
7	24.99	2.00	23.00	1970.16	33.53	1936.63	0.775
8	24.99	1.50	23.50	1903.03	17.09	1885.94	0.754
9	24.99	1.00	23.99	1827.39	5.81	1821.58	0.729
10	24.99	0.50	24.49	1742.15	0.00	1742.15	0.697
11- 20	24.99	0.00	24.99-	1646.10- 0.00	0.00	1646.10- 0.00	0.658- 0.000

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EXHIBIT 16

PLEGGED SAVINGS ACCOUNT

Loan Information:

Property Value	\$2500.00	Down to Equity	\$168.32
Loan Amount	\$2331.68	Down to Savings	\$331.68
Loan Rate	15%	Total Down	\$500.00
Loan Term	20 years	Graduation Method	Constant Dollar

Payment Information:

Amount Financed	\$2000.00
Total Interest	\$5037.11
Total P & I	\$7368.79
Total Saving Withdrawals	\$ 405.28
Total Net Payment	\$6963.50

--MONTHLY PAYMENTS--

-- YEAR-END BALANCES --

YR	P & I	SAV W/D	NET PMT	LOAN BAL	SAV BAL	NET BAL	LTV
1	30.70	6.14	24.56	2311.65	276.29	2035.36	0.814
2	30.70	5.53	25.18	2288.40	225.08	2063.32	0.825
3	30.70	4.91	25.79	2261.42	178.30	2083.12	0.833
4	30.70	4.30	26.40	2230.10	136.22	2093.87	0.838
5	30.70	3.68	27.02	2193.74	99.14	2094.60	0.833
6	30.70	3.07	27.63	2151.54	67.35	2084.19	0.834
7	30.70	2.46	28.25	2102.55	41.19	2061.36	0.825
8	30.70	1.84	28.86	2045.69	21.00	2024.70	0.810
9	30.70	1.23	29.48	1979.69	7.14	1972.56	0.789
10	30.70	0.61	30.09	1903.08	0.00	1903.08	0.761
11- 20	30.70	0.00	30.70	1814.15- 0.00	0.00	1814.15- 0.00	0.726- 0.000

The variable-rate mortgage may be of either of two types; the variable interest rate may be implemented through changing the monthly or annual payment required or through leaving the monthly or annual payment constant while changing the maturity of the mortgage. Exhibit 17 provides an example of the variable-payment type of mortgage. The exhibit shows a variable-rate mortgage in the amount of \$1,000 with a term of 20 years, monthly payments, and an interest rate 1% higher than the index rate. In developing countries, the index rate may be a central bank rate or an administratively determined rate. The exhibit shows the first ten years of the life of the loan. It also shows the index rate per year, the mortgage rate per year, the monthly payment, and the loan balance at the end of each year. The column entitled "Monthly Payment" indicates that with the variation in interest rates, the payment ranges from a low of 9.65 per month to a high of 13.04 when interest rates have reached the level of 16%. The year-end balance has decreased from 1,000 at the beginning of the period to 778.50 at the end. The rate of amortization is a variable depending upon the level of interest rates when they occur in the life of the loan.

The variable-rate/variable-payment mortgage has several advantages in the mobilization of housing finance funds. These include:

1. It allows lenders to make long-term loans even when future interest rate and inflation conditions appear somewhat unstable.
2. The variable-rate/variable-payment loan maintains a high level of cash flow to the mortgage lending institution allowing it to pay competitive interest rates for funds and raise funds for new lending activity.
3. The variable-rate/variable-payment mortgage provides some hedge against inflation. When inflation tends to be high, interest rates increase. At the same time, the monetary value of workers compensation also increases; thus, the real repayment of debt is maintained within the approximate affordability constraints of the home purchaser.

A disadvantage of the variable-rate/variable-payment loan is that the purchaser cannot forecast the level of cash flow required to service his mortgage; those on long-term fixed incomes may find the maintenance of their mortgage difficult. The second disadvantage is that the variable-rate/variable-payment mortgage requires greater accounting apparatus than do simpler types of mortgages. This mortgage may be less understandable, both by lenders and buyers, than a simpler approach. Finally, the variable-rate mortgage cannot easily adjust to massive changes in interest rates or runaway inflation.

An alternative form of the variable-rate mortgage can be employed where the monthly or yearly payment for the mortgage remains constant, but the number of payments required is adjusted to account for interest rate fluctuations. When interest rates rise, the number of payments is increased; when interest rates fall, the maturity of the loan is shortened. Exhibit 18 provides an example of the first four years of the variable-rate mortgage with a constant monthly payment of 9.65. In this example, the amount of the loan

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EXHIBIT 17

VARIABLE RATE/VARIABLE PAYMENT  
MORTGAGE

Amount of Loan            1,000  
Term                        20 years  
Interest Rate            1% over Index  
Monthly Payments

Year	Index Rate	Mortgage Rate	Monthly Payment	Year End Balance
1	9.0%	10.0%	9.65	983.45
2	10.0%	11.0%	10.30	967.21
3	11.0%	12.0%	10.95	951.03
4	10.5%	11.5%	10.63	931.80
5	10.0%	11.0%	10.33	909.18
6	11.0%	12.0%	10.91	886.10
7	12.0%	13.0%	11.48	862.17
8	13.0%	14.0%	12.03	836.96
9	13.0%	14.0%	12.03	807.98
10	15.0%	16.0%	13.04	778.65

EXHIBIT 18

VARIABLE RATE/VARIABLE MATURITY  
MORTGAGE

Amount of Loan            \$1,000  
Monthly Payment            9.65  
Interest Rate            1% over Index  
Original Term            20 Years

Year	Index Rate	Mortgage Rate	Remaining Years	Year End Balance
1	9.0%	10.0%	19.00	983.45
2	10.0%	11.0%	24.85	975.43
3	10.5%	11.5%	30.25	971.61
4	11.0%	12.0%	Interest Exceeds Payment	

is 1,000 and the original term 20 years. If at the end of the first year interest rates have risen to 10% for the index rate and 11% for the mortgage rate, the maturity of the loan must be extended to 24.85 years. The remaining balance of the loan at the end of the second year is 975.43. At the beginning of the third year, mortgage interest rates have risen to 11.5%. The maturity of the loan jumps to 30.25 years and the amortization occurring during the third year is extremely small. The balance of the loan drops from 975.43 to 971.61. At the beginning of the fourth year the mortgage rate has risen to 12%. At an interest rate of 12% the interest alone on the unamortized balance is 9.72 whereas the monthly payment is only 9.65. Therefore, there is no maturity which will allow the payment to pay off the loan and the variable-rate/variable-maturity mortgage breaks down.

The advantages of the variable-rate/variable-maturity mortgage are that (1) it maintains the accounting income of the financial institution and in an accounting sense allows the payment of competitive interest rates, and (2) the cash required from the borrower remains constant over the life of the loan, increasing affordability and allowing for cash planning. The disadvantages of the variable-rate/variable-maturity loan are substantial. First, the loan does not provide increased cash flow to the lending institution during periods of increasing interest rates. Therefore, cash is unavailable for the payment of higher interest rates for savings or borrowed funds. Second, the mortgage is very limited in its flexibility. Interest rates may only increase modestly before the variable maturity becomes infinite and the adjustment ceases to operate. The variable-rate/variable-maturity loan also shares the disadvantage of the variable-rate/variable-payment loan in that the accounting and bookkeeping are more difficult and the loan may be somewhat confusing to both lenders and borrowers.

#### The Renegotiable-Rate Mortgage

The renegotiable-rate mortgage can be regarded as a version of the variable-interest-rate mortgage. Like the variable-rate mortgage, the renegotiable-rate mortgage allows for the adjustment of mortgage terms as economic variables change. It enjoys the advantage of requiring fewer adjustments than the variable-rate loan. However, in periods of rapid economic change, this may also be its major disadvantage. The renegotiable-rate mortgage is based on a long-term amortization, with a fixed interest rate for a shorter period. For example, the mortgage amortization may be based on a period of 20 years; however, the loan interest rate will be renegotiated every five years. At the five-year anniversary period, the loan is examined and the interest rate is changed to coincide with current economic conditions. Normally at this time the borrower has the opportunity to prepay the mortgage without penalty of any type, or he may accept the new interest rate and continue the mortgage in force.

The method and amount of interest rate adjustments should be clearly understood by the lending institution and by the borrowers when the loan is originated. Because interest rates are renegotiated at predetermined intervals,

the accounting and bookkeeping requirements for the lending institution are less than those of the typical variable-rate loan.

An example of the renegotiable-rate mortgage is provided in Exhibit 19. The mortgage is in the amount of 1,000, has monthly payments, a term of 20 years, a rollover period of five years and an interest rate at the time of origination of 10%. The interest rate is adjusted to 11% for the period from the sixth through the tenth years. The 11% interest rate applies to the beginning balance of 898.02 which was outstanding at the end of the five-year period. The loan for the sixth to the tenth year will be based on an interest rate of 11% and an amortization schedule of 15 years resulting in a monthly payment of 10.21. The interest rate is again adjusted at the end of the tenth year and at the end of the fifteenth year. The loan is designed to fully amortize over the original term.

