

FINAL REPORT

JUNE 1991 TRAINING PROGRAM

POLAND HOUSING FINANCE PROJECT

TEAM 2

Prepared for
U.S. Agency for International Development
Office of Housing and Urban Programs
and
Housing Finance Project of the World Bank
and the Government of Poland

Prepared by
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INTRODUCTION

A series of workshops focused on housing finance were prepared and conducted in various provincial cities in Poland from early June to early July 1991. The workshops were designed to train investors/developers, bankers/mortgage lenders and municipal officials in the operational characteristics of the proposed World Bank and Government of Poland Housing Finance Project (HFP). The materials for the workshops were developed by, and the training conducted by, three PADCO consultants: Howard Henward, team leader and investment/development specialist; Phillip Jones, banking/finance specialist; and Robert Rickards, municipal affairs specialist. The team prepared the materials, agenda and "script" for the training sessions in Warsaw in concert with a second team to be working in parallel and with the staff of the Housing Finance Project Office (HFPO). The team then proceeded to conduct 2 1/2 day workshops in each of five provincial cities that had expressed interest in the Program: Wroclaw, Jelenia Gora, Czestochowa, Lodz and Bialystok. The team then returned to Warsaw to discuss their findings and recommendations with the HFPO and with the other team. This report is a summary of these findings and recommendations.

EXECUTIVE SUMMARY

OBJECTIVES

The objectives of the Housing Finance Workshops were discussed and agreed with the HFPO at the outset:

- To stimulate housing production
- To generate interest in the Housing Finance Program
- To introduce private sector concepts of housing development
- To build skills in project planning and organization; and
- To establish ongoing dialogue and communication between the participants (e.g., developers/investors, bankers/mortgage lenders and municipal officials)

KEY ISSUES

The workshops were designed and "scripted" to focus on several key issues:

- Appraising property and land values
- Competitive bidding (e.g., construction and public sector land sales)
- Estimating/calculating project costs
- Market analyses, affordability and financial feasibility
- Banker-borrower relations
- Design and construction technologies
- Development process/project cycle

EVOLUTION OF THE WORKSHOP

The agenda and script for the workshops were prepared in Warsaw in concert with the HFPO and the second training team (See **Appendix 1**). The agenda included the statement of workshop objectives, key issues to be addressed, the institutional structure of the HFP and the flow of funds. The agenda then shifted to a discussion of a 19-step housing development process, using a proposed project as a case study. All aspects of the development process and especially the key issues were given equal weighting in the discussions. However, feedback from the participants in the first workshop in Wroclaw convinced the consultants that the primary interest was in the housing finance systems being proposed and, therefore, the "script" of the workshops was quickly adjusted to focus most heavily on the fourth and fifth key issues: "Market analyses, affordability and financial feasibility" and "Banker/borrower relations". The revised "script" still covered all the aspects related to the private sector development process but covered many of them more quickly. This left time for additional case studies; in particular, market analyses and affordability studies of participants' projects (See **Appendix 2**).

The revised "script" for the workshops was found to be more successful in stimulating the interest of the participants and led to their active participation in the discussions. This interactive dialogue convinced the consultants that the participants' receptivity was high, and that the numerous case studies probably also improved the level of understanding. Many participants, although they had several hand-outs on the program, copied the charts, took notes and made copies of the affordability analyses from the blackboards.

CONCLUSION AND RECOMMENDATIONS

The feedback from the workshop participants was very positive. There is no doubt that considerable interest in the HFP has been generated (**objective 2**) and that the other objectives of the workshops were achieved. However, it was very clear to both the participants and the trainers that unless a number of bankers elect to actively participate in the HFP construction and mortgage credit systems, the HFP will not achieve the objective of stimulating housing production.

The following recommendations regarding future training reflect the importance and priority the consultants believe should be given to identifying and developing banker participation in the HFP:

1. The HFPO should add senior personnel skilled in the developer/investor, banker/ finance and municipal finance areas, respectively, or retain consultants skilled in these areas prior to undertaking similar workshops in other cities.
2. The current municipal advisors (the Peace Corp and United Nations Volunteers) should be trained using this same workshop format as soon as possible to provide each with an understanding of the total development process, and the particular role their expertise can play and where specialist technical support should be sought. New arrivals should receive the same training prior to departing for the field.
3. Absolute top priority should be given to identifying banking institutions willing to participate in the constructive credit, mortgage credit or both systems. Orientation mini-workshops should be organized by the HFPO to demonstrate the HFP and provide head offices of bankers the necessary information to make a decision and direct their branches.
4. Top priority should then be given to developing and implementing a training program in credit analyses and project appraisal for senior regional and branch office staff of participating banks.
5. At the same time, training courses should be developed with the assistance of foreign banking or bank training institutions, at Polish bank training institutions to provide follow-up training to these senior officials and in-depth training to more junior staff.

6. Intensive technical assistance in project preparation and financing should be provided jointly to developer/investors and banker/lenders in the case of selected initial projects to expedite the process of applying for and obtaining financing commitments and to achieve a demonstration effect of how the HFP system works.
7. The HFPO and its municipal advisors should focus on key issues in each municipality that are clear impediments to the HFP and seek assistance from other programs to address the myriad of other issues and problems that impact these cities.

CONDUCT OF THE WORKSHOPS

This section of the report describes how the workshops were initially prepared. First, the broad structure of the initial workshop format is discussed. Second, the general audience reception and absorption of the workshop material is reviewed. Third, modifications made to increase the workshop's emphasis on housing finance issues are described. Fourth, an overview of how the modified workshops stimulated the interest and involvement of the participants is provided.

ORIGINAL WORKSHOP SCRIPT

Appendix 1 contains a copy of the original workshop agenda and "script" prepared in concert with the HFPO and the second training team during the consultants' first week in Warsaw. It began with a statement of the workshop's five goals and identified the seven key issues associated with housing construction and finance in Poland that would be themes of the workshop. Next, there followed an explanation of the institutional relationships and the flow of funds between the World Bank, Government of Poland, the Mortgage Lending Facility (MLF), local banks, developers/investors, and home buyers (See **Appendix 1** charts). This explanation included the features of both the construction and the long-term mortgage financing schemes the MLF will support.

The agenda then moved to a detailed description of a 19-step housing development process flow chart that used two proposed projects as case studies: a 104-unit project outside of Czestochowa and a phased 414-unit project in Katowice. As originally conceived, workshop participants were to join the consultants in discussing each step in the process. The discussion was focused by using the two project case studies to illustrate the key issues the consultants addressed in the course of their presentations. The discussions were to take place first among all the participants before being discussed in more detail among homogeneous groups of developers, bankers, and city officials. The consultants also foresaw mixed groups of workshop participants presenting their own analyses of new project proposals volunteered by members of the audience. The consultants intended to use any remaining time to answer private questions, provide technical assistance to individuals requesting it, and visit representative housing construction sites nearby.

INITIAL RESPONSE OF PARTICIPANTS

The HFPO in Warsaw arranged with local government officials for the consultants to hold workshops for about 45 developers, bankers and municipal officials in Wroclaw, Jelenia Gora, Czestochowa, Lodz, and Bialystok. In each city, from 26 to 40 individuals preregistered for the workshops. However, in both Wroclaw and Jelenia Gora, attendance was only 24; and, in Lodz, only 16 participants attended. Low attendance reflected poor organization of the workshops by the respective cities involved and might have been avoided if the HFPO

had followed up prior to the workshop. In contrast, the turnouts in Czestochowa and Bialystok (45) were good—in fact, exceeding the number of preregistered participants. The large group assembled in Bialystok may very well have resulted from the presence of a UN volunteer municipal adviser in that city. Apparently, he played an active role in stimulating local interest in the workshop. Although there was a lower than expected turnout in 3 of the 5 workshop cities, the hoped-for mix and dialogue between developers, bankers, and city officials did materialize.

However, there was also a tendency for some kombinat (state construction companies) directors, managers of large cooperatives, and state bank officials, as well as public- and private-sector architects to drift away during the first day of the workshops and not return. Three factors explain that tendency. First, individuals wedded to the "old way" of financing housing in Poland left as soon as they learned that the HFP would not be providing grants or subsidized interest rate loans to enable them to carry on as they had in the past. Second, HFPO and local workshop organizers relied on local untested personnel for translators. Some of these translators lacked sufficient fluency in English for the job or, although fluent, lacked the technical vocabulary to explain in Polish such concepts as "affordability," "equity," "feasibility," "developer," "financial capacity," "purchase commitment," "schedule of unit costs," "risk/reward ratio," and "punch list," for example. Accordingly, it is likely some workshop participants dropped out because they simply could not fully understand the consultants' presentation. Third, and most important, some of the participants clearly did not respond well to the initial workshop script. In debriefings, they said they found the statement of goals, identification of problems, and explanation of institutional relationships in the HFD too long. In addition, they found different portions of the 19-step housing project preparation discussion dwelt on material with which they were at least as familiar as the consultants. Moreover, the case study criticisms of site selection, project designs and building technology seemed tedious or irrelevant to them.

The consultants addressed the second of these three problems by relying heavily on one translator the Housing Finance Program Office sent from Warsaw for the last three workshops. Not only was that translator's English fluent, but she rapidly mastered the technical vocabulary involved. In addition, by attending all three workshops, she became familiar with the material presented and was even able to clarify the questions being asked. Given the improved quality of communications resulting from using the same translator throughout, the HFPO may want to eliminate the use of local translators in the future.

EVOLUTION OF THE "SCRIPT"

The consultants addressed the first and third factors affecting workshop attendance by keeping to the agenda, but altering the emphasis embodied in the original script. Due to the uneven mix of workshop participants, only large-group sessions were held to ensure developers, bankers, and city officials listened to each other's points of view. In addition, presentations on workshop objectives, HFP mechanics, and several steps in the Polish housing construction development process, were shortened. Because workshop participants' interests and perspectives varied, the consultants continued to discuss all 19 steps in the development process but focused attention on the issues of market analysis, affordability, financial feasibility and banker-borrower interaction. The participants were asked to be patient, to provide the consultants with the opportunity to discuss the HFP within the context of the overall development process.

The revised format and script reduced or eliminated altogether material the workshop participants had found tedious or irrelevant. With the freed-up time, the consultants expanded their presentations in the three areas of marketing, affordability, and financing. For the marketing presentation, audience participation was solicited in drawing a curve representing the local income distribution. Then they analyzed the affordability of one or two projects already submitted to the HFPO to show the audience what portion of the local market such a project might address. Very often the high cost and, consequently, high sales prices and limited market associated with these projects became a vehicle for lively discussions of how to choose good housing sites, downsize and phase projects to shorten building cycles, improve designs, introduce new technologies, better coordinate the permitting process, and tighten management of construction and costs. Most importantly, the need to identify the market (the buyers) for the project at the outset was recognized and the concept of a market-driven housing program emphasized.

Next, the consultants turned the discussion to construction financing for developers and mortgage financing for buyers. That discussion flowed smoothly into presentation of the Dual-Indexed Mortgage (DIM). The consultants illustrated its operation graphically and in tabular form for specific case studies, which are included in **Appendix 2**. These graphs and examples made abstract concepts like "negative amortization" and "capitalized interest" readily comprehensible. Workshop participants frequently reported having had intuitive feelings for such concepts, but had previously lacked the clear, concise explanations necessary to grasp them.

Since most current project proposals for the HFP are projects prepared previously, with no particular regard to the HFP guidelines or the concept of a market-driven approach and market-rate financing, the consultants asked developers to submit their own proposals as additional examples for marketability, affordability, and financing analyses. After a short introductory overview by the developer, the audience actively joined in assessing all aspects of the project. Following completion of these assessments and the three analyses, the consultants asked the participants to rank order for funding all the projects presented and then defend their rank ordering. In this way, participants repeatedly applied and reinforced their knowledge of the analytic skills and concepts taught in the workshops.

RECEPTIVITY OF THE PARTICIPANTS

As a result of these modifications in the original script, attendance stabilized, while interest and active participation increased markedly. So, too, did the participants' curiosity about the structure and operation of the Housing Finance Program, evidenced by the level of sophistication of their questions and comments. The consultants fielded most questions without difficulty. Nevertheless, in some instances, the consultants were unable to answer questions because they pertained to HFP details which the World Bank and Government of Poland still must work out. **Appendix 4** contains a summary listing of the questions workshop participants asked most frequently.

RECOMMENDATIONS FOR FUTURE HOUSING FINANCE PROJECT (HFP) TRAINING

CORE CURRICULUM DEVELOPMENT

The agenda, training materials (e.g., charts, graphs, initial "script" and case study data) are included in **Appendix 1**. As emphasized in the previous section of this report, Conduct of the Workshops, while the initial agenda remained in terms of sequence of activities, the emphasis of the workshops shifted predominantly to two key issues: "Market analysis, affordability, and financial feasibility", and "Banker/borrower relations". The other issues continued to be covered, often in considerable detail, where interest was strong. However, the concepts of market analysis, affordability, financial feasibility and construction and mortgage financing, as proposed under the HFP, were consistently the areas of primary interest of the participants. Coincidentally, these were also the areas that required the most "rethinking" and where misunderstandings were prevalent. The training materials prepared and modified in **Appendix 1**, along with the case study affordability evaluations in **Appendix 2**, provide a suitable core curriculum or training agenda for future workshops such as these, if it is decided to conduct them in other provincial cities and in Warsaw. However, we do not believe the HFPO has the necessary developer/investor and banker/finance skills to conduct these workshops, and recommend the HFPO not conduct these workshops in other cities without adding senior personnel to the office skilled in these areas, as well as in municipal finance. The alternative, and perhaps the only alternative in the short term, is to utilize the services of one or two consultants to provide these skills. It is also recommended that, prior to any further detailed training such as this process, other training be undertaken as described in the following paragraphs.

"MISSIONARIES"

Throughout the workshops, it was clear that, while substantial efforts have been made by the HFPO to "get the message out" on the HFP, knowledge is not as widespread as we had anticipated and most of those who had previous contact with program officials or consultants did not attend the workshops and, therefore, did not benefit from this detailed training. Further, there is an ongoing program that is fielding U.S. Peace Corp and United Nations Volunteers, attached to the HFPO, in up to 15 of the major and moderate-sized cities in the country to act as "municipal advisors," with particular emphasis on the HFP. Their roles seem to be that of "missionaries"—getting the message out about the HFP program and encouraging project preparation and submission. It is recommended that these "municipal advisors" be provided the same scope of training as contained in the workshops, not with the objective of creating fully self-sufficient advisors in each city, but to provide each of them a complete understanding of the total development process, and the role their particular expertise can play and where specialist, highly technical support should be sought for the resources of the HFPO. These advisors should not be encouraged to represent themselves as developers or mortgage bankers.

MINISTERIAL LEVEL ORIENTATION

It is a fact of life in Poland that action in government begins by direction from the top. Bankers are waiting for direction from their head office, the Ministry of Finance or the National Bank of Poland. It is recommended that the HFPO, with appropriate banking and finance consultant support, prepare mini-workshops to demonstrate and promote the program to attract bank participation. Appropriate materials should be left with each bank to allow them to evaluate the costs, benefits and risks involved in participating in the HFP. Follow-up sessions to answer questions and confirm their interest and training needs will be necessary.

BANKERS

There is virtually no knowledge, or at least no real understanding, of the HFP at the local bank level, including the PKO (National Savings Bank). Although the HFP is a national program, all lending decisions will be made at the local bank level (See **Appendix 1: Construction Credit and Mortgage Credit** charts). While there is considerable interest, or at least a curiosity, on the part of several banks, including PKO, none were aware of how the construction and mortgage credit systems would work, and none had been approached by developer/investors to finance a project under this program. Needless to say, the proposed housing finance system will be utilized and effective only in stimulating housing production if local banks are prepared and sufficiently skilled and organized to utilize it. If they decide the system is too cumbersome or exposes them to unacceptable levels of risk, they will not participate. It is recommended that top priority be given to identifying banks interested in either construction or mortgage lending, or both, and to provide immediate training in credit analyses and project appraisal to their senior staff within the context of the proposed HFP system. It is also recommended that training courses be developed at Polish banking training centers to provide follow-up training to these senior officials and in-depth training to more junior staff. It is essential that this program commence no later than November of this year.

