Folder Title:	Evaluation of Urban Development (Sites and services projects)
Folder ID:	1064779
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Dates:	12/1/1972 - 6/30/1975
Sub-Fonds:	Records of the Office of the Vice President, Development Policy (VPD) and the Development Policy Staff
Fonds:	Records of the Office of the Chief Economist
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Evaluation of Urban Development
(Sites & Services Projects) E.7

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Evaluation of Urban Development (Sites and services projects)

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MR B B.KING

OFFICE MEMORANDUM

TO: Mr. Warren C. Baum

DATE: June 18, 1975

FROM: John H. Adler, Director, P & B

JHA

SUBJECT: Funding for the Evaluation of Urban Development Projects involving Shelter Components

1. I refer to Mr. Jaycox's June 13 memorandum on the above subject (see attached copy). I am delighted to hear that IDRC has agreed to finance \$450,000 of the costs of the work. I want to note, however, that although P & B has agreed that the Bank should go ahead with the work, we have not agreed to a specific dollar amount to be committed by the Bank. There is no question that it will be possible to cover an amount in the neighborhood of \$450,000 over a five-year period. Specific annual figures and "budget sources" for the funds, however, remain to be determined.

2. In addition, regarding the proposal of Messrs. van der Tak and King for use of contingency funds for similar projects which could not be financed out of a loan or credit, I want to again draw your attention to Mr. McNamara's view that to the greatest extent possible these kinds of research activities should be included in the loans and credits made for sites and services projects (see attached copy of my April 16 note to you).

Attachment

cc: Mr. McNamara
Mr. Chenery
Mr. Jaycox
Mr. B. B. King ✓

WWLewis:lf

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OFFICE MEMORANDUM

TO: Mr. John Adler, Programming and Budgeting — DATE: June 13, 1975

FROM: E.V.K. Jaycox, Director, TUPD

SUBJECT: Funding for the Evaluations of Urban Development Projects Involving Shelter Components (Sites and Services and Slum Upgrading)

#J/PB
file Budget
TUPD

1. In January of this year it was agreed - at the level of the Vice-President, Projects Staff; the Vice-President, Development Policy Staff; and yourself - that the Bank would commit $450,000 over a five year period to cover approximately one-half the costs of evaluating three urban development projects involving shelter components. The projects in question are located in Senegal, El Salvador and Zambia. This agreement was based on the understanding that a like amount of funds would be obtained from outside sources.

2. This memorandum is to inform you of our progress in obtaining these external funds. We have approached the International Development Research Centre (IDRC) Canada, which has readily agreed to finance the other half of the estimated cost ($450,000.) We are now finalizing a formal agreement to this effect. In addition, UNICEF in Lusaka has formally agreed to contribute $15,000 to be used for equipment and supplies for the evaluation team in that country.

cc: Mr. R.S. McNamara
Mr. W.C. Baum
Mr. H.B. Chenery
Mr. B.B. King
Mr. C.M. Isbister
Mr. D.H. Keare

EVKJ:gr

NL

OFFICE MEMORANDUM

TO: Mr. Warren C. Baum

DATE: April 16, 1975

FROM: John H. Adler, Director, P & B JHA

SUBJECT: FY76 Administrative Budget

A. Transportation & Urban Projects

Subject to a further final review, Mr. McNamara has accepted our recommendation for the CPS administrative expenses for FY76. He has, however, raised a question regarding the cost of the five-year urban sites and services evaluation project estimated as $910,000.

I told Mr. McNamara that this sum included funds which the Transportation and Urban Projects Department was hoping to obtain as contributions from other interested institutions. Mr. McNamara thereupon approved the allocation of $90,000 for this year, but said that to the greatest extent possible further cost should be included in loans or credits made for sites and services projects.

I told him that I would pass on his recommendation.

B. Consultative Group on Food Production and Investment (CGFPI)

Mr. McNamara has decided that the 13 positions (7 professional, 1 assistant level, 5 secretarial) which we proposed to establish in the FY76 budget should not be carried as regular positions, but should be considered as "special" positions similar to those established for the Development Committee staff. Therefore, they will no longer appear in the number of staff allocated to Central Projects. As a consequence, we also will not show the total cost of CGFPI, but only the Bank's share.

C. Cooperative Programs

I refer to paras. 22-24 of my memorandum on the FY76 Administrative Budget of April 8 (attached). Mr. McNamara has commented that he will not agree with FAO on any cost sharing agreements for CY76-77 until the administrative, budgetary and control arrangements referred to in the three paragraphs are resolved.

Attachment

JHAdler:cbm

cc: Mr. Jaycox
Mr. Yudelman
Mr. Gabriel

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OFFICE MEMORANDUM

TO: Mr. John Adler, Programming and Budgeting DATE: June 13, 1975

FROM: E.V.K. Jaycox, Director, TUPD

SUBJECT: Funding for the Evaluations of Urban Development Projects Involving Shelter Components (Sites and Services and Slum Upgrading)

1. In January of this year it was agreed - at the level of the Vice-President, Projects Staff; the Vice-President, Development Policy Staff; and yourself - that the Bank would commit $450,000 over a five year period to cover approximately one-half the costs of evaluating three urban development projects involving shelter components. The projects in question are located in Senegal, El Salvador and Zambia. This agreement was based on the understanding that a like amount of funds would be obtained from outside sources.

2. This memorandum is to inform you of our progress in obtaining these external funds. We have approached the International Development Research Centre (IDRC) Canada, which has readily agreed to finance the other half of the estimated cost ($450,000.) We are now finalizing a formal agreement to this effect. In addition, UNICEF in Lusaka has formally agreed to contribute $15,000 to be used for equipment and supplies for the evaluation team in that country.

Eval. S&S file

cc: Mr. R.S. McNamara
Mr. W.C. Baum
Mr. H.B. Chenery
Mr. B.B. King
Mr. C.M. Isbister
Mr. D.H. Keare

EVKJ:gr

ASSOCIATION | RECONSTRUCTION AND DEVELOPMENT | CORPORATION

OFFICE MEMORANDUM

TO: Ms. Helen Hughes, Deputy Director, ECDDR DATE: March 24, 1975

FROM: Douglas H. Keare, Chief, and Carroll Long, ECDRB

SUBJECT: Back to Office Report: Visit to International Development Research Centre, Ottawa

1. On March 18 we visited Ottawa where we held discussions with Dr. Aprodicio Laquian of the IDRC concerning the monitoring and evaluation of site and services and squatter upgrading projects--principally those in El Salvador, Senegal and Zambia, but also more generally.

2. Among the topics discussed were the following: (a) budgetary breakdowns of the evaluations in each country; (b) institutional affiliations for the evaluation teams; (c) project development meetings which might be held before fieldwork begins with the principal researchers as well as with representatives of the project units, the Bank, and the IDRC; (d) eventual arrangements for the exchange of data and methodological approaches which might evolve as the evaluations progress; (e) the possible association of other researchers with the program at a later stage; and (f) publication and dissemination of reports that would be generated by the research teams and Bank staff.

3. Dr. Laquian confirmed the interest of the IDRC in participating in the funding and coordination of the evaluations. It was agreed that a proposal would be prepared by the Bank for presentation to the IDRC, and a decision in principle would be made during the first half of April as to their contributing at least one-half the total budgetary requirements for a five-year monitoring and evaluation of the three projects.

CLong:dh

CC: Messrs. B. King, R. Gulhati, M. Cohen
Messrs. E.V.K. Jaycox, A. Churchill, H. Dunkerley

Geri, this belongs in the same file as ~~my~~ the memo to Baum vander Tak/King which? & Chenery.

BK

Mr. B. King

CORPORATION

OFFICE MEMORANDUM

TO: Mr. John H. Adler DATE: March 13, 1975

FROM: Warren C. Baum and Hollis B. Chenery

SUBJECT: Evaluation of Urban Development Projects

We agree with the general principles of the attached memorandum of Messrs. B. King and van der Tak for financing studies of this type, with two qualifications. First, we think the contingency of $200,000 to be used only for the year for which the study starts is too large. $100,000 may be more appropriate. Second, it would be equally acceptable to have this contingency as a part of the overall contingency in P & B's hands, with the clear understanding however that a specific provision for this purpose may be used at the discretion of Mr. Baum. Could we have your agreement to these arrangements?

Attachment

HGvanderTak:lfb

cc: Mr. B. King
Mr. J. King
Mr. Jaycox

OFFICE MEMORANDUM

TO: Messrs. Warren C. Baum and Hollis B. Chenery

DATE: March 3, 1975

FROM: B. B. King and H. van der Tak

SUBJECT: Evaluation of Urban Development Projects

1. In his memoranda of November 11 and December 17, 1974, Mr. Jaycox has made a case for the financing of the in-depth evaluation of three site and service projects. While it is expected that part of the cost would be covered by other institutions, there would be a substantial contribution from the Bank Group. This raises the question of the particular budgetary resources to be used, if it is decided to go ahead with the study. At a meeting on January 17, P & B expressed agreement, in principle, to finance the study. The issue of the particular budget resource was, however, left in abeyance for FY76 and beyond.

2. In tackling this question, we would make two initial points. The first is that the budgetary question for this study should be considered in the larger context of the whole genus of evaluation studies and studies of a similar kind, past and future. The second is that the question should be decided not on semantic grounds, such as whether this is "research" or not, but on pragmatic grounds such as the locus of initiative and responsibility for undertaking such studies.

3. As to the first point, we are not aware of any past studies of a similar kind, at least on the scale envisaged. There have been, however, occasions where research, involving substantial sums of money, has formed part of a project financed by the Bank Group. As to the future, we can only speak of intentions. It would appear from informal inquiries, that evaluations similar to those in the Jaycox proposal will be undertaken in the fields of urban and rural development and education and population. Other kinds of project-linked studies have been proposed by the Operations Evaluation Department (e.g. quantification of development effects of highway projects - Secretary's memorandum SD75-3 of January 17), and no doubt more will be suggested in the future. Since many of these studies will involve data collection over an extended period, they are likely to be expensive. The Jaycox proposal alone costs \$150,000 per annum over six years.1/

1/ Part of this is expected to be covered by other institutions.

4. On the second point, it should be noted that the initiative for undertaking project-linked studies of this kind, will largely come from the Projects Departments (both in the Regions and CPS). It is likely that the decision to undertake such studies will de facto be made on the basis of operational considerations beyond the normal scope of a body such as the Research Committee. The timing and incidence will be determined operationally.

5. In the light of these considerations, we can compare the merits of financing in four different ways:

(a) The external research budget.
(b) Some other centrally controlled budget item, e.g. in the Office of the Vice President, Projects Staff.
(c) Loans and credits.
(d) Some combination of the above.