The advantages of the renegotiable loan are that it allows the lending institution to keep its loans relatively current with interest rates and other economic developments, allowing it to pay a competitive rate for funds and maintain the flow of mortgage credit. The disadvantages of this loan are that it does not provide as quick an adjustment to changing economic conditions as the variable-interest-rate loan and it is somewhat more difficult to understand and maintain than the fixed-rate fixed-term loan.

#### The Shared Appreciation Mortgage

One of the newest innovations in home financing is the shared appreciation mortgage (SAM). It allows the home buyer to obtain a below-market mortgage rate in return for a share in the appreciated value of the home purchased. The future share of the equity could be purchased by an institutional investor such as an insurance company, pension fund, or social security fund, or by the government itself. The equity investor pays the mortgage lender the difference between the monthly payments at the market interest rate and the payments at the below-market rate charged on the loan. The larger the share of the future home value sold, the lower the interest rate that can be charged on the loan. Like the renegotiable-rate mortgage, there is a predetermined date at which the home owner must pay the equity investor his share of the equity in the home. The home owner raises the funds by selling or refinancing the home.

An example will help to illustrate how a shared appreciation mortgage works. A family with monthly income of \$100 (\$1,200 per annum) could afford payments of \$25, assuming a maximum ratio of mortgage payment to gross income of 25%. If the current mortgage interest is 12% on a 20-year mortgage, the family's income could support a loan of \$2,270. The family has \$700 for a downpayment. Homes available in a housing project are selling for \$3,500. The family is unable to raise the additional downpayment required to qualify for a mortgage to purchase a home. Property values in this housing project are expected to increase at a 10% annual rate over the next five years. Therefore, the value of the home at the end of five years is expected to be \$5,637.

## EXHIBIT 19

LOAN ANALYSIS FOR  
RENEGOTIABLE ROLLOVER MORTGAGE

BEG MONTH	END MONTH	INT RATE	MONTHLY PAYMENT	REMAINING BALANCE
1	60	0.100%	9.65	898.02
61	120	0.110%	10.21	740.97
121	180	0.120%	10.63	477.91
181	240	0.130%	10.87	0.00
The Rate of Return on the Loan is		10.6415%		

The Housing Authority is willing to pay the difference between the \$25 per month the family can afford and the \$30.83 payment required to amortize an 80% (\$2,800) loan on the house in return for a 25% share of the \$2,137 increase in property value at the end of five years. The \$5.83 investment required per month for 60 months will return \$534.25 at the end of 60 months. The yield on the annuity would be 16.24%.

At the end of the fifth year the family would either sell the home to pay the housing authority the \$534.25 or refinance. Assume that the home is refinanced at 12% interest rate for the remaining term to maturity of 15 years. The amount to be refinanced would be the outstanding balance on the loan of \$2,568.81 plus the \$534.25 owed to the housing authority for a total of \$3,103.06. The monthly payment would be \$37.24. If the family's income had increased over the five-year period at a rate of 9% per year, the new payment would be less than 25% of their monthly income. If the family has accumulated savings over the five years, these savings deposits could be applied towards the required payment to the Housing Authority.

The SAM is based on the assumption that property values will increase in the future. In most urban areas property values increase at a rate at least equal to the rate of inflation in a country. The equity investor in a shared appreciation mortgage is speculating on future inflation and assumes the risk that the projected increase in value will not be realized. The shared appreciation mortgage is complex and would require a substantial amount of research and planning before it could be implemented. However, it opens a new possibility for the solution of the housing affordability problem.

#### Flexible Loan Plans

The discussion to this point has concentrated on relatively large long-term mortgages. In many cases, the uncertainty of a family's income makes the assumption of large long-term debt too risky an undertaking. For many low-income families a small loan with a three- to five-year maturity is more appropriate to their debt-bearing capacity. Such loans would be applicable in sites and services, core housing, and upgrading projects where construction is extended over a long period and is done in stages.

The level-payment, graduated-payment, and variable-rate mortgages can be applied to short-term as well as long-term loans. However, they have one drawback in common. All three types of mortgages are based on the regular monthly (quarterly, semiannual, or annual) payment of a set amount. The difficulty with utilizing such instruments for low-income families is that in many cases employment is not regular. Income streams from seasonal or intermittent employment do not come in level flows. Therefore, when it is assumed that a family can afford to pay 20% to 30% of its average monthly income on housing, the payments thus derived may be more than the gross earnings of a family in those months when incomes are low and inadequate during those months when incomes are high. As a result, families may fall behind in their payments during the low-income months, causing increased administrative and collection costs.

The regular-payment plan is not sacrosanct. It is utilized by lenders around the world because payments can be easily computed, bookkeeping and administrative costs are reduced, and institutions can predict their cash flows with some degree of accuracy and, as a result, can plan expenditures and investments. The certainty of a fixed payment also permits the borrower to plan his budget. In the case of the family with seasonal or intermittent income, it would be desired that in those months in which their income is high, they would put away the payments required during the months that family incomes will be low. However, in the case of low-income families, other needs are so pressing that even the most well-intentioned of borrowers may fail to make adequate provision.

Commercial banks in highly developed countries have recently introduced the concept of the customized loan geared to the income pattern of the borrower. The borrower establishes the payment schedule which best fits his income pattern when he applies for the loan. He can alter this schedule as his situation changes. The only constraint is that the loan be fully paid off upon maturity. The customized loan has been popular among workers whose income is seasonal, such as teachers, construction workers, and people receiving their income from agriculture, tourism, and other seasonal industries.

The customized loan is most applicable for short- to intermediate term lending. Therefore, it could be utilized for construction, building materials, or home improvement loans. The primary difficulty with any nonconventional loan has been the difficulty of determining payments. Loan amortization tables do not provide for a great deal of flexibility and innovation. But in 1980 this problem is not as great as it has been in the past. For a nominal amount, a lending institution could purchase a programmable calculator or small computer which could prepare an entire customized payment schedule in a matter of minutes. Several examples will illustrate the potential of a customized loan plan. In each case we will assume that the annual income of the borrower is \$840 and is constant for the life of the loan. The amount borrowed is \$700 and the term of the loan is five years. The loan is evaluated at interest rates of 10%, 12%, 15%, and 18%.

The annual income of the applicant of \$840 results in an average monthly income of \$70. As shown in Exhibit 20, an average income at this level would qualify the family for either a level-payment or a graduated-payment loan under the rule of thumb of 25% of monthly income at even the highest interest rate of 18%.

There appears to be no problem the family's ability to meet the financial obligations imposed by this loan. However, if the family's income pattern within a year is seasonal or intermittent, there may be some difficulty in meeting fixed monthly obligations.

Two family income patterns are shown in Exhibit 21. In the first case the family's income is seasonal. In the second case the family's income is intermittent. Most of the family income in the second hypothetical case

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EXHIBIT 20

MONTHLY PAYMENT  
REQUIRED TO AMORTIZE A LOAN  
OF \$700 OVER FIVE YEARS

A. Level Payment

Interest Rate	Payment	% of Average Monthly Income
10%	\$14.87	21.2%
12%	\$15.57	22.2%
15%	\$16.65	23.8%
18%	\$17.78	25.4%

B. Graduated Payment with 5% Annual Payment Growth Rate

P A Y M E N T

Int. Rate	Year 1		Year 2		Year 3		Year 4		Year 5	
	\$	% of Income								
10%	13.59	19.4	14.27	20.4	14.95	21.4	15.76	22.5	16.58	23.7
12%	14.25	20.4	14.96	21.4	15.68	22.4	16.53	23.6	17.39	24.8
15%	15.29	21.8	16.05	22.9	16.85	24.1	17.70	25.3	18.58	26.5
18%	16.36	23.4	17.18	24.5	18.04	25.8	18.94	27.1	19.89	28.4

## EXHIBIT 21

HYPOTHETICAL INCOME PATTERNS  
FOR A FAMILY EARNING \$840 PER ANNUM

## I N C O M E   P A T T E R N

Month	CASE 1: Seasonal	CASE 2: Level with Periodic Remittances from Family Member Working Abroad
January	40	130
February	40	30
March	40	30
April	40	140
May	40	30
June	100	120
July	100	30
August	100	100
September	100	30
October	100	140
November	100	30
December	40	30
Total Annual Income	840	840

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EXHIBIT 22

SKIP PAYMENT LOAN

Principal = \$700  
 Origination Date 5/01/80  
 First Payment Due 6/15/80

I. SEASONAL INCOME - Family makes payments only in the six months when income is \$100.

	<u>INTEREST RATE</u>			
	<u>10%</u>	<u>12%</u>	<u>15%</u>	<u>18%</u>
Number of Payments	30	30	30	30
Number of Payments per year	6	6	6	6
Amount of Each Payment	\$ 29.07	\$ 30.28	\$ 32.14	\$ 34.03
Annual Debt Service	\$174.42	\$181.68	\$192.84	\$204.18
Total Annual Debt Service (as a percent of total annual income)	20.8%	21.6%	23.0%	24.3%
Total Payments	\$872.10	\$908.40	\$964.20	\$1,020.90
Total Interest	\$172.10	\$208.40	\$264.20	\$ 320.90
Maturity Date	11/15/84	11/15/84	11/15/84	11/15/84

II. LEVEL INCOME WITH PERIODIC REMITTANCES - Family member working abroad  
 Family makes payments only in the months when remittances are received.