TECHNICAL ASSISTANCE ON PROJECT PREPARATION AND FINANCING

The second most critical point in the process of operationalizing the HFP appears to be the interaction of the developer/investor and the banker/lender. It is at the point when the developer/investor is seeking financing for a project and the banker/lender is seeking to assess the credit-worthiness of both the borrower and the project, where issues of market analyses, affordability and financial feasibility are discussed. It is recommended, in the case of selected initial projects, that technical assistance from the HFPO be used to bring the parties together and to assist them in working their way through the issues involved, to expedite the process and to achieve a demonstration effect of how the HFP process can work. This should not commence until banks interested in the program are identified and initial training has been completed.

TECHNICAL ASSISTANCE FOR CITIES

Polish cities face a bleak future, especially in terms of their fiscal survival. Enabling legislation—for residential rent increases, property taxation, property title clearing, and many other issues—needs urgent resolution so that the cities can successfully manage their own affairs. The HFP should not be seen or used to solve all the municipal ills that directly or indirectly relate to housing. Many of these issues should be addressed via other programs, such as municipal infrastructure and urban management. It is recommended that the HFPO and its municipal advisors should prioritize the areas or issues in each municipality that need attention, focus on those issues that are clear impediments to the HFP, and actively seek assistance from other programs to address the less critical (to the HFP) issues. Issues that need to be prioritized in each city may include the following: municipal finance, municipal infrastructure financing and management, housing strategy, communal housing management and maintenance, land use and zoning, urban planning issues, the permitting process, cadastral land mapping and tax database, city asset database, privatization of public assets, land management and environmental management.

In conclusion, the participants felt the workshops were very effective in explaining the details of the program, and many expressed their interest in additional training as the program goes forward. The experience also provided the trainers an exceptional opportunity to assess the participants' willingness and ability to work with a totally new housing finance system. However, it is important to re-emphasize that unless a number of banks are willing to actively utilize this system, the HFP will not effectively achieve its objective of stimulating housing production.

APPENDIX 1

Training Materials and Core Curriculum

Housing Finance Project Office

Seminar on Housing Finance & Construction

Day 1

- 9:00 - 10:30 Introduction and overview of Housing Finance Project (HFP)
- * Welcome to Participants
 - * Introduction of consultants and HFP officials
 - * Roles of consultants
 - * Objectives of the workshops
 - * Main problems
 - * Discussion of the Housing Finance Project
- 10:30 - 10:45 Break
- 10:45 - 12:15 Case Study One
- * Presentation of typical project proposal
 - * Project development process
 - * Role and responsibilities of the city, developer, local bank, and the potential buyers
 - * Critique of the case study project
 - * Conformity with the guidelines and objectives of the HFP
- 12:15 - 1:30 Lunch
- 1:30 - 3:00 Continuation of the case study
- 3:00 - 3:15 Break
- 3:15 - 4:30 Conclusions of Case Study 1
- 4:30 - 5:00 Introduction of Case Study 2
- 5:00 Closing for the day
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Day 2

- 9:00 - 9:30 Case Study Two
- * Presentation of typical project proposal
 - * Project development process
 - * Role and responsibilities of the city, developer, local bank, and the potential buyers
 - * Critique of the case study project
 - * Conformity with the guidelines and objectives of the HFP
- 9:30 - 10:30 Small group discussion and analysis of Case Study 2
- 10:30 - 10:45 Break
- 10:45 - 12:15 Continuation of small group discussion
- 12:15 - 1:30 Lunch
- 1:30 - 3:00 Group conclusions and reporting
- 3:00 - 3:15 Break
- 3:15 - 4:45 Conclusions of Case Study 2
- 4:45 - 5:00 Workshop conclusion and closing remarks

Day 3

- 9:00 - 12:00 Consultants will be available to meet with individual participants to discuss and review specific project proposals

BIURO PROJEKTU FINANSOWANIA BUDOWNICTWA

Seminarium Finansowania Budownictwa

Dzien 1.

- 9:00 - 10:30 Wprowadzenie i ogolna prezentacja Projektu Finansowania Budownictwa
- * Powitanie uczestnikow
 - * Prezentacja konsultantow i pracownikow Projektu Finansowania Budownictwa
 - * Rola konsultantow
 - * Cele seminarium
 - * Glowne problemy
 - * Omowienie Projektu Finansowania Budownictwa
- 10:30 - 10:45 Przerwa
- 10:45 - 12:15 Studium Przypadku 1
- * Przedstawienie typowej propozycji projektu
 - * Procedura opracowania projektu
 - * Role i obowiazki miasta, inwestora, lokalnego banku i potencjalnego nabywcy
 - * Krytyczna ocena proponowanego projektu
 - * Zgodnosc z wskazowkami i celami Projektu Finansowania Budownictwa
- 12:15 - 1:30 Lunch
- 1:30 - 3:00 Kontynuacja studium przypadku
- 3:00 - 3:15 Przerwa
- 3:15 - 4:30 Omowienie studium przypadku 1
- 4:30 - 5:00 Wprowadzenie do Studium Przypadku 2
- 5:00 Podsumowanie

Dzien 2

- 9:00 - 9:30 Przedstawienie Studium Przypadku 2
- * Przedstawienie typowej propozycji projektu
 - * Procedura opracowania projektu
 - * Role i obowiązki miasta, inwestora, lokalnego banku i potencjalnego nabywcy
 - * Krytyczna ocena proponowanego projektu
 - * Zgodność ze wskazówkami i celami Projektu Finansowania Budownictwa
- 9:30 - 10:30 Dyskusja w podgrupach i analiza studium przypadku 2
- 10:30 - 10:45 Przerwa
- 10:45 - 12:15 Kontynuacja dyskusji w podgrupach
- 12:15 - 1:30 Lunch
- 1:30 - 3:00 Wnioski i raporty podgrup
- 3:00 - 3:15 Przerwa
- 3:15 - 4:45 Omówienie studium przypadku 2
- 4:45 - 5:00 Uwagi końcowe

Dzien 3

- 9:00 - 12:00 Konsultanci będą mogli spotkać się z uczestnikami seminarium w celu omówienia problemów dotyczących projektów na ich terenach.

CELE SEMINARIUM

1. Stymulacja budownictwa mieszkaniowego
2. Pobudzenie zainteresowania Projektem Finansowania Budownictwa.
3. Sformułowanie koncepcji rozwoju budownictwa mieszkaniowego w sektorze prywatnym.
4. Rozwijanie umiejętności planowania i organizacji projektów.
5. Doprowadzenie do dialogu i komunikacji pomiędzy wszystkimi uczestnikami seminarium.

WORKSHOP OBJECTIVES

1. Stimulate housing production.
2. Generate interest in Housing Finance Program.
3. Introduce concepts of housing development in the private sector.
4. Build skills in project planning and organization.
5. Establish dialogue and communications among all participants.

Seminarium Finansowania Budownictwa

GŁÓWNE PROBLEMY

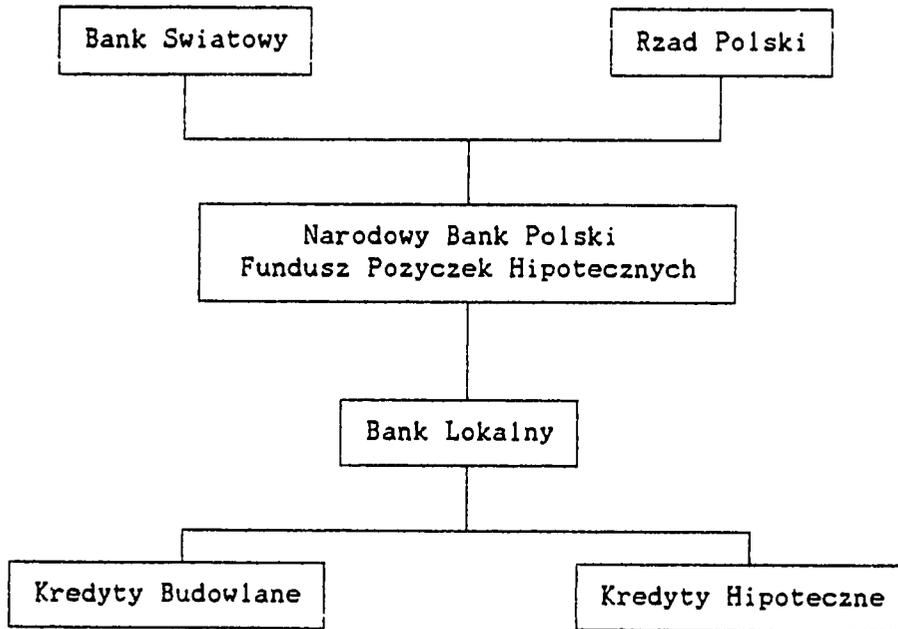
1. Ocena nieruchomości i wycena ziemi.
2. Przetarg konkurencyjny.
3. Szacowanie i kalkulacja kosztów.
4. Analiza rynku; dostępność finansowa projektu; ocena opłacalności finansowej projektu.
5. Stosunki Bank - Kredytobiorca.
6. Projekt i technologie budowlane.
7. Proces opracowywania projektu mieszkaniowego i cykl realizacji projektu.

Housing Finance Workshop

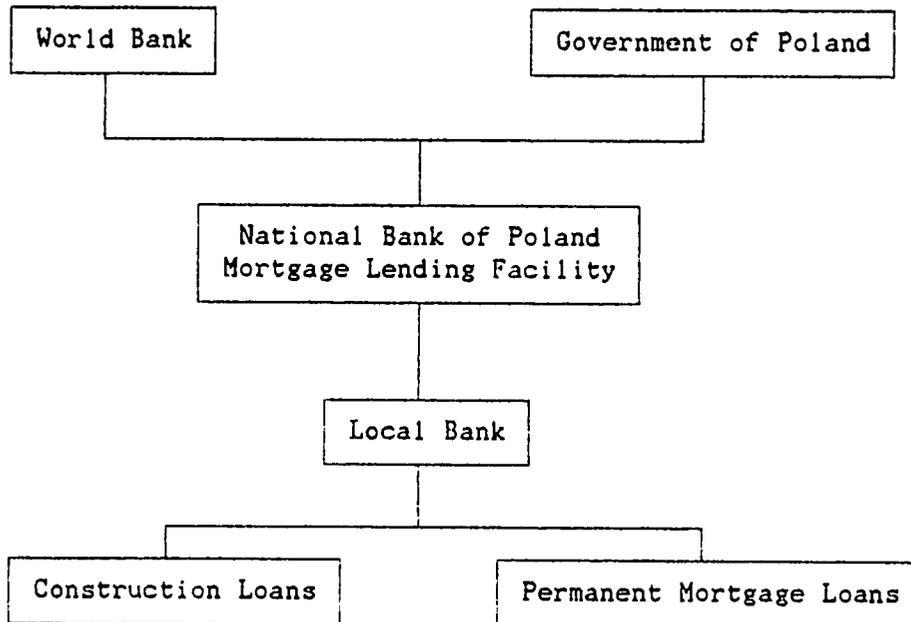
KEY ISSUES

1. Appraising property and land values.
2. Competitive bidding.
3. Estimating and calculating costs.
4. Market analysis, affordability, and financial feasibility.
5. Banker - Borrower relations.
6. Design and construction technologies.
7. Housing development process and development cycle.

