

# **SECTOR SYNTHESIS OF POSTEVALUATION FINDINGS**

**IN THE**

## **URBAN DEVELOPMENT AND HOUSING SECTOR**

**October 1995**

### **I. INTRODUCTION**

1. The Sector Synthesis of Postevaluation Findings (SSPF) in the urban development and housing sector (i) provides an analysis and synthesis of the Bank's postevaluation experience in the sector, and (ii) identifies key issues and lessons learned from completed projects which are of relevance to the various stages of the project cycle. It provides useful lessons in the implementation of ongoing projects as well as in the formulation of future projects in the sector. This Report is based primarily on a review of the findings of postevaluation reports prepared by the Post-Evaluation Office (PEO), including Project Performance Audit Reports (PPARs), a Reevaluation Study and the Country Syntheses of Postevaluation Findings (CSPFs). It also takes into account the information and data stored in the Postevaluation Information System (PEIS).

## II. BANK OPERATIONS IN THE URBAN DEVELOPMENT AND HOUSING SECTOR

### A. Overview

2. Lending operations of the Bank in the urban development and housing sector commenced in 1976 with the approval of the technical assistance (TA) loan for the Bandung Urban Development and Sanitation Project (Loan No. 271) in Indonesia. As of 31 August 1995, 33 projects have been approved and the loan amount reached \$1,758.1 million (see Appendix 1), accounting for 3.4 percent of total Bank lending. Group B countries received the bulk of the loan amount, \$1,112.9 million (63.3 percent) for 15 projects (see Appendix 2). A far second were the Group A countries<sup>1</sup> which garnered 23.5 percent of the entire Bank lending, followed by the Group C countries with 13.2 percent. Indonesia was the largest recipient, accounting for \$1,024.9 million or 58.3 percent of the total, followed by Bangladesh with 12.2 percent and Pakistan with 6.9 percent. Generally, the traditional mode of project lending was used. However since 1983, the sector lending modality has been more frequently used because of (i) a relatively large number of subprojects involved, and (ii) improvement in the technical and managerial capabilities of institutions in the sector. Financing of urban development and housing sector projects were mostly sourced from the ordinary capital resources (OCR) of the Bank (about 73 percent) as of 31 August 1995. Loan sizes varied from \$9.6 million<sup>2</sup> (Low Income Housing Development Project [Loan No.1005-FIJ]) to \$175.0 million (Second Medan Urban Development Project [Loan No. 919-INO]). The average loan size was \$52 million.

3. The 1990s ushered in an intensification in the Bank's lending to the urban development and housing sector. Compared to the last decade (1981-1990) when total loan approval for the sector amounted to \$874.5 million (51.2 percent) for 15 projects, the period 1991-1994 has already posted \$693.5 million (40.6 percent) for 10 projects. Nonetheless, the share of Bank loans in the urban development and housing sector declined year by year since 1991: from 7.6 percent in 1991 to 4.5 percent in 1992 and to 1.8 percent in 1993, no loan for 1994. This year, however, Bank financing to this sector has resumed, with the urban development and housing sector garnering about 3.8 percent of total Bank lending as of end August.

4. A total of 92 technical assistance grants (including 10 regional technical assistance grants) amounting to \$35.8 million has been extended to the sector as of 31 August 1995. About 65.3 percent of the amount was for advisory and operational (A&O) TAs (see Appendix 1). Group A countries benefitted most from the TAs as they received 63.4 percent of the aggregate TA amount approved as of end August 1995 (see Appendix 2). A majority of the amount was for AOTAs aimed either at strengthening institutional capability, preparation of sector development plans or carrying out sector-oriented studies. Group B countries accounted for 27 percent of the total TA grant while Group C countries, 9.6 percent. Bangladesh and Indonesia received almost equal amounts, \$6.8 million and \$6.6 million or 20.2 percent and 19.7 percent, respectively.

<sup>1</sup> Group A countries include Bangladesh, Lao PDR, Nepal, Pakistan and Sri Lanka. Meanwhile, Indonesia, Philippines and Thailand fall under the Group B category. Group C countries comprise Fiji, Hong Kong, Republic of Korea and Malaysia.

<sup>2</sup> Excludes TA Loan No. 271-INO: *Bandung Urban Development and Sanitation Project*, approved on 26 August 1976.

## **B. Postevaluation Operations**

5. As of 1 September 1995, 11 of the 14 completed projects in the urban development and housing sector, with an aggregate investment cost of \$672.2 million, have been postevaluated (see Appendix 3). The projects which were approved between 1977 and 1985 were completed between 1982 and 1990. Six of the eleven postevaluated projects were from Group C countries while the rest were from Group B countries.<sup>1</sup> On a per country basis, Indonesia had the most number (3) of postevaluated projects in the sector, followed by Hong Kong, Korea, Malaysia and Thailand with 2 projects each.