	<u>INTEREST RATE</u>			
	<u>10%</u>	<u>12%</u>	<u>15%</u>	<u>18%</u>
Number of Payments	25	25	25	25
Number of Payments per year	5	5	5	5
Amount of Each Payment	\$ 35.53	\$ 37.15	\$ 39.65	\$ 42.23
Annual Debt Service	177.65	185.75	198.25	211.15
Total Annual Debt Service (a percent of total annual income)	21.1%	22.1%	23.6%	25.1%
Total Payments	\$888.25	\$928.15	\$991.25	\$1,055.75
Total Interest	\$188.25	\$228.15	\$291.25	\$355.75
Maturity Date	4/15/85	4/15/85	4/15/85	4/15/85

is received from a family member working abroad. Unless the family is able to accumulate funds during the high-income months, it will be unable to meet its obligations during the low-income months. As a result the family may be chronically delinquent on its payments.

By using a customized loan payment plan, the loan can be structured so that the payments would be manageable. A skip-payment plan would permit the family to make payments in the months in which they had high income and skip payments in the months in which they had low income. The skip-payment plan would be appropriate for the family which has seasonal income or receives regular payments from abroad. The pattern of payment is established when the borrower applies for the loan. Therefore, the borrower and the lending institution know exactly when the cash flows will occur. The skip-payment loan is illustrated in Exhibit 22. The financial requirements for level-payment, graduated-payment, and skip-payment plans are summarized in Exhibit 23. As the exhibit demonstrates, the financial burden on the family is least under the skip-payment plan at all interest rates.

The lesson to be learned from this brief discussion is that housing finance institutions do not have to be limited to traditional financing instruments, terms, and payment plans. The use of customized loan payment systems for families whose income patterns are not suitable for level payments within a year will permit a larger number of families to qualify for financing without increasing risk to the lender. In fact, the tailored loan plan may actually decrease delinquencies and collection costs.

## CONCLUSIONS

The use of alternative mortgage instruments having maturities, amortization schedules, or interest rate adjustments which are different from those presently in use will not increase the basic stock of capital available for investment in housing. However, to the extent that present housing finance mechanisms may provide barriers to those desiring to participate, these barriers can be lowered in order to make housing and housing finance available to a wider spectrum of the population and increase the economic activity associated with instruments which may be available, those charged with developing financing mechanisms should carefully evaluate these as to their applicability in the actual circumstances of their country. These instruments should be evaluated based on at least the following considerations:

1. Is the nature of the mortgage instrument consistent with the economic conditions of the country? For example, long-term fixed-rate instruments without adjustment clauses make sense only in the most stable economies?
2. Are the cash flow characteristics of the mortgage instruments designed to support the cash flow of the financial institutions and allow them to pay competitive and necessary rates for obtaining funds?

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EXHIBIT 23

SUMMARY OF ALTERNATIVE PAYMENT PLANS

A. 10 PERCENT INTEREST RATE

	Level Payment	Graduated Payment	SKIP PAYMENT	
			Seasonal	Remittance
Number of Payments	60	60	30	25
Annual Debt Service	\$178.44	\$163.08 to \$198.96	\$174.42	\$177.65
Annual Debt Service (as a percent of annual income)	21.2%	19.4% to 23.7%	20.8%	21.1%
Total Payments	\$892.20	\$901.80	\$872.10	\$888.25
Total Interest	\$192.20	\$201.80	\$172.10	\$188.25
Maturity Date	5/85	5/85	11/84	4/85

B. 12 PERCENT INTEREST RATE

	Level Payment	Graduated Payment	SKIP PAYMENT	
			Seasonal	Remittance
Number of Payments	60	60	30	25
Annual Debt Service	\$186.84	\$171.00 to \$208.68	\$181.68	\$185.75
Annual Debt Service (as a percent of annual income)	22.2%	20.4% to 24.8%	21.6%	22.1%
Total Payments	\$934.20	\$945.72	\$908.42	\$928.15
Total Interest	\$234.20	\$245.72	\$208.40	\$228.15
Maturity Date	5/85	5/85	11/84	4/85

## EXHIBIT 23

SUMMARY OF ALTERNATIVE PAYMENT PLANS  
(CONT'D)C. 15 PERCENT INTEREST RATE

	Level Payment	Graduated Payment	SKIP PAYMENT	
			Seasonal	Remittance
Number of Payments	60	60	30	25
Annual Debt Service	\$199.80	\$183.48 to \$222.96	\$192.84	\$198.25
Annual Debt Service (as a percent of annual income)	23.8%	21.8% to 26.5%	23.0%	23.6%
Total Payments	\$999.00	\$1,013.73	\$964.20	\$991.25
Total Interest	\$299.00	\$313.73*	\$264.20	\$291.25
Maturity Date	5/85	5/85	11/84	4/85

D. 18 PERCENT INTEREST RATE

	Level Payment	Graduated Payment	SKIP PAYMENT	
			Seasonal	Remittance
Number of Payments	60	60	30	25
Annual Debt Service	\$213.36	\$196.32 to \$238.68	\$204.18	\$211.15
Annual Debt Service (as a percent of annual income)	25.4%	23.4% to 28.4%	24.3%	25.1%
Total Payments	\$1,066.80	\$1,085.11	\$1,020.90	\$1,055.75
Total Interest	\$366.80	\$385.11*	\$320.90	\$355.75
Maturity Date	5/85	5/85	11/84	4/85

\* Includes negative amortization.

3. Do the terms offered the home purchaser allow him the maximum possible participation in the housing finance area given the limitation of his real income?

4. Do the financial instruments allow for the cultural and lifestyle patterns which exist in the area? If seasonal income exists, does the payment mechanism take this into account? If financial institutions are poorly developed, are mechanisms available for dealing with borrowers and collecting payments?

5. Are the financing instruments designed to recover the real cost of funds.

6. Are the financing instruments to be used within the administrative and technological capability of those who will be charged with their use? Mortgage lending processes developed in western countries are based on high technology and should not be unthinkingly applied to less sophisticated financial systems requiring manual processing.

Thoughtful consideration of the alternative approaches to household financing can increase housing availability to the populace, increase the size and strength of financial institutions, and spur economic growth and development.

## PRIVATE SECTOR HOUSING FINANCE AND LOW-INCOME SHELTER IN INDIA

Mr. T. N. Nagendra  
General Manager  
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Countries of the less-developed world which resort to national planning for economic development are prone to underestimate the productive role of housing in the national economy. Housing is generally regarded as peripheral to the dynamics of the developmental process and is therefore largely ignored in economic planning exercises in favor of direct investment in infrastructure, industrial promotion, and agricultural production.

HOUSING AND THE ECONOMY

In India, total government expenditure in 1976 was Rs. 115 billion (US\$14.4 billion) of which Rs. 3.1 billion (US\$38 million) was allocated to housing. In other words, housing received 2.72% of total government expenditures.

Table Ia illustrates total expenditure on housing in several developing economies. Table Ib indicates the increasing share of housing in some developed economies over two decades. (In India, total gross capital formation in residential housing as a percentage of national income was in the region of 3.3%.)

TABLE Ia

Expenditure on Housing and Community Activities as %  
of Total Government Expenditure  
(Selected Developing Countries)

Peru	2.66	Philippines	1.12
India	2.72	Singapore	7.16
Korea	0.63	Sri Lanka	0.67
Malaysia	0.41	Thailand	2.37
Pakistan	3.14		

Source: Government Finance Statistics Yearbook, IMF, 1978

TABLE Ib

Residential Investment as % of GNP

	<u>1961-69</u>	<u>1970-78</u>
Japan	6.0	7.6
France	5.8	7.1
West Germany	7.2	6.5
Belgium	5.9	6.2



Mr. T. N. Nagendra, General Manager, Housing Development Finance Corporation, India, makes a presentation on private sector housing finance and low income shelter in India.



Mr. Albert Votaw, Assistant Director, AID Office of Housing (Abidjan) meets with conference participants.

TABLE Ib (cont.)

	<u>1961-69</u>	<u>1970-78</u>
Canada	4.5	5.7
Holland	5.0	5.6
Italy	6.6	5.4
United States	4.2	4.4
Britain	3.5	3.6

Source: OECD, Quoted from The Economist, January 17, 1981

Investment in housing, according to the Planning Commissions' estimates, has fallen from 34% in the first five-year plan to 10% in the fifth plan (1978-83). Further, total public sector outlay in housing has been falling as a proportion of total public-sector investment from about 16% in the first five-year plan to 1.6% in the Draft Plan 1978-83. The contribution of housing to National Income at current prices has fallen from 4.1% in 1960-61 to 3.3% in 1976-77.

Housing has received a declining proportion of total governmental resources. This reflects a celebrated attitude among development economists that government outlays ought to be in the areas which have low capital-output ratios. Housing construction, with ratios approaching 7 to 1 and above, therefore, has not been a favorite candidate for government investment. This view has been eroded in recent times with the realization that the housing stock yields housing services which flow over time; these services yield benefits to home owners in terms of shelter, environment, employment, and income besides being a capital asset which appreciates in value.

Further, the contribution of housing investment to employment and income generation in an economy with a mobile, willing, and underutilized labor force can be significant. (The income multiplier of housing construction may be in the region of 2. Employment in the construction sector, nevertheless, raises problems for the provision of adequate facilities for workers in an urban environment--housing and associated facilities being the most important.)