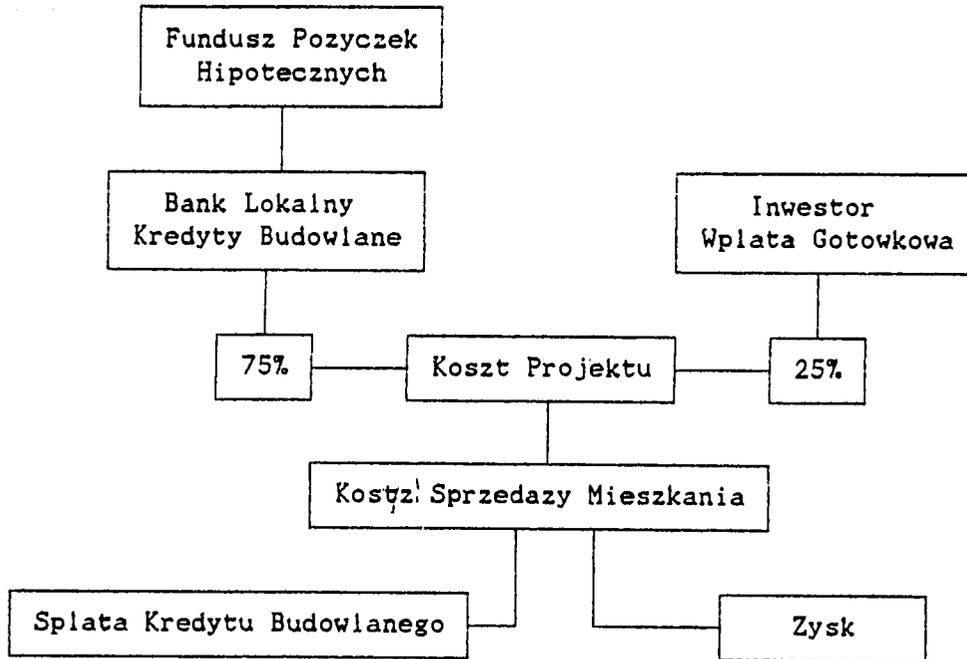
Program Pozycezek



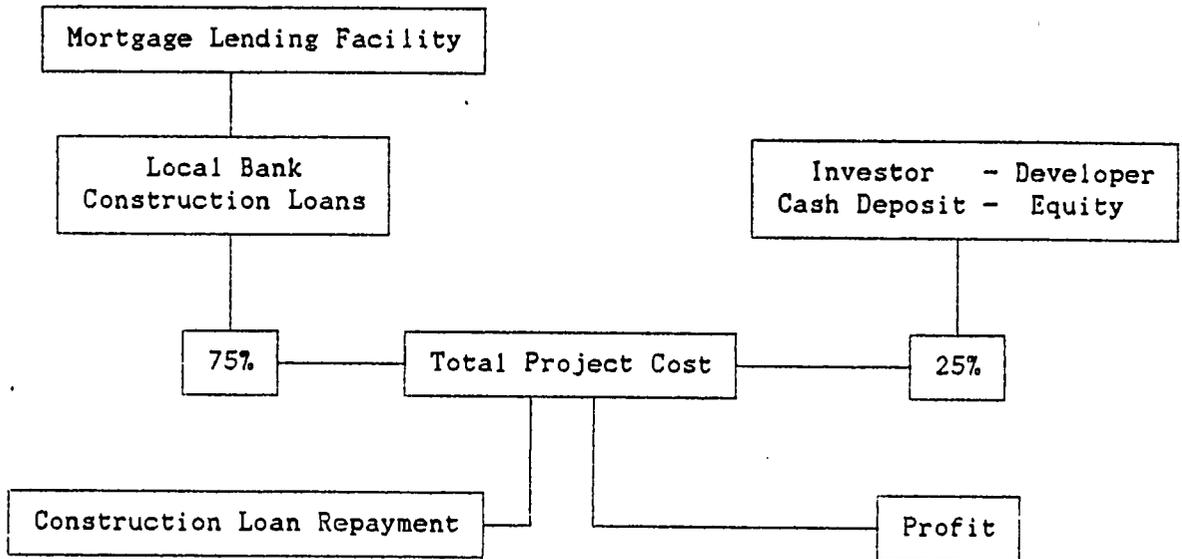
Lending Program



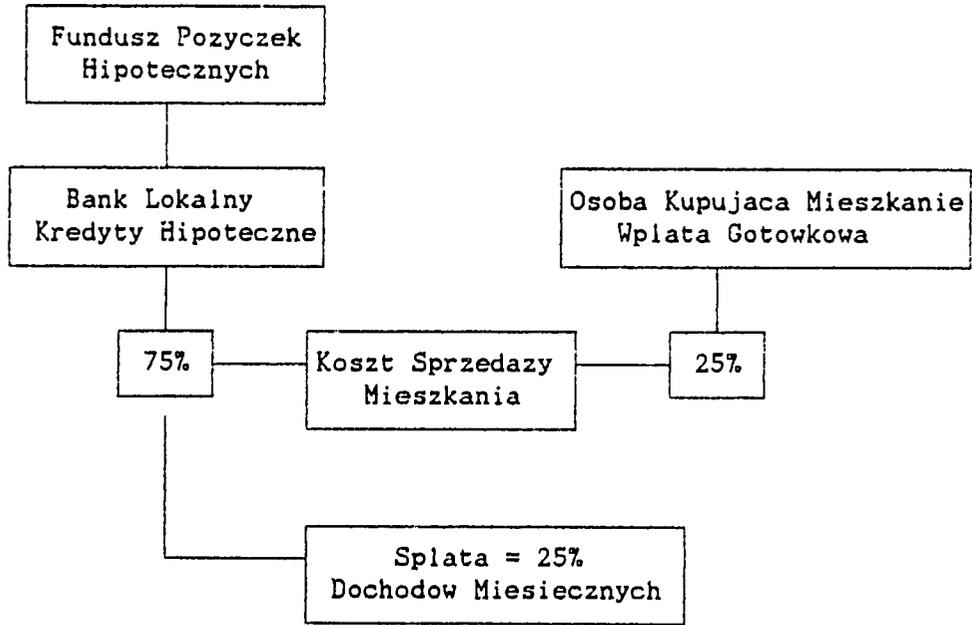
Kredyty Budowlane



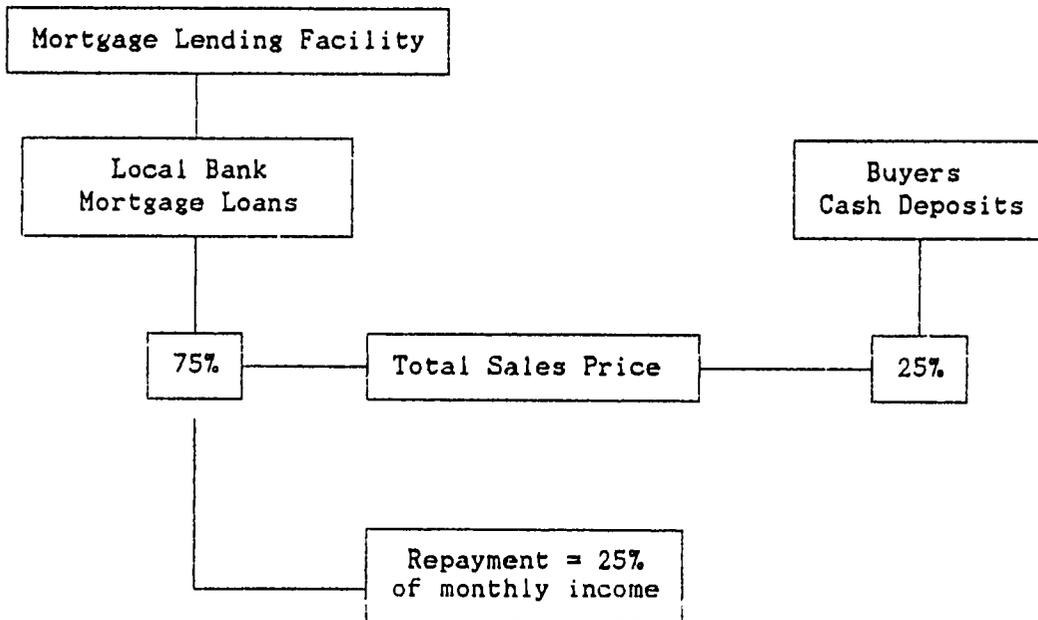
Construction Loans



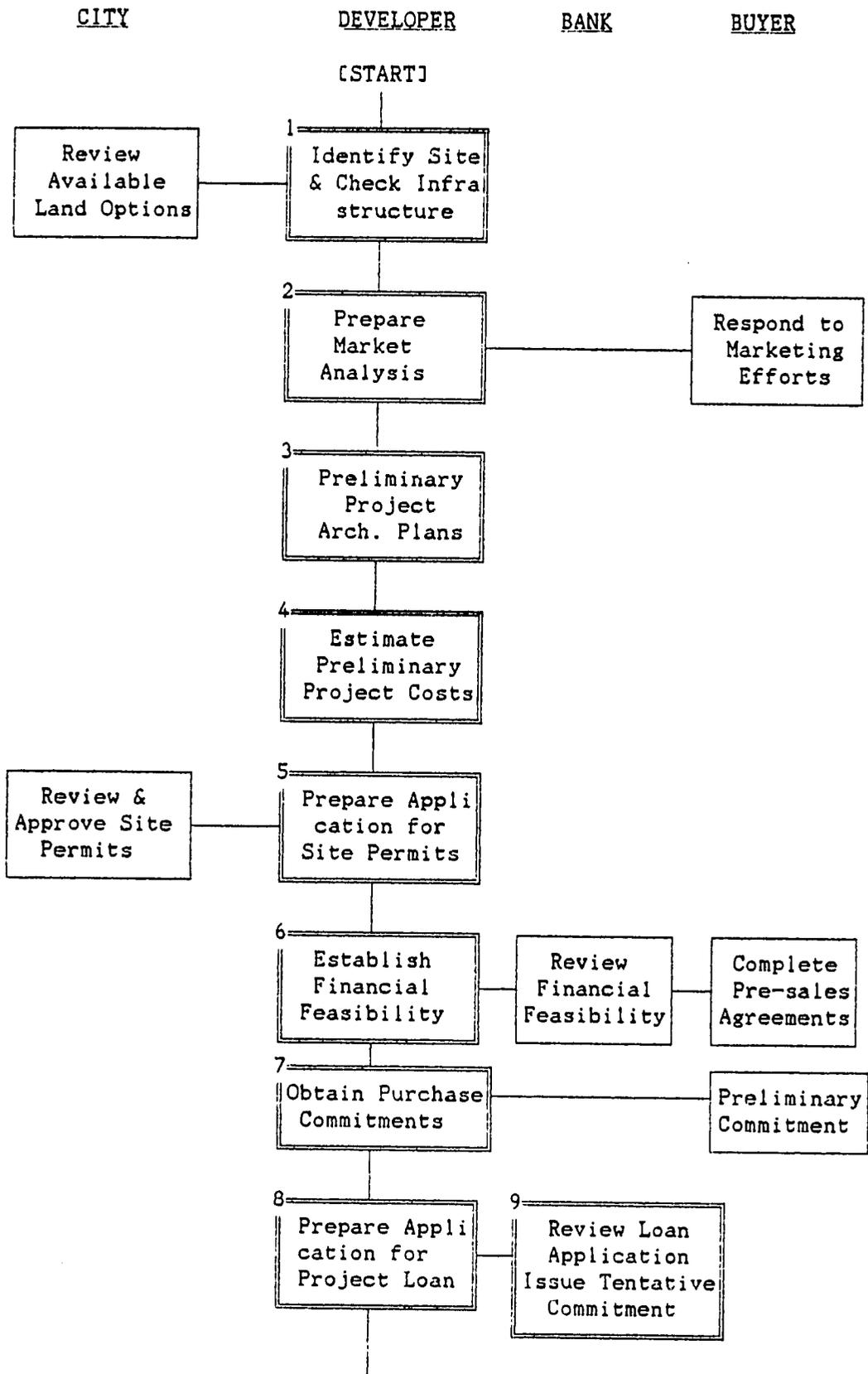
Kredyty Hipoteczne

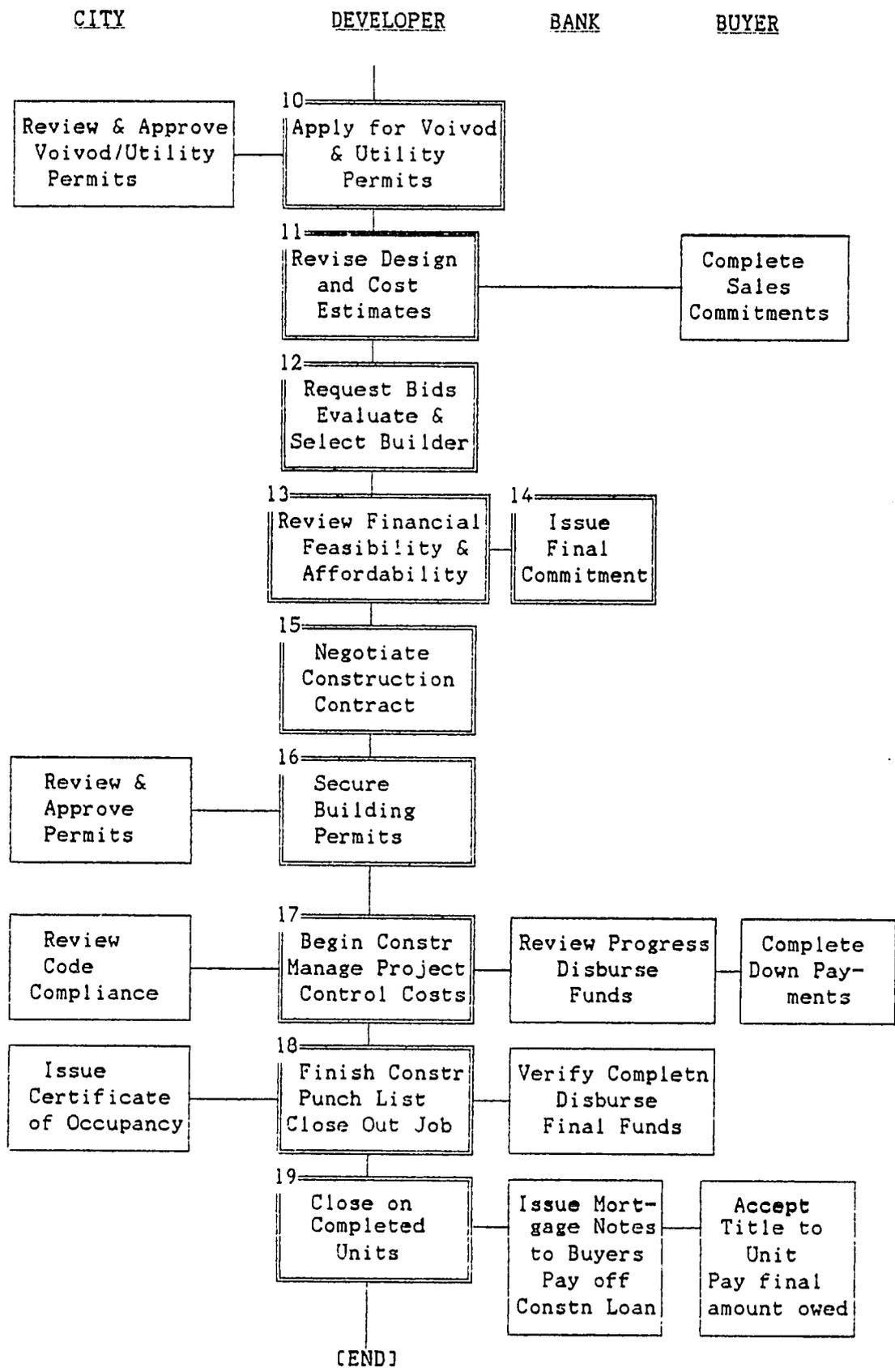


Mortgage Loans

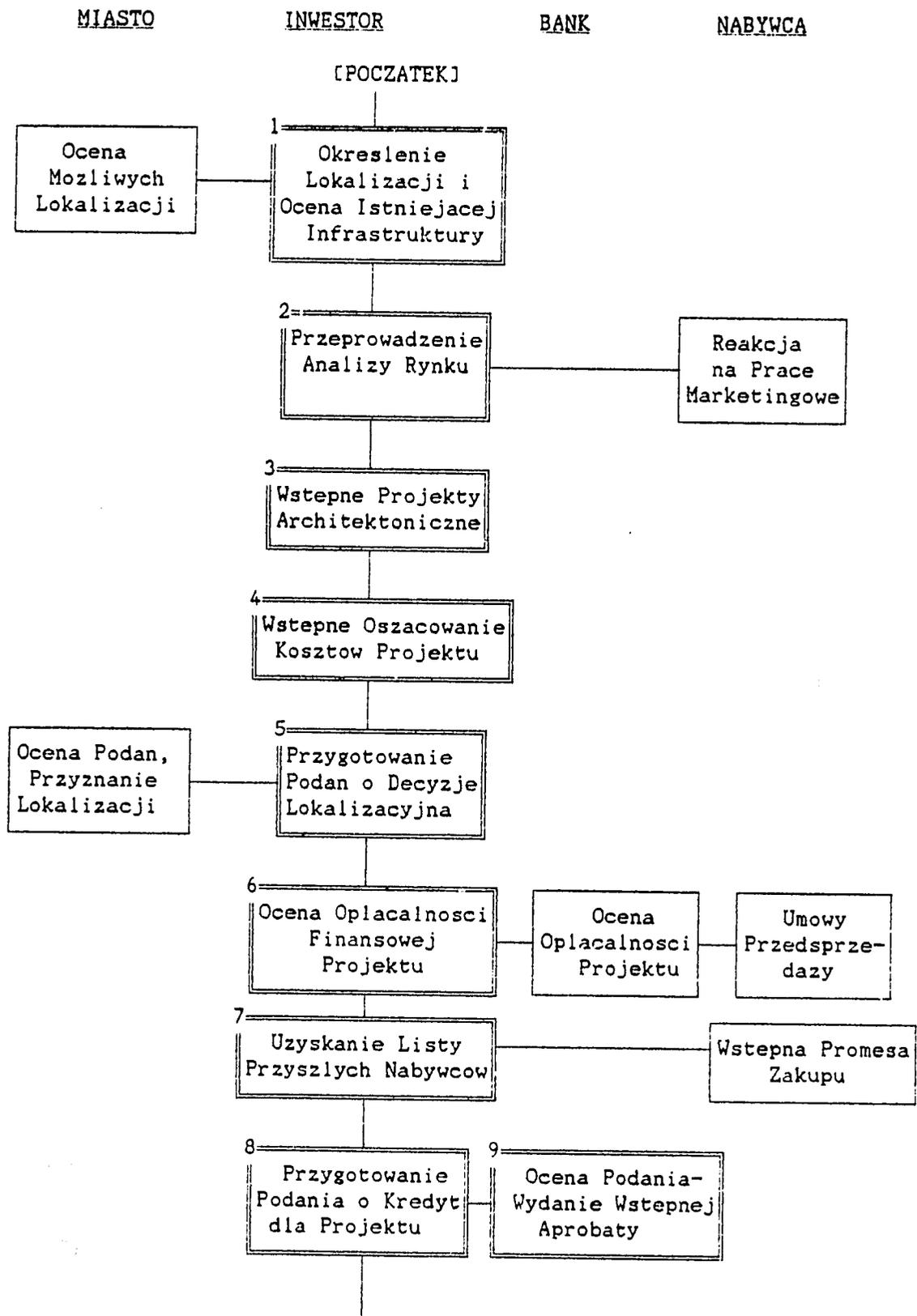


GENERAL PROJECT FLOW CHART





OGOLNY SCHEMAT PROJEKTU



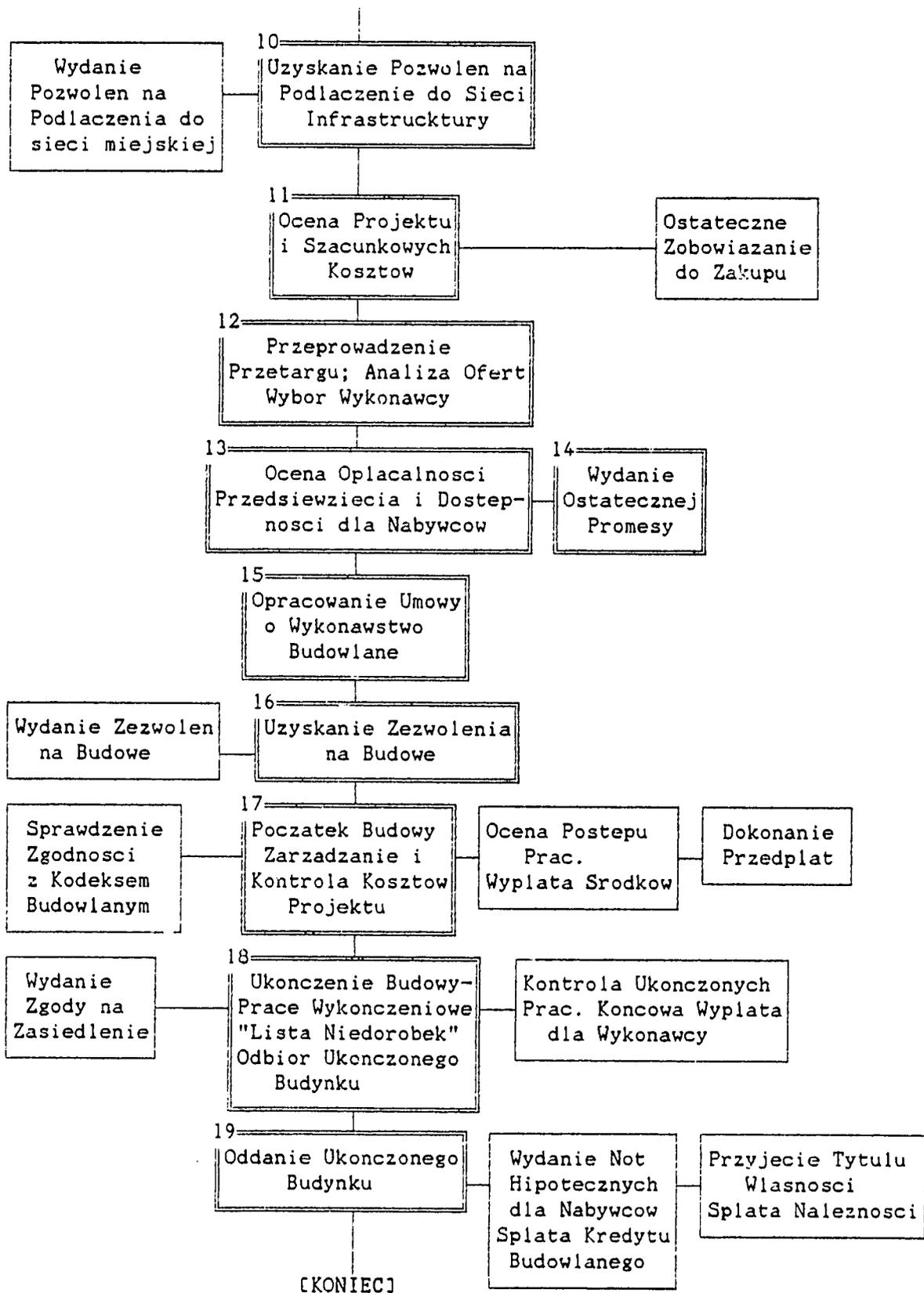
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MIASTO