## **C. Objectives and Scope of Postevaluated Projects**

6. Generally, the postevaluated projects were part of larger development programs of the government aimed at an integrated approach towards a planned and orderly development of existing urban areas and new communities as well. Specifically, the projects aimed at (i) providing adequate housing for the lower income households, (ii) enhancing the living conditions of low to moderate income groups by providing basic social facilities and infrastructure, (iii) improving the urban environment through planned settlement, (iv) decentralizing housing and employment to secondary cities or new towns thus relieving congestion in the urban region, and (v) supporting the institutional development of the agencies involved. These objectives were planned to be achieved through the (i) acquisition of land and construction of housing units together with community facilities (such as schools, health clinic, fire station, playgrounds, shopping malls and day care centers for both young and old) and basic infrastructure and social facilities (water, electricity, sewerage services, roads, walkways and drains) as well as commercial buildings, (ii) development of towns covering infrastructure development (site formation, roads, drainage, water reticulation, sewerage, solid waste management and water supply); and (iii) provision of consultancy and support services for planning studies, project implementation and institutional strengthening.

# **III. IMPLEMENTATION EXPERIENCE AND PERFORMANCE RESULTS**

## **A. Implementation Experience**

### **1. Project Design**

7. Urban development and housing projects are generally aimed at benefitting low

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<sup>1</sup> As of 1 September 1995, there were no urban development and housing projects in Group A countries which have been completed.

income households. The actual beneficiaries, however, included relatively better-off people. This was largely because of (i) the price-income mismatch, (ii) conflicting objectives (between immediate cost recovery and benefitting the low-income group) of concerned agencies, and (iii) the lack of adequate selection criteria and safeguards to prevent subsidized project facilities from being enjoyed by people from higher income brackets. Specifically, the first housing project of Korea highlighted the need to respond to consumer preference in order to enhance the marketability of housing units vis-a-vis financial considerations. Some of the housing units were difficult to sell because the size preference of apartment purchasers was not comprehensively assessed. Thus, as of the time of postevaluation, a number of small (i.e., 33 m<sup>2</sup>) housing units were still unsold/unoccupied. Experience in this first project gave an indication as to the composition of the housing units to be provided under the second housing project. Similarly, the Shelter Sector Project (Loan No. 736) in Thailand demonstrated that low income families, in most cases, preferred to pay more for houses where all basic facilities were provided, rather than occupy semi-finished housing units as originally designed under the Project. This emphasized the need for project design to be based on consumer responses to the cost, style, level of amenities and location of housing units. Market research needs to explore the types of housing which are both preferred and affordable.

8. Meanwhile, one of the remedies prescribed to decongest the urban region was the development of new towns. Experience showed that the development of new towns requires large initial capital investment and may not be most cost effective unless some special considerations require new towns.

9. Other deficiencies in the design and implementation of urban development projects included: (i) inadequate site investigation data resulting in incompatible planning and engineering design with site conditions; (ii) tight implementation schedule; (iii) insufficient counterpart funds from the government; (iv) incompatible development approach with existing organizational structures and policies; and (v) oversight of some critical aspects such as solid waste disposal and relationship of a new town with district and provincial authorities. Consequently, changes in project scope and design ensued which in most cases were translated into delays in project completion.

## **2. Physical Achievements**

10. The extent of changes in scope for urban development and housing projects varied. Some were minor in nature and thus, did not change the overall project concept since only upward or downward revisions in quantities were involved or changes in project location were made. On the other hand, major revisions were also involved such as the deletion of four out of seventeen towns comprising the water supply subproject under the Small Towns Urban Development Sector Project (Loan No. 629-INO) since it was believed that this would be better dealt with in subsequent Bank-assisted projects and the deletion of five out of twelve centers under the Kedah Regional Development Sector Project (Loan No. 729-MAL) due to inadequate counterpart funds from the Government. On the whole, in spite of the changes encountered, the physical components of the postevaluated projects were generally completed as envisaged during appraisal. Because of the integrated approach taken in urban development and housing projects, the facilities/infrastructure provided under these projects included a different combination of the following facilities: (i) low-cost housing units with essential amenities such as open landscaped recreational spaces, playgrounds

and sports complexes, day care centers for the youth and elderly, public baths and toilets as well as commercial centers and community facilities including schools, clinics and fire stations; (ii) provision of transportation facilities including roads and bridges, (iii) water supply; (iv) drainage, (v) solid waste disposal; (vi) sewerage systems; (vii) income-generating components in connection with township development such as industrial centers and agricultural plantations, and (viii) training center equipped with training facilities.

### **3. Project Cost**

11. Total project costs amounted to \$672.2 million, about 68 percent of which was accounted for by six projects in the Group C category. All of the postevaluated projects, except one, experienced cost underruns averaging 31.1 percent, with about 45 percent of the projects posting a shortfall of less than the average (see Appendix 4). This could be attributed to a substantial reduction in scope and keener competition among contractors in the construction industry which has resulted in competitive bid prices. Other factors responsible for the lower actual project costs relative to estimates were (i) devaluation of local currency, (ii) overestimated costs, including price contingency, and (iii) the government's increased ability for self financing, not to mention shifts in external financing policies. On the other hand, (i) implementation delays, (ii) changes in project design and scope, and (iii) an initial underestimation of costs resulted in a 38.5 percent cost overrun for the Trengganu Tengah Township Development Project (Loan No. 344-MAL).