Income-earning opportunities in urban areas are perhaps the most powerful incentives which attract labor to metropolitan cities in developing economies. The related problems caused by this migration are complex and growing. Recent studies indicate that those living in slums, squatter settlements, and substandard housing contribute significantly to the urban economy. This suggests that the phenomenon of urbanization, while it imposes visible and severe costs, also produces substantial benefits. The task of minimizing these costs must be shared not only by the city authorities or state governments, but by all those who benefit by urbanization. The private sector and, most importantly, private initiative, has a significant role to play in providing an institutional and organizational structure through which resources can be raised and channeled to urban housing programs.

PRIVATE SECTOR HOUSING FINANCEAggregate Activity

While the government contribution to housing investment has been low the private sector has had to take up the major portion of the housing financing requirement. The Draft Sixth Five-Year Plan envisages a public sector outlay of Rs. 20.55 billion (US\$2.57 billion) and a private sector investment of Rs. 109 billion (US\$13.6 billion) over the same period totaling Rs. 129 billion (US\$16.1 billion) (see Table II).

TABLE II

Plans for Housing Investment  
(Draft Plan 1978-83)  
(Rupees in Millions)

<u>Period</u>	<u>Public</u>	<u>Total</u>	<u>Private</u>
1978-83	20,550		109,000
1983-88	34,500		159,500
1988-93	52,080		230,920
1993-98	85,910		285,090

Source: Planning Commission

While the private sector is expected to finance nearly 85% of total housing investment in the Sixth Plan, there is no institutional structure through which this order of finance can be channeled. Those who purchase or construct their own houses do so out of owned investible resources and through private savings. About one-third of total private-sector investment in housing is expected to be made in rural areas. Public agencies can assist in these programs to a limited extent. (See Appendix for a brief outline of public agencies operating in housing.)

Apart from finance, the Planning Commission estimates that public sector capability at present for the construction of houses is roughly 100,000 units per annum. The private sector is estimated to be capable of constructing 170,000 units per annum including unauthorized additions or alterations to the existing stock of houses.

Housing Finance and Development Banks

Financing housing is, perhaps, the most essential, initial requirement for an ongoing program of housing development. Like other major development activities, it requires a system of finance through the capital market and not simply government allocations under plan expenditure.

The era of development banks is a post-World War II phenomenon and India has seen the establishment of several such institutions working in various sectors. Examples include the Agricultural Refinance and Development Corporation, Industrial Development Bank of India, Industrial Finance Corporation of India, and the Housing and Urban Development Corporation limited.

These special banks, by virtue of their specialization, introduce elements of professionalism and expertise in their particular areas of activity. As more specialized banks fulfill the needs of various sectors of the economy, they in turn develop the domestic capital market. New instruments of finance are introduced and new sources of funds encouraged. These special banks have come to play a key role in India by financially deepening the capital market and permitting various sectors of the economy to function with much less reliance on the government fiscal budget and on international aid flows.

In 1956 the Industrial Credit and Investment Corporation of India (ICICI), a nongovernment financial institution was established with the aid of the World Bank to finance industrial projects, especially those which required foreign currency credits. It is an example of a semipublic company operating as one of the most successful development banks for industrial finance in a developing economy.

In 1977, ICICI, together with the International Finance Corporation, Washington, and the Aga Khan, was instrumental in promoting a new type of development bank, to finance housing along the lines of building societies in the U.K. and savings and loan associations in the USA. Known as the Housing Development Finance Corporation Limited (HDFC), it was the first nongovernment housing-finance agency to be established in India. With a share capital of Rs. 100 million (US\$12 million), HDFC commenced operations by providing long-term loans mainly to individuals for the purchase or construction of a residential house. HDFC raises resources through long-term lines of credit, certificates of deposit, and housing-loan-linked deposits. As of December 1980, HDFC had sanctioned Rs. 450 million (US\$56.25 million) for 18,759 units and disbursed Rs. 180 million (US\$22.5 million). Of total loans sanctioned, 80% were for individual ownership, the remaining 20% being loans advanced to companies for staff housing.

As HDFC does not receive any direct government financial assistance, it relies on the capital market and on its saving schemes for its resources. The mortgage rate of interest is determined largely by the cost to HDFC of the funds it borrows and the efficiency with which it lends. At present, the lending rate is in the range of 11.5% to 13% per annum.

HDFC is a beginning; it is the first housing finance and development agency in the private sector which faces a vast market for its lending operations. It will require a series of such institutions to meet the demand for housing finance which remains unsatisfied in the income range of Rs. 600 (US \$75) per month, and above. In India, specialized housing-finance institutions can play a significant role in stimulating investment, output, and employment not only in housing-related activities but in the economy as a whole. Their specialization itself will produce a rapid stimulus to home ownership while, at the same time, efforts to fund their activities would develop saving instruments specifically for housing, which have not hitherto existed, and strengthen investment opportunities in the capital market.

### Other Sources of Housing Finance

In India, some companies in the public and private sector have special housing schemes for their staff and workers at subsidized rates of interest.

In 1976 the commercial banks, for example, had Rs. 934.6 million (US \$116.8 million) outstanding as loans for the housing sector of which Rs. 585 million (US\$73.1 million) or 63% were for individuals--mainly employees. In 1974-75, the public sector, which includes the railways, other public-sector undertakings, etc., completed 67,000 units. Finance and construction of this type, however, is at best ad hoc and contributes little to a national delivery system of housing units.

The private sector relies on its own sources of funds to finance housing. Companies and individuals must rely on internally generated funds or personal savings, respectively. The public sector, on the whole, concentrates largely on the provision of housing for the economically weaker sections, the low-income groups, and middle-income groups of people. (See Table III for a definition of various income groups.)

TABLE III  
Definitions of Income Groups (HUDCO)

<u>Category</u>	<u>Income Range*</u> <u>(Monthly Income)</u>	<u>Definition</u>
I	Less than Rs. 351 (US\$44)	Economically Weaker Section
II	Rs. 351 - Rs. 600 (US\$44) - (US\$75)	Low Income
III	Rs. 600 - Rs. 1500 (US\$75) - (US\$188)	Middle Income
IV	Rs. 1500 and above (US\$188) and above	High Income

\*Total household income taken to include the income of husband, wife, dependent relations including unmarried children.

While the interaction between the private and public sector has been slight, the cooperative movement has played a significant role in bridging the gap. There are seventeen "Apex" Cooperative Housing Finance Societies at the state level which channel loans largely from the Life Insurance Corporation of India to over 26,000 primary societies. The LIC has advanced loans to Apex societies for housing which are guaranteed by the respective state governments. This has contributed to the construction of over 400,000 units up to June 1979, of which nearly 250,000 units have been occupied throughout the country.

The interaction between private and public-sector activities in housing can be much enhanced through the development of the capital market and by the issue of housing bonds by both public and private-sector institutions. While this will permit the raising of funds specifically for housing, they are likely to be costly and hence will be channeled to housing for the higher-income groups. The problem of slums, squatter settlements, and low-income households remain to be tackled.

#### FINANCE FOR LOW-INCOME HOUSING

It has been estimated that in India 85% of households are unable to own or finance a housing unit. It would be unrealistic to suppose that the government, public sector, or private sector would be able to cope with such a large problem. Each year population growth, urban density, and migration from rural areas create "concentrated" housing problems normally in areas where land is in short supply and is expensive. The housing problem, in other words, becomes more difficult to solve, given the dynamics of population flows into urban areas; it increases the investment required to produce housing for a given number of households.

Conventional financing institutions, including institutions such as HDFC, find it difficult to cope with a large number of small loans. Private-sector enterprises are responsible to their shareholders and have a responsibility to remain viable. High eligibility requirements for loans such as stability and regularity of income together with restrictive loan terms (high down payments, high rates of interest, relatively short maturity periods, penalties for delayed payments) disqualify the typical low-income household from access to long-term loan finance. Even public-sector institutions such as HUDCO must remain economically viable. Those disqualified from loan finance on conventional terms and unable to qualify for or receive public housing are forced to seek shelter within their resource capabilities and ingenuity. Housing remains, for the vast majority, a purely private activity. People in this category require a special subsystem of finance from nonconventional financial institutions which will cater to their own requirements.

#### Nonconventional Institutions

While the provision of high-quality housing is a laudable objective, it also involves high initial capital costs which puts it beyond the affordability threshold of the poor. Standards in housing must be made to conform to the objective and cost constraints faced by the target group to be benefited. To avail of unconventional financial arrangements, unconventional houses may also be required. Housing programs can only be formulated in accordance with the real requirements of the poor given their willingness and capacity to maintain and improve, wherever possible, their physical living environment.

A program to aid the poor, especially in urban areas, would require a process of evolution from existing standards to future betterment. At first, an elementary shelter, at an affordable cost, can be designed which would allow further extension and improvement as the resources of the household increase.

Finance would be required in sufficiently small amounts at various periods to help poor households use monetary resources optimally. Both building and finance of housing of this type would require strong community affinity and a collective desire to improve the living environment of existing slum and squatter areas.

Financing of this order would require institutions operating within the community. Cooperative credit societies or credit unions at the community level, functioning with the help of voluntary agencies and conventional financial institutions, may be an important first step towards the establishment of unconventional financial institutions. These institutions would help members of the community build up savings and grant loans tailored to the housing needs of the community. Local initiative of this type, especially from the private sector, can well meet the requirements of a successful program of urban renewal through the concept of self-help for incremental housing. The cooperative sector, already well established in India, can play a significant role in promoting private initiative with government support.