INWESTOR

BANK

NABYWCA



World Bank Poland Housing Program
June/July 1991 Training Program

Overall Presentation

Follow the Project Preparation Flowchart

1. Identify Site and Check Infrastructure

The first step in the development process should be the identification of a suitable site that can be acquired or leased where the owner is prepared to enter into a joint venture. By suitable we mean a site that is easily developed without extraordinary costs. Site selection for the HFP should take into account the following:

- a. Location relative to infrastructure services
- b. Location relative to community services
- c. Location relative to transport
- d. Size, shape, soil, and drainage characteristics
- e. Uses of adjoining properties and environmental issues
- f. Cost

Projects proposed under the HFP generally should be urban in-fill sites, modest in size, with all utilities in the adjacent streets, high levels of services, inexpensive to develop, and moderate in cost.

Criticisms of project:

- a. Takes too much time -- city thinks it can build project in 3-year phases;
- b. Too far away from city center -- located on periphery;
- c. Too far away from infrastructure -- 600 meters to nearest heat chamber, 200 meters to water line; 150 meters to power line;
- d. Too close to gas main for project to be built near street;
- e. Too far from public transportation;
- f. Poor access to retail stores;
- g. Infrastructure sized for 300 additional units to be built as part of another project at some later date; and
- h. Failure to address other issues.

2. Prepare Market Analysis and Respond to Marketing Efforts

A developer always should have a specific market in mind when developing a housing project and design the project to fit that market. Housing in a market economy is market-driven; to be successful, a developer should supply what the market wants to buy (demand). Once a site is identified, a market analysis should be conducted to determine, based on local demographics, estimated household incomes, housing need, and housing type preferences, the magnitude and characteristics of the local housing market.

Obviously, the market can be stratified according to different levels of affordability. The target market for a project should be based on specific levels of affordability of a portion of the overall housing market and the

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project designed to meet those financial parameters. Projects proposed under the HFP generally should target the household market where current housing need (effective demand) is the greatest.

Criticisms of Project:

- a. Project is an employee cooperative, which assumes employees will work abroad, earn high DM incomes, thereby enabling them to make larger deposits and qualify for larger mortgages;
- b. Number of employees smaller than number of apartments in project;
- c. Employees' East Berlin contract will expire soon;
- d. Proposal does not address the number of non-company employees, their incomes, and whether they qualify for HFP mortgages; and
- e. Apartments range in size from 57 sq. meters to 97 sq. meters (i.e., they fit the old model series).

3 & 4. Preliminary Projection of Architectural Plans and Estimation of Preliminary Projection of Project Costs

Urban, high-density housing projects have the highest economic feasibility. Three types of projects can be constructed rapidly and efficiently on serviced, urban land parcels:

- a. In-fill projects;
- b. Site intensification projects;
- c. Attic and rooftop reconfigurations.

To maximize utilization of the site and available infrastructure, four- or five-story, walk-up structures will be considered the norm for new construction. The design of such structures should attempt to minimize the number of stair towers serving the units. "Corridor" layouts and "point" designs (with units radiating from a central core) serve this purpose effectively.

Utilizing the "traditional" Polish construction method, a net usable area of 60 sq. meters appears to be a generally affordable size of unit. Larger units should be excluded from the project design unless market analysis and presale efforts support the construction of such units. To facilitate construction efficiency, a minimum number of layout designs should be included in the building design.

On a per capita basis, Poland has only one-third the commercial/retail space of Czechoslovakia or Hungary. When applicable, ground level retail space should be included.

Off-street, covered parking space should be another critical design element. Sublevel parking is the recommended solution. Other alternatives such as multi-level facilities or ground-level enclosed garages also may be appropriate.

Every effort should be made to incorporate modern construction and energy efficiency components into the project design. Building techniques which will

reduce both the time of execution and material usage should be explored. Insulation methods that exceed the current low Polish standard are desired.

Improved building technologies and construction methods will lower the cost of housing in Poland. Immediate attention must be directed to improving job-site management. Improving the effectiveness and efficiency of the following activities could bring substantial cost savings to the project:

- (1) Cost estimating
- (2) Scheduling
- (3) Purchasing
- (4) Job-site management
- (5) Crew organization and monitoring
- (6) Worker safety
- (7) Materials handling
- (8) Cost tracking
- (9) Project execution.

However, longer-term improvements in building methods and materials are required. Upgrading these aspects of the construction process will shorten the required construction period, thereby reducing both construction risk and capitalized construction cost.

Other advantages of improved building technologies would include increasing the usable space in the structure; reducing the volume of materials in foundations, shear walls and exterior walls; increasing thermal efficiency, reducing sound transmission, reducing long-term maintenance costs, and enhancing the attractiveness of the project.

Improved building technologies would include:

- (1) Reusable formwork
- (2) Poured-in-place concrete technology
- (3) Concrete pumping equipment
- (4) Modern curing and strengthening compounds
- (5) Improved ceramic block materials
- (6) Use of interior studs and drywall construction
- (7) Concrete structural frame construction
- (8) Concrete post-and-beam construction
- (9) Modern exterior finishes that will reduce the high maintenance cost of traditional stucco.

Each individual building project should be completed within 12 months of ground breaking. Such a time frame will require radically improved project management systems and execution practices from Polish contractors. To meet this requirement, projects must also be broken up into smaller, separable phases or components. Each of these phases can then be initiated, completed and sold in the 12 month time span.

Criticisms of project:

- a. Too much space for stair towers;
- b. Too material-intensive construction methods (too many load-bearing walls).
- c. Too many units for 1-year completion -- phasing needed;
- d. Total area to net usable area ratio is relatively good at 1.32 -- comparable ratios for the proposals submitted to date range from 1.15 to 2.5;
- e. Above ratio implies net usable area exceeds 70% of total area, but in US low end of range would exceed 80%;
- f. Calls for use of traditional construction methods;
- g. Could improve ratio by removing drying rooms, while supplying stackable washer/dryers to satisfy tenants' needs; and
- h. Also could increase the number of corridors around stairwell.

4. (Continued)

Criticisms of Project (ask questions):

- a. Does the proposal use measured, real quantities as take-offs from actual plans? i.e., are labor hours, productivity measures, and so forth computed using current systems rather than outdated, centrally-determined standards?
- b. Are material costs and sources computed on the basis of local supplies rather than cost in the Warsaw market?
- c. Does the proposal specifically recognize transportation, delivery, and storage costs?
- d. Does proposal explore possibility of renting idle combinat equipment?
- e. Does proposal take advantage of greater efficiency, productivity, and time-savings by using subcontractors rather than in-house workers? If so, how does the contractor plan to control and coordinate the subcontractors' activities?

5. Prepare Application for Site Permits; Review and Approve Site Permits

The building permit process consists of three steps. The first step occurs at the city level when the developer applies for site (land use) permission. The city specifies and confirms the lot, its zoning, long-range goals for the property, its access to infrastructure, soils and ecological conditions, and points out what additional, back-up documents the developer will need in order to fulfill the requirements of the next two steps.

6. Establish Financial Feasibility

Review all financial aspects of the preliminary development plan to assure that all costs have been properly counted.

Verify that sources of payment have been identified for all project costs, including infrastructure, as well as direct construction costs.

Ascertain that an adequate profit will be realized, and that the profit reflects the risks that have been assumed.

Prepare preliminary estimates and obtain deposit and down payment commitments from proposed buyers.

Obtain a commitment from the local bank that the proposed housing units will qualify for permanent mortgage financing as long as they are built to the approved plans and specifications, subject to the qualifications of the proposed buyers. Obtain cash purchase commitment from other buyers.

Criticisms of Project:

- a. No affordability study for workers in company coop.
- b. For non-company co-op members, the proposal does not attempt to identify the clientele or to establish what they can pay.

7. Obtain Purchase Commitments

Ascertain that half or more of the units have qualified buyers (either cash buyers or ones who should qualify for loans).

Review preliminary sales contracts to determine that all proposed borrowers are likely to qualify for individual mortgage loans from the local bank. Buyers not requiring financing must have an assured source of cash for the purchase of their units.

Estimate the deposit and down payment requirements and meet with all known buyers to verify their continued participation in the project, before presenting the final application to the local bank.

Criticism of Project:

- a. So far, no cash commitments obtained.

8. Developer prepare application for project loan

Criticisms of Project:

- a. No financial projections made.
- b. No equity paid in or deposits collected.
- c. All sources of financing in the "other" category.
- d. No competitive bidding.
- e. No square-meter cost breakdown.
- f. No calculations on interest payments.
- g. No cash flow projections.

9. Bank review loan application and issue tentative commitment

In reviewing the application, the lender must be satisfied that the Borrower has the ability to manage the project, meet scheduling commitments, successfully complete the project and repay the loan. To a large extent, the Borrower's ability to perform is directly related to his/her character, financial strength, experience with similar projects, and the quality of the collateral in conjunction with the Borrower's investment.

Though subjective in nature, these factors can be assessed through analysis of the application itself. The following steps can be useful in a lender's analysis:

- (1) Is the application form complete? If not, what was left out and why. If the cash flow information is missing, does the Borrower understand the principle and importance of cash flow? Can he or she express cash flow in a different format?
- (2) Examine the details of the cost analysis, square meter costs, the worksheets, and all other information on the project. Do the numbers all add up correctly? Do they make sense relative to your experience in lending to other projects?
- (3) Complete your own analysis of the numbers presented. Do you agree with the Borrower's conclusions? Does the cost of construction and project budget accurately reflect all costs? Are you satisfied with the source and uses of funds?
- (4) Does the proposed site itself make sense? Is it close to transportation, shopping, infrastructure (roads, water, sewer, heat, electricity), church and schools? If off-site infrastructure is not available, how soon will the municipality be able to provide the infrastructure? Has the local government considered the project and approved the infrastructure development? Will people want to buy and live in a unit located on this site?
- (5) Including accrued interest payments and total cost of the project, what is the expected sale price of each unit? Is the sale price competitive? Is the sale price calculated in relation to the desirability of each unit?
- (6) How does the sale price compare with the value of comparable properties? Will prospective buyers find the same or better properties at cheaper prices?
- (7) Has the bank conducted an appraisal of the project? Does the appraisal support the price?
- (8) Is the sale price of individual units affordable by prospective buyers?

- (9) What is the source of the Borrower's equity? Is it all cash? Where does the cash come from; how much of it is the Borrower's? Is a portion of it from Purchasers who have agreed to pre-sales? If so, examine the pre-sales agreement. What happens to the sale price in the event of cost overruns? Who will cover cost overruns? How will they be covered?
- (10) What is the liquidity level of the Borrower? What is the liquidity level of the Purchaser? Do the Purchasers who have agreed to pre-sales meet requirements for a mortgage loan?
- (11) Who is the Contractor? What is the financial strength or other resources of the Contractor? What is the contractor's experience and ability to complete projects on time and on budget?
- (12) Analyze the Borrower's personal cash flow. Is he/she making or losing money now? Does the Borrower have enough cash to meet his/her daily commitments? What impact will this project have on the Borrower's cash flow?
- (13) Conduct sensitivity analyses on the project's costs and cash flow. What happens if the project is completed six months late? How sensitive is the project to changes in interest rates? Does the Borrower have financial resources to overcome such difficulties? Could the sales price be increased to accommodate such circumstances? Will the Purchaser be able to afford an increased unit price? Will the Purchaser be willing to buy the same unit at a higher price?
- (14) In the final analysis, what would your bank do with the property should the worst situation occur and the bank ended up owning the property? How would you complete the project? Does the project budget provide for developer's fees? Would the bank be able to sell the units and recover its loan, plus foreclosure expenses?

Criticism of Project:

- a. Proposal does not address questions raised earlier in this section.

10. Apply for Voivod & Utility Permits

The second step of the permit application process involves interaction with the voivod administration. The offices involved are the following:

- a. Voivod sanitation inspectorate -- gives opinion on waste management, septic tanks/fields, on-site location of garbage cans' waste receptacles; permission for sewer hook-up to water main.
- b. Voivod fire department -- input re: fire, land location, turnaround, and fire protection zones.
- c. Local electric utility.
- d. Ecological waste management and geology office: identify what

existing green areas require protection, reviews project, and specifies heating fuel.

- e. Gas department -- permit for hook-up and/or use of heating gas.
- f. Energy department -- reviews technical supply parameters in light of energy reserves.
- g. Regional water supply and sanitary storm sewer -- level of water treatment required and permit for drilling for new water source from/with voivod geologist.

11. Revise design and cost estimates

This is a revision of Item 4, above.

Criticism of Project:

- a. No way to revise design and adjust cost estimates because preceding steps not completed.

12. Request bids; Evaluate & select builder

After the architect has revised the project design documents and the owner/developer has established a reasonable budget for the project within the project finance guidelines, he should then request formal construction bids from qualified companies to build the project. The competitive bidding phase is composed of 7 steps as follows:

- (1) Compile list of prospective construction firms qualified to perform work;
- (2) Send out invitations to bid, identifying nature of project, overall project guidelines, where to see/how to obtain, copies of plans and specifications, bid due date, "statement of qualifications" to be submitted with bid, etc.;
- (3) Send out plans and specifications to bidders who respond;
- (4) Receive bids & review qualifications of bidders; identify bid range from among qualified bidders;
- (5) Review cost proposals, building schedules, and cost variations around high risk items (plumbing, electrical, foundation/excavation, etc.);
- (6) Select lowest (feasible?) bid [alt: throw out lowest and highest bid, compute average of remaining bids, select bid below and closest to average].
- (7) Notify winning bidder of intent to award contract and notify other bidders of winning bid, cost range and position of their bid in the bid range (and amount?).

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Criticism of Project:

- a. No competitive bidding and therefore no evaluation of bids.

13. Review Financial Feasibility & Affordability

Criticism of Project:

- a. No review of financial feasibility and affordability conducted because no initial study undertaken.

14. Bank issue final commitment

Criticism of Project:

- a. Final commitment unlikely without 25%, more realistically 40%-50% downpayment;
- b. No in-kind contributions acceptable; and
- c. Should be paid into a trust account or to bank.