6. Our recommendation is that the primary source should be loans and credits. It is worth noting what the cost of even one project per annum such as the Jaycox proposal would amount to. The annual cost would build up over six years to close to $1,000,000 per annum. It would not take many such projects per annum to amount to a sizeable proportion of the Bank's budget, while still remaining a small proportion of the volume of lending. It is worth noting certain comparative proportions based on round figures for the volume of lending ($4 billion), the budget ($200 million) and the research budget ($2 million):

	$4 million p.a. (%)	$20 million p.a. (%)
Volume of lending	0.1	0.5
Bank budget	2.0	10.0
Research budget	200.0	1,000.0

7. If we accept the view that project-linked studies designed to raise the effectiveness of Bank lending should be even a modest proportion of that lending, then it is easy to see that expenditure of this magnitude would tend to weigh heavily on the Bank's budget, if that were the source of finance, and psychologically might encounter substantial resistance. If, however, the financing came from loans and credits, the proportion would not appear so extreme, simply because relevant magnitudes were being compared. There is also,

great value in any studies of this kind being undertaken as and understood as joint ventures between the Bank and the recipient country. This is less likely to be the case, if the studies are financed by the Bank, even if they are in some sense "negotiated" in parallel with the loan or credit. Objection might be raised by the recipient countries that studies of this kind are services of universal benefit rather than of particular benefit to the recipient. If they are done right, this is, of course, true, though one should not forget the educative or institution building value of such studies to the recipient country. In any event, if we are correct in assuming that there is likely to be a fairly substantial program in the future along these lines, then the incidence of any single study in one country becomes irrelevant. The question only becomes one of the general incidence of such studies and whether it is particularly heavy in a few countries.

8. We cannot say to what extent there is a danger that the idea of financing these studies through loans and credits is likely to be resisted by recipients. The danger might be minimized if one could obtain the support of the Executive Directors, in principle. In any event, there are always likely to be some cases, in which it may be considered impolitic to insist on a particular study being fully financed out of a particular loan or credit. An obvious example would be when the loan or credit was small and the cost of the study large and therefore a substantial proportion of the total cost of the project. Therefore, one should have a reserve source of funds up one's sleeve to finance at least part of the cost.

9. The best place for this source might well be a special item in the budget of the Office of the Vice President, Projects Staff. This item would include expenditures for any such budget-financed studies as had been agreed on in the past plus a contingency for anything which might be undertaken during the current fiscal year. It would be recognized that this contingency sub-item would not be used in some years, simply because all studies of the kind we are discussing were financed out of loans and credits. The contingency sub-item would be there precisely for contingencies, i.e. those cases where, in the process of negotiation, it appeared impossible to put the study under the project to which it was linked and finance it out of a loan or credit. It would

be desirable to set the contingency sub-item fairly high to take care of possible bunching - at, say, $200,000. At the same time, there would be an understanding that there was an overall ceiling on the item as a whole (including ongoing studies); this might be set at $500,000.

10. As to the current proposal, we would recommend that from FY76 on, it be the first project to be financed from the special budget item described above. We understand that FY75 will be taken care of from general contingency funds.

CIRCULATION | REF

OFFICE MEMORANDUM

TO: Messrs. Warren C. Baum and Herman G. van der Tak DATE: March 7, 1975

FROM: John A. King JAK

SUBJECT: Evaluation of Urban Development Projects

1. I agree with the general principles of the B. King/van der Tak paper but I have some questions about the mechanics.

a) Size of the contingency. As for studies which are being financed by the Bank, the contingency is to be used only for the year in which the study starts. After the first year, the study costs should be part of the budget of the department responsible (see (c) below). Because it is unlikely that anything approaching a full year's costs will be needed in the first year (either the study will start after some part of the year has elapsed or it should have been foreseen during the preceding year and included in the appropriate departmental budget), I think $200,000 is too large.

b) Location of the contingency. I believe is would be preferable from both CPS and P&B's point of view to have the contingency a part of the overall contingency in P&B's hands. This would keep down the CPS totals, be an incentive to forward planning by potential users, and add budgetary flexibility from P&B's point of view. There should, however, be a specific provision of say $100,000 in the general contingency for this purpose.

c) Responsible department. In the Urban case, no choice between the Regions and CPS arises, but in the decentralised sectors it might. The Regions are responsible for project supervision and, therefore, might logically claim supervision for the study. Since, however, the studies are supposed to lead to conclusions about project design and project policy, it is probably preferable for them to be supervised by CPS.

JAKing:jlg

Messrs. Warren C. Baum and
Hollis B. Chenery

March 3, 1975

B. B. King and H. van der Tak

Evaluation of Urban Development Projects

1. In his memoranda of November 11 and December 17, 1974, Mr. Jaycox has made a case for the financing of the in-depth evaluation of three site and service projects. While it is expected that part of the cost would be covered by other institutions, there would be a substantial contribution from the Bank Group. This raises the question of the particular budgetary resources to be used, if it is decided to go ahead with the study. At a meeting on January 17, P & B expressed agreement, in principle, to finance the study. The issue of the particular budget resource was, however, left in abeyance for FY76 and beyond.

2. In tackling this question, we would make two initial points. The first is that the budgetary question for this study should be considered in the larger context of the whole genus of evaluation studies and studies of a similar kind, past and future. The second is that the question should be decided not on semantic grounds, such as whether this is "research" or not, but on pragmatic grounds such as the locus of initiative and responsibility for undertaking such studies.

3. As to the first point, we are not aware of any past studies of a similar kind, at least on the scale envisaged. There have been, however, occasions where research, involving substantial sums of money, has formed part of a project financed by the Bank Group. As to the future, we can only speak of intentions. It would appear from informal inquiries, that evaluations similar to those in the Jaycox proposal will be undertaken in the fields of urban and rural development and education and population. Other kinds of project-linked studies have been proposed by the Operations Evaluation Department (e.g. quantification of development effects of highway projects - Secretary's memorandum SD75-3 of January 17), and no doubt more will be suggested in the future. Since many of these studies will involve data collection over an extended period, they are likely to be expensive. The Jaycox proposal alone costs $150,000 per annum over six years.1/

1/ Part of this is expected to be covered by other institutions.

4. On the second point, it should be noted that the initiative for undertaking project-linked studies of this kind, will largely come from the Projects Departments (both in the Regions and CPS). It is likely that the decision to undertake such studies will de facto be made on the basis of operational considerations beyond the normal scope of a body such as the Research Committee. The timing and incidence will be determined operationally.

5. In the light of these considerations, we can compare the merits of financing in four different ways:

(a) The external research budget.
(b) Some other centrally controlled budget item, e.g. in the Office of the Vice President, Projects Staff.
(c) Loans and credits.
(d) Some combination of the above.

6. Our recommendation is that the primary source should be loans and credits. It is worth noting what the cost of even one project per annum such as the Jaycox proposal would amount to. The annual cost would build up over six years to close to $1,000,000 per annum. It would not take many such projects per annum to amount to a sizeable proportion of the Bank's budget, while still remaining a small proportion of the volume of lending. It is worth noting certain comparative proportions based on round figures for the volume of lending ($4 billion), the budget ($200 million) and the research budget ($2 million):

	$4 million p.a. (%)	$20 million p.a. (%)
Volume of lending	0.1	0.5
Bank budget	2.0	10.0
Research budget	200.0	1,000.0

7. If we accept the view that project-linked studies designed to raise the effectiveness of Bank lending should be even a modest proportion of that lending, then it is easy to see that expenditure of this magnitude would tend to weigh heavily on the Bank's budget, if that were the source of finance, and psychologically might encounter substantial resistance. If, however, the financing came from loans and credits, the proportion would not appear so extreme, simply because relevant magnitudes were being compared. There is also,

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8. We cannot say to what extent there is a danger that the idea of financing these studies through loans and credits is likely to be resisted by recipients. The danger might be minimized if one could obtain the support of the Executive Directors, in principle. In any event, there are always likely to be some cases, in which it may be considered impolitic to insist on a particular study being fully financed out of a particular loan or credit. An obvious example would be when the loan or credit was small and the cost of the study large and therefore a substantial proportion of the total cost of the project. Therefore, one should have a reserve source of funds up one's sleeve to finance at least part of the cost.

9. The best place for this source might well be a special item in the budget of the Office of the Vice President, Projects Staff. This item would include expenditures for any such budget-financed studies as had been agreed on in the past plus a contingency for anything which might be undertaken during the current fiscal year. It would be recognized that this contingency sub-item would not be used in some years, simply because all studies of the kind we are discussing were financed out of loans and credits. The contingency sub-item would be there precisely for contingencies, i.e. those cases where, in the process of negotiation, it appeared impossible to put the study under the project to which it was linked and finance it out of a loan or credit. It would

be desirable to set the contingency sub-item fairly high to take care of possible bunching - at, say, \$200,000. At the same time, there would be an understanding that there was an overall ceiling on the item as a whole (including ongoing studies); this might be set at \$500,000.

10. As to the current proposal, we would recommend that from FY76 on, it be the first project to be financed from the special budget item described above. We understand that FY75 will be taken care of from general contingency funds.

BBKing:gm

FORM NO. 75
(7–73)

WORLD BANK GROU

ROUTING SLIP	DATE 14 /an 75

NAME	ROOM NO.
Mr B B King	
1) Rao	
2) King	

	APPROPRIATE DISPOSITION		NOTE AND RETURN
	APPROVAL		NOTE AND SEND ON
	COMMENT		PER OUR CONVERSATION
	FOR ACTION		~~PER YOUR REQUEST~~
	INFORMATION		PREPARE REPLY
	INITIAL		RECOMMENDATION
	NOTE AND FILE		SIGNATURE

REMARKS

Ask H. Mi
about Cor. memo

FROM	ROOM NO.	EXTENSION
Mahbub ul Haq		

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OFFICE MEMORANDUM

TO: Mr. John H. Adler

DATE: January 9, 1975

FROM: William W. Lewis WWL

SUBJECT: CPS Proposal for Evaluation of Urban Development Projects

1. Mr. Baum has endorsed Mr. Jaycox's proposal of December 17, 1974 that the Transportation and Urban Department make an "evaluation" of three sites and services projects. The work would extend over six years - FY75-80 and require about $910,000 total. Mr. Jaycox believes that his budget would need $38,000 from the Contingency in FY75 (although there is a possibility that UNDP might contribute $20,000 and reduce the amount needed in FY75 to $18,000).

2. "Evaluation" is described in the proposal as involving an analysis of the effects of the project on the target population both during and after project execution. The evaluation work as envisaged in the current proposal would involve primarily the collection of data. The data would provide the basis for drawing conclusions on future project design and policy. The evaluation would include the use of control groups to provide data for an analysis of the degree to which changes in the project household characteristics could be attributed to including the household in the project. This work is distinguished from that of the Operations Evaluation Department in that it compares the project population with a "control" group over time from the beginning of the project, whereas the Operations Evaluation Department reviews project performance only against originally stated project objectives and only after disbursements are completed.