#### Housing Performance in Bombay

Bombay is an excellent example of the severe shortage of housing in a city which is doubling in size every twenty years. Table IV indicates that the city's population doubled between 1961 and 1981, addition roughly four million people. The housing requirement is likely to be in the range of 70,000 to 80,000 new units per annum.

TABLE IV  
Growth of Population in Greater Bombay

<u>Year</u>	<u>Population (Million)</u>	<u>Annual Growth Rate(%)</u>
1901	0.81	--
1911	1.02	2.59
1921	1.24	2.16
1931	1.27	0.24
1941	1.69	3.31
1951	2.97	7.57
1961	4.15	3.97
1971	5.97	4.39
*1981	8.36	4.00
*1991	11.41	3.17
*2001	15.19	3.08

\*Estimated

At present, the Bombay Housing and Area Development Board has been constructing an average of 2,800 units per year, the city and Industrial Development Corporation has contributed around 1,000 units per year in New Bombay- and the private sector (including cooperative societies) has contributed around 12,000 units per year. In other words, only 15,000 units are constructed for an annual requirement of nearly 80,000. These figures do not include the problems of old houses, slums, and past backlogs.

The 1971 census indicated that over 77% of households in Greater Bombay were residing in one-room units and slums. Over 20,000 buildings were identified as needing repairs. A hut-to-hut census undertaken in 1976 identified 1,680 slum areas in Bombay with a population of more than 2.8 million inhabitants; 79% of slum households had an income of less than Rs. 600 (US\$75) per month and the median monthly income per household worked out at Rs. 400 per month (US\$32).

Bombay's problems are enormous; current programs and concepts of housing construction, design, and standards are unrealistic, given the nature of the housing problem for nearly half of the city's growing population. New ideas and approaches and, above all, a commitment to treat housing construction and finance as a major economic and social goal in the 1980s will be crucial, failing which the problem will intensify to unmanageable proportions.

### CONCLUSION

While the demand for housing is prodigious, the ability to pay for housing is limited to one's own resources or one's success in obtaining long-term loan support from a housing institution. Housing "need," however, is an immediate problem, a problem of immediate shelter whether or not one is able to pay for it.

Housing has been largely a private activity in India. Obtaining housing is becoming an increasingly perplexing problem for middle-income groups in large cities, which leaves the poor largely to their own devices. There is an urgent need to formulate a national housing policy which would recognize some basic propositions:

1. To develop and promote a housing-finance system in India which would provide long-term loan finance to individuals for the purchase or construction of housing units. HDFC has already begun in the private sector; this could be supplemented by other institutions such as a national housing bank.
2. To develop instruments by which housing finance institutions can fund their activities through the capital market and from savings from future home owners.
3. To accept the need for formulating housing policies framed in relation to real housing needs of the poor and their ability to afford, maintain, and develop their standard of life. This would require a major overhaul of existing housing programs and would alter the concept of a "house."
4. While direct government programs can be enhanced, it would be prudent on the part of policy planners to develop an efficient delivery system for housing units together with methods by which these units can be financed by beneficiaries. This would establish an ongoing program of housing development while, at the same time, encourage future home owners to save specifically for a house of their choice.

5. While a substantial volume of resources can be raised for housing from future home owners, the government can increase its contribution to housing investment to at least 5% of GNP during the decade of the 80s. This is not unrealistic at the present time. A greater investment is required by government in establishing a housing finance system which, when begun can rely on its own efforts with diminishing direct support from the fiscal budget.
6. To recognize the importance of housing in the development process in general. A system of housing finance together with the capacity to deliver a range of housing units to all sections of society will have a major economic effects not only in generating employment, income, and output in the domestic economy, but in developing the scope of the capital market and encouraging domestic capital formation.
7. To review critically the entire legislative framework within which a housing policy operates. This will require appraisal of the Urban Land (Ceiling and Regulation) Act 1976 and Rent Control Legislation. The mortgage could be developed further as an active instrument on which housing institutions can rely for security and recovery as a transactable asset in a secondary mortgage market. The scope of mortgage insurance can be significant in this area.
8. Finally the importance of town and country planning, city development, and land-use patterns in urban areas must be recognized as a vital input into long-term urban planning.

While these propositions are by no means exhaustive, they do indicate the components of a future policy. The establishment of HDFC is an encouraging indication of the contribution that a private-sector institution can make to housing development.

In India, housing investment can play a crucial role in not only promoting housing construction but economic growth coupled with social welfare. Direct government finance of housing programs scattered throughout the country is likely to have a minimal impact on the supply of new housing units.

An enhanced flow of funds into the housing sector through housing-finance institutions from both the public and private sectors will, in time, contribute significantly to housing development. Housing is a sector which is attractive to private investment and has beneficial effects on individual standards of living, to the economy as a whole, as well as to city development. In the USA, over one-third of total funds raised in U.S. credit markets is for residential mortgages. The following quotation from *The Economist*, on December 27, 1980, is significant: "Today more American capital flows into mortgages than flows into any other use, including into the business investment on which America's future real income mainly depends."

In India, where the housing situation is acute, virtually the opposite prevails: less capital flows into housing than any other use. Though the importance of housing investment has been recognized, it will be some time before India enjoys a progressive and effective system of housing finance which will promote housing development for all sections of society.

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## FINANCING HOUSING DEFICITS FOR LOW-INCOME GROUPS

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The size of the urban shelter problem leads, paradoxically, both to exaggerated pessimism and to exaggerated optimism. Pessimism on the part of development planners and government budgetary officials, who find that available financing is inadequate to provide "a decent home for all"; that subsidy requirements quickly outrun budgetary resources; that, in effect, urban housing needs look very much like a bottomless pit.

The sheer size of the need, on the other hand, often generates an equally unjustified optimism on the part of those responsible for public housing, a feeling that if only given enough funds, traditional housing projects can do the job. The great unsatisfied demand means that a project, no matter how poorly conceived, can always be filled up: because of inflation, last year's project, no matter how costly, is always a better buy than this year's.

The statistics are, by themselves, dismaying enough. But I believe we must also recognize that, in most countries, publicly sponsored programs have generally proven very slow to organize and to implement. This being the case, we must recognize that any so-called "solution" to the urban housing problem, that requires a quantum leap in shelter construction and investment, is impractical and, indeed, contributes more to the problem than to its solution.

What I should like to try to outline in this paper are some attempts, with which I am familiar, to quantify a country's unmet basic shelter needs in terms designed to provide a basis for establishing the dimensions of a feasible solution, that is, the strategies which will permit a government to intervene effectively in the economy within the limits set by its performance and the availability of resources, both public and private. The key idea underlying this approach is leverage: what can government do to make a system, over which it has no real control, work better towards the achievement of its policy goals.

One of these studies is a summary of basic shelter needs in the five small Central American countries with a total population of 20 million, prepared by the consulting firm of Ables, Schwartz and Associates. The other document, prepared by Planning Research Co., suggests a strategy for meeting urban housing needs in Nigeria, a country of 80 million with one of the highest rates of urban overcrowding in the world--if United Nations figures are correct--3.5 persons per room, as compared to a figure of 2.6 for India.

While differing in purpose and in presentation, both studies have been developed using a similar methodology, which I believe can be used by policy makers in any country. The methodology uses available data:

1. to set forth need on the basis of the number and quality of housing units required in accordance with standards defined as acceptable to meet certain policy goals;
2. to describe effective demand both in terms of the number and quality of dwelling units that can be afforded by different subsets in the population and in terms of a projected aggregate investment in residential construction;

3. to feed back the information on effective demand in order to re-define acceptable standards in terms of what people can afford, that is, to reduce as much as possible the gap between need, as defined by policy, and effective demand; and, finally

4. to project the increased level of investment required to meet policy objectives.

Standards, it should be pointed out, are not absolutes. They have usually been presented that way: so many persons per room, so many square meters of living space. When standards are defined in terms of social good, in terms of what governments feel their citizens deserve, they tend to be unrelated to the way people actually live. The methodology used here suggests that government policy be concerned as how to provide the best shelter possible at any given level of cost.

It is at this point that governments can examine the constraints on the supply side of the shelter-delivery system--demand being considered for present purposes primarily a function of over-all economic growth--and begin to analyze the most effective use of its resources in the sector.

The brief outline of these two studies is intended to suggest some possible useful applications of this way of looking at urban shelter.

#### I. Description of Need

The exercise starts off with the familiar accumulation of available data:

- housing stock, tenure and conditions.
- infrastructure, services and community facilities.

An initial classification by subsets is useful. The Central American study simply identifies three categories: large cities (or metropolitan centers), non-metropolitan urban centers, and rural.

The Nigerian study sets up a grid based on the size of the urban center and on cultural/regional variations in housing types. This last identifies three basic types--savanna cities, forest cities, and new towns (i.e., colonial influence) - based on two variables affecting shelter typology and design: household organization, density and orientation, on the one hand, and neighborhood organization, including ethnic and income mix, on the other.

At this point a description of shelter prototypes can be useful. The Nigerian study identified five basic shelter prototypes, and the typical cost per unit of providing full facilities as described, based on the following:

1. Size of plot.
2. Size of typically built space (or potentially buildable).
3. Existing infrastructure, including water supply, sanitary waste disposal, energy (cooking fuel, availability of electricity), solid waste disposal, circulation, and drainage.