15. Negotiate construction contract

After detailed design drawings and specifications have been drafted, and after the project schedule for each major phase has been fixed, the owner and the contractor will negotiate the overall amount of the contract and the schedule of payments at each major construction milestone. Other terms which may be negotiated can include:

- (1) Contingencies, allowances and project reimburseables
- (2) General conditions (usually a percentage of construction cost)
- (3) Working capital provisions and payment method
- (4) Penalties and bonuses
- (5) Subcontractor payments and retainage (if applicable)
- (6) Insurance and reporting requirements.

Criticism of Project:

- a. How could one incorporate guaranteed maximum price of unit, contractor performance bonuses, cost-saving, and distribution provisions into contract negotiations?

16. Secure Building Permits

With the city and voivod department approvals in hand, one proceeds to the third step of the permitting process: the ZTE and the PTI.

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- a. General project description.
- b. Infrastructure quantity cost estimation.
- c. Site development.
- d. Site plan.
- e. Working drawing and specs.
- f. Construction plan.

17. Begin construction; manage project; control costs

When construction financing has been secured, the construction contract has been negotiated and final construction permits have been received. The contractor should then begin work in the field. Prior to this time, the project schedule for each phase of work should have been established, materials should have been ordered and/or delivered to the site, and arrangements made for utilities on site.

Once the work has begun, the contractor should keep a daily project log onsite, and should fill out weekly progress reports to document the project. The architect's role in this phase of the work is to assure that what was called for in the plans and specifications is actually constructed. The developer/owner may also want to use the services of a construction manager or project manager to assure that the project is brought in ahead of schedule and under budget.

The whole purpose of project management is to assure that the project objectives with respect to cost, time and quality are attained to the ultimate benefit of buyers of the units.

The Architect and the contractor should utilize a simple project cost control system which at any point during the construction process can provide up-to-date information about:

- (1) Budget for each project cost element (project phase)
- (2) Committed costs (buyout amount) for each cost element
- (3) Amount spent for each cost element (already paid or incurred)
- (4) Balance remaining to be paid for each cost element
- (5) Contingency for unknown project elements (anticipated costs not yet committed), broken into hard and soft costs
- (6) Projected Final Cost for each project element.

The primary purpose of this system is to assure that project budgets are not exceeded, and that the overall Projected Final Cost is known throughout the construction period. It also serves as a tool the contractor should use in preparing drawdown requests for work that has already been completed.

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17A. Draw requests, inspections, and disbursements

Each draw request must be examined for accuracy and compliance with the draw schedule:

- (1) Did the borrower sign the request?
- (2) Did the Construction Manager and Project Architect sign the request?
- (3) Does the request breakdown previous draw requests (i.e. the amount and percentage already paid) versus the current request?

Inspections must be completed by or on behalf of the bank prior to each disbursement. This can be achieved through the following contract relationships:

- (1) Contracting with an engineering firm or an independent builder to conduct thorough inspections
- (2) Use personnel inside the bank with recent construction experience to conduct inspections.

In either case (and noting that item (1) above will probably be most cost effective), the inspector must visually and physically inspect the site. "Drive-by" or "windshield" inspections are not sufficient.

The inspector should report back to the bank on the following issues:

- (1) Is work completed equal to the draw request?
- (2) Is the quality of the work satisfactory?
- (3) Are there any existing or potential problems that will affect the cost of construction, the work schedule or the quality of work?
- (4) Does the inspector agree with and recommend approval of any change orders?
- (5) Does the inspector recommend that the draw request be approved?

Once the lender is satisfied that the draw request is accurate and justified, and that the work completed is satisfactory, then the disbursement can be made. The lender should keep track of all developments in the loan, making notes for the file on progress, problems, delays and the like.

The same procedures and issues apply to the Final Inspection. There, however, the project should also receive final certification of completion and verification it is ready for occupancy.

Criticism of Project:

- a. No breakdown of contingency reserves between construction and soft costs.

18. Finish construction; Punch list; Close out job

At completion of construction when the project is ready for occupancy, the owner/developer should submit the final draw request to the local bank for final payment due the contractor and for other reimbursable project costs. Payoff of the construction credit from the purchasers' mortgage credits should be completed as rapidly as possible in order to minimize ongoing interest charges.

However, the owner must assure that all vendors of materials, subcontractors and workmen on the project have been completely paid for all the work, services, or materials they provide to the project.

Recommend regular progress meetings because time is essential for project. In addition, discuss:

- a. What is the appropriate role (beyond design) of the architect during the construction process?
- b. At present, just three draws during project's construction phase. How many additional draws might be appropriate?
- c. Utility of site meetings with developer, banker, architect, and primary subcontractors.

19. Sale and Closing on Completed Units

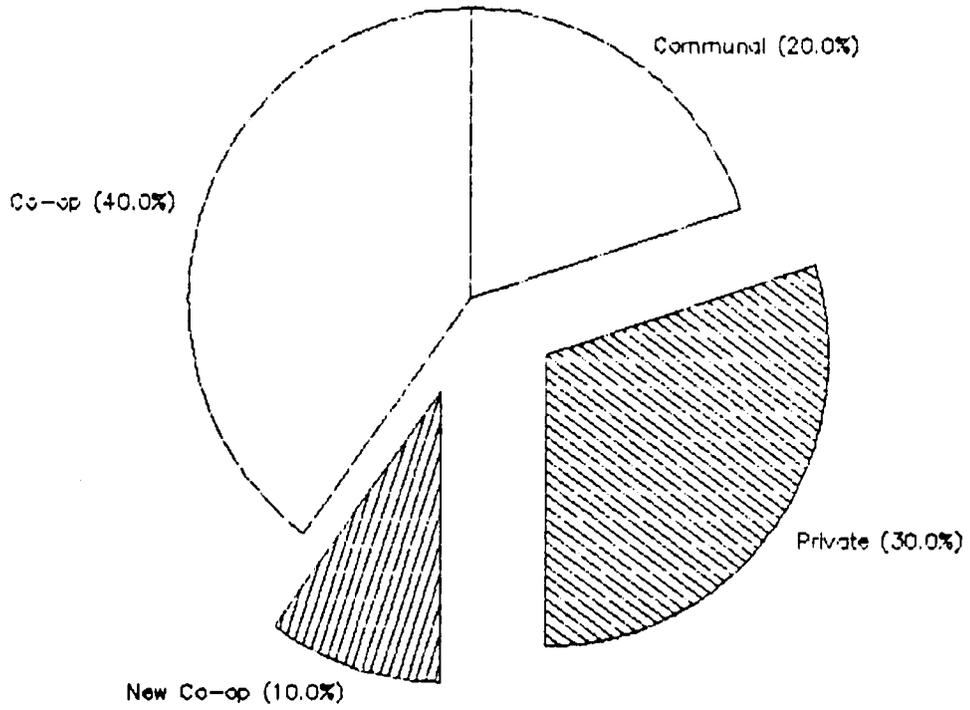
Following completion of construction, possession of the individual units is taken by the individual purchasers (the legal form and status of the transaction is as yet uncertain). Repayment of the construction loan can be fulfilled in one of two ways:

- (1) The individual owner assumes a mortgage credit (presumably utilizing the World Bank financing program)
- (2) The unit is purchased in cash

The final step in the project process is the documentation and closing of the mortgage credit.

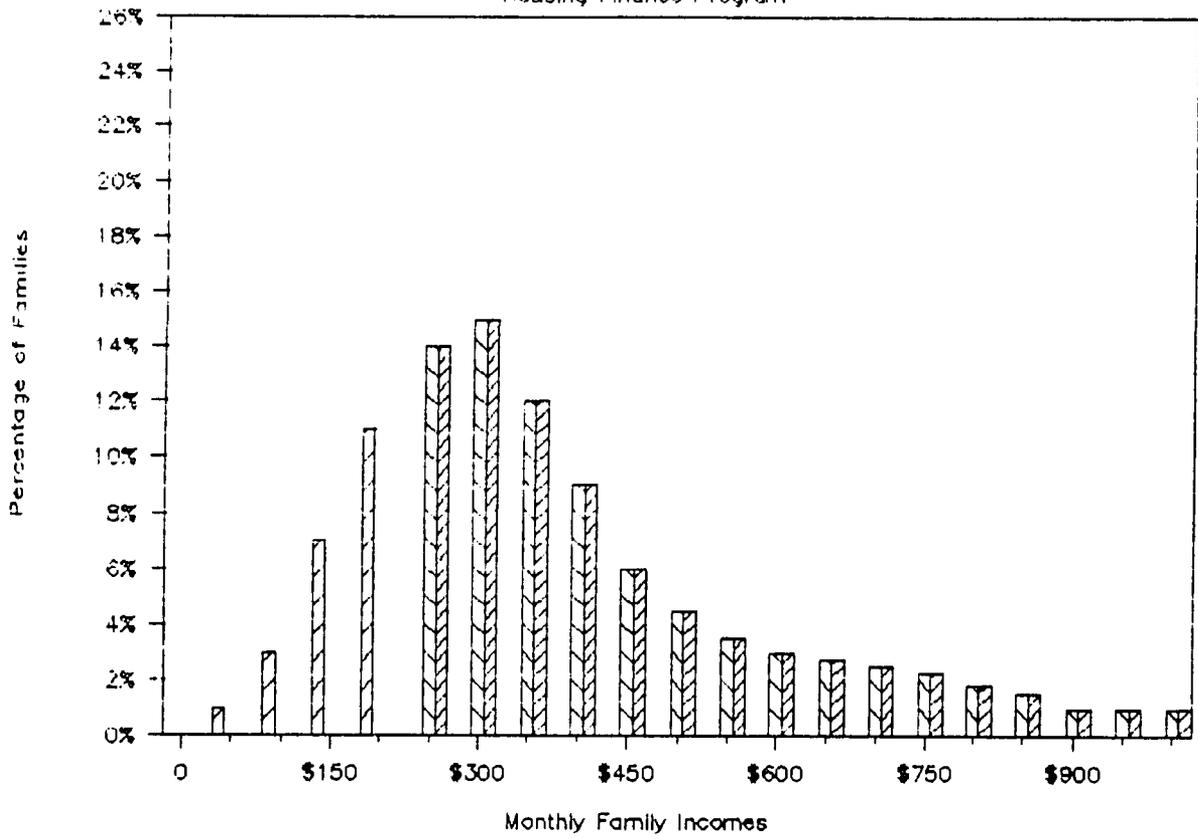
Poland Housing Finance Program

Illustrative Housing Distribution



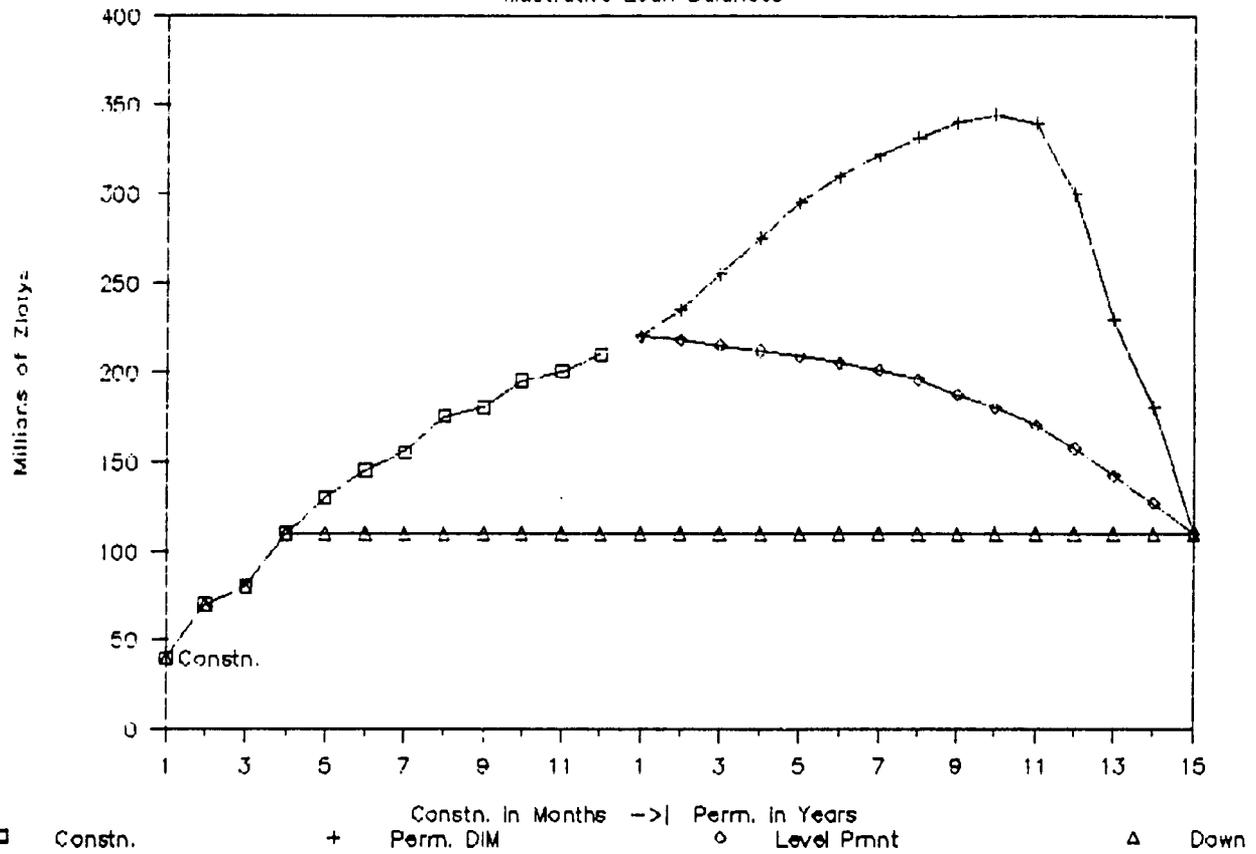
Illustrative Income Distribution

Housing Finance Program



Housing Finance Program

illustrative Loan Balances



Poland USAID/World Bank Housing Program

8 June - 11 July 1991

Training Notes from Phillip D. Jones

The 19-step Project Development Flowchart was used as a handout to illustrate the Housing Program to the participants. At Step 6, the developers, should bring together the banks and buyers to assure that the proposed housing will be acceptable to the banks and affordable to the buyers. The initial analysis of affordability should be done before the developer has spent a great deal of time and money on his project. After the developer has verified that he has potential buyers, and that a bank can be made interested, he should continue his work to develop the project. This will include another detailed Affordability Analysis after the full costs of the project have been estimated based on complete architectural and construction details.

During the workshops the Affordability Analysis for individual projects was used to demonstrate the required incomes of buyers under several different lending terms and conditions. The illustrations were taken from several iterations of the same project under the varying conditions that can reasonably be expected from the program. The Affordability Analysis spreadsheet is designed for bankers and financial experts, and gives too much obscure information for the types of audiences attending the training sessions. Therefore, only the information on the DIM was presented on the blackboard. This allowed the consultants to limit the discussion to the aspects of the World Bank Housing Program that are now under consideration, rather than having the participants get deeply involved in asking for other types of mortgage instruments. The consultants demonstrated that the Dual Indexed Mortgage can work in any inflationary environment, as long as there is a reliable source of funding for the Liquidity Fund.

Illustrative Monthly Income Distribution

In the better projects affordability starts in the range of \$300 per month. The Illustrative Monthly Income Distribution curve was used to demonstrate the possible range of family incomes. The numbers used in the seminars were not based on any published source. We didn't find any such source. Rather, at the early workshops we asked the participants to react to the drawing of different income distribution curves, and finally settled on the one shown in the report. The curves were drawn on the blackboard and the income range of the likely potential clientele for the program was shaded.

The purpose of bringing consideration for the end-users into the discussion early in the development process was to demonstrate to the participants that the old housing system in Poland did not consider the end-users the same way that a market-oriented system must consider them. The discussions that followed these presentations revealed that there has been almost no marketing of the proposed housing projects. The developers have generally been architects and designers who have produced preliminary plans for projects that would have fit very well under the old system, but which will have to be changed if they are to fit into a new market-oriented housing system.

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Target Clientele

The consultants used an illustrative pie-chart to direct group discussion of the ownership of housing in the regions of the workshops. The chart used in the report is typical of the ownership possibilities we encountered. The four main ownership types were listed: Co-op, Communal, Private, and New Co-op. The proposed World Bank Housing Program is expected to be directed to private ownership of apartments and houses. Therefore, the Private and New Co-op pie sections were exploded out of the pie and shaded, to indicate that they represent the likely potential clientele.