### **4. Implementation Schedule**

12. Of the 11 postevaluated projects, ten experienced implementation delays. Actual average implementation period was 5.7 years compared with the 3.5 years estimated at appraisal or an average time overrun of about 65 percent (see Appendix 5). Largely contributing to the recorded delays in the sector were projects in the Group B countries, with Indonesia posting a 72.7 percent time overrun and Thailand, 90.4 percent. The Bang Plee New Town Project posted the longest delay of 145 percent. The major reasons for the substantial delay in the completion of the Project were poor soil conditions, and coordination problems within the executing agency itself as well as among the agencies involved. Other factors contributing to delays in project completion included: (i) changes in project layout and design, (ii) problems in land acquisition, (iii) delays in the recruitment and fielding of consultants, (iv) adverse weather conditions, (v) insufficient government counterpart funds, (vi) unfavorable performance of contractors and subcontractors, (vii) shortages of labor and materials during construction, (viii) reevaluation of project sites, (ix) unfamiliarity of agencies concerned with Bank procedures and requirements, (x) delays in the procurement process, and (xi) an unrealistic implementation schedule. On the other hand, the Second Low-Income Urban Housing Project (Loan No. 538-KOR) was completed slightly ahead of schedule as it benefitted from the experience of the first project, thereby avoiding the possibility of duplicating the difficulties originally encountered.

## **B. Performance Results**

### **1. Operational Performance**

13. The housing projects which were carried out mainly in Group C countries have shown successful overall planning and design as well as well-executed construction. This could be attributed to the honest efforts and commitment on the part of the agencies involved and their experience in housing development. The housing estates have been well maintained. Instrumental for the successful functioning of these estates were the institutional framework and managerial inputs provided in the operation of the physical assets as well as in the formation of viable communities. Self-help initiatives on the part of the tenants/occupants, mutual aid committees and the formation of residents' associations were encouraged. Since the occupants viewed the apartments as a form of investment and as permanent homes, substantial efforts have been made to improve their units as well as maintain discipline and orderliness. The open recreational spaces, on the other hand, have undergone frequent maintenance vis-a-vis structural improvements in order to withstand heavy usage. Meanwhile, the provision of commercial centers (including food outlets, retail shops and service businesses such as banks and restaurants) and schools has significantly contributed to the convenience and living conditions in the housing estates.

14. The performance of urban development projects, meanwhile, varied on a component basis. The water supply system, although satisfactory under the Medan Urban Development Project (Loan No. 550-INO), left much to be desired under the Small Towns Urban Development Sector Project. Cost recovery was inadequate due to a (i) relatively high level of nonrevenue water; (ii) slow rate of house connections which could be attributed to financial constraints, design problems or water shortage; and (iii) limited area coverage. Household interviews indicated that even low-income households were willing to pay for individual house connections rather than rely on public taps. It is believed that the drainage systems have generally reduced the incidence of flooding, although in varying degrees. However, due to insufficient funds and the lack of suitably experienced personnel in some agencies, drainage maintenance was poor to nonexistent. The main causes of the problem were (i) completely blocked drains by household refuse, construction debris and soil; (ii) decreased capacity of the streams and rivers; and (iii) increased storm water runoff as a result of continuing growth of the built-up area.

15. Solid waste management has generally improved the sanitary conditions in the project areas and made use of low-cost solutions (such as locally made hand carts and small durable bins), with solid waste eventually transported to landfill sites. In the case of Bandung Urban Development Project (Loan No. 400-INO), the house to house collection of trash clashed with the traditional system. In other cases, high maintenance cost for large trucks used for solid waste disposal have burdened the managing entities. Consequently, a number of these trucks were no longer being used. Meanwhile, waste collection and disposal under the Bang Plee New Town Project [Loan No. 481-THA(SF)] was found to be unsatisfactory since solid waste disposal was not properly planned and simply left to the district authorities. Specifically, no disposal site was identified or provided.

16. With regard to housing projects/subprojects, the relatively lax screening of beneficiaries has resulted in the leakage of benefits to higher income brackets than the target bracket. While in Korea the initial screening of interested buyers is based on a rather informal declaration of income, neither could the applicants' incomes be reliably verified nor could ownership of other assets or combined incomes of several household members be investigated. Meanwhile, the enforcement of selection criteria in Thailand encountered difficulties because of the Thai custom which frowns on the intrusion into personal affairs particularly with regard to income and homes. In addition, the financing agency's bias for applicants with steady income in Indonesia has resulted in the selection of government employees as major beneficiaries. Improvements have been made to a number of houses, with the quality and sophistication of the houses after a year or more of occupancy much above the original core house standards.

17. The outcome of the Indonesian kampung improvement programs (KIP) varied. While the KIP was generally satisfactory, the objective of assisting mostly low-income groups was not fully met since not all of the areas selected under these programs belonged to the below average income group. For the Medan Urban Development Project, the kampung improvement works were spread so thinly that the measures undertaken did not have the necessary scope and standards to result in kampung-wide and lasting improvements.