3. The immediate issue with regard to this proposal is the context within which a decision to fund the proposal should be made and the budget through which the funds should be provided, if approved. Currently, operating departments in the Bank do not do research work similar to that of the Jaycox proposal. Mr. McNamara's memorandum to the Executive Directors on the Bank Group Research Program (January 3 draft) states that the only items excluded from external research are:

a) small, generally short-term studies financed by departmental resources (including preparatory work for new research proposals),

b) research work carried out by Bank staff in the course of regular country, sector, or commodity work,

c) exceptional ad hoc studies, such as those leading to Report No. 477 on the "Prospects for the Developing Countries",

Jamaica d) research financed by loans and credits, which is related to specific projects,

e) Bank participation in the Consultative Group on International Agricultural Research.

4. I believe this proposal should be considered as a candidate for the external research budget. There are clear advantages to keeping as much of our research together as possible so that the total amount remains visible and all research claims can be considered together. It could be argued that this proposal is primarily for data collection; however, the acquiring of useful data is clearly an integral part of research. Moreover, research work related to Bank projects in the transportation area is already included in the External Research Budget - the Feeder Road Studies in Yemen, A.R., Ethiopia, and Madagascar. Evaluation of Bank projects was also the purpose of the African Rural Development study. Data collection is a major component of many Bank-financed research projects, for example the Capital/Labor Substitution Study.

5. Based on the above points, I believe the proposal should be submitted to the Research Committee now for consideration for funding from the External Research Budget in FY76 and thereafter. If the Research Committee approves the project, then $18,000 should be provided at that time from the FY75 Contingency and another $20,000 later if UNDP does not contribute. The issue of whether the External Research Budget as a whole needs additional funds should be considered later in the context of the entire Bank budget.

WWLewis:lf

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

Mr. B.B. King

OFFICE MEMORANDUM

TO: Mr. Warren C. Baum, Vice President

DATE: December 17, 1974

FROM: Edward V.K. Jaycox, Director, TUPD

Ed Jaycox

SUBJECT: Budget Requirements for the Evaluation of Urban Development Projects Involving Shelter Components

1. On December 11 we discussed in considerable depth my memorandum of November 11, with Herman van der Tak, John King, Tony Churchill, Douglas Keare and Michael Cohen present. We agreed that the proposals for in depth evaluation of three projects -- in Dakar, Senegal; San Salvador, El Salvador; and Lusaka, Zambia -- merited strong Bank support on the basis of proper specification of the socio-economic variables and processes to be measured, the selection of projects and the methodology that has been developed. We further agreed that, as a result of the developmental work by the Development Economics Department and this Department, the Bank now has the opportunity -- which it might well have seized long ago -- of gaining very valuable knowledge about important aspects of the development process.

2. This opportunity is best seized by instituting a program of rigorous evaluation, from the date of their inception, of a limited number of urban development projects, as outlined in my earlier memorandum and the supporting attachments. There is no more efficient way to accomplish this than through the monitoring and evaluation of actual projects. And, though there are a large number of institutions eager to participate importantly in such a venture, it is unreasonable to expect that they should make substantial commitments until the Bank itself has first firmly commited itself to financing a substantial proportion of the undertaking.

3. The problem that emerged from our discussion was one of identifying -- in a tight budgetary situation -- the resources to substantiate this commitment by the Bank. Our response is to put forward for the consideration of the Programming and Budgeting Department and Management two options, both of which recognize the same tight budgetary constraints, particularly for FY 75, but also beyond.

4. Under both options we would take draconian steps to reduce the incremental budgetary requirements for evaluation during FY 75. As estimated in our original proposal, the financial requirements for the three projects for this fiscal year add up to $134,000. We propose to reduce these expenditures as follows:

Original Estimate	$134,000
Enforced Delays in Implementation and Payment	46,000
	88,000
Additional Allocations from Operating Budgets 1/	30,000
	58,000
Contribution from Other Agencies 2/	20,000
Balance: To be obtained from contingency budget	$ 38,000 3/

5. For financing beyond FY 75, we strongly prefer that an additional allocation of $450,000 -- or $90,000 per year -- be added to the budget of this Department for this purpose. I say added because we cannot absorb expenditure of this magnitude from the consultant budget we would normally expect to receive in the course of the coming year. With a commitment of this nature by the Bank, we envision no difficulty at all in obtaining the balance of the funds from one or more participating agencies. (UNEP, UN, UNDP, IDRC, etc.)

6. Herman van der Tak suggested a second option which we are prepared to consider but do not favor, namely that a portion only of the additional requirements be allocated as new funds, and the balance be allocated from research funds. We feel that evaluation, albeit to a lesser extent than monitoring, is essentially a project related undertaking. There are, to be sure, elements of research in it. But its essential feature is to provide a longitudinal and cross-sectional (within and across projects) data base for later related research. It has always

1/ CPS, TUPD and ECDRB, $10,000 each.

2/ We have received word, but not formally, that UNICEF will participate in the Lusaka evaluation. This would involve a commitment of $20,000 against FY 75 expenditures.

3/ With the possibility that this amount might be reduced further by a contribution of approximately $20,000 from UNDP for the El Salvador evaluation (part of a total contribution of $50,000 for FY 75 and 76 combined).

been intended that such research efforts will be undertaken and justified at a later stage as discrete projects. If it is decided that the Bank's severely limited research funds should be tapped also at this earlier stage, then we believe that this should be limited to, at most, 50 percent of the total -- or $45,000 per year over the fiscal years 76-80.

7. We do not feel that there are other acceptable options for financing and carrying out this work in a rigorous and efficient manner. Certainly we would wish an opportunity for presenting our case to top management before other options are considered.

cc: Messrs. J.H. Adler, Programming & Budgeting Department
H. van der Tak, Office of the Vice President, Projects Staff
J.A. King, " " " " " " "
B.B. King, Office of the Vice President, Development Policy ✓
A. Churchill, Transportation & Urban Projects Department
D.H. Keare, Development Economics Department
M.A. Cohen, " " "
Ms. C. Long, Development Economics Department

DHKeare/EVKJaycox:am

New file
Evaluation: Sites & Services.

Mr. Warren C. Baum, Vice President, November 11, 1974
Projects Staff
Edward V.K. Jaycox, Director, Transportation and Urban Projects Department

Budget Requirements for the Evaluation of Urban Development Projects Involving Shelter Components

I. Summary

1. My Department is requesting funds amounting to $910,900 to carry out evaluation of three site and services projects over six fiscal years - FY75-80. This request is based on the January 1973 commitment made by you and Mr. Stern for an evaluation of the Senegal site and services project and on subsequent developmental work and discussions with the Development Economics Department concerning evaluation design. Whereas developmental costs to date have been borne jointly by the two Departments, all involved agree that this will no longer be practicable as we shift to actual evaluation, associated with project execution and monitoring, in three countries. We therefore propose that budgetary allocations for this purpose be consolidated in Transportation and Urban Projects Department; however, the work will be undertaken jointly by Transportation and Urban Projects Department and the Urban and Regional Economics Division of Development Economics Department.

II. Background

2. In January 1973, you and Mr. Stern agreed to finance the monitoring and evaluation of the Senegal site and services project, as requested during the Board presentation of that project, and as proposed in draft Terms of Reference dated December 1972. That proposal, prepared jointly by the Development Economics Department and the then Urban Projects Department, involved the eventual evaluation of three projects, two in addition to Dakar, to be carried out during FY73-78. Delays in project execution and further work on the development of monitoring and evaluation methodology have led to a delay in the implementation of the January 1973 agreement. This memorandum reviews the evolution of work on monitoring and evaluation in the urban sector since that time and presents the budget requirements necessary for this work to go forward.

III. Evolution of Monitoring and Evaluation Design

3. In contrast to the earlier proposal for two years of in-depth field work on three projects, experience with projects and longitudinal research design has convinced us that a more productive approach to project evaluation would include (1) collection of baseline data before occupancy begins, (2) sample surveys and case studies during occupancy, and (3) follow-up surveys at a later point in the project's development after disbursements are completed. This lengthier design permits great appreciation

of longer term effects of the project, greater flexibility to handle the sometimes unpredictable schedules of project execution, and more time to analyze data between the periods of field work. It also allows field techniques to be better adapted to individual projects. These judgments reflect a very considerable amount of preparatory work and analyses, as indicated in the attached documents.1/ It is not intended that you should read all of these: however, we would direct your attention to Attachment 9, which indicates how far we have progressed on methodological questions and is of general relevance for all Bank Group evaluation activities.

4. This approach also sharply distinguishes between monitoring and evaluation, even though they occur concurrently during the early phases of the project. Whereas monitoring will involve, for purposes of improved project management, the collection and comparison of baseline data with similar data collected during project execution, evaluation will involve longitudinal analysis to determine whether project objectives are being achieved over time. Evaluation will use control groups to analyze the degree to which changes in project household characteristics could be attributed to inclusion of the household in the project. The data and analyses would also be provided to the executing agency to inform project decisions and the design of future projects.

5. It should be noted that this type of evaluation compares project results with a "control" situation over time. In this, it differs markedly from the work of the Operations Evaluation Department which reviews project performance only against originally stated project objectives and only after disbursements are completed.

1/ Attachment 1: "Terms of Reference for the Monitoring and Evaluation of Urban Development Projects Involving Shelter."
Attachment 2: "Discussion Note on the Assumptions Underlying a Comparison of Shelter Strategies in Different Countries."
Attachment 3: "Note Regarding Proposed Evaluation Questionnaire."
Attachment 4: "Fiche de Renseignements, Senegal."
Attachment 5: "Preliminary Evaluation Program for the Lusaka Squatter Upgrading and Site and Services Program."
Attachment 6: "Suggested Content of Evaluation Questionnaire: Lusaka Squatter Upgrading and Site and Services Project."
Attachment 7: "Preliminary Research Design for the Evaluation of the El Salvador Sites and Services Project."
Attachment 8: "Suggested Content of Evaluation Questionnaire: El Salvador Sites and Services Project."
Attachment 9: "Notes on the Research Designs to be Used in the Evaluation of Bank Projects Involving Shelter Components" (p. 40).

IV. Agreements Between Transportation and Urban Projects Department and the Urban and Regional Economics Division of Development Economics Department

6. In May 1974, a new Terms of Reference for Monitoring and Evaluation of Urban Development Projects was agreed upon by the two Departments.1/ This agreement occurred during a period when the evaluation of urban projects received increasing attention from the Board, notably during discussions of the Jamaica and Tanzania projects. It was decided that (1) all projects would be monitored during the period of disbursements, and (2) in-depth evaluations would be undertaken of projects in Senegal, Zambia, and El Salvador.2/ These projects represent a mix of geographical environments, institutional arrangements, scale, private/public sector involvement, and various project components. The responsibility for supervision of these evaluation exercises would rest with the Urban and Regional Economics Division, in consultation with my Department.