During the workshops, the consultants would draw a large circle and usually discuss the ownership distribution in the local region. At the later workshops we had less discussion of the local situation, but still talked about local variations. The participants often were interested in developing more communal or old style co-op housing, and the pie chart served to focus the group onto the potential for their future participation in the World Bank program, with its emphasis on privately-owned housing.

Illustrative Loan Balances

As part of the workshop dealing with the bankers, the consultants presented a drawing illustrating a typical DIM, with a construction loan being turned into a permanent loan, including capitalized interest during construction, a large downpayment paid by the buyer, equity from the developer which will likely be the downpayment from the buyer, and then a permanent mortgage loan for which the balance increases for several years, then decreases as the borrower's payments become higher than the interest.

The drawings used in the workshops were similar to the one shown in the report entitled Illustrative Loan Balances. In that chart the vertical scale represents the loan balance in millions of zlotys. The horizontal scale represents time. The left half of the chart is the construction loan and is scaled in months. The right half is the permanent loan and is scaled in years. There are two examples of permanent loans, including the Dual Indexed Mortgage which increases for several years with high inflation, and an amortizing loan which would also be the case of a DIM in a low-inflation environment.

During the workshops with the basic drawing on the board the consultants demonstrated how the term of the permanent DIM loans would change with increased or decreased inflation. This would also demonstrate that higher income buyers would generate less negative amortization than lower income buyers, and that the same buyer would pay the same each month no matter which house size he would buy, and no matter how much the downpayment. The maximum loan size of 25 times income will encourage the banks to require a higher downpayment than the World Bank would require, in order to limit the bank's exposure to negative amortization.

APPENDIX 2

Project Case Studies: Affordability Analyses

Poland/World Bank Housing Program - July 1991
 Kluczbork - 107 units

Affordability at: 13.00% annual dollar interest rate.
 25.00% annual zloty interest rate.

Downpayment of: 25.00% of house sales price

Prices as of 4/91

Construction period of 18 months

Includes developer profit of 0%

Loan Payments not to exceed 40% of monthly income if level payment.

Loan Payments will be 25% of monthly income if DIM.

Loan Amount can be up to 35 times stated income if DIM.

Amounts in Dollars or Thousands of Zlotys
 US \$1 = 1000 zlotys

Typical Units size	Sales Price	25% Downpat	Loan Amount	Months pay	Months save	Monthly Payment	Monthly Incomes in dollars, today's zlotys, and future zlotys.												
							\$200	\$300	\$400	\$500	\$600	\$700	\$800	\$900	1000	1100	1200	1300	
							2200	3300	4400	5500	6600	7700	8800	9900	11000	12100	13200	14300	
							2464	3696	4928	6160	7392	8624	9856	11088	12320	13552	14784	16016	
	\$/ZL 000	\$/ZL 000	\$/ZL 300				\$/ZL 000												
Typ. A 48	\$16,868	\$4,217	\$12,651	180	26	\$160 :	--	--	--	32%	27%	23%	20%	18%	16%	15%	13%	12%	
						DIM Payment @ 25% \$	n/a	n/a	\$100	\$125	\$150	\$175	\$200	\$225	\$250	\$275	\$300	\$325	
	220,881	55,220	165,661	180	16	3,538 :	--	--	--	--	--	--	36%	32%	29%	26%	24%	22%	
						DIM Payment @ 25% ZL	n/a	n/a	1232	1540	1848	2156	2464	2772	3080	3388	3696	4004	
						Min. Interest	3,451	no	OK	OK									
Typ. B 56	\$19,910	\$4,978	\$14,933	180	26	\$189 :	--	--	--	38%	31%	27%	24%	21%	19%	17%	15%	15%	
						DIM Payment @ 25% \$	n/a	n/a	n/a	\$125	\$150	\$175	\$200	\$225	\$250	\$275	\$300	\$325	
	260,722	65,181	195,542	180	16	4,176 :	--	--	--	--	--	--	38%	34%	31%	28%	26%	25%	
						DIM Payment @ 25% ZL	n/a	n/a	n/a	1540	1848	2156	2464	2772	3080	3388	3696	4004	
						Min. Interest	4,074	no	no										
Typ. C 55	\$23,064	\$5,766	\$17,298	180	26	\$219 :	--	--	--	36%	31%	27%	24%	22%	20%	18%	17%	17%	
						DIM Payment @ 25% \$	n/a	n/a	n/a	\$125	\$150	\$175	\$200	\$225	\$250	\$275	\$300	\$325	
	302,028	75,507	226,521	180	16	4,837 :	--	--	--	--	--	--	39%	36%	33%	30%	29%	29%	
						DIM Payment @ 25% ZL	n/a	n/a	n/a	n/a	1848	2156	2464	2772	3080	3388	3696	4004	
						Min. Interest	4,719	no	no										
Typ. D3E 80	\$27,308	\$6,827	\$20,481	180	26	\$265 :	--	--	--	38%	33%	29%	26%	24%	22%	20%	20%	20%	
						DIM Payment @ 25% \$	n/a	n/a	n/a	n/a	\$150	\$175	\$200	\$225	\$250	\$275	\$300	\$325	
	365,449	91,362	274,087	180	16	5,953 :	--	--	--	--	--	--	40%	37%	34%	31%	30%	30%	
						DIM Payment @ 25% ZL	n/a	n/a	n/a	n/a	n/a	2156	2464	2772	3080	3388	3696	4004	
						Min. Interest	5,710	no	no										
						Stated Incomes: Dollars	\$200	\$300	\$400	\$500	\$600	\$700	\$800	\$900	1000	1100	1200	1300	
						Now ZL 000	2200	3300	4400	5500	6600	7700	8800	9900	11000	12100	13200	14300	
						Future "	2464	3696	4928	6160	7392	8624	9856	11088	12320	13552	14784	16016	

General Notes:

1. Payments do not include charges for water, electricity, heat, ground rent, and other services.
2. Unit sales price includes any garage, common area, developer profit, and interest during construction.
3. "Months Pay" is initial expected repayment period.
4. "Months Save" is the down payment divided by the normal monthly payment.
5. "Monthly Payment" is regular payment using an unindexed level-payment mortgage.
6. "DIM Payment @ 25%" is initial monthly payment using Dual-Indexed Mortgage plan.
7. "n/a" indicates that mortgage amount exceeds stated number of times monthly income or is otherwise Not Affordable.
8. "--" indicates payment exceeds stated percentage of monthly income and therefore is Not Affordable.
9. Zloty incomes are as of now and one year from now.
10. Dollar incomes assumed to remain constant; zloty incomes increase by the difference in annual interest rates.
11. "Min. Interest" is loan amount times zloty interest rate for one month. "OK" or "no" indicates if DIM payment covers interest.

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Poland/World Bank Housing Program - July 1991
 Kluczbork - 107 units

Affordability at: 13.00% annual dollar interest rate.
 25.00% annual zloty interest rate.

Downpayment of: 50.00% of house sales price

Prices as of 4/91

Construction period of 18 months
 Includes developer profit of 0%
 Loan Payments not to exceed 40% of monthly income if level payment.
 Loan Payments will be 25% of monthly income if DIM.
 Loan Amount can be up to 35 times stated income if DIM.

Amounts in Dollars or Thousands of Zlotys
 US \$1 = 11000 zlotys

Typical Units size	Sales Price	50% Downpat	Loan Amount	Months pay	Months save	Monthly Payment	Monthly Incomes in dollars, today's zlotys, and future zlotys.												
							\$200	\$300	\$400	\$500	\$600	\$700	\$800	900	1000	1100	1200	1300	
							2200	3000	4400	5500	6600	7700	8800	9900	11000	12100	13200	14300	
							2464	3636	4928	6160	7392	8624	9856	11088	12320	13552	14784	16016	
Typ. A	\$16,485	\$8,242	\$8,242	180	79	\$104 :	--	35%	26%	21%	17%	15%	13%	12%	10%	--	--	--	
48						DIM Payment @ 25% \$	n/a	\$75	\$100	\$125	\$150	\$175	\$200	\$225	\$250	\$275	\$300	\$325	
	211,804	105,902	105,902	180	47	2,262 :	--	--	--	37%	31%	26%	23%	20%	18%	17%	15%	14%	
						DIM Payment @ 25% ZL	n/a	924	1232	1540	1848	2156	2464	2772	3080	3388	3696	4004	
						Min. Interest	2,206	no	no	no	no	no	OK	OK	OK	OK	OK	OK	
Typ. B	\$19,458	\$9,729	\$9,729	180	79	\$123 :	--	--	31%	25%	21%	18%	15%	14%	12%	11%	10%	--	
56						DIM Payment @ 25% \$	n/a	\$75	\$100	\$125	\$150	\$175	\$200	\$225	\$250	\$275	\$300	\$325	
	250,008	125,004	125,004	180	47	2,669 :	--	--	--	36%	31%	27%	24%	22%	20%	18%	17%		
						DIM Payment @ 25% ZL	n/a	924	1232	1540	1848	2156	2464	2772	3080	3388	3696	4004	
						Min. Interest	2,604	no	no	no	no	no	no	OK	OK	OK	OK	OK	
Typ. C	\$22,541	\$11,270	\$11,270	180	79	\$143 :	--	--	36%	29%	24%	20%	18%	16%	14%	13%	12%	11%	
65						DIM Payment @ 25% \$	n/a	n/a	\$100	\$125	\$150	\$175	\$200	\$225	\$250	\$275	\$300	\$325	
	289,616	144,808	144,808	180	47	3,092 :	--	--	--	--	36%	31%	28%	25%	23%	21%	19%		
						DIM Payment @ 25% ZL	n/a	n/a	1232	1540	1848	2156	2464	2772	3080	3388	3696	4004	
						Min. Interest	3,017	no	OK	OK	OK	OK							
Typ. G&E	\$27,274	\$13,637	\$13,637	180	79	\$173 :	--	--	--	35%	29%	25%	22%	19%	17%	16%	14%	13%	
80						DIM Payment @ 25% \$	n/a	n/a	\$100	\$125	\$150	\$175	\$200	\$225	\$250	\$275	\$300	\$325	
	350,431	175,215	175,215	180	47	3,742 :	--	--	--	--	--	38%	34%	30%	28%	25%	23%		
						DIM Payment @ 25% ZL	n/a	n/a	n/a	1540	1848	2156	2464	2772	3080	3388	3696	4004	
						Min. Interest	3,650	no	OK	OK									
						Stated Incomes: Dollars	\$200	\$300	\$400	\$500	\$600	\$700	\$800	900	1000	1100	1200	1300	
						Now ZL 000	2200	3300	4400	5500	6600	7700	8800	9900	11000	12100	13200	14300	
						Future "	2464	3636	4928	6160	7392	8624	9856	11088	12320	13552	14784	16016	

General Notes:

1. Payments do not include charges for water, electricity, heat, ground rent, and other services.
2. Unit sales price includes any garage, common area, developer profit, and interest during construction.
3. "Months Pay" is initial expected repayment period.
4. "Months Save" is the down payment divided by the normal monthly payment.
5. "Monthly Payment" is regular payment using an unindexed level-payment mortgage.
6. "DIM Payment @ 25%" is initial monthly payment using Dual-Indexed Mortgage plan.
7. "n/a" indicates that mortgage amount exceeds stated number of times monthly income or is otherwise Not Affordable.
8. "--" indicates payment exceeds stated percentage of monthly income and therefore is Not Affordable.
9. Zloty incomes are as of now and one year from now.
10. Dollar incomes assumed to remain constant; zloty incomes increase by the difference in annual interest rates.
11. "Min. Interest" is loan amount times zloty interest rate for one month. "OK" or "No" indicates if DIM payment covers interest.

44

Poland/World Bank Housing Program - July 1991
Opole - Gorna Wygonowa - 221 units

Affordability at: 13.00% annual dollar interest rate.
25.00% annual zloty interest rate.

Downpayment of: 50.00% of house sales price

Prices as of 1/91

Construction period of 24 months
Includes developer profit of 0%
Loan Payments not to exceed 40% of monthly income if level payment.
Loan Payments will be 25% of monthly income if DIM.
Loan Amount can be up to 35 times stated income if DIM.

Amounts in Dollars or Thousands of Zlotys
US \$1 = 11000 zlotys

Typical Units size	Sales Price	50% Downpat	Loan Amount	Months pay	Months save	Monthly Payment	Monthly Incomes in dollars, today's zlotys, and future zlotys.											
							\$200	\$300	\$400	\$500	\$600	\$700	\$800	900	1000	1100	1200	1300
							2200	3300	4400	5500	6600	7700	8800	9900	11000	12100	13200	14300
							2464	3696	4928	6160	7392	8624	9856	11088	12320	13552	14784	16016
	\$/ZL 000	\$/ZL 000	\$/ZL 000															
Typ. A 100	\$24,277	\$12,139	\$12,139	180	79	\$154 :	--	--	38%	31%	26%	22%	19%	17%	15%	14%	13%	12%
						DIM Payment @ 25% \$	n/a	n/a	\$100	\$125	\$150	\$175	\$200	\$225	\$250	\$275	\$300	\$325
	315,945	157,973	157,973	180	47	3,374 :	--	--	--	--	--	39%	34%	30%	27%	25%	23%	21%
						DIM Payment @ 25% ZL	n/a	n/a	1232	1540	1848	2156	2464	2772	3080	3388	3696	4004
						Min. Interest	3,291	no	OK	OK	OK							
Typ. B 111	\$26,746	\$13,373	\$13,373	180	79	\$169 :	--	--	--	34%	28%	24%	21%	19%	17%	15%	14%	13%
						DIM Payment @ 25% \$	n/a	n/a	\$100	\$125	\$150	\$175	\$200	\$225	\$250	\$275	\$300	\$325
	348,075	174,038	174,038	180	47	3,717 :	--	--	--	--	--	38%	34%	30%	27%	25%	23%	21%
						DIM Payment @ 25% ZL	n/a	n/a	n/a	1540	1848	2156	2464	2772	3080	3388	3696	4004
						Min. Interest	3,626	no	OK	OK	OK							
Typ. C 127	\$30,643	\$15,321	\$15,321	180	79	\$194 :	--	--	--	39%	32%	28%	24%	22%	19%	18%	16%	15%
						DIM Payment @ 25% \$	n/a	n/a	n/a	\$125	\$150	\$175	\$200	\$225	\$250	\$275	\$300	\$325
	398,790	199,395	199,395	180	47	4,258 :	--	--	--	--	--	--	38%	35%	31%	29%	27%	25%
						DIM Payment @ 25% ZL	n/a	n/a	n/a	1540	1848	2156	2464	2772	3080	3388	3696	4004
						Min. Interest	4,154	no										
Typ. D 132	\$31,877	\$15,939	\$15,939	180	79	\$102 :	--	--	--	34%	29%	25%	22%	20%	18%	17%	16%	15%
						DIM Payment @ 25% \$	n/a	n/a	n/a	\$125	\$150	\$175	\$200	\$225	\$250	\$275	\$300	\$325
	414,355	207,428	207,428	180	47	4,430 :	--	--	--	--	--	--	40%	36%	33%	30%	28%	26%
						DIM Payment @ 25% ZL	n/a	n/a	n/a	1540	1848	2156	2464	2772	3080	3388	3696	4004
						Min. Interest	4,321	no										
						Stated Incomes: Dollars	\$200	\$300	\$400	\$500	\$600	\$700	\$800	900	1000	1100	1200	1300
						Now ZL 000	2200	3300	4400	5500	6600	7700	8800	9900	11000	12100	13200	14300
						Future "	2464	3696	4928	6160	7392	8624	9856	11088	12320	13552	14784	16016

General Notes:

1. Payments do not include charges for water, electricity, heat, ground rent, and other services.
2. Unit sales price includes any garage, common area, developer profit, and interest during construction.
3. "Months Pay" is initial expected repayment period.
4. "Months Save" is the down payment divided by the normal monthly payment.
5. "Monthly Payment" is regular payment using an unindexed level-payment mortgage.
6. "DIM Payment @ 25%" is initial monthly payment using Dual-Indexed Mortgage plan.
7. "n/a" indicates that mortgage amount exceeds stated number of times monthly income or is otherwise Not Affordable.
8. "--" indicates payment exceeds stated percentage of monthly income and therefore is Not Affordable.
9. Zloty incomes are as of now and one year from now.
10. Dollar incomes assumed to remain constant; zloty incomes increase by the difference in annual interest rates.
11. "Min. Interest" is loan amount times zloty interest rate for one month. "OK" or "no" indicates if DIM payment covers interest.