18. Meanwhile, the population build up in Malaysian new towns built in regional development schemes was much slower than expected. Major factors which were responsible for this were (i) competing opportunities offered by other projects which also depended on the migration of the pool of rural workers; (ii) counter-attractions offered by major urban/industrial areas which also attracted rural workers; and (iii) slow completion of social infrastructure and community facilities, thus hindering the progress of the new town development projects. An exception was the Kedah Regional Development Sector Project, which used the existing settlements for development instead of the creation of new centers. While the performance of various components of the Kedah Project was generally satisfactory, other projects have experienced a number of problems including (i) solid waste disposal, (ii) overstretched capacity of the agencies involved, (iii) soil erosion and flooding, and (iv) inadequate water supply.

## **2. Organization and Management**

19. Considering the integrated approach and complex nature of urban development and housing projects, a number of agencies were usually involved. Thus, a Project Management Unit (PMU) or Coordinating Committee was generally created. Among others, this unit was responsible for coordinating and synchronizing the activities involved through proper planning, not to mention resolving conflicts, if any, among the agencies involved. In some cases, further support was given to the PMU through the establishment of interagency committees empowered with higher level authority. Nonetheless, such organizational arrangements frequently failed to achieve the level of coordination and synchronization required to ensure the effectiveness of the projects primarily because of (i) the relative inexperience of the executing agency/ies (EA/s) with limited institutional capability; (ii) shortage of qualified staff; (iii) insufficient authority bestowed on the coordinating units; and (iv) lack of commitment on the part of some of the agencies involved as evidenced by the delegation of part-time staff for key managerial positions in the PMU.

20. The housing projects in Hong Kong and Korea which at times involved up to three EAs were, nevertheless, implemented successfully basically as a result of the EA's competence and experience in this field.

21. Bank supervision has proven to be generally adequate, with the EAs displaying a likewise generally cooperative attitude towards the Bank.

### **3. Institutional Development**

22. All the postevaluated projects except those in Hong Kong and Korea had components for institutional strengthening. Results showed that, generally, the consultants had made useful contributions in enhancing the planning and implementing capabilities of the agencies involved. However, some recommendations of expatriate consultants were not heeded to, e.g. accuracy of survey data and protection of slopes through turfing as in the case of Trengganu Tengah Township Development Project, the recommendations of the urban/regional planning advisor on the Greater Bangkok Plan, and advice on urban development policies under the Bang Plee New Town Project.

23. The postevaluated projects in Hong Kong and Korea had no provision for institution building. At the time of appraisal, the relative strength of the executing agencies from these Group C countries was already recognized. The EAs, which were described as experienced and competent organizations, further increased their competence as a result of the additional experience gained from the Bank's projects. Procedures involved (particularly with regard to accounting and monitoring of resources) were refined, staffing constraints reduced, review of rental policy systematized, research and planning functions strengthened, and new initiatives as well as innovations launched.

24. In Indonesia, under the policy of decentralization, attempts were made to give the local governments the opportunity to implement urban development projects. This approach would provide for a greater control of the implementation by the agency most directly concerned with the provision of urban services and charged with many of the residual maintenance responsibilities. As integrated urban development projects comprise a number of components, several entities which have overlapping and interlocking interests are involved as well. For instance, improved trash collection results in less materials being dumped in the drains, thus reducing the cost of drainage maintenance. However, recent measures to decentralize central government functions and resources to local levels had temporarily intensified interagency competition as in the case of the Medan Urban Development Project. Conflicting interests and overlapping responsibilities often resulted in jealous defense of jurisdictions and vying for financial resources. In the meantime, project management and supervision capabilities have not yet been institutionalized at the local government levels, probably because capital investments in urban infrastructure facilities were not yet considered as routine activities but rather as a prerogative of higher level government provided through grants to lower levels of government. Thus, proposals came from the district levels while the decisions still essentially depended on central authorities. This organizational pattern resulted in limited effective integration and decentralization of urban development with less than optimal meeting of local demand, and unclear delineation of responsibilities for operation and maintenance (O&M) of completed facilities.

25. Studies were undertaken to assess the impact of some of the projects. Specifically, an impact evaluation study was carried out under the Small Towns Urban Development Sector Project to formulate methodologies conducive to practical policy feedback; develop methodologies for measuring economic, social and other benefits; and strengthen human resources capacity to conduct impact evaluation studies at local government levels. Likewise, a socioeconomic survey was conducted to study the impact of the Kedah Regional Development (Sector) Project on the beneficiaries. In addition, a Workers' Survey was undertaken to assess the impact and perception of skills training provided at the Sik Training Center. These studies were important in providing feedback information needed for future decision making purposes.