4. Availability of social services.
5. Personal security, including both individual tenure and personal safety (police, fire, building code enforcement).
6. Access to employment.

These prototypes are not normative. As suggested earlier in this paper, they describe the best housing available at given levels of cost, from permanent structures of modern materials in full-service subdivisions to multiple-family occupancy of rooms in temporary structures in illegal settlements.

The Central American study described conditions more simply in terms of those households lacking adequate basic sanitary facilities. These were defined as follows:

for rural shelter - the complete absence of waste disposal, or 85% of households

for urban - the absence of one connected waste disposal facility per household, or 70% of the population.

It should be noted that these descriptions do imply some judgmental decisions beyond the usual standard vs. substandard dichotomy. The Nigerian study defines need in terms of the estimated investment required to provide services, as defined, for each of the observed prototypical levels over five-year periods. These costs were compared with the prices affordable by households to estimate the percentage of households able to afford housing of a standard equal or superior to that reflected by each prototype. Assuming that households would occupy the highest affordable standards, total estimated needs were then multiplied by these percentages to project the number of units needed at each prototype level for each time period.

As incomes rise, as technology improves, and/or as governments upgrade existing neighborhoods, the relative number of households that can afford to live in each level of shelter will change. Abandonment of squatter shacks or the provision of services in a neighborhood lacking them, for example, can reduce the number of housing units in the least-desirable prototypes.

The goal of policy can be described as a progressive reduction in the number of households who can afford to live only in unacceptable conditions, that is at the lowest level.

In the Central American study, the definition of need in terms of public sanitation implies that governments will give priority to providing those goods and services that the private sector cannot supply, and this is evident in the description of the minimum shelter package:

- a minimum lot size of 60 M2, which is lower than that permitted under existing codes.
- a hierarchy of drained, paved and unpaved vehicular and pedestrian access (the details are not necessary in terms of the concept, and can obviously be modified and the modifications costed as part of the exercise).

- piped water within walking distance.
- on-site sanitary waste disposal.
- street lighting.
- materials and labor for a basic shelter unit of 20 M2.

Incremental improvements to the basic unit can be made in accordance with beneficiary income and inclinations, and will be constructed immediately by the households who can afford them. For purposes of estimating the total annual investment in residential construction these subsequent improvements were costed out to include, progressively, individual water, sanitary sewer and electrical connections, paved secondary streets, additional rooms, and a larger lot.

The Central American study suggested that 90% of the families living in substandard shelter (or 70% of the total population) could afford the minimum shelter package as defined above, were this to be acceptable government policy.

## II. Description of Effective Demand

The actual numbers of units required are derived through the classic definition of need in terms of one or more alternative hypotheses of population growth, plus an independent variable for the replacement of units to be demolished or abandoned and the reduction of overcrowding. These data can also be prepared in accordance with alternative economic growth projections.

Both studies then go on to describe acceptable standards for identifying need in terms of effective demand, that is by what households can afford in accordance with certain patterns of income distribution and household expenditures and certain assumptions on the availability and nature of financing.

This approach results in two sets of figures necessary for effective policy decisions. The first identifies how many households can afford "standard" shelter, as defined by government and, in turn, permits the feedback by which "standard" can be related to affordability. The second set of figures suggests an anticipated aggregate national investment in residential construction. Inasmuch as government resources can be predicted with relative confidence, it becomes possible to evaluate how they might best be applied for maximum leverage.

Data available for the Central American study permitted an estimate of anticipated monthly expenditure on shelter, and hence of total feasible shelter package, for each decile of income distribution.

Where less data is available, housing investment projections must perforce be more gross. In Nigeria, it was still possible to develop estimates for mean urban household income for each of the 19 states, and assuming a housing-income ratio of 15%, to derive from this an aggregate housing investment per state per year.

The purpose of this exercise is to indicate the general magnitude of the problem and the possible parameters of effective government intervention. There is no question but that these data can easily be criticized and that

considerable effort can be engaged in further refining them. It is our position that this is neither useful nor relevant. In the real world there is a gap between what the housing delivery system can supply at affordable costs and absolute needs as defined in terms of certain standards of acceptability. Assuming that the purpose of public policy is to reduce the gap between needs and effective demand, these data will enable a government to outline its strategy for resolving the differences between standards which are desirable and those which are affordable, and to evaluate the extent to which its intervention can leverage the housing delivery system to make an improved response to demand.

### III. Policy Implications

Both studies suggest that a realistic increase in the percentage of GNP devoted to residential construction can result in the provision of basic shelter for all classes in the urban population within the limits set by the performance of the sector and the availability of resources, public and private, provided--and this is very important--provided governments concentrate their efforts on encouraging programs designed to produce a very large number of new shelter units while at the same time upgrading the existing stock. There are three basic principles underlying such an approach.

The first is that the production of large numbers of units can only be done at prices the occupants and their governments can afford. This is why it is necessary to stress the adaption of technical standards to the beneficiaries' ability to pay and the conservation and upgrading of the existing housing stock.

The second principle is cost recovery. Housing is an investment. The capital used in the sector needs to be recovered. In that way, the shelter production system can be renewed and become self-sustaining. The recovery of public resources will relieve the shelter sector of overreliance on the vagaries of the government budgetary process and protect housing from the interruption of financing because of the potentially more important demands from other sectors.

Furthermore, subsidized housing, no matter how praiseworthy the intentions of its sponsors, rarely reaches those for whom it is intended and, in fact, creates endless problems for the government. The absence of an effective government program for all income groups leads to tremendous pressure for subsidized housing from those economically and politically best placed to exert this pressure. Subsidized housing has a built-in incentive to subleasing and speculation, because market rents are higher than public housing rents. Finally, subsidized rents are often accompanied by high delinquencies. It is easier to build than to manage. Upper-income tenants can afford the rents, but they are often less than willing to pay, have many other debts, and can sometimes avoid action by housing authorities. (Needless to say, recourse to widespread eviction does not lead to popularity prizes, either.)

Not only does most social housing go to those better off than the intended beneficiaries, but once the higher income occupants have moved in, their dissatisfaction with the standard of comfort creates interminable management problems for the sponsors. There is really no way to satisfy someone who expects something for nothing.

The third program principle is to assign different responsibilities to the public and to the private sectors, so that each can do that for which it

is best suited. There is danger in government trying to do everything. Admittedly, government has the monopoly of public resources, of wisdom, and of technical expertise; but experience shows that this does not often result in successful improvement of housing for all. There are also resource limitations: government needs to apply its resources where it will get maximum leverage. Finally, it must be recognized that even in those countries with large and well-managed public-housing programs, possibly 90% of the housing occupied by the poor is built by the private sector.

Without trying to define exclusive, compartmentalized areas of action, it is our general belief that government should concentrate on public areas, outside the property lines. These include policy, the provision of land, of infrastructure and community facilities, and the mobilization of capital for the sector. These also must include equitable access to resources such as social services and public maintenance and to financing.

The private sector, on the other hand, can be encouraged to do what it does best--build, maintain, and improve shelter within property lines in accordance with the needs and resources of the occupants. This suggests that we need to accept that housing production will be evolutionary and continuing, and that the function of government, as suggested earlier, is to seek to maximize its leverage over a system over which it has basically no real control so that the process of the shelter production and delivery system will work towards its policy goals.

Politically this is a very difficult decision for governments to make. Expectations once aroused develop their own constituency, and there undoubtedly are significant costs involved in shifting objectives from a more-or-less utopian formulation of social good to a commitment to partnership, that is, to the best affordable shelter.

Another major difficulty with this approach lies in the challenge it presents to us in the public sector. Why is it that publicly sponsored programs for the urban poor are so very slow to organize and implement, as compared, for example, with more traditional public works or, indeed, with the private sector which, as I have stated, houses--and very profitably, too--the vast majority of our target group.

Is the answer more money? Not exclusively. For the last five years I have been closely involved with a joint Housing Guaranty - World Bank urban development project, of the kind familiar to many of you. The program includes neighborhood upgrading, sites and services, low-rent housing, small loans and technical assistance, with a total project cost of \$63 million.

It has certainly not been lack of funds that has slowed down achievement. Rather, an evaluation suggests that the problems are those of organization, of coordination, and of adjustment to innovation on the part of the public sector.

During a joint evaluation of this project we identified a total of 111 months' delay involving seven subprojects in planning. Of these delays, 20 months--or one-sixth--could be attributed to IBRD and AID requirements. A similar delay was caused by the consultants' inability to perform on time. But almost half the delay was the result of government reviews, in which one department refused to approve modifications in standards approved by another, and of

changes in policy, including the withholding of local funding. These difficulties were largely limited to the \$63 million shelter component; the \$50 million transport project--involving more familiar and quite probably more desirable activities--has been on schedule.

There seem to have been two major sources of delay. One must be described as institutional inertia: an insistence on familiar technical standards; a fear of innovation; and, where agencies are used to spending annual budgets, an absence of any concern over increased costs resulting from delays, which of course in our projects must be paid by the poor. The other reason is policy, and is related to the fact that the politically significant demand for shelter does not come from the poor and that most countries are unprepared to settle for less than first-class projects.