115

Poland/World Bank Housing Program - July 1991
 Jelenia Gora - Zabobrze - 38 units

Affordability at: 13.00% annual dollar interest rate.
 25.00% annual zloty interest rate.

Downpayment of: 50.00% of house sales price

Prices as of 6/91

Construction period of 15 months
 Includes developer profit of 0%
 Loan Payments not to exceed 40% of monthly income if level payment.
 Loan Payments will be 25% of monthly income if DIM.
 Loan Amount can be up to 35 times stated income if DIM.

Amounts in Dollars or Thousands of Zlotys
 US \$1 = 11000 zlotys

Typical Units size	Sales Price	50% Downpat	Loan Amount	Months pay	Months save	Monthly Payment	Monthly Incomes in dollars, today's zlotys, and future zlotys.												
							\$200	\$300	\$400	\$500	\$600	\$700	\$800	900	1000	1100	1200	1300	
							2200	3300	4400	5500	6600	7700	8800	9900	11000	12100	13200	14300	
							2464	3696	4928	6160	7392	8624	9856	11088	12320	13552	14784	16016	
	\$/ZL 000	\$/ZL 000	\$/ZL 000																
Typ. M5 71	\$16,914	\$8,457	\$8,457	180	79	\$107 :	--	36%	27%	21%	18%	15%	13%	12%	11%	--	--	--	
						DIM Payment @ 25% \$	n/a	\$75	\$100	\$125	\$150	\$175	\$200	\$225	\$250	\$275	\$300	\$325	
	215,887	107,944	107,944	180	47	2,305 :	--	--	--	37%	31%	27%	23%	21%	19%	17%	16%	14%	
						DIM Payment @ 25% ZL	n/a	924	1232	1540	1848	2156	2464	2772	3080	3388	3696	4004	
						Min. Interest	2,249	no	no	no	no	no	OK	OK	OK	OK	OK	OK	
Typ. M4 64	\$15,277	\$7,638	\$7,638	180	79	\$97 :	--	32%	24%	19%	16%	14%	12%	11%	--	--	--	--	
						DIM Payment @ 25% \$	n/a	\$75	\$100	\$125	\$150	\$175	\$200	\$225	\$250	\$275	\$300	\$325	
	194,993	97,497	97,497	180	47	2,082 :	--	--	--	34%	28%	24%	21%	19%	17%	15%	14%	13%	
						DIM Payment @ 25% ZL	n/a	924	1232	1540	1848	2156	2464	2772	3080	3388	3696	4004	
						Min. Interest	2,031	no	no	no	no	no	OK	OK	OK	OK	OK	OK	
Typ. M4 60	\$14,136	\$7,068	\$7,068	180	79	\$89 :	--	30%	22%	18%	15%	13%	11%	--	--	--	--	--	
						DIM Payment @ 25% \$	n/a	\$75	\$100	\$125	\$150	\$175	\$200	\$225	\$250	\$275	\$300	\$325	
	180,437	90,218	90,218	180	47	1,927 :	--	--	--	39%	31%	26%	22%	20%	17%	16%	14%	12%	
						DIM Payment @ 25% ZL	n/a	924	1232	1540	1848	2156	2464	2772	3080	3388	3696	4004	
						Min. Interest	1,880	no	no	no	no	no	OK	OK	OK	OK	OK	OK	
Typ. M5 68	\$16,203	\$8,102	\$8,102	180	79	\$103 :	--	34%	26%	21%	17%	15%	13%	11%	10%	--	--	--	
						DIM Payment @ 25% \$	n/a	\$75	\$100	\$125	\$150	\$175	\$200	\$225	\$250	\$275	\$300	\$325	
	206,820	103,410	103,410	180	47	2,208 :	--	--	--	36%	30%	26%	22%	20%	18%	16%	15%	14%	
						DIM Payment @ 25% ZL	n/a	924	1232	1540	1848	2156	2464	2772	3080	3388	3696	4004	
						Min. Interest	2,154	no	no	no	no	no	OK	OK	OK	OK	OK	OK	
						Stated Incomes: Dollars		\$200	\$300	\$400	\$500	\$600	\$700	\$800	900	1000	1100	1200	1300
						Now ZL 000		2200	3300	4400	5500	6600	7700	8800	9900	11000	12100	13200	14300
						Future "		2464	3696	4928	6160	7392	8624	9856	11088	12320	13552	14784	16016

General Notes:

1. Payments do not include charges for water, electricity, heat, ground rent, and other services.
2. Unit sales price includes any garage, common area, developer profit, and interest during construction.
3. "Months Pay" is initial expected repayment period.
4. "Months Save" is the down payment divided by the normal monthly payment.
5. "Monthly Payment" is regular payment using an unindexed level-payment mortgage.
6. "DIM Payment @ 25%" is initial monthly payment using Dual-indexed Mortgage plan.
7. "n/a" indicates that mortgage amount exceeds stated number of times monthly income or is otherwise Not Affordable.
8. "--" indicates payment exceeds stated percentage of monthly income and therefore is Not Affordable.
9. Zloty incomes are as of now and one year from now.
10. Dollar incomes assumed to remain constant; zloty incomes increase by the difference in annual interest rates.
11. "Min. Interest" is loan amount times zloty interest rate for one month. "OK" or "no" indicates if DIM payment covers interest.

46

Poland/World Bank Housing Program - July 1991
 Jelenia Gora - Krotka - 18 units

Affordability at: 13.00% annual dollar interest rate.
 25.00% annual zloty interest rate.

Downpayment of: 50.00% of house sales price

Prices as of 6/91

Construction period of 24 months
 includes developer profit of 0%
 Loan Payments not to exceed 40% of monthly income if level payment.
 Loan Payments will be 25% of monthly income if DIM.
 Loan Amount can be up to 35 times stated income if DIM.

Amounts in Dollars or Thousands of Zlotys
 US \$1 = 11000 zlotys

Typical Units size	Sales Price	50% Downpat	Loan Amount	Months pay	Months save	Monthly Payment	Monthly Incomes in dollars, today's zlotys, and future zlotys.											
							\$200	\$300	\$400	\$500	\$600	\$700	\$800	900	1000	1100	1200	1300
							2200	3300	4400	5500	6600	7700	8800	9900	11000	12100	13200	14300
							2464	3696	4928	6160	7392	8624	9856	11088	12320	13552	14784	16016
	\$/ZL 000	\$/ZL 000	\$/ZL 000															
Typ. M3	\$24,754	\$12,377	\$12,377	180	79	\$157 :	--	--	39%	31%	26%	22%	20%	17%	16%	14%	13%	12%
54						DIM Payment @ 25% \$	n/a	n/a	\$100	\$125	\$150	\$175	\$200	\$225	\$250	\$275	\$300	\$325
	322,157	161,078	161,078	180	47	3,440 :	--	--	--	--	--	40%	35%	31%	28%	25%	23%	21%
						DIM Payment @ 25% ZL	n/a	n/a	1232	1540	1848	2156	2464	2772	3080	3388	3696	4004
						Min. Interest	3,356	no	OK	OK	OK							
Typ. M4	\$30,524	\$15,262	\$15,262	180	79	\$193 :	--	--	39%	32%	28%	24%	21%	19%	19%	16%	15%	
67						DIM Payment @ 25% \$	n/a	n/a	n/a	\$125	\$150	\$175	\$200	\$225	\$250	\$275	\$300	\$325
	397,248	198,624	198,624	180	47	4,242 :	--	--	--	--	--	--	38%	34%	31%	29%	26%	
						DIM Payment @ 25% ZL	n/a	n/a	n/a	1540	1848	2156	2464	2772	3080	3388	3696	4004
						Min. Interest	4,138	no										
Typ. M5	\$38,542	\$19,271	\$19,271	180	79	\$244 :	--	--	--	--	35%	30%	27%	24%	22%	20%	19%	
85						DIM Payment @ 25% \$	n/a	n/a	n/a	n/a	\$150	\$175	\$200	\$225	\$250	\$275	\$300	\$325
	501,593	250,797	250,797	180	47	5,356 :	--	--	--	--	--	--	--	--	40%	36%	33%	
						DIM Payment @ 25% ZL	n/a	n/a	n/a	n/a	1848	2156	2464	2772	3080	3388	3696	4004
						Min. Interest	5,225	no										
0	\$0	\$0	\$0	180	ERR	\$0 :	--	--	--	--	--	--	--	--	--	--	--	--
0						DIM Payment @ 25% \$	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	0	0	0	180	ERR	0 :	--	--	--	--	--	--	--	--	--	--	--	--
						DIM Payment @ 25% ZL	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
						Min. Interest	0	OK										
						Stated Incomes: Dollars	\$200	\$300	\$400	\$500	\$600	\$700	\$800	900	1000	1100	1200	1300
						Now ZL 000	2200	3300	4400	5500	6600	7700	8800	9900	11000	12100	13200	14300
						Future "	2464	3696	4928	6160	7392	8624	9856	11088	12320	13552	14784	16016

General Notes:

1. Payments do not include charges for water, electricity, heat, ground rent, and other services.
2. Unit sales price includes any garage, common area, developer profit, and interest during construction.
3. "Months Pay" is initial expected repayment period.
4. "Months Save" is the down payment divided by the normal monthly payment.
5. "Monthly Payment" is regular payment using an unindexed level-payment mortgage.
6. "DIM Payment @ 25%" is initial monthly payment using Dual-Indexed Mortgage plan.
7. "n/a" indicates that mortgage amount exceeds stated number of times monthly income or is otherwise Not Affordable.
8. "--" indicates payment exceeds stated percentage of monthly income and therefore is Not Affordable.
9. Zloty incomes are as of now and one year from now.
10. Dollar incomes assumed to remain constant; zloty incomes increase by the difference in annual interest rates.
11. "Min. Interest" is loan amount times zloty interest rate for one month. "OK" or "no" indicates if DIM payment covers interest.

47

Poland/World Bank Housing Program - July 1991
Katowice - Stary Dwor - 414 units in 7 phases

Affordability at: 13.00% annual dollar interest rate.
25.00% annual zloty interest rate.

Downpayment of: 50.00% of house sales price

Prices as of 6/91

Construction period of 9 months
Includes developer profit of 10%
Loan Payments not to exceed 40% of monthly income if level payment.
Loan Payments will be 25% of monthly income if DIM.
Loan Amount can be up to 35 times stated income if DIM.

Amounts in Dollars or Thousands of Zlotys
US \$1 = 11000 zlotys

Typical Units size	Sales Price	50% Downpat	Loan Amount	Months pay	Months save	Monthly Payment	Monthly Incomes in dollars, today's zlotys, and future zlotys.											
							\$100	\$200	\$300	\$400	\$500	\$600	\$700	\$800	\$900	1000	1100	1200
							\$100	\$200	\$300	\$400	\$500	\$600	\$700	\$800	\$900	1000	1100	1200
							1100	2200	3300	4400	5500	6600	7700	8800	9900	11000	12100	13200
							1232	2464	3696	4928	6160	7392	8624	9856	11088	12320	13552	14784
	\$/ZL 000	\$/ZL 000	\$/ZL 000				\$/ZL 000											
A,M,P	\$17,128	\$8,564	\$8,564	180	79	\$106	--	--	36%	27%	22%	18%	15%	14%	12%	11%	--	--
44							DIM Payment @ 25% \$ n/a n/a \$75 \$100 \$125 \$150 \$175 \$200 \$225 \$250 \$275 \$300											
	213,546	106,773	106,773	180	47	2,280	--	--	--	--	37%	31%	26%	23%	21%	19%	17%	15%
							DIM Payment @ 25% ZL n/a n/a 924 1232 1540 1848 2156 2464 2772 3080 3388 3696											
							Min. Interest 2,224 no no no no no no no no OK OK OK OK OK											
S,C,D,F	\$31,920	\$15,960	\$15,960	180	79	\$202	--	--	--	--	34%	29%	25%	22%	20%	18%	17%	
82							DIM Payment @ 25% \$ n/a n/a n/a n/a \$125 \$150 \$175 \$200 \$225 \$250 \$275 \$300											
	337,972	168,986	168,986	180	47	4,249	--	--	--	--	--	--	--	--	38%	34%	31%	29%
							DIM Payment @ 25% ZL n/a n/a n/a n/a 1540 1848 2156 2464 2772 3080 3388 3696											
							Min. Interest 4,146 no											
E,I	\$35,812	\$17,906	\$17,906	180	79	\$227	--	--	--	--	38%	32%	28%	25%	23%	21%	19%	
92							DIM Payment @ 25% \$ n/a n/a n/a n/a n/a \$150 \$175 \$200 \$225 \$250 \$275 \$300											
	446,505	223,252	223,252	180	47	4,768	--	--	--	--	--	--	--	--	39%	35%	32%	
							DIM Payment @ 25% ZL n/a n/a n/a n/a n/a 1848 2156 2464 2772 3080 3388 3696											
							Min. Interest 4,651 no											
G,H	\$41,651	\$20,826	\$20,826	180	79	\$263	--	--	--	--	38%	33%	29%	26%	24%	22%		
107							DIM Payment @ 25% \$ n/a n/a n/a n/a n/a \$150 \$175 \$200 \$225 \$250 \$275 \$300											
	519,304	259,652	259,652	180	47	5,545	--	--	--	--	--	--	--	--	--	--	38%	
							DIM Payment @ 25% ZL n/a n/a n/a n/a n/a n/a 2156 2464 2772 3080 3388 3696											
							Min. Interest 5,409 no											
							Stated Incomes: Dollars \$100 \$200 \$300 \$400 \$500 \$600 \$700 \$800 \$900 1000 1100 1200											
							How ZL 000 1100 2200 3300 4400 5500 6600 7700 8800 9900 11000 12100 13200											
							Future " 1232 2464 3696 4928 6160 7392 8624 9856 11088 12320 13552 14784											

General Notes:

1. Payments do not include charges for water, electricity, heat, ground rent, and other services.
2. Unit sales price includes any garage, common area, developer profit, and interest during construction.
3. "Months Pay" is initial expected repayment period.
4. "Months Save" is the down payment divided by the normal monthly payment.
5. "Monthly Payment" is regular payment using an unindexed level-payment mortgage.
6. "DIM Payment @ 25%" is initial monthly payment using Dual-indexed Mortgage plan.
7. "n/a" indicates that mortgage amount exceeds stated number of times monthly income or is otherwise Not Affordable.
8. "--" indicates payment exceeds stated percentage of monthly income and therefore is Not Affordable.
9. Zloty incomes are as of now and one year from now.
10. Dollar incomes assumed to remain constant; zloty incomes increase by the difference in annual interest rates.
11. "Min. Interest" is loan amount times zloty interest rate for one month. "OK" or "no" indicates if DIM payment covers interest.

Poland/World Bank Housing Program - July 1991
Katowice - Expo Domkat - 58 units

Affordability at: 13.00% annual dollar interest rate.
25.00% annual zloty interest rate.

Downpayment of: 50.00% of house sales price
Prices as of 6/91

Construction period of	18 months	
Includes developer profit of	10%	Amounts in Dollars or Thousands of Zlotys
Loan Payments not to exceed	40% of monthly income if level payment.	US \$1 = 11000 zlotys
Loan Payments will be	25% of monthly income if DIM.	
Loan Amount can be up to	35 times stated income if DIM.	