#### 4. Economic Results

26. An examination of the economic internal rates of return (EIRRs) of the postevaluated projects revealed that reestimated EIRRs were generally lower compared with appraisal estimates. This could be attributed to relatively lower benefits at the time of postevaluation. Benefits of urban development are often measured by land value increase due to the project. Land value increases directly attributable to the projects are, however, very difficult to measure.<sup>1</sup> A slower rate of increase in the market value of the projects' housing units due to the private sector's cost efficient development of similar housing programs particularly under the Bang Plee New Town Project in Thailand has also exerted a downward pressure on the benefit stream. In the case of the Low Cost Urban Housing Project (Loan No. 424) in Korea, suppressed housing demand in the wake of an economic recession during the early 1980s necessitated a downward adjustment in the market prices of comparable housing units. Differences in methodology were also partly responsible for the lower EIRRs. For instance, the ex-post EIRR for the Medan Urban Development Project compared somewhat unfavorably with the appraisal estimate. This could be traced to the fact that only two components with comparatively high returns were quantitatively evaluated at appraisal compared with ex-post evaluations carried out for four of six components (with the PEM using very conservative estimates for the water supply component).

27. EIRRs for almost half of the number of postevaluated projects were not recalculated due to (i) data constraints, (ii) lack of an appropriate methodology for projects with social objectives; and (iii) premature evaluation of the project since a second phase was still ongoing.

28. All of the projects postevaluated, including those for which EIRRs were not recalculated at postevaluation would have significantly better economic returns had the non-quantifiable benefits been included. The difficulty of expressing a large array of benefits from projects with social objectives has depressed not only the EIRR at postevaluation but also the estimates calculated at appraisal and project completion. Thus, caution should be exercised when evaluating urban development and housing projects since the usefulness of a single measure as the EIRR may be limited.

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<sup>1</sup> The use of property value increase as an indicator of economic benefits is conceptually sound. However, difficulties are in the collection of data and isolating property value increases due to the project as against a number of other events which tend to increase property values such as inflation, population increase, changes in per capita income, the direction of urban growth, changes in accessibility due to road improvement, and availability of water supply and other public as well as private services.

## **5. Financial Results**

29. Projects, for which financial internal rates of return (FIRRs) were recalculated at postevaluation, likewise posted generally lower FIRRs. This could be mainly attributed to relatively lower revenues than expected at appraisal. Particularly for two housing projects in Korea which were implemented during a period of economic recession, downpayments were not made within the first year and had to be spread over a number of years. In addition, interest rates on mortgage loans, which were used to finance the purchase of houses, were reduced. Other factors contributing to lower FIRRs included (i) a longer overall construction period which delayed the realization of project revenues, and (ii) higher O&M costs, including additional administrative costs which were not included at appraisal (as in the case of Bang Plee New Town Project). Only one project, Medan Urban Development, registered a higher FIRR at postevaluation compared with the appraisal estimate. The large housing component was instrumental in pushing up the FIRR because of the significantly higher than anticipated revenues from the sale of housing units which accrued at the front end of the evaluation period.

## **6. Socioeconomic Impact**

30. Generally, one of the major objectives of urban development and housing projects was to improve the living conditions of lower income households through the provision of low-cost housing and municipal infrastructure services. In this regard, the postevaluated projects confirm that low-income families benefitted, although the benefits were spread to a wider spectrum of income levels. Living conditions were enhanced as a result of the provision of a well laid-out environment characterized by (i) private living spaces which were definitely an improvement over the more crowded and often communal quarters; (ii) reliable supply of safe water and electricity; (iii) a convenient disposal of sewage and garbage; (iv) newly installed, if not well maintained drainage systems; and (v) related amenities such as schools, commercial centers and day care centers for the young and elderly.

31. In addition, the provision/improvement of the solid waste, sewage disposal, and drainage systems, as well as water supply, community toilets and washhouses resulted in improved health and sanitary conditions. A reduction in the incidence of flooding is further expected with the improvement of a number of drainage systems. This, in turn, could be translated to a decline in water-borne parasitic diseases. Likewise, these projects have resulted in additional jobs (and therefore additional income) not only within the project areas but also in neighboring urban centers because of the construction and upgrading of connecting roads which facilitated commuting. Moreover, the availability of and easy access to schools and training centers was of major importance to the project communities as well as nearby areas.

## **7. Impact on Women**

32. Although the urban development and housing sector projects benefited people regardless of sex and age, their impact on women in particular, was substantial. The improvement in the water supply, drainage, sewerage and solid waste disposal systems as well as market infrastructure brought about a more hygienic environment, resulting in a lower incidence of diseases. This, together with the reduction in the time needed for fetching water, could be translated in more time available for other activities. The establishment of commercial and industrial centers where provided has created additional employment for women and income. With the various courses offered at the training centers benefitting women under the Kedah Regional Development Sector Project, better bargaining power in the job market could be expected.

## **8. Environmental Impact**

33. In line with the projects' objectives, a generally favorable impact on the environment was observed, as shown in an overall improvement in living conditions. With the provision of housing facilities, not to mention the related infrastructure, a number of families were relocated from their former unsatisfactory and overcrowded environment. This could have reduced some pressure on congested urban centers. In addition, health and sanitation in the project areas were enhanced through the provision of improved solid waste management, drainage and market infrastructure, among others.