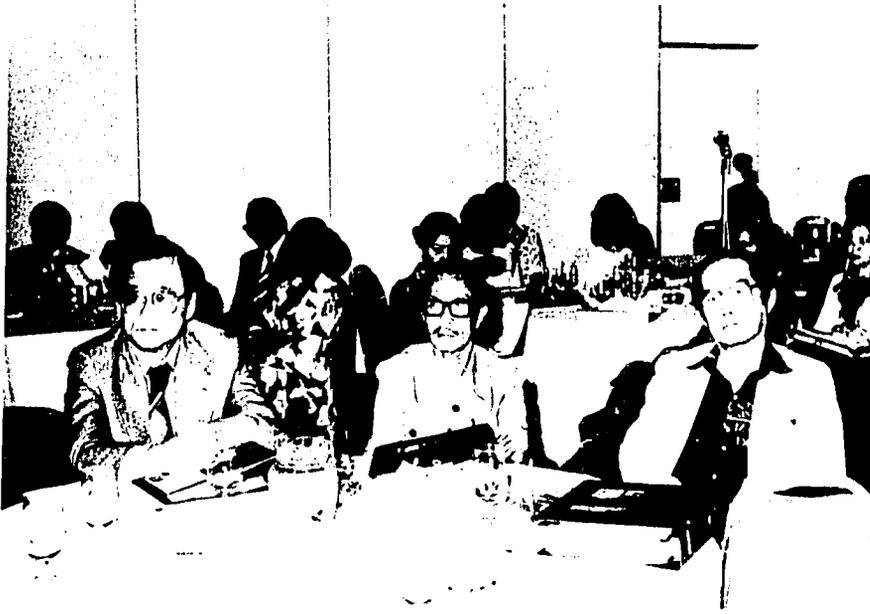
There is in most countries, as we all know, a significantly unfilled shelter demand from a large and politically volatile middle class, which has unreasonably high expectations based on the existence and presumed potential availability of high-standard, publicly sponsored subsidized housing. Present policies, while theoretically addressed to this group, actually operate against their interest.

In one of the small countries in which I work and which has a relatively large and well-managed public housing program, about 5% of GNP is devoted to residential housing construction, of which about half comes from the public sector. In the last year for which data are available, the top 10% of the population absorbed about 75% of private investment, and 63% of direct government and government-sponsored investment was devoted to the construction of public housing affordable only by upper-income groups.

During that same period, the private sector, as it were, took care of the poor. Available data suggest that over the last 15 years rents in the cheapest private units have remained fairly constant at 25% of the official minimum wage, as has occupancy (2.3 persons per room).

The greatest deficit occurs among those very groups the government has declared its intention to assist--that is, among middle-income groups unable to compete with the rich for financing and unwilling to accept the miserable conditions in which the poor must live.

The methodology outline in this paper suggests to policy makers a solution to this dilemma. It has been my privilege to present it for your consideration as, perhaps, politically the most difficult but practically the only effective solution.



Delegates from Malaysia, with Mr. Too San Hai at right.



Mr. Gewa Au (standing in center), General Manager of the National Housing Commission of Papua New Guinea, was a conference delegate.

## ASIAN CONFERENCE ON LOW-INCOME SHELTER AND HOUSING FINANCE

CLOSING SESSION--DISCUSSION OF MAJOR QUESTIONS  
RAISED BY THE CONFERENCE

At the closing session of the conference a number of questions and issues were raised by the delegates. Some of the issues had been discussed in the various small group sessions held during the conference; others were questions which had arisen out of the presentations. Robert DeVoy, a consultant to AID working in Thailand, raised the issue of how the informal market can be tapped to provide funds for low-income housing. He asked if any of the delegates present had had any experience in effectively mobilizing informal sources of funds to finance housing for the poor.

Sean Walsh, Assistant Director of the AID Office of Housing/Asia Regional Office, responded based on his experience in Korea:

MR. WALSH: There is a large informal system in Korea. It is difficult to establish how large this market is, but it is known to be substantial. One of the methods employed to tap funds in the informal sector is the use of high down payments. The theory supporting such a policy is that although funds are not in the formal financial sector, the public does have access to financial resources. A way to bring these funds into the formal sector is through the requirement of high down payments.

A delegate from Korea added that the official government policy in Korea is that savings outside the formal financial sector is undesirable. However, he pointed out that from an economic point of view, these funds are contributing to a certain extent to capital formation in the country.

Dr. Pratt joined the discussion at this point, commenting on the fact that it is difficult, if not impossible to induce funds out of the informal sector by the use of savings media that pay below market rates of interest or which promise housing which cannot be delivered.

DR. PRATT: I think that one of the reasons that we don't mobilize savings is that the people are too smart to have their savings mobilized. Quite often when we talk about mobilizing savings, we really are talking about an attempt to tax people for the money they have saved, to take their money and give them less than a true rate of interest on it. I would guess that these people in the informal sector are saving quite intelligently. I don't know where they are putting their money, perhaps into precious metals or jewelry, but they are probably putting their money into good investments which really do protect them against inflation.

We also don't see the real savings that go into housing. Let's say that someone has a six-month contract to buy tin from the tin merchant for his roof. There is some kind of credit mechanism out there which we simply do not see. When programs have been offered in the formal sector which promise a house five years in the future, the people quite correctly perceive the scheme as a risky venture. They are reluctant to put their money into such a program and, as a result, such schemes have failed. People will not be interested in such programs until we can provide some mechanism for saving which gives them a real rate of return on their money or a realistic and actual promise of receiving housing in the future.

Mr. Walsh added that in Korea, interest rates in the informal, or curb, market run from 2% to 3% per month. Borrowers who cannot avail themselves of formal financing frequently employ the curb market. Informal savings find their way into the housing sector most frequently through borrowing from other family members.

Harry Sorensen, the delegate from Australia, raised the issue of tapping compulsory savings programs such as employee provident funds for housing. A delegate from Malaysia responded that a program of providing loans to home buyers from the Employee Provident Fund in Malaysia has been proposed. A delegate from the Philippines discussed the programs of the Home Development Mutual Fund. The Home Development Mutual Fund is a private fund with government support. Employees contribute up to a maximum of 3% of their basic salaries. This contribution is matched by the employer. By law the fund may be invested only in housing. Loans are granted to members based on the amount of contribution made to the fund. The maximum limit per member at this time is 100,000 pesos, or approximately \$14,000. There is also a system of priorities on which funds are allocated based on the applicants' need. The demand for loans from the fund exceeds the financial capacity of the fund. After one and a half years of operation, the fund could afford to finance 10,000 to 20,000 units. Basically the fund wholesales money to financial institutions. The financial institutions originate and service the mortgage loans and the Home Development Mutual Fund purchases the loans from the financial institutions.

At this point, Dr. Pratt commented that the system described by the Philippine delegate appeared to be an efficient one. He also pointed out that such a secondary market arrangement helps to separate finance from subsidy.

The discussion returned to the issue of mobilizing funds from low-income families for housing. Peter Kimm, Director of the Office of Housing, discussed AID's experience in a number of countries.

MR. KIMM: The most observable pattern of the mobilization of funds from low-income families is in the level of investment in their own homes, once they have established security of tenure. We have some case studies of the development of squatter areas over a ten-year period. People start with tents and, over time, they construct substantial dwellings. Often the value of the dwelling is fifteen times the family's annual income, well above the two-to-three-times-family-income rule of thumb frequently employed to measure affordability. The fact of the matter is this rule of thumb and the 25%-of-income rule of thumb have no relevance. Whenever a family has an extra \$10 they invest it in shelter; that is their primary means of investment. They add rooms to their houses, when they rent, thereby creating a supplementary source of income for the family.

Albert Votaw, Assistant Director of the Office of Housing/West Africa Regional Office, continued the discussion on this topic by relating his experience and the results of several studies which had been conducted on the sources and uses of funds in low-income areas.

MR. VOTAW: I've had the good fortune, or misfortune, of struggling through any number of socioeconomic studies of low-income neighborhoods. Over 80% of the people interviewed said that they had been able to build their homes through either borrowing from family and friends or savings.

Less than 2% had obtained bank loans. These communities house thousands of people. When a family builds a room for rent, the initial investment is recovered in two or three years. That is a pretty good payback. Poor people can't afford to be dumb. They invest in investments which have a good rate of return, and rental shelter is one of the best investments they can make. The problem, it seems to me, is how to connect this ongoing process of investment with the financial institutions that exist in order to speed up the rate of development.