V. Schedule for FY75

7. To carry out the evaluation proposed in the Terms of Reference it will be necessary to begin certain activities during FY75. It is expected that plot allocation will begin during February-March 1975 for all three projects. Therefore, the following activities would be undertaken during FY75: (1) analysis of selection of project occupants, (2) choice of experimental and control populations, (3) pre-occupancy interviews of both experimental and control populations, and (4) preparation for later evaluation. These activities require the recruitment of a local or "imported" research team. Contacts have been made in each case, with individual researchers and local institutes capable of undertaking the evaluation. Serious negotiations, however, must await budgetary commitments.

8. Given the above, it is necessary that the funding for all three exercises be assured as soon as possible so that field work may in fact be proceeding by February 1975. In the Senegal case, many of the first-stage operations are underway within OHLM, the executing agency. However, processing and analysis of the information being collected cannot be completed without the recruitment of a full-time field team. In addition, further preparatory time will be needed to complete the design of survey instruments and to pre-test them. If, as is desirable, the choice of some control populations is to be undertaken by social area analysis, more time will be required. Again, assurance of funds for the entire evaluation is necessary to recruit a team on a long-term basis.

1/ See Attachment 1.

2/ Monitoring is a feature of all urban projects and monitoring plus limited evaluation components are included in recent appraisal reports for projects in Indonesia, Korea, and Kenya.

9. In the Zambia and El Salvador cases, both UNICEF and UNDP respectively have been contacted and may participate in the funding of evaluations. The participation of UNICEF in the evaluation of the Lusaka project should have been decided on October 7 in a regional UNICEF meeting in Nairobi. We await their final decision which, following our prediction, should result in some $20,000 for the period FY75. Discussions with representatives of the government of El Salvador and UNDP are underway concerning the possibility of a UNDP allocation of up to $50,000. In addition to contacts with UNDP and UNICEF, we have been discussing possibilities of reducing the size of the Bank commitment through collaboration with several other organizations, including the Inter-American Foundation and IDRC. The IDRC presently appears to be a likely partner. Initial discussions with Mr. Laquian indicate that IDRC is interested in our work, favors the proposed evaluation design, and has its own contacts in Senegal, El Salvador, and Zambia. We shall be continuing our discussions with IDRC in hopes that this will result in a substantial commitment to local costs of evaluation in all three countries.

10. However, affirmative and definitive decisions by UNICEF, UNDP, and IDRC rest to a large degree on the assurance and guarantee that the Bank will fund successive phases of the evaluation effort. Those agencies understandably desire that their first-phase input contribute to a significant product at the end.

VI. Budget Requirements for Evaluation of Three Projects

11. My Department and the Development Economics Department have borne the costs incurred thus far in developing monitoring and evaluation procedures, selecting the first three projects to be evaluated, assessing the feasibility of doing so in each case, and making tentative arrangements to proceed. These costs have amounted to approximately $45,760.[1] In addition, a consultant, Professor Remi Clignet,[2] has been employed on a full-time basis for FY75 to aid in developing the appropriate methodology and its application to the three different situations. The two departments have used $32,000 for this purpose.

1/ These include funds for mission travel, consultant fees, the printing of questionnaires, and the processing of previously gathered data.

2/ Professor Clignet was initially employed to be the principal researcher in Senegal. Due to delays in project execution he has now assumed an advisory and technical role in the definition of all three evaluations. (Though there is something to be said for leaving this in, there is probably more to be said for taking it out!)

12. This preparatory work has enabled us to move forward with the monitoring and evaluation plans. It is now necessary, however, to firm up funds for the duration of the evaluation exercises so that the work program may continue. The following additional expenditure requirements are anticipated in FY75 for the three evaluations:

FY75	Senegal	El Salvador	Zambia
Personnel	$30,100	$27,450	$25,500
Mission Travel	6,600	3,360	8,100
Other 1/	11,700	5,600	5,950
Subtotal	48,400	36,410	39,550
10% contingencies on Personnel and Other	4,180	3,305	3,145
TOTAL	$52,580	$39,715 2/	$42,695 3/

1/ This includes computer time, transportation, supplies, equipment, etc.

2/ UNDP may agree to contribute $50,000 toward the total in FY75-76.

3/ $20,000 may be contributed by UNICEF.

13. The assurance of substantial funding by the Bank is necessary if long-term working relationships are to be established with executing agencies, serious negotiations are to be pursued with interested personnel, and, most important, substantial external contributions are to be secured, so that the amount which will actually have to be financed by the Bank may be reduced. The total requirements for the three projects from FY75 are projected to be the following:

	Senegal	El Salvador	Zambia	Totals
FY75	$52,580	$39,715[2/]	$42,695[3/]	$134,990
FY76	29,370	20,677[2/]	43,010	93,057
FY77	45,072	33,215	47,138	125,425
FY78	49,579	36,536	51,851	137,966
FY79	71,806	53,089	74,850	199,745
FY80[1/]	78,986	58,397	82,335	219,718
TOTALS	$327,393	$241,629[2/]	$341,879[3/]	$910,901

1/ It should be noted that the phasing of evaluation depends upon the progress of project execution. Delays in the latter will necessarily push back expenditures related to evaluation.

2/ UNDP funding of $50,000 may reduce the FY75 and FY76 Bank commitment in those years to $10,392. We have not discussed additional funding for future years with UNDP.

3/ UNICEF may contribute $20,000 during FY75. They will not at this point commit themselves to future financing.

14. The total costs assume initial agreements establishing FY75 prices for FY75 and FY76 expenditures and include an inflation factor thereafter. The differences in total costs among the three countries reflect variations in travel expenses, costs of local personnel and transportation, and back-up facilities offered by executing agencies. It is assumed that not just the nominal but also the real expenditures in FY79 and FY80 will be larger than those in earlier years because of the additional analyses to be performed in the final phase.

VII. Conclusion

15. We are requesting a commitment for the total sum of $910,900 to proceed with this work in a productive manner. An immediate Bank commitment is necessary to stimulate contributions from others.

16. It is not possible at this stage to hazard a guess as to the total amount of collaborative commitments that might be obtained. The eventual choice will involve trade-offs between amounts of funds and degrees of freedom in maintaining what we regard to be an appropriate research design. Nevertheless, we are confident that such funds will be forthcoming in significant amounts, enabling the Bank to reduce the proposed commitment so that substantially less than $910,900 would be required. However, since a major, long-term commitment by the Bank appears to be a precondition for collaboration by others, and in order to proceed as planned with FY75 work and later efforts for all three projects, it is necessary at this time to commit sufficient funds so that this work may be completed even if the expected partners, UNICEF and UNDP in the first instance, and IDRC or others later, do not participate as hoped.

Attachments

cc w/o attachments: Messrs. A. Churchill, Transportation and Urban Projects Department
H. Dunkerley, Transportation and Urban Projects Department
R. Gulhati, Development Economics Department
D. Keare, Development Economics Department
E. Stern, Office of the Vice President, Development Policy

DKeare/vjb
IBRD

DRAFT
RClignet/CLong:dh
October 23, 1974

NOTES ON THE RESEARCH DESIGNS TO BE USED IN THE EVALUATION OF BANK PROJECTS INVOLVING SHELTER COMPONENTS

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DRAFT
RClignet/CLong:dh
October 23, 1974

NOTES ON THE RESEARCH DESIGNS TO BE USED IN THE EVALUATION OF BANK PROJECTS INVOLVING SHELTER COMPONENTS

I. Introduction

The Bank is currently involved in a variety of shelter strategies, including sites and services projects of various forms and magnitudes, as well as squatter upgrading projects. Financial evaluations alone, however, are not sufficient to determine whether to continue, or how to modify, such types of projects. Assessments of the micro and macro socio-economic effects of the projects are necessary for this purpose, and should benefit the Governments concerned, the executing agencies, and the Bank in their planning for future programs involving shelter components.

A. Distinction Between Monitoring and Evaluation

1. Monitoring is sometimes referred to as administrative evaluation. It is concerned with the question of determining whether inputs are delivered in accordance with plans of operation as defined in the Appraisal Reports and other project agreements. Monitoring involves an assessment of the synchronization between the anticipated and actual project schedules and expenditures. In this sense, it includes measurements of independent variables such as plot size, type of water and sewerage facilities, and the provision of technical assistance programs offered to plot occupants.

2. Evaluation, on the other hand, is concerned with establishing a causal relationship between the independent variables and a number of economic and social phenomena which are viewed as the dependent variables.[1/]

1/ The goals of the project are the dependent variables in the analysis; the means of achieving those goals are the independent variables.

The latter include changes in income formation, in patterns of consumption, in educational attainments, etc. Thus, whereas monitoring a road construction project involves an assessment of changes in the timetable of construction and/or the extent of actual as related to expected expenditures, evaluation of the same project involves a measurement of the use of the road and the consequences of that use. For example, the road may have been built to accelerate the economic development of a particular area. The evaluator must then test the conditions under which the construction of the road has the economic consequences that political authorities anticipated.

B. Distinction Between Various Forms of Evaluation

3. Evaluation involves the measurement of at least two factors:

a) Direction -- is the correlation between the dependent and independent variables positive or negative, i.e. do the components of the various shelter strategies affect the social or economic behavior of the project populations in the direction predicted at the outset of the project?

b) Intensity -- what is the magnitude of the correlation between the variables, i.e. what is the proportion of the population affected by the treatment? (To examine the overall intensity of the relationship between dependent and independent variables, however, is not sufficient for the analysis, for the intensity may vary with the particular characteristics of various segments of the population. For this reason, one must examine the impact of the intervening variables.)

4. In principle, evaluation is concerned with measurements of both the changes affecting project participants and the impact of the project on the entire urban system. In reality, it is likely that more emphasis will be placed on one rather than both of these components. The first, concerned with project participants, is micro-economic and

micro-social; the second is macro-economic and macro-social. The following discussion focuses on the validity of micro-evaluation. The questions raised, however, are equally applicable to the second type.

5. When the outcomes that the Bank, the Governments, or the executing agencies want to evaluate differ from one another, different sets of data must be gathered, and the work of the evaluator may be made more difficult. If, for example, one agency is primarily interested in determining whether the project succeeds in lowering rates of default among project populations, evaluation will consist of testing the consequences of various selection methods on the regularity and extent of rent payments. When another agency is primarily interested in determining whether the project caused changes in income distribution, or patterns of family income formation and consumption, evaluation will consist of identifying the anticipated and unexpected effects of a number of incentives on economic and social behavior.

6. This document seeks to: a) review the factors which may limit the validity of the conclusions derived from the evaluation and to examine at what stage of the evaluation these factors must be taken into account (i.e., at the time of population selection, of statistical analysis, etc.); b) review the variety of experimental models where these factors may intervene; c) examine in greater detail the precautions which must be taken to improve the validity of the analysis.

C. Factors Affecting Evaluation

7. We have stated above that the purpose of evaluation is to verify that there is a causal relationship between a particular housing strategy (i.e., sites and services or upgrading) and a set of selected social and economic behaviors, and to determine the magnitude and direction of that relationship.