34. Concomitant with the above benefits were some negative impact on the environment, more common of which was the increased discharge of untreated waste water into the rivers. Other unfavorable effects on the environment included (i) the dramatic increase in the level of run-off erosion as in the case of Trengganu Tengah Township Development Project, wherein inadequate attention was given to the impact of the method of development used on the environment; (ii) removal of the vegetation cover in the Project site under the Bang Plee New Town Project with very little plant life introduced; (iii) pumping of large amounts of excess water (still under the Bang Plee New Town Project) into a canal system which was not designed for this purpose, since the site of the new town has been bounded by dikes and thus removed from the area's drainage and water storage system; (iv) regular flooding as a result of the continuous large scale alienation of wet lands from their natural purpose of storing seasonal flood and rain waters and of replenishing ground water (Bang Plee New Town Project); and (v) extension of spatial growth into rural surroundings with a new housing scheme at the city's fringes, while land within the city proper remained underutilized, thus encroaching upon the vegetative cover, water resources and other environmental assets (Medan Urban Development Project).

## **9. Performance Rating**

35. The urban development and housing sector projects have significantly contributed to the development programs of the various DMCs as shown by an overall impressive success rate of 9 out of 11 being generally successful projects and the remaining 2 being partly successful (see

Appendix 6). Investments were well channelled in this sector since projects accounting for 85 percent of actual aggregate project costs were generally successful. Similarly, more than 85 percent of the Bank loans to this sector supported generally successful projects. These projects have resulted in better living conditions although the actual beneficiaries came from a wider income mix. In addition, in the projects where it was possible to recalculate EIRRs, the rates were relatively high. There were also numerous unquantifiable socioeconomic benefits which are believed to be sustainable for most of the project components.

36. Four out of five projects in Group B countries, three of which were Indonesian projects, were generally successful. Only one Group B project (Bang Plee New Town Project in Thailand) posted a partly successful rating. Meanwhile, a relatively higher generally successful rating of 83 percent was recorded for the Group C countries, with only one project (Trengganu Tengah Township Development Project in Malaysia) registering a partly successful rating. The relatively mediocre rating of two postevaluated projects could be attributed to (i) shortcomings in operation and maintenance as well as administration; (ii) slow population build-up in the project areas, if not stagnant; (iii) inadequate time available for proper surveys and site inspection; and (iv) difficulties in coordinating the various agencies involved.

## **10. Sustainability**

37. At postevaluation, sustainability of the projects varied depending on specific components. On the whole, sustainability of the housing units was assured primarily because of the commitment of the beneficiaries/owners to the maintenance of their respective units not only through individual self-help but also through well-organized associations. Strong institutional framework vis-a-vis well managed programs were of considerable importance for the continued functioning of physical assets as well as in forming viable communities. Likewise, the sustainability of the benefits from the training center and the agricultural component of the Kedah Regional Development Sector Project would remain high as long as the former is able to adapt to the changing needs of the area served while the latter is managed by capable cooperatives. On the other hand, the sustainability of components such as solid waste, drainage as well as some public facilities, for which ownership could not be directly traced to the beneficiaries, is in doubt. This could be attributed to the lack of funds needed for operation and maintenance. As difficulties have been encountered in collecting fees from the users, budgetary support from the responsible institution (which at times is inadequate and could not probably be sustained for a long time) is required. Meanwhile, inadequate cost recovery due to low water tariffs has resulted in a relatively weak financial position of the agency responsible for water supply.

38. Based on the experience of postevaluated projects, the following factors are found essential in ensuring the sustainability of project benefits: (i) adequacy of funds for O&M purposes, (ii) appropriate and well organized institutions with skilled and dedicated staff, and (iii) well-organized and committed associations of beneficiaries.

## IV. ISSUES AND LESSONS LEARNED

### A. Key Issues

39. This section focuses on the important issues impinging on project performance which have been identified at postevaluation and could likewise be relevant to ongoing and future projects. Among these are the proper targeting of beneficiaries, changing approach to urban development, the sector lending approach, relevance and practicability of the new town concept, formulation of multisectoral urban projects vis-a-vis multisectoral project management units, managed urban development, disposal of project assets and project sustainability.

#### 1. Proper Targeting of Beneficiaries

40. One of the major objectives of urban development and housing sector projects is to help low-income households and help alleviate urban poverty. However in the case of housing and kampung improvement components, relatively higher income households manage to get a share of the benefits. For instance under the Bang Plee New Town Project, a number of housing units remained unoccupied years after they were purchased, suggesting that the buyers did not need the houses urgently. Purchased housing units may have been made only for investment purposes. This could be traced to a number of reasons, foremost of which is the issue of affordability. The selling price of housing units, in particular, is still burdensome to low-income households. Financing plans, although available, usually require a steady income from the borrower, thus favoring the relatively higher income groups. Consequently, the houses were sold to the more privileged groups to meet the executing agencies' objective of speeding up cost recovery. Likewise, the lack of effective mechanisms to ensure that benefits accrue to low-income groups has resulted in its wider distribution to households other than those in the specified target groups. In some countries, sociocultural tenets impede an objective analysis of personal affairs, income and households, thus limiting the strict application of the beneficiary selection criteria.