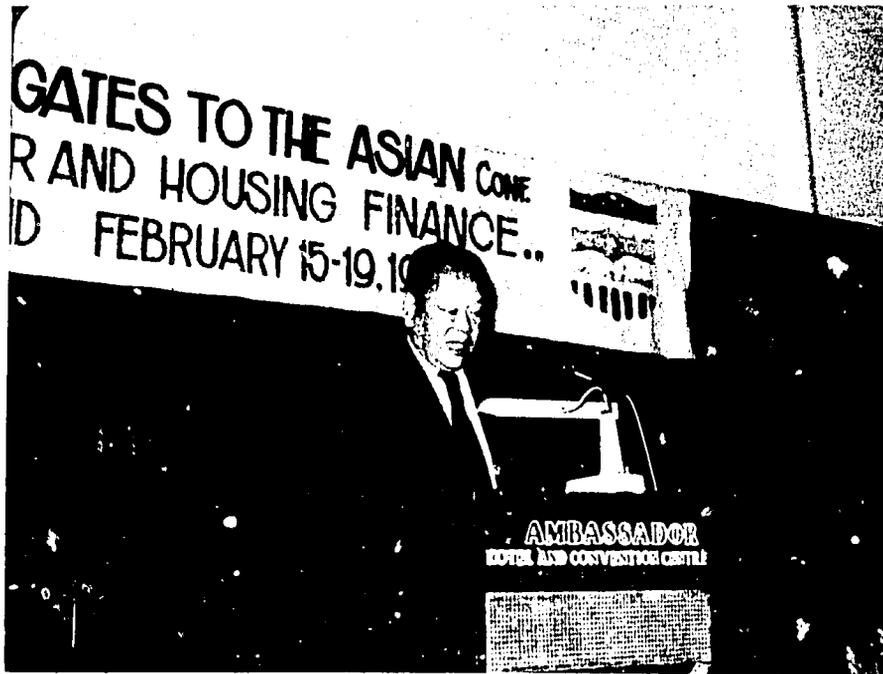
Mr. Kimm commented that this is one area where there appears to be a great opportunity for development. Florencio Orendain, President of the National Home Mortgage Finance Corporation of the Philippines, raised a caveat about overemphasizing the development of financial institutions and the mobilization of savings among low-income households.

MR. ORENDAIN: It does not make sense to me to talk in terms of savings if the country really does not have a surplus. It is my feeling that, in talking about mobilizing savings and the intermediation process, we are addressing only a very small portion of the population in a developing country. If you work towards generating savings among people whose incomes are at or below the subsistence level, you may be wasting your time, money, and effort.

Another issue in the development of savings is that we must first address the question of where and how surpluses can be created in the economy. I think that the emphasis should be on the creation of the surplus, rather than the mobilization of what few resources there may be. The mobilization of savings is premised on the existence of a surplus. If indeed there is a surplus, then there is something to mobilize. I am working on the assumption that in many of the underdeveloped countries, there are no resources to mobilize. Therefore, the strategy should be different for those who genuinely have surpluses and for those who are clearly nonsavers. In the first case savings could be mobilized through various means, such as taxation, financial intermediation, and bond issues. In the second case, the effort should be directed towards the creation of new wealth, new resources.

The planning process should also include programs to insure that funds created through the housing sector remain in the housing sector. I think that we should not leave the allocation of these resources to chance. As we create a surplus in the poorer sector of the economy, I feel that housing should be able to preempt at least part of that surplus. Otherwise, if it flows into financial intermediaries, the funds may be diverted into industrial and commercial development. If this happens, as it is almost certain to do, without any restrictions on the uses of loanable funds, the funds generated by small savers will flow into the hands of large companies and wealthy people. When a small saver goes to a financial institution to secure a loan for the purchase or construction of a house, he will find that such loans are not available to him. It is our feeling that, in the planning of public and private finance for housing, it may be necessary to develop a highly specialized savings system for housing.

Dr. Pratt agreed in principle with Mr. Orendain, but added the comment that housing finance officials should be willing to try some aggressive and innovative ideas closely related to the way people use the informal sector for financing.



General Annard, Chairman of the Government Housing Bank, addresses the conference.



The staff of the Government Housing Bank, who worked on the conference, with Mr. John Wasielewski (rear), conference coordinator for the AID Office of Housing.

DR. PRATT: We might be surprised if we tried a pilot project of making housing loans that are six months long or one year long and charging 50% interest while savers are offered a 30% return on their savings. We could even utilize the informal sector lenders for this purpose. For example, we could go to the tin merchant who sells corrugated iron for roofs and say, "We are going to help you become a financial institution. If you will make loans at a 50% per year interest rate to people who want to buy a sheet of iron, we will let you solicit deposits from the public and we will guarantee to them that they will be repaid and you pay them 30% interest."

Mr. Orendain responded to Dr. Pratt's comments that in the Philippines savers can earn as much as 500% per year. He gave the example of the market vendor who has no capital at all borrowing on a Monday and repaying the loan on a Friday plus 20% interest. With this type of return available, it would not make economic sense for small savers to deposit their money at a financial institution which pays very low rates of interest.

A discussion followed about the proper level of government intervention in the housing sector. Mr. Orendain suggested that the need is greatest in the urban areas where people need access to infrastructure. Dr. Pratt responded that the government should do first that which only the government can do, that is, provide security of land tenure and off-site infrastructure. He stated that, based on his observations around the world, when it came to building individual housing units, individual households do a far better job on their own than the government does on their behalf. He concluded that the proper role of the government is to support the private sector, not supplant it.

Several reports were made on the issues and recommendations made in some of the small group discussions. The conclusions of the small group on the development of secondary mortgage markets were that this was an area which has yet to be developed in most of the countries represented. The group recommended that studies be conducted by the appropriate authorities to evaluate the feasibility of establishing a secondary mortgage market. The group recommended that this is an area in which there should be a high degree of involvement of the public sector, the private sector and international agencies who can provide the benefit of the experience of the developed countries, primarily the United States.

The report from the group on the development of savings and loan systems in developing countries concluded that those countries without a savings and loan system should begin the procedure for implementing a system. The group reached four conclusions which are as follows:

1. Government institutions do not have the financial capacity to serve their respective country's demand for housing finance. Therefore, it is necessary to expand this capacity by establishing private savings and loan associations to help mobilize additional resources for housing.

2. In the establishment of this savings and loan system, the government and private sector should engage in a joint effort with the government acting as a wholesaler of funds channeling money into the private sector, including the savings and loan associations, who can then act as retailers, lending money to the public.

3. If a country does not have a savings and loan system at present, the first step is to pass legislation to permit such development. To further this goal, a task force of government and private-sector representatives should be formed as soon as possible.

4. For those countries with existing savings and loan associations, it may be timely to review existing legislation and regulation to explore methods of strengthening the involvement of these associations in housing finance without sacrificing financial viability.

Harry Sorensen reviewed the discussion of the group on loan administration of loans to low-income households. He stated that he had been surprised by the fact that in most of the countries represented in the group, collections and delinquencies were not severe problems. He indicated that the reason may be that in some countries mortgage-lending institutions do not enforce their contracts very strictly. He suggested that consideration be given to the formation of cooperatives so that several people become responsible for collections.

Susil Sirivardana of Sri Lanka pointed out that in Sri Lanka, and perhaps in other developing countries, the problem of collections is one of educating the public. He also indicated that in Sri Lanka, as well as other countries, strict enforcement of loan contracts and the exercise of rights of foreclosure may not be politically feasible. In Sri Lanka they are attempting to create an environment in which prompt and regular repayment is the accepted standard.

MR. SIRIVARDANA: The important thing is to have the principle of repayment accepted. For example, one person asks another if he is paying. If that person says that he is not paying, it will lead to a chain reaction where everyone will have the impression that they do not have to pay. If we can educate people to pay regularly, we will have achieved a great victory.

Dr. Codapilly of Sri Lanka suggested that one way to improve repayment experience is to have major employers co-guarantee loans to their employees. Payroll deductions could be used to insure that payments are made. The company could also be used to collect mortgage payments. They are experimenting with such a program with the sugar plantations in Sri Lanka.

DR. CODAPILLY: An interesting experiment which we are currently exploring is trying to set up housing programs for certain sugar plantations. We are attempting to link up income generated from agriculture to our housing finance program. Two banks are participating; they have shown a willingness to make mortgage loans subject to a guarantee by the sugar corporation. By linking up productive activity with housing finance, we are trying to move away from a very long history of subsidies.

Mr. Orendain continued the discussion of the role of subsidies by reminding the delegates that in many underdeveloped countries there are no true free-market interest rates. To a great extent, housing finance is controlled by the monetary policies of a country. He felt that, in many cases, the monetary authorities were pursuing policies that were either neutral or negative towards the housing sector.

Dr. Pratt responded to Mr. Orendain's comments by stating that housing finance frequently occurs outside of the monetary sector. When people forego

earned income in order to devote time and effort to constructing their houses, this is really a savings and investment function outside the control of the monetary authorities.

The discussion returned to the question of mobilizing savings for housing. One discussant pointed out that in a number of Asian countries the institutions responsible for housing are dependent on government funding for their programs, and as such, are subject to periodic budgetary constraint which limits their ability to provide a regular flow of funds into housing. A member of the discussion group on savings mobilization reported that the consensus of opinion in that group was that specialized institutions supported and assisted by the government could be effective in mobilizing small savings if they were able to offer the incentives to enable them to compete with larger and more developed intermediaries.

Dr. Pratt and Mr. Sorensen pointed out that the ability to offer financial services to small savers is largely a function of the degree of automation in the system. The acceptance of small deposits could result in operating costs which are prohibitively high. Mr. Sorensen cautioned that if any country actively promotes savings for the small saver, it is imperative that they evaluate the cost of providing such services. If the services cannot be performed economically, then there is no point in pursuing such a program. Dr. Pratt suggested that the current level of computer technology permitted small operations to perform accounting functions very inexpensively. He urged all of the delegates to evaluate the possibility of acquiring inexpensive computers to enable them to offer a variety of financial services to small customers.

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The Government Housing Bank of Thailand hosted a dinner that was enjoyed by all.



Mr. Peter Kimm and Mr. Manasakdi Intarakomalyasut at the closing of the conference.

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