In order to do so, we must establish that:

a) The cause is anterior to the effect. The treatment must preceed the changes in economic and social behavior that we want to measure.

b) Variations in the frequency, intensity, and nature of the treatment are in all instances associated with parallel changes in the selected social and economic behaviors of the individuals and groups exposed to the treatment. In order to reach accurate conclusions, we must systematically disaggregate the various components of the strategies employed in each project. By doing so, we should be able to distinguish between the effects of 1) access to land per se; 2) size of the allocated lots; 3) access to water, sewage and electricity; 4) access to technical assistance and credit facilities; 5) institutional arrangements of executing agencies; 6) the magnitude or size of the project. Similarly, it is important to distinguish between the recurrent components of the various strategies (e.g. technical assistance, where contacts between technicians and residents may vary over time) and those which are fixed once and for all (e.g. access to the plot or size of the plot). Finally, it is important to analyze technical assistance programs both in terms of their content (e.g , construction materials loans as differentiated from instruction in construction techniques) and in terms of the sequential order in which these programs are introduced.[1/]

1/ An analysis of the sequential order should help determine, for example, whether the initial mobilization of people to dig water trenches has the same effect as their initial mobilization for building markets or a community center.

c) There is no other explanation of behavioral change. In other words, the treatment is the only factor which can account for the emergence of or changes in new economic and social behavior.

We will discuss the difficulties associated with points a and b under the headings external and conclusion validity. Those associated with point c will be discussed under both internal and construct validity.

II. Internal Validity

8. It is important to assure that variations in the economic or social behavior of target populations as well as of entire cities (all of which are treated here as dependent variables) result from the sites and services, upgrading, or "overspill"[1/] approaches. We must therefore take account of:

A) History

9. Changes in behavior may result from the overall development of the country or the city. Increases in school enrollment, for example, may not necessarily result from residential factors but rather from the processes of industrialization affecting the entire society with its increased demand for an educated labor force. Likewise, negative results of housing strategies are not necessarily the result of poor planning on the part of the relevant agencies but may rather reflect inflationary trends associated with such factors as the energy crisis.

10. In order to minimize all the competing explanations provided by history, both "experimental" and "control" groups may be used in order to

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1/ "Overspill" plots are located adjacent to upgraded squatter areas and are serviced to the same standard.

make history a constant. In some cases, it may be possible to neutralize the effects of history by weighting the relevant income data, for example, with coefficients reflecting the inflationary rate or the real growth of the local economy.

B) Maturation

11. Changes in behavior may also reflect maturation (variations in the position occupied by individuals within their life cycle) rather than changes due to participation in the project. For instance, an increase in individual income is not necessarily the result of savings associated with participation in the project, but may be the result of seniority acquired by the participant in the economic organization to which he belongs. In this context, it may be important to distinguish between the effects of seniority on income between manual and non-manual workers (it is more linear in the second case), between various categories of employers (it is more linear in the case of bureaucratic, large-scale organizations), and between wage earners and self-employed individuals. Similarly, an increase in certain types of domestic expenditure may reflect the fact that individuals have more children, regardless of their participation in the project. In order to minimize the importance of maturation, it is important both to widen the range of individuals assigned to experimental and control groups and to measure the effects of this factor, independently of those of the treatment. It is equally important in this case to check the changes observed on both experimental and control groups with those affecting the population at large.

C) Testing

12. Data gathering before and after the treatment takes place in distinctive contexts. If the baseline survey for evaluation takes place before completion of selection, individual candidates may link their chances of selection with their meeting certain demographic or economic criteria. This may lead them to offer what they perceive as the "preferred" response in the first instance, and only during subsequent interviews to provide a more realistic description of their attitudes or behavior. For example, whenever access to projects requires that incomes fall between upper and lower limits, candidates may be tempted to minimize or to exaggerate their incomes. Similarly, when it is assumed that preference will be given to individuals who have only one wife, candidates may falsely assert that they are monogamous.

13. In order to minimize the chances of assuming differences due to treatment when they are actually due to the interviews, it has been suggested that the activities of the evaluation team should be completely separated from those of the executing agency. But individual candidates are not necessarily aware of this distinction. It has also been suggested that the interviews take place at the home of the candidates in order to maximize the rapport between interviewer and respondent, and to check on some information (e.g. the composition of the household). Such a step, however, increases the cost. The best means to account for this type of potential difficulty will have to be decided in each individual context, but must in any case be kept in mind at the time of the final analysis.

D) Means of Measurement

14. Changes in the content or the techniques of implementing the interviews over time, or in gathering other data, may lead to spurious differences in pre- and post-treatment observations. In this context, it is important to note that it is impossible to ascertain on an *a priori* basis the time limits within which the treatment may be expected to affect behavior or attitudes. Consumption patterns may change only after two years of residence in the project, but patterns of income formation may be more immediately affected.

15. To alleviate the potential weaknesses of an analysis based on inappropriate means of measurement, as many questions as possible should be retained in the successive questionnaires and they should be kept in the same order. Some measurements[1/] should be taken more frequently than others.

E) Selection

16. It is also important to remember that differences between pre- and post-treatment results may reflect the characteristics of the experimental population rather than the effects of the strategy. The report on selection in Senegal indicates, for example, that the individuals most likely to build permanent structures quickly in a project are young, monogamous, and have few children or dependents. While we may be tempted to believe that building habits are the result of simple demographic factors, it could also be suggested that both building activities and family composition reflect an *a priori* orientation towards an urban life style

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1/ Such as water consumption, which depends on seasonal and daily fluctuations.

and hence that building activities are less dependent upon the incentives provided by the treatment than upon the characteristics of the population. In short, the smaller the variations in the socio-cultural profile of individuals selected for a project, the more difficult it becomes to ascertain whether the recorded changes result from the project or from the differential characteristics of the populations included in the experimental and control groups. For this reason the selection criteria should be kept as flexible as possible.

F) Regression to the Mean

17. Internal validity may also be lowered as a result of the selection of experimental and control populations, which leads to a particular type of error in measurement. Regression to the mean involves a relative natural increase over time of all scores at the lower end of the distribution and a relative decrease over time of those scores at the upper end of the continuum. The closer the individuals are to either end of a distribution, the greater their chances of moving closer to the mean of the overall population over time. This statistical effect is not important when we deal with populations initially located near the mean, median, or mode of the distribution of a variable which determines access to the project (income, family size, etc.). In such cases, the effects of measurement errors over time cancel each other out.

18. However, this effect is important in all compensatory treatments and hence in the case of Bank-assisted shelter strategies since such projects are directed at populations with marginal incomes and economic skills. If access to the project depends on a certain income range, for example, both candidates and interviewers are likely to either know or suspect the

importance of this particular criterion for admission. Consequently, both income and age are likely to be under- or over-estimated.

19. Such errors in measurement may induce misleading conclusions about the potency of the treatment. If we compare the performance over time of an economically marginal experimental group with that of an economically successful control group, regression to the mean may incorrectly suggest that the differences between the two groups have declined due to the treatment, when it is actually due to errors in measurement at the outset. Similarly, if we compare the performance over time of an experimental and control population matched on the basis of certain low pre-treatment scores, their parallel performances at the post-treatment stage may reflect their parallel regressions to the mean rather than the absence of treatment effects.

20. In order to deal with this problem, we should match populations before their selection by using measurements which are independent of selection criteria. This matching should enable us to make sure that the distributions of control and experimental populations on pre-treatment performances have both comparable means and equally large variances. As a second precaution, we must determine the correlation between pre- and post-treatment scores for the total experimental and control populations. A perfect correlation indicates there is no regression to the mean and consequently no error in measurement. As the correlation declines, it becomes more difficult to predict the post-treatment scores from the pre-treatment ones. They become particularly inaccurate at both ends of the

distribution. As a third precautionary measure, we must introduce statistical regression adjustments in the final analysis.[1/]

21. It should be noted that there is a second substantive effect of regression to the mean. It may reflect the characteristics of the environments to which the populations belong. Attitudinal studies of college and graduate students have shown that liberalism acquired during college years tends to diminish after graduation, with graduates adopting the same sorts of beliefs as their parents over time. With similar reasoning, we may assume that individuals who score lower (on income, etc.) than the remaining parts of the experimental population will gradually catch up with the latter. Such a probability must be considered during the final analysis of results.

G) Attrition

22. Differences between the experimental and control groups may be incorrectly interpreted when one does not take into account the number and characteristics of individuals who leave the project area. Careful records must be kept on such individuals who should be interviewed in their new location whenever this is possible. Both the initial occupants of the dwelling units and their successors should be retained in the analysis.

1/ Such adjustments, however, tend to under-adjust for the latent differences between the groups because of the instability of errors on the pre-test.

H) Interaction Between Factors

23. We have, in the above sections, examined the potentially distorting effects that certain factors considered separately might have on the validity of the evaluation. These factors may also operate in conjunction with each other. There is, for example, a danger of interaction between selection and maturation. Increased differences at the post-experimental stage between control and experimental groups may reflect both the differential position they occupy initially in the social structure (with regard to age, seniority, etc.) and their maturation. Responses of individuals over time may result both from the fact that they do not have the same cognitive or social skills initially and from the fact that, given such initial differences, they will not follow the same paths over time. This suggests once again the importance of precautions in choosing the control and experimental groups.

24. There is also a danger of interaction between history and selection. Whenever a project will be executed in different phases (as is the case in Dakar, El Salvador and Lusaka), differences in the initial characteristics of respondents may be obscured by the fact that they do not enter the project at the same time. If, for example, we observe on or about the same date that the population of the second execution phase of a project earns higher incomes than the population of the first execution stage, we have to consider three competing explanations: a) the short-term and long-term effects of the treatment may be different; b) there may be improved conditions in the local economy; c) there may be changes in the characteristics of the population. Once again, this indicates the need

to carefully select occupants, to retain the same procedure for selection over time,[1] and to minimize the potential implications of history by adjusting the various economic indicators employed.

25. In the above discussion, we have reviewed some of the factors likely to artificially depress or enhance the differences between control and experimental groups and that may make the interpretation of the effects of the treatment more difficult. There are other factors which may intervene to artificially minimize the impact of the housing strategies.

I) Diffusion or Limitation of the Treatment

26. It is not certain that the medical, educational, and commercial facilities provided in the project area will serve the occupants of that area exclusively, nor is it sure that such occupants will not go beyond the boundaries of the project to use similar services elsewhere in the city. As a result, post-treatment differences between control and experimental populations may be unduly depressed. This possibility is difficult to avoid. The extent of this depressed difference may be determined by comparing the data gathered from individual respondents and that aggregated by various administration units concerned with the individual services provided.

J) Compensatory Equalization of Treatment

27. There may be pressures to give services similar to those provided in the project area to parts of the control areas. Initial differences in the treatment administered to the various control and experimental groups (e.g., direct access to water and sewage) may decline due to poli-

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1/ There must be close cooperation between the evaluation teams and the executing agencies to accomplish these goals. It is clear, in fact, that evaluation cannot take place successfully unless the executing agency is convinced that it will gain something from the exercise.

tical pressures, and it will be difficult to assess accurately the effects of the treatment. A situation of compensatory rivalry may also develop where different agencies deliver the same or similar services to both groups.