#### 2. Formulation of Integrated Urban Development Projects

41. The various components of urban development projects (i.e., housing, drainage, sewerage, solid waste management, water supply, etc.) usually complement and support each other. Thus, these components are undertaken together in order to enhance their benefits and at the same time, minimize disruption of the day-to-day activities in the project areas. Nonetheless, integrated urban development projects necessitate intricate physical planning and synchronized implementation, requiring the cooperation and coordination of a number of government agencies.

42. While formulating multisectoral urban projects has its own merits (i.e., consolidating project components which would have been individually small [and thus require limited foreign exchange expenditures]), the involvement of a number of government agencies particularly in an

unfavorable environment, has resulted in a lot of difficulties. A Special Study on Executing Agency Arrangements<sup>1</sup> found an unfavorable correlation between the number of agencies involved and a project's overall success. Moreover, precise timing of the various components which is necessary to bring about a synchronized implementation and an effective overall development program is difficult.

43. In the design and execution of Bank projects, future development efforts ought to be directed towards enhancing the overall productivity of urban entities by lending financial support to large-scale city-wide infrastructure improvements. Although some urban development projects and all housing projects are meant to benefit the low-income people, greater emphasis on a city-wide approach is likewise necessary in order to help meet the growing needs of the urban population and overcome backlogs in infrastructure requirements. In addition, efforts should be focussed at (i) demonstrating measures to improve living conditions that are replicable and can be sustained by recovering costs; and (ii) reforming and then strengthening the administrative and financial institutions to enable them to formulate consistent policies, pursue systematic enforcement and mobilize resources.

### **3. Multisectoral Project Management Units**

44. Project management units (PMUs), which are specifically set up for purposes of managing single sector projects, have definitely assisted the Bank in the different phases of implementation. Institutional strengthening usually ensue from experience, with the transfer of knowledge from the PMUs to their parent organizations, since a good number of personnel return to the parent agency once the PMU is dissolved. However, multisectoral PMUs which comprise more than one government agency are involved in activities in several sectors. Thus, multisectoral PMUs are not attached to any of the sectoral organizations/agencies and attain a quasi-independent status. The life of such multisectoral PMUs presumably ends when the projects are eventually completed. The experience gained through on-the job training take place outside the institutional context of the sectoral agencies and are therefore less relevant. In effect, only the individual involved benefits from the transfer of knowledge. The question of whether project implementation through a multisectoral PMU is a realistic approach in the sociocultural and institutional environment of some developing member countries has to be addressed.

### **4. Changing Approach to Urban Development**

45. The approach to managing urban development, particularly in Indonesia, is undergoing a major change. From a centralized form of management, the Government is gradually shifting towards decentralization as responsibility is devolving from the Central Government to lower government levels and local communities. Medium-term investment programs reflect a more

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<sup>1</sup> Bank's Post-Evaluation Office: *A Special Study on Executing Agency Arrangements*, Doc. No. SS-2, 1984.

bottom-up planning process based on priorities of local authorities and on the demand surveys of potential beneficiaries. Local participation is sought along with increased cost recovery and local government capabilities for O&M, planning, programming and coordination.

46. With this change in management approach, several key aspects need emphasis and clarification in future planning and implementation. These include (i) determining the optimal degree of decentralization and coordination of the urban subsectors with regard to technical effectiveness, potential local resource mobilization, and meeting the local priority needs; (ii) evolving effective and replicable models of public-private partnership and privatization; (iii) adequately addressing environmental and health problems; (iv) proper targeting of the poor segments of the urban population; and (v) shifting from a supply-driven to a demand-driven sectorwide orientation in planning. Similarly, the relative emphasis to be given in urban development on the often conflicting objectives of efficiency, growth and equity has to be resolved.

47. Notwithstanding the trend towards decentralization, the rapidly increasing population necessitates improved analytical framework and monitoring and evaluation systems to ensure a successfully managed urban development.

## **5. Sector Lending Approach**

48. The sector lending approach is based on the premise that the government agencies involved have reasonably good experience with similar projects and could identify, select, design and appraise subprojects and carry out all necessary activities needed for an expeditious implementation. Thus, prior to loan approval, the Bank should have sufficient information regarding policies and plans reflecting local priorities and institutional capabilities as well as appropriate appraisal and design standards.

## **6. Utilization of Loan Savings**

49. Regular monitoring of loan proceeds gives an early indication of a loan surplus. In such an event, flexibility should be provided in considering alternative means of utilizing the savings. Similar expenditure items which are within the scope of the project could be added and still effectively contribute to the realization of the overall objectives of the project.

## **7. New Town Concept**

50. The excessive population build-up in existing urban centers has resulted in measures to decongest the high density urban areas. One of such measures is the creation of new towns. While theoretically sound, this strategy has proven to be difficult to implement, and more costly than providing facilities and amenities in existing settlements.

## 8. Community Participation and Self-Help

51. Various components of urban development and housing sector projects require varying degrees of community participation and self-help. From the onset of a project, the involvement of the community must be encouraged in order to generate interest and solicit their inputs. Because of the need for community support, systematic effort should be made by the government agencies involved to mobilize and guide community action. Likewise, the Bank should give more consideration to this aspect during the preparatory stages of a project. In the meantime, sustained communal self-help has been observed to be a function of the effectiveness of formal or informal leadership in the community in some of the DMCs.