Typical Units size #2	Sales Price	50% Downpat	Loan Amount	Months pay	Months save	Monthly Payment	Monthly Incomes in dollars, today's zlotys, and future zlotys.											
							\$100	\$200	\$300	\$400	\$500	\$600	\$700	\$800	\$900	1000	1100	1200
							\$100	\$200	\$300	\$400	\$500	\$600	\$700	\$800	\$900	1000	1100	1200
							1100	2200	3300	4400	5500	6600	7700	8800	9900	11000	12100	13200
							1232	2464	3696	4928	6160	7392	8624	9856	11088	12320	13552	14784
	\$/ZL 000	\$/ZL 000	\$/ZL 000															
M-3, M-4	\$13,948	\$6,974	\$6,974	180	79	\$88 :	--	--	29%	22%	18%	15%	13%	11%	--	--	--	--
38						DIM Payment @ 25% \$	n/a	\$50	\$75	\$100	\$125	\$150	\$175	\$200	\$225	\$250	\$275	\$300
	177,472	88,736	88,736	180	47	1,895 :	--	--	38%	31%	26%	22%	19%	17%	15%	14%	13%	
						DIM Payment @ 25% ZL	n/a	n/a	924	1232	1540	1848	2156	2464	2772	3080	3388	3696
						Min. Interest	1,849	no	no	no	no	no	no	OK	OK	OK	OK	OK
M-5	\$16,885	\$8,442	\$8,442	180	79	\$107 :	--	--	36%	27%	21%	18%	15%	13%	12%	11%	--	--
46						DIM Payment @ 25% \$	n/a	n/a	\$75	\$100	\$125	\$150	\$175	\$200	\$225	\$250	\$275	\$300
	214,834	107,417	107,417	180	47	2,294 :	--	--	37%	31%	27%	23%	21%	19%	17%	16%		
						DIM Payment @ 25% ZL	n/a	n/a	924	1232	1540	1848	2156	2464	2772	3080	3388	3696
						Min. Interest	2,239	no	no	no	no	no	no	OK	OK	OK	OK	OK
DJ-1	\$21,657	\$10,828	\$10,828	180	79	\$137 :	--	--	34%	27%	23%	20%	17%	15%	14%	12%	11%	
59						DIM Payment @ 25% \$	n/a	n/a	n/a	\$100	\$125	\$150	\$175	\$200	\$225	\$250	\$275	\$300
	275,548	137,774	137,774	180	47	2,942 :	--	--	40%	34%	30%	27%	24%	22%	20%			
						DIM Payment @ 25% ZL	n/a	n/a	n/a	1232	1540	1848	2156	2464	2772	3080	3388	3696
						Min. Interest	2,870	no	OK	OK	OK							
DJ-2	\$36,786	\$18,353	\$18,353	180	79	\$232 :	--	--	39%	33%	29%	25%	23%	21%	19%			
100						DIM Payment @ 25% \$	n/a	n/a	n/a	n/a	n/a	\$150	\$175	\$200	\$225	\$250	\$275	\$300
	467,031	233,516	233,516	180	47	4,987 :	--	--	37%	31%	27%	23%	21%	19%	17%	16%		
						DIM Payment @ 25% ZL	n/a	n/a	n/a	n/a	n/a	1848	2156	2464	2772	3080	3388	3696
						Min. Interest	4,865	no										
						Stated Incomes: Dollars	\$100	\$200	\$300	\$400	\$500	\$600	\$700	\$800	\$900	1000	1100	1200
						Now ZL 000	1100	2200	3300	4400	5500	6600	7700	8800	9900	11000	12100	13200
						Future "	1232	2464	3696	4928	6160	7392	8624	9856	11088	12320	13552	14784

General Notes:

1. Payments do not include charges for water, electricity, heat, ground rent, and other services.
2. Unit sales price includes any garage, common area, developer profit, and interest during construction.
3. "Months Pay" is initial expected repayment period.
4. "Months Save" is the down payment divided by the normal monthly payment.
5. "Monthly Payment" is regular payment using an unindexed level-payment mortgage.
6. "DIM Payment @ 25%" is initial monthly payment using Dual-Indexed Mortgage plan.
7. "n/a" indicates that mortgage amount exceeds stated number of times monthly income or is otherwise Not Affordable.
8. "--" indicates payment exceeds stated percentage of monthly income and therefore is Not Affordable.
9. Zloty incomes are as of now and one year from now.
10. Dollar incomes assumed to remain constant; zloty incomes increase by the difference in annual interest rates.
11. "Min. Interest" is loan amount times zloty interest rate for one month. "OK" or "no" indicates if DIM payment covers interest.

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Poland/World Bank Housing Program - July 1991
Lodz - POI-DIM Ustronna - 120 units

Affordability at: 13.00% annual dollar interest rate.
25.00% annual zloty interest rate.

Downpayment of: 50.00% of house sales price

Prices as of 12/90

Construction period of 12 months
Includes developer profit of 0%
Loan Payments not to exceed 40% of monthly income if level payment.
Loan Payments will be 25% of monthly income if DIM.
Loan Amount can be up to 35 times stated income if DIM.

Amounts in Dollars or Thousands of Zlotys
US \$1 = 11000 zlotys

Typical Units size	Sales Price	50% Downpmt	Loan Amount	Months pay	Months save	Monthly Payment	Monthly Incomes in dollars, today's zlotys, and future zlotys.											
							\$200	\$300	\$400	\$500	\$600	\$700	\$800	900	1000	1100	1200	1300
							2200	3300	4400	5500	6600	7700	8800	9900	11000	12100	13200	14300
							2464	3696	4928	6160	7392	8624	9856	11088	12320	13552	14784	16016
		\$/ZL 000	\$/ZL 000	\$/ZL 000		\$/ZL 000												
Typ. A 34	\$9,322	\$4,661	\$4,661	180	79	\$59 :	29%	20%	15%	12%	--	--	--	--	--	--	--	--
						DIM Payment @ 25% \$	\$50	\$75	\$100	\$125	\$150	\$175	\$200	\$225	\$250	\$275	\$300	\$325
	118,188	59,094	59,094	180	47	1,262 :	--	34%	26%	20%	17%	15%	13%	11%	10%	--	--	--
						DIM Payment @ 25% ZL	616	924	1232	1540	1848	2156	2464	2772	3080	3388	3696	4004
						Min. Interest	1,231	no	no	OK								
Typ. B 51	\$10,280	\$6,640	\$6,640	180	79	\$84 :	--	28%	21%	17%	14%	12%	11%	--	--	--	--	--
						DIM Payment @ 25% \$	\$50	\$75	\$100	\$125	\$150	\$175	\$200	\$225	\$250	\$275	\$300	\$325
	168,365	84,182	84,182	180	47	1,798 :	--	--	36%	29%	24%	21%	18%	16%	15%	13%	12%	11%
						DIM Payment @ 25% ZL	616	924	1232	1540	1848	2156	2464	2772	3080	3388	3696	4004
						Min. Interest	1,754	no	no	no	OK							
Typ. C 64	\$16,473	\$8,237	\$8,237	180	79	\$104 :	--	35%	26%	21%	17%	15%	13%	12%	10%	--	--	--
						DIM Payment @ 25% \$	n/a	\$75	\$100	\$125	\$150	\$175	\$200	\$225	\$250	\$275	\$300	\$325
	208,845	104,423	104,423	180	47	2,230 :	--	--	36%	30%	26%	23%	20%	18%	16%	15%	14%	
						DIM Payment @ 25% ZL	n/a	924	1232	1540	1848	2156	2464	2772	3080	3388	3696	4004
						Min. Interest	2,175	no	no	no	no	no	OK	OK	OK	OK	OK	OK
Typ. D,E 78	\$20,129	\$10,065	\$10,065	180	79	\$127 :	--	--	32%	25%	21%	18%	16%	14%	13%	12%	11%	--
						DIM Payment @ 25% \$	n/a	\$75	\$100	\$125	\$150	\$175	\$200	\$225	\$250	\$275	\$300	\$325
	255,197	127,598	127,598	180	47	2,725 :	--	--	37%	32%	28%	25%	22%	20%	18%	17%		
						DIM Payment @ 25% ZL	n/a	924	1232	1540	1848	2156	2464	2772	3080	3388	3696	4004
						Min. Interest	2,658	no	no	no	no	no	no	OK	OK	OK	OK	OK
						Stated Incomes: Dollars	\$200	\$300	\$400	\$500	\$600	\$700	\$800	900	1000	1100	1200	1300
						Now ZL 000	2200	3300	4400	5500	6600	7700	8800	9900	11000	12100	13200	14300
						Future "	2464	3696	4928	6160	7392	8624	9856	11088	12320	13552	14784	16016

General Notes:

1. Payments do not include charges for water, electricity, heat, ground rent, and other services.
2. Unit sales price includes any garage, common area, developer profit, and interest during construction.
3. "Months Pay" is initial expected repayment period.
4. "Months Save" is the down payment divided by the normal monthly payment.
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7. "n/a" indicates that mortgage amount exceeds stated number of times monthly income or is otherwise Not Affordable.
8. "--" indicates payment exceeds stated percentage of monthly income and therefore is Not Affordable.
9. Zloty incomes are as of now and one year from now.
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11. "Min. Interest" is loan amount times zloty interest rate for one month. "OK" or "no" indicates if DIM payment covers interest.

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Poland/World Bank Housing Program - July 1991
 Bialystok - Ul. Konopnickiej - 14 units

Affordability at: 13.00% annual dollar interest rate.
 25.00% annual zloty interest rate.

Downpayment of: 50.00% of house sales price

Prices as of 7/91

Construction period of 10 months
 Includes developer profit of 0%
 Loan Payments not to exceed 40% of monthly income if level payment.
 Loan Payments will be 25% of monthly income if DIM.
 Loan Amount can be up to 35 times stated income if DIM.

Amounts in Dollars or Thousands of Zlotys
 US \$1 = 11000 zlotys

Typical Units size a2	Sales Price	50% Downpat	Loan Amount	Months pay	Months save	Monthly Payment	Monthly Incomes in dollars, today's zlotys, and future zlotys.												
							\$200	\$300	\$400	\$500	\$600	\$700	\$800	900	1000	1100	1200	1300	
							2200	3300	4400	5500	6600	7700	8800	9900	11000	12100	13200	14300	
							2464	3696	4928	6160	7392	8624	9856	11088	12320	13552	14784	16016	
	\$/ZL 000	\$/ZL 000	\$/ZL 000																
Typ. A&B	\$41,233	\$20,616	\$20,616	180	79	\$261 :	--	--	--	--	--	37%	33%	29%	26%	24%	22%	20%	
138						DIM Payment @ 25% \$	n/a	n/a	n/a	n/a	\$150	\$175	\$200	\$225	\$250	\$275	\$300	\$325	
	520,352	260,176	260,176	180	47	5,556 :	--	--	--	--	--	--	--	--	--	--	38%	35%	
						DIM Payment @ 25% ZL	n/a	n/a	n/a	n/a	n/a	2156	2464	2772	3080	3388	3696	4004	
						Min. Interest	5,420	no											
0	\$0	\$0	\$0	180	ERR	\$0 :	--	--	--	--	--	--	--	--	--	--	--	--	
0						DIM Payment @ 25% \$	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	0	0	0	180	ERR	0 :	--	--	--	--	--	--	--	--	--	--	--	--	
						DIM Payment @ 25% ZL	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
						Min. Interest	0	OK											
0	\$0	\$0	\$0	180	ERR	\$0 :	--	--	--	--	--	--	--	--	--	--	--	--	
0						DIM Payment @ 25% \$	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	0	0	0	180	ERR	0 :	--	--	--	--	--	--	--	--	--	--	--	--	
						DIM Payment @ 25% ZL	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
						Min. Interest	0	OK											
0	\$0	\$0	\$0	180	ERR	\$0 :	--	--	--	--	--	--	--	--	--	--	--	--	
0						DIM Payment @ 25% \$	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	0	0	0	180	ERR	0 :	--	--	--	--	--	--	--	--	--	--	--	--	
						DIM Payment @ 25% ZL	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
						Min. Interest	0	OK											
						Stated Incomes: Dollars	\$200	\$300	\$400	\$500	\$600	\$700	\$800	900	1000	1100	1200	1300	
						Now ZL 000	2200	3300	4400	5500	6600	7700	8800	9900	11000	12100	13200	14300	
						Future "	2464	3696	4928	6160	7392	8624	9856	11088	12320	13552	14784	16016	

General Notes:

1. Payments do not include charges for water, electricity, heat, ground rent, and other services.
2. Unit sales price includes any garage, common area, developer profit, and interest during construction.
3. "Months Pay" is initial expected repayment period.
4. "Months Save" is the down payment divided by the normal monthly payment.
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9. Zloty incomes are as of now and one year from now.
10. Dollar incomes assumed to remain constant; zloty incomes increase by the difference in annual interest rates.
11. "Min. Interest" is loan amount times zloty interest rate for one month. "OK" or "no" indicates if DIM payment covers interest.

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APPENDIX 3

Lists of Participants by City

Wroctaw

June 17-19, 1991

(includes Opole)

Location: Dolnoslaskie Centrum Szkolenia Samorządowego

Attendance: Bankers --	1
Investors --	13
Municipal Officials --	6
Others --	<u>4</u>
Total	24

HFPO Rep: Hannah Bartosze

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Jelenia Gora

June 20-23, 1991

Location: Centrum Samorzadu Lokalnego

Attendance: Bankers --	5
Investors --	6
Municipal Officials --	10
Others --	<u>3</u>
Total	24

HFPO Rep: Hannah Bartosze

Czestochowa June 24-26, 1991

(includes other nearby municipalities)

Location: City Hall

Attendance: Bankers --	8
Investors --	10
Municipal Officials --	18
Others --	<u>6</u>
Total	42

HFPO Rep: Magda Wajda

Kazimierz Kirelzyk

Lodz

June 27-29, 1991

Location: Lodzkie Centrum Kształcenia

Attendance: Bankers --	1
Investors --	3
Municipal Officials --	9
Others --	<u>2</u>
Total	16

HFPO Rep: Magda Wajda

Jan Czarniecki

Bialystok July 1-3, 1991

(includes other nearby municipalities)

Location: Miedzywojewodzki Osrodek Doskonalenia

Kadr Administracji Panstwowej,

Suprasl.

Attendance: Bankers ---	16
Investors --	10
Municipal Officials --	15
Others --	<u>4</u>
Total	45

HFPO Rep: Magda Wajda

Timothy Smith

UN Volunteer: Patrick Dwire

APPENDIX 4

Key Questions Asked by Workshop Participants

1. What terms must construction and mortgage loan borrowers meet to participate in the HFP?
2. What terms will the World Bank give local banks in Poland?
3. Can the HFP operate successfully in an environment with continuing high or increasing inflation?
4. How large will the HFP liquidity fund be to support mortgage financing?
5. Can developers use commercial space to lower costs for housing buyers?
6. Assess critically the prospectus Invest Bank is circulating throughout Poland.
7. What is the optimal size of a flat? What is the optimal size of a housing construction project?
8. Will the HFP help cities construct more subsidized communal housing?
9. Will the HFP provide start-up capital for small, private construction companies?
10. How does housing finance work in the West?
11. How do American cities handle the problem of servicing land for housing construction?
12. How does the housing situation in our city compare with that of other cities you have visited?
13. What managerial and technological changes can make Polish housing cheaper?
14. Aren't you skeptical about elements of the HFP?
15. What specific technologies can shorten housing construction time?

16. How many projects have been submitted from our city? our voivodship?
17. Will there be HFP loans to facilitate production of housing construction materials?
18. Can completed construction work count as part of the developer's 25% equity contribution when applying for a construction loan?
19. Can a municipal government be both a developer and a contractor?
20. Why should insulation standards for HFP projects exceed the current Polish norm?
21. What other HFP design/construction norms are there?
22. What local banks in Poland are in direct contact with the World Bank?
23. Will the HFP support land purchases and infrastructure financing to facilitate housing construction?
24. When will the World Bank and the Government of Poland sign the final loan agreement?
25. How does the World Bank propose handling inflation during the loan period?
26. Why do local banks charge such high interest on their loans when the World Bank provides funds to the Government of Poland for just 8-10%?
27. How can I do a marketing analysis using a final price valid next year, when I can't estimate my costs more than two months in advance?
28. Who receives interest on the buyers' deposits? Who pays taxes on the interest received?

29. Does the HFP exclude the handicapped?
30. Will the U.S. savings and loan debacle repeat itself here?
31. Why does the HFP help the banks instead of poor people?
32. Has the World Bank finalized the terms and conditions of its loan to the Government of Poland?
33. How should a developer estimate his profit margin?
34. Does the World Bank profit when it lends money to the Government of Poland at 8-10%?
35. Why doesn't the World Bank provide 100% of the funding for mortgage loans?
36. How should the municipal government verify the appropriate price for housing land?
37. Is the HFP targeting particular social or professional groups?
38. How will the local banks verify mortgage loan applicants' incomes?
39. Does interest on borrowing from a local bank accrue during the construction period? When is it payable?
40. How do you make sure someone with a 25% down payment at the beginning of the construction process will qualify for a mortgage loan?
41. Who will maintain the common areas and grounds in multi-family housing projects?
42. What tax liability, if any, will the investor face while collecting buyers' deposits?
43. What role will the long-term advisers and short-term training assistants play in the housing construction program?