K) Local History

28. Spatial and temporal variations in economic and social indicators may occur regardless of the treatment and may blur the distinction between experimental and control groups. Contrasts in the distance between the locations of various types of projects, for example, and the major sources of economic opportunities, may affect variations in the transportation costs of individuals, regardless of the treatment itself. In addition, contrast in the occupational composition of the experimental and control populations (e.g. the number of self-employed individuals) may induce incorrect observations of differential income formation if such variations as seasonal fluctuations are not taken into account. For example, if we measure the income of self-employed populations in Senegal at the very beginning or very end of the dry season, there will be significant contrasts in the incomes recorded. Such contrasts will not emerge in the case of wage-earners in the large-scale economic sector, however.

29. In order to minimize the above effect, we must randomly distribute the interviews of the experimental and control populations. There should be no systematic differences in the time of year or hour of the day that each of the two groups is interviewed.

III. Conclusion Validity

30. The factors which may mask the true relationship between treatment and effect have been discussed above. Here we will discuss the factors which may jeopardize the validity of our conclusions. Among the factors to consider

are the following:

A) Statistical Power

31. Our chances of concluding that the treatment has no effect increase when the size of the two groups is small, for in such a case differences between populations are more likely to be attributed to chance rather than to the treatment. The choice of a statistical level of significance which is too low may also distort our interpretation of the effects of the treatment. (For example, we may decide that there is an effect only when the differences observed between the experimental and control groups are significant at the P=.01 level).

32. The results may also be distorted if we do not take into account the statistical peculiarities of the distributions with which we work. We should not, for example, forget that a very low zero-order correlation between two variables may reflect either a low association between such variables or a marked curvilinear type of relationship. In the later case, we must transform mathematically the face values obtained in order to reach a more exact approximation of the type of relationship observed. Our conclusions regarding the effects of the treatment may also be erroneous if the statistical threshold is set too high.

B) Error Rate Problem

33. With an increase in the number of treatments, measures and comparisons and with the diversity of the scales utilized, there is a corresponding increase in the probability of making errors and incorrect judgments. The statistical analysis must therefore take into account the number and the variety of measurements to which the data have been subjected in order to minimize distortions.

C) Reliability of Measures

34. As the reliability of the measures decreases, there is an increase in the value of the error terms in the relevant equations and thus a decrease in the degree to which the measurements are accurately reflecting change due to the treatment. In order to minimize this potential problem, we may both enlarge the period of observation and decrease the time interval between observations. (The larger the time interval between observations, the greater the chance that factors other than the treatment are recorded.) We may also aggregate the data recorded, for aggregation tends to minimize the errors made at the individual level.

D) Reliability of Project Execution

35. Project execution involves human factors. The strategies to be employed in Senegal and Zambia, for instance, include programs of technical assistance. It is probable that such programs will not be standardized, and that individuals in the experimental group may have not only a differential exposure to the information pertaining to programs of technical assistance, but may also be differentially treated by the technical assistants themselves. There may, therefore, be an increase in error variance and hence a decrease in the chances of obtaining true differences between the control and experimental populations.

36. In order to deal with this factor, the agencies should be encouraged to standardize their treatment and explain to the technical assistants themselves the consequences of variations in the behavior they adopt toward project participants. It would also be important to observe the assistants in the field and to keep archives of their work.

E) Randomness in Project Location

37. The location of the project areas within each city may mask some of the effects of the treatment. Although the intended effects of the project may be to change patterns of income formation and consumption, its actual potency may depend upon its location. In fact, the sites of projects do not necessarily correspond to a rational choice but reflect instead the availability of areas randomly distributed within a city. Whenever the distribution of sites is randomly distributed, the variance in the distribution of such indicators as transportation budgets, occupational mobility, etc. within project populations are likely to increase. This situation may artificially minimize the differences between experimental and control groups. Statistical analysis must then isolate the characteristics of the experimental locations and introduce them as controls in the relevant equations.

F) Random heterogeneity of Respondents

38. Individuals in the control and experimental groups differ from one another not only in terms of dependent or intervening variables, but also in terms of behaviors or background experiences (such as religion or ethnicity) which may initially appear irrelevant to the evaluation. Yet such factors are relevant, for they are likely to enhance the error terms in the measurement of the project's effects. For this reason, it is incorrect to assume that the effects of the project are independent of such factors as ethnicity.

39. In order to deal with this problem, we may either select homogeneous experimental and control populations (which will minimize the external validity of the evaluation) or introduce controls in the statistical analysis for the characteristics of the population.

IV. Construct Validity

40. The validity of the conclusions regarding the effects of the treatment also depends upon the translation of key concepts into concrete measurements. Two major difficulties arise at this point. First, the translation is contingent upon the theoretical framework adopted at the outset of the evaluation. As an example of this, we have already noted that in Senegal the young wage earners of the modern economic sector who are monogamous and support few dependents are deemed to achieve higher construction performances. Differential construction performances, however, may be interpreted in the context of two distinct theoretical frameworks. On the one hand, if one assumes that contrasts between the construction activities of young modern wage earners and of other participants in the project primarily reflect differences in the resources available to them, one adopts an economic and demographic approach. This approach in turn affects the type of data collected. However, if one assumes that household composition, occupational status and construction activities are three simultaneous effects of a predisposition to adopt "westernized" modes of attitudes and behaviors, and that the contrasts observed reflect the differential past experiences of the individuals or groups compared, one adopts a sociological approach and stresses measurements of attitudes and aspirations. Thus, the first difficulty as regards construct validity results from the limitations attached to the specific theoretical frameworks used in the evaluation.

41. The translation of key concepts into concrete measurements also depends upon one's knowledge of the social environment. For example, reported changes in behavior may differ from actual changes. Administrative units may inflate or deflate the success of their performances, depending on the expectations they hold toward budget appropriations. Similarly, individual respondents may offer differing answers over time either because of changes in their perceptions of the interviewers, or because of changes in their preoccupations. In all these examples, the data collected are not those that the researcher intended to gather.

In order to assure construction validity, the following points must be considered:

A) Measurements Minimizing the Significance of the Variable.

42. In order to evaluate the effects of the program on health, we may decide to measure the utilization of local medical facilities. Our measurement of the utilization of these facilities may underestimate the effects of the project on the health of the participants, however, either because the occupants of the project area go to medical facilities located elsewhere or to private doctors to whom we have no access. We may, therefore, underestimate how participation in the program changes both attitudes and behavior regarding health, because the ethnocentric nature of our definition of medical help prevents us from tapping the appropriate sources of assistance received.

43. In order to cope with this problem, we must use a number of approaches (questionnaires, examinations of records, interviews with doctors, participant observation) and see whether the results gathered are consistent.

B) Measurements Irrelevant to the Variable .

44. One of the desired effects of the project may be to increase security. In order to test this assumption, we may then examine whether the incidence of crimes reported either by respondents or by police varies before and after the implementation of the project. Yet it may be that the incidence of crimes reported by the experimental population increases (because moving to the project is associated with a decline in "alienation" and a consequent decrease in the fear of reporting crimes). Variations

in the reports made by police may also reflect contrasts in the political climate more than contrasts in the relative violence prevailing in the area or more accurate reporting than previously. To give another example, the treatment may in effect be associated with an unexpected increase in infant mortality rates. This is because the enhanced concern over health problems is associated with an improvement in the way records are kept.

45. In order to deal with the above situation, the use of a variety of approaches will allow for cross-validation. An analysis of the psychological and sociological dimensions underlying "reporting" will probably also be necessary.

C) Generalization over Time

46. We must distinguish between the short and long term effects of the project. It has been shown that when people move to a new area, they spend a number of months learning the constraints and resources of the new environment; they then begin to build up various forms of solidarity in order to cope with problems they encounter. Later they may cease to be highly preoccupied with their neighborhood as its problems get solved or are deemed impossible to solve. For this reason it is important to take at least three measurements rather than one or two. It is equally important to increase the overall period of time during which the measurements are made.

D) Generalization of Effects

47. We must not arbitrarily eliminate a number of dependent or intervening variables which do not appear to be *a priori* relevant. We have noted previously that participation in a sites and services project

may lead to a decline in the feeling of alienation and hence to an increase in the willingness to report one's true situation. If we only include behavioral indicators in the questionnaire or in our data gathering, we may conclude that crime within the project area increases when, in fact, the information only reflects the degree to which the population is willing to report it. Yet it is true that the measurement of attitudes in a cross-cultural context is often hazardous. The fact remains that the questionnaire must be discussed not in terms of its length, but in terms of its ability to get at the true information. If we know a priori both the type of expected effects and the mechanisms by which they are obtained, there is no need for evaluation.

E) Individual Reactions to the Experiment and to the Evaluation

48. As the evaluation becomes more public, there may be individuals in either experimental or control populations who inaccurately report behaviors that suggest the treatment is (or is not, depending on the motivations) functioning as expected. Similarly, when and if the evaluator participates in the final definition of the treatment to be employed, he may be tempted to set up questions, or analyses, which will prove the point in which he has a vested interest.

F) Interaction Between Treatment and Procedure

49. Treatment here refers to the fact, for example, that occupants of certain types of lots must pay a certain amount of money for that lot; procedure refers to the fact that this payment must be made periodically to a particular agency. Thus, it may be difficult to ascertain whether the behavior of participants in the project is due to: a) the amount

of money they must pay, or b) to the fact that this money goes directly or indirectly to the agency delivering the amenities, or c) to the fact that this money involves payments over n years. It is similarly difficult to ascertain what cognitive and emotional connections individuals make between amount of payments, periodicity of payments, and the material or social resources they expect to be offered. For example, although the duration and periodicity of payment constitute significant components of the treatment, we have little knowledge of the psychological or sociological dimensions of time in such countries as Senegal or Zambia. It would be important to ascertain whether target populations consider the duration and the periodicity of these payments as "rewards" or as "punishments" and whether their views affect their propensity to default.

G) Faulty Measurements of the Variables

50. Many analyses are based upon linear models of association. As noted earlier, zero-order correlations and the derived statistical analyses (factor analysis, multiple regressions) are based upon the assumption that the distributions are approximately normal and that associations are linear. Yet, low zero-order correlations are obtained either when there is no association or when this association is curvilinear. Similarly, a multiple regression equation presupposes that all variables contribute to the variance additively. In actuality, however, their effects may be multiplicative. In examining the combined influence of years of education and of job seniority on earnings, for example, in many cases the years should not be added to most accurately predict the income earned, but may better predict actual income when they are multiplied. In order to minimize

this factor, we must first examine the distribution of each variable and the profile of their associations, and transform them mathematically whenever necessary.