## 9. Sustainability

52. Well maintained project assets are critical to the sustainability of project benefits. In this regard, the responsibility of operating and maintaining project assets generally falls under the jurisdiction of concerned government agencies (except for housing units which are maintained by the owners). Experience showed the lack of proper O&M, particularly for drainage, due to inadequacy of funds which in turn could be traced to poor cost recovery and low local revenue generation as well as low priority given to O&M.

## 10. Environmental Concern

53. The availability of sites has been constrained by the increasing competition among land users for various purposes--residential, industry, infrastructure, agricultural production, among others. As such, the need for land-use planning becomes indispensable and a thorough analysis of the impact of land use on the environment is needed.

## B. Lessons Learned

54. The highlights of the lessons learned in the urban development and housing sector is presented below. Appendix 7 shows a list of selected issues and lessons learned from postevaluated projects in this sector.

- (i) **Multisectoral urban development projects**, usually comprising a number of components, should be implemented in a coordinated and synchronized manner. A full commitment and effective coordination among the various agencies involved are

essential for successful implementation and post-completion operation. Nonetheless, integrated projects offer the opportunity to foster comprehensive planning and establishing new links across a metropolitan region. More detailed planning is required and if possible, detailed engineering should be available at appraisal to help ensure that a minimum cost design is adopted.

- (ii) The **time frame** for the implementation of complex, integrated projects should be adequate to allow for periodic reviews of master plans and effect changes, if needed. At the initial stages, projects should be regularly reviewed to allow for the early detection and solution to problems.
- (iii) Overall, a modest **scope** combined with high quality may be preferable to large integrated development projects. Moreover, improved analytical framework and monitoring and evaluation systems would ensure a successfully managed urban development.
- (iv) Applying conventional **economic analysis** and purely economic criteria in the evaluation of urban development and housing projects may result in relatively low economic internal rates of return. Social infrastructure projects which are part of a larger program could be more meaningfully assessed in the context of policy analysis and program evaluation that focus on the achievement of objectives, cost effectiveness, effects of resource reallocations and a comprehensive identification of benefits (rather than through the selective evaluation of components).
- (v) **New urban growth centers** are established in an effort to decongest large existing urban centers. An alternative approach to this is the improvement and consolidation of existing settlements. This would allow for settlement patterns to be based on the existing pattern of rural villages and small towns, not to mention a reduction in the front-end capital expenditure requirement for basic site development and provision of infrastructure.
- (vi) **Project design** should incorporate specific measures to ensure that targeted low-income households benefit from urban development facilities and services. However, experience demonstrates that implementing such measures is difficult. In this regard, assessment of affordability should not be based only on the relationship of amortization to total household income. Downpayments and other front-end costs such as those associated with sewerage and water supply connections proved to be burdensome to low-income families. In view of this, appropriate financing schemes should be incorporated in project design to make the facilities more affordable to the target group.
- (vii) **Institutional development** should be given more attention during project preparation. Greater efforts should be focussed on creating more capable institutions for efficient urban management. In this regard, the sector loan approach does not only provide flexibility in decision-making but also a continuing opportunity for the executing agencies to learn and strengthen their implementation capacity and facilitate both integration and decentralization of

responsibility toward lower levels of government and beneficiary communities.

(viii) **Community involvement** is required in urban development undertakings. Measures should be developed and incorporated in projects to mobilize and support citizens' and communities' initiatives and participation. Such participation and group ownership of urban facilities would ensure their sustainability, progressive improvement and expansion.

(ix) **Preferences of potential buyers/tenants** should be well considered by government agencies involved in low-income housing schemes. In the case of Bangkok which was characterized by rapid economic growth, the sites and services with core houses approach was not well accepted by the low-income earners. The low-income target group preferred to wait, save and then buy more complete and attractive units from the private sector.

Planning and design function must be supported by comprehensive market research activities which monitor changes in the preferences, financial standing and affordability of the buyers. In particular, income and price elasticities for low-income housing units need to be estimated carefully, in relation to alternative private sector options which may be offered.

(x) **Environmental considerations** should be incorporated in project planning. For instance, an environmental impact study should be conducted during the initial stages of a project where major earthworks are to be undertaken. This would enable the incorporation of mitigating measures during design as well as construction.

## V. CONCLUSIONS

55. One of the major changes affecting many DMCs today is the shift from agrarian to urban-based economies. As a result of increasing urbanization, many policy changes and massive investments will be required to facilitate the ongoing transition from rural to urban economies. Thus, the Bank's operations in this area is expected to intensify. Experience from the eleven postevaluated projects in this sector, if properly fed back at appropriate stages in the project cycle, will help improve project formulation and implementation, which then could be translated into increased benefits. The complex nature of urban development and housing projects point to the need for a more careful project preparation and design in order to ensure a synchronized implementation of subcomponents and maximize project benefits.