V. External Validity

51. Once we have established that the treatment alone accounts significantly for the changes observed in the experimental populations, we must then ascertain whether the observations may be generalized across projects, locations and populations. The following caveats should be noted as regards external validity:

A) Interaction Between Treatments

52. As indicated above, the strategies subsumed under the heading "treatment" include a number of distinct subtreatments (i.e., access to a plot of a particular size, to a project of a particular scale, access to water, sewage and electricity, access to credit facilities and/or technical assistance). All of these subtreatments should be isolated in order to measure their relative effects. We should also be aware that they take place in a particular sequential order.

B) Interaction Between Testing and Treatment

53. The application form which must be completed before the population is chosen and moves to the project may prejudice the responses of some of the candidates. In many projects, individuals are allocated a certain type of lot depending on their resources and the family composition. The very fact of asking project candidates information concerning their

income and budgets may make some of them more aware of their economic behavior and induce them to change their consumption patterns, for example, or to report inaccurate information. It may then become difficult to distinguish between the effects of participation in the project *per se* and those resulting from the screening interview.

C) Interaction of Setting and Treatment

54. Judgments regarding the effectiveness of the treatment may be prejudiced by the variety of locales and countries in which they take place. In Senegal, similar projects are being executed in Dakar and Thies. Contrasts in the size, functions, and administrative structures of these two cities may account for differences observed in the effectiveness of the treatment. In the same vein, the effectiveness of a particular strategy may vary with the growth rate of the city and more specifically with the number of immigrants per year. Finally, the observed results of this strategy may be affected by the fact that executing agencies are of a different type. Thus the differences in project execution in different countries may reflect variations in the way a public and a private agency implement the project, the way they maintain a system of archives, and the way they are perceived by the clients. All of these aspects must be taken into account in the analysis.

D) Interaction of Selection and Treatment

55. Where candidates with particular characteristics (older people, female household heads, members of marginal ethnic groups, etc.) are systematically eliminated by the selection committee, it will be more difficult to generalize the findings to the entire target population

(i.e. the population having an income comprised between an upper and lower limit). The experimental population must therefore, as noted earlier, be as broad as possible. The income spread must be large enough to make it possible to test the differential effect of the treatment by income level within the target zone.

E) Interaction of History and Treatment

56. In Senegal, Zambia and El Salvador, the projects on different sites do not take place at the same time. The effects of the differential phasing of various projects may be masked by other situations, such as the energy crisis, inflationary trends, or markets to which one country is closely related. To a certain extent, the effects of this factor may be minimized by introducing relevant indicators in the equations used. They must also be borne in mind at the analysis.

VI. Conclusions Related to Choice of Models

57. In the preceding sections we have listed a variety of factors which may jeopardize the interpretation of the data gathered. We believe such a list is necessary at this point in order to make sure that we share the same expectations about what might be gained from an evaluation of the type proposed. The list includes factors which at times overlap, but it should be clear that the questions to which conclusion, external, internal and construct validity address themselves are distinct. It should also be clear that for the evaluation of projects involving shelter, we are primarily interested in internal and external validity, but the satisfaction of those requirements should not imply a disregard of the others.

Problems Posed by the Experimental Models Used in the Evaluation of Shelter Strategies

58. After having identified the variety of factors which may cause difficulties in the interpretation of results, we must then examine in which experimental models they intervene most significantly. This examination should enable us to assess the relative strengths and shortcomings of various models. While some of the models that we present may be less expensive or easier to implement than others, those same models may cause a number of difficulties which make their use in evaluation problematic. Other models presented here may be used in conjunction with one another as the need arises. The models are not necessarily mutually exclusive; their respective uses depend upon the type of specific assumptions that one intends to test.

A) One Group, Post-Treatment

59. This model is summarized in the following diagram:1/

$$\xrightarrow[\text{time}]{\text{X} \quad \text{01}}$$

Although this model is inexpensive to implement, the absence of pre-treatment observations and of control groups minimizes its internal validity.

B) One Group, Pre-Treatment/Post-Treatment

60. This is summarized in the following diagram:

$$\xrightarrow[\text{time}]{\text{01} \quad \text{X} \quad \text{02}}$$

At least three of the factors limiting internal validity are at work in this model.

1/ X = treatment; 0 = observation.

a) History. Although our purpose is to measure the changes in social and economic behavior caused by the project incentives, we must realize that those changes may be the result of economic, educational or political developments at the local and/or national level. A new industry may have been built close to the project, with changes in participant behavior resulting from this additional opportunity, independently of the sites and services strategy *per se*.

b) Regression to the Mean. Given the fact that we have only one measure of individual economic and social behaviors (i.e., that of the project participants) before the introduction of the treatment, it becomes difficult to ascertain the position that those economic and social behaviors occupy in the overall distribution of the population at large. In view of the existence of random fluctuations in our measurements, low pre-treatment scores may be expected to be accompanied by an upward regression toward the mean, regardless of the treatment introduced. Alternatively, if such pre-treatment measurements are exceptionally high, there will be a downward regression toward the mean regardless of the treatment. As noted before, this regression is made more likely by the compensatory nature of the treatment and by the marginal socio-economic characteristics of the target population.

c) Maturation. It is clear that changes in the economic or social behavior of the subjects may be due primarily to their maturation. Changes in their income, for example, may be due to their seniority rather than to their participation in the project. Changes in their consumption patterns may reflect an increase in the age of their children or in their number. The One Group, Pre-Treatment/Post-Treatment Model does not permit us to determine the extent to which observed changes are due to history, statistical regression, or maturation rather than to the treatment.

C) Post-Treatment Only with Non-Equivalent Control Group[1]

61. This situation is summarized as follows:

$$\begin{array}{lll} X & & 01 \ \text{(Earlier site and services project)} \\ & \xrightarrow{\text{time}} & 0'1 \ \text{(Control Group)} \end{array}$$

In this ex post facto model, we are conducting the research only after the treatment has been introduced and eventually completed. This model is only possible in countries where shelter strategies similar to those financed by the Bank have been introduced previously. It is feasible in the case of countries like El Salvador and Zambia, where such strategies have been employed in the past. The advantage of this model is that it yields quick results and is relatively inexpensive. It raises some difficulties as to the selection of the control group and it is weak in the sense that we cannot necessarily determine whether differences between 01 and 0'1 are due to the treatment or to the selection of peoples in the experimental group. In the case of Zambia, however, it may be possible to determine whether the National Housing Authority has kept records of the individuals they have admitted (and rejected) to their past programs. We could then reconstruct the characteristics of the experimental population at the time preceding the introduction of the treatment and choose the control group accordingly.

D) Pre-Treatment/Post Treatment with Non-Equivalent Control and Experimental Groups

62. This can be plotted as follows:

$$\begin{array}{ccc} 01 & X & 02 \\ 0'1 & & 0'2 \\ & \xrightarrow{\text{time}} & \end{array}$$

1/ We refer to control groups as "non-equivalent" because of both the substantive and methodological difficulties involved in matching experimental and control groups.

This design will be the one used if an entire project is carried out at once and if we are content with only two observations, one before and the other after the treatment. Yet, this particular design is not perfect. Whenever the two groups, experimental and control, are different at the time of the first observation, increased differences between the two groups at the post-treatment observation time may be the result of an interaction between maturation and selection. This will be the case whenever executing agencies adopt rigid standards of selection and when the distributions of income or family size or age for experimental and control populations have both differing means and differing variances.

63. This model does not eliminate either of the dangers posed by the regression to the mean. As already noted, matching individuals in experimental and control groups does not necessarily solve the problem. It is not sufficient to match the two groups by including within the experimental group individuals who have had economic or social performances <u>lower</u> than the mean of that group and including in the control group individuals who have <u>higher</u> economic or demographic performances than the mean of that group. Matching must be made by reference to the grand mean of the populations examined. Further, this matching should <u>precede</u> and not follow selection.

64. The use of non-equivalent control and experimental populations raises two additional problems. First, pre- and post-treatment differences between these populations may result from the <u>measurements</u> used and more specifically from the type of scales on which behaviors or performances are reported. The intervals of the scales used in the evaluation are not

necessarily equal[1/] and changes may occur more frequently in cases when performances are defined as extreme (this is what is called the ceiling or the floor effect). It will sometimes be necessary to make a mathematical transformation of the face value of the measures used in order to reduce the problems posed by the particular type of scaling used.

65. Second, we are not necessarily avoiding the factor of local history. Whenever experimental and control groups are not similarly located within the city, changes in the transportation budgets of individuals within these two groups will be dissimilar. In the same vein, the opening of a new business in a particular part of the city may increase or decrease differently the opportunities offered to control and experimental groups independently of the effects of the project. Finally, depending on their location, those two groups may or may not use the same social networks and interact or not with one another. In the case they do, local history ceases to be relevant to evaluation. It may be advisable for this reason to choose a control group in the same area as the experimental one.

66. Measurements of the effects attributed to the project may require the use of various types of control groups. Most frequently (and this is the assumption we have primarily relied upon in the preceding pages), we intend to examine how the project enables individuals to move away from a level of economic and social poverty. In this case we are comparing the changes affecting populations who are all initially poor, but who are

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1/ For example, one can translate educational attainment in terms of the number of years in school. However, the rewards attached to 7 years of education (i.e., completion of primary school, plus one additional year) as opposed to 6 years are much greater than those between 3 and 4, or 4 and 5 years of schooling.

differentially exposed to the treatment (Figure I). But, we may also examine how the treatment enables individuals to adopt a pattern of behavior similar to populations who are already economically "successful". More specifically, the evaluation of the effect of a particular sheltering strategy may involve comparisons between the behaviors of the participants and those of the populations living in middle income residential projects. In this latter case the premise under which we operate for this portion of the analysis is summarized in Figure II.

FIGURE I

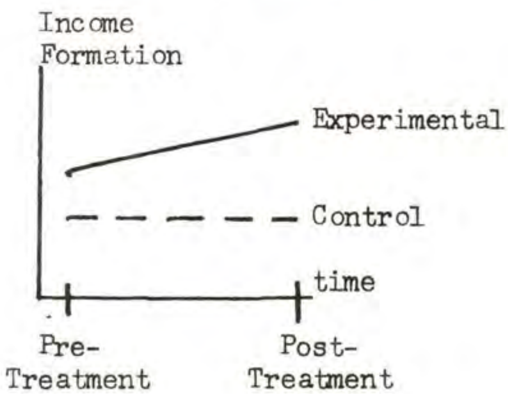
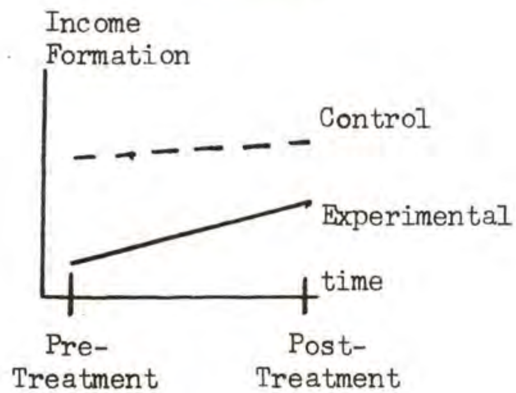


FIGURE II



67. The second premise does not eliminate the problems posed by regression and local history. However, whenever the results confirm the anticipated effects of the treatment, we are then in a position to rule out the selection-maturation factor. For example, insofar as economic maturational processes are often cumulative (the rich get richer and the poor poorer), the experimental group should be further away from the control population at the post- than at the pre-treatment stage. If, as indicated in Figure II, the difference declines, it is clear that the treatment has had some effect, since the growth rates of incomes earned by experimental and control groups diverge from our initial expectations.

E) Pre-Treatment/Post-Treatment with Non-Equivalent Control and Experimental Groups--Different Treatments

68. This can be summarized as follows:

01	X+	02
0'1	X-	0'2
	time →	

This design is used when treatments are introduced which we presume to have different effects. For example, we may hypothesize that wherever a project is administered by a public rather than by a private agency, defaults of payment will increase in the first case but not in the second. In addition, commitment (as measured by the amount of self-help or communal help) should decrease in the first case but will increase in the second one. As another illustration, we may hypothesize that while the gains of sites and services strategies may be eroded by the uprooting of target populations from a particular area they know and control, these gains may be consolidated in the case of upgrading squatter areas.

69. In order to make sure that differences between occupants of sites and services and upgrading areas at the post-treatment level are really proving our point, we must ask ourselves whether individual occupants were assigned randomly to any treatment area. If this assignment has been made randomly and if there are no differences at the pre-treatment level between the populations, we have no reason to believe that the two groups should have matured differentially. Furthermore, if the two groups are comparable at the pre-treatment level, there is less danger that post-treatment differences will be due to a scaling artifact.

70. Altogether, this design has both a high internal and external validity since it is easy to replicate the experiment in an increasing number of settings to see whether we obtain the same results. Construct validity depends on whether changes experienced by the various project groups run in the same or in opposite directions. When they are in the opposite direction, construct validity is high. When they are in the same direction, the same ambiguities noted regarding earlier models persist. In order to be sure that the conclusions of the experiment are valid, researchers should add an untreated control group to the evaluation in order to facilitate comparisons between pre- and post-treatment performances and to make sure that the conclusions reached are not vitiated by measurement errors.

F) Repeated Treatments

71. This design may be summarized as follows:

$$O1 \quad X^1 \quad O2 \qquad O3 \quad X^2 \quad O4$$
$$\xrightarrow{\text{time}}$$

This design may be used with regard to technical assistance. The contacts that participants establish with the personnel supposed to help them with problems of construction or of credit (i.e., technical assistance) are not constant. In order to be interpretable, this model must yield results where 01 differs from 02, 03 from 04, and where the difference 04-03 runs in the same direction as 02-01.

72. One of the difficulties with this design is related to the possibility of cyclical maturation. For example, if 02 and 04 are recorded at the peak of the economic cycle and 01 and 03 at the lowest point, differences may be related to differences in the economic cycle rather than

to the repitition of the treatment. In addition, the behavior of experimental populations may be the result of what they anticipate regarding technical assistance rather than the result of technical assistance per se. This possibility, however, is minimized with successive applications of the treatment (and when contacts with technical assistants are frequent and randomly distributed across time periods).

G) Repeated Time Series with Multi-Experimental Groups

73. This design may be summarized as follows:

01	X	02		03		04	Experimental Group 1
0'1		0'2	X	0'3		04	Experimental Group 2
0"1		0"2		0"3	X	0"4	Experimental Group 3
0"'1		0"'2		0"'3		0"'4	Non-Equivalent Control Groups

time →

In its simplest form, this model is used whenever the entire project involves various execution phases. It may also be used in a modified form in the case of countries where there is already a long history of sites and services or upgrading strategies or where the entire project involves the introduction of different treatments ("overspill", sites and services, upgrading) at various points in time.

74. This design is advantageous on two counts. It enhances external validity because an effect can be demonstrated on more than one population at different points in time. It also enhances construct validity whenever there are differences associated with the application of each treatment. This particular model, however, may have problems of internal validity and, specifically, of interaction between history and selection. There may be changes in the composition of the population entering each phase of the

project and such changes may also be associated with differing historical events. In order to deal with this danger, it is necessary to apply significant controls on the selection of participants for the various execution phases.

VII. Recommendations

75. After this review of the factors which may potentially limit the accurate interpretation of the experimental model with which they are associated, we must focus our attention on an examination of the strategies we must choose to enhance the validity of our conclusions.

76. With regard to selection procedures, a full randomization for the recruitment of control and experimental populations minimizes many of the problems associated with the interpretation of results. This randomization is possible whenever the number of candidates exceeds the number of plots offered in the project. However, randomization among eligible populations is often not regarded as acceptable. Those most eligible, the most needy, are believed to have priority over the more fortunate segments of the target population. Many people plead against randomization as if existing assignment procedures did in fact meet the equity requirements that randomization does not. Careful examination of most agencies shows that this is rarely the case. Some individuals less needy are, in fact, treated while more needy are turned away. Nepotism and administrative convenience may frequently tend to dominate selection procedures.

77. This raises the question of the amount of publicity to be provided about the conditions underlying access to the projects. Some executing agencies may feel that whenever publicity is not sufficiently widespread,

a situation will occur where the populations most likely to be served first are the best informed; it is therefore not feasible to evaluate the effects of the project. Other executing agencies feel that it is more appropriate to minimize information concerning conditions of access to the project in order to increase the reliability of the responses on the application forms and perhaps also to increase the pool of candidates.

78. Although most executing agencies are unwilling to make full use of randomization in selecting the candidates, there is still room for a partial application of this principle, an example being the "tie-breaking technique". Insofar as many executing agencies base admission on a point system, it is likely that the number of candidates with a particular score will be too numerous for all to be admitted. For example, whenever candidates receive a certain number of points for the amount of income they earn, plus a number of additional points based on the number of children they have, etc., individuals with, for example, 26 points and over may be automatically admitted to the project but not fill it, while those with 25 points are too numerous to fill the remaining plots. In this case, evaluation should be based on an analysis of individuals with scores of 25 points who will then be randomly assigned to experimental and control groups.

79. This method permits the researcher to decrease the number of individuals to be interviewed over time, which thereby decreases the cost of the research. To reduce the number of cases, however, makes post-treatment differences less likely to be significant. Since the validity of these scores is relative and since a one point difference is not necessarily associated with a proportionate difference in post-treatment performance,

it is recommended that one enlarges the concept of the "breaking point" and use zones of scores rather than precise cut-off scores. Thus individuals with 25 points and over are admitted to the program and are necessarily included in the analysis, but those with scores falling between 22 and 25 points are randomly assigned to control or experimental groups and are systematically followed over time.

80. A second technique to deal with the problem of selecting control and experimental populations involves the use of regression discontinuity techniques. This technique consists of comparing over time the performances of individuals whose scores have enabled them to get access to the project and of those who were below the cutting point and are therefore treated as control groups. Should the association between pre- and post-treatment performances be linear and continuous across the board, we may infer that the treatment has no effect (Figure III). Should we observe that there is a discontinuity and that this discontinuity takes place at the "breaking point" previously agreed upon,[1] we may examine the intensity of this discontinuity and assess statistically whether it is significant and reflects the impact of the treatment (Figure IV). Regression discontinuity techniques

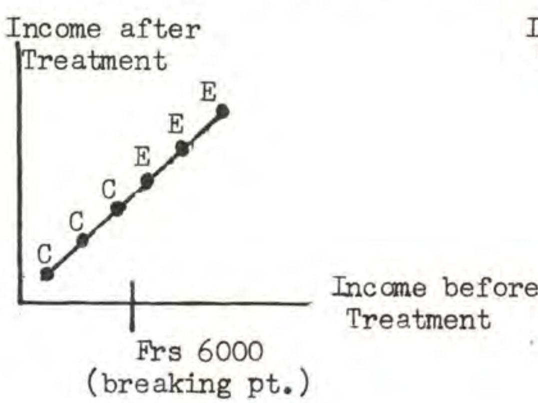


FIGURE III.

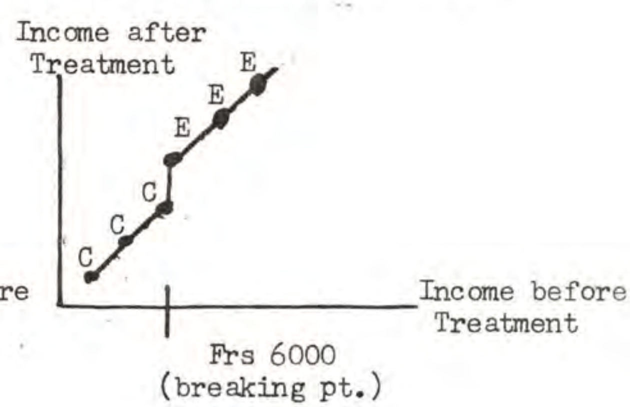


FIGURE IV.

1/ Such as an upper or lower income, or an age limit.

may be used when large groups of candidates are processed at once. They may also be used when the program includes the entrance of successive waves of occupants. The selection may be made all at once, the sequential order in which candidates are admitted being determined by their scores on the eligibility scale. If selection is made independently for the occupants of the various execution phases, each population will be treated as an independent experimental group. Given the fact that point systems are based on ranking procedures, it is indispensable to minimize irrelevant influences on the selection process in order to avoid biases. If only one rater is used, he should not know where the breaking point is located. The best solution, of course, consists of using various raters.

81. To summarize, we should not insist upon full randomization since it appears to be politically dangerous. We may either use randomization "at the breaking point" or use a regression discontinuity type of analysis. In this later case, it is still necessary to ask the executing agency for (1) a full and detailed report on the selection procedures used and (2) the development of an archivial system where data regarding admitted and rejected candidates may be easily retrieved.

82. In countries where there has been a history of sites and services or upgrading projects, it is recommended that we use an experimental model which may help the Bank to reach relatively quickly conclusions concerning the effect of various treatments. This model would be the following:

X	01		02	03	Experimental Group 1 - Earlier sites and services project
	0'1	X	0'2	0'3	Experimental Group 2 - Bank-financed current sites and services project
	0"1		0"2	0"3	Control Group

time →

The use of experimental group 1 is only valid when it is possible to gather information on the nature of the treatment (the strategy used before the intervention of the Bank) and on the characteristics of the experimental population 1 prior to their entry in the project. As far as control groups are concerned, it is recommended that we use populations which have not only the same eligibility characteristics as those entering the current project (both in terms of income and of needs) but which may also score <u>higher</u> in this regard. This will enable us to have a better sense of the full association between pre- and post-treatment incomes as described in Figures I and II.

83. <u>With regard to treatment procedures</u>, we have to make sure that there are no variations in the administration of the treatment and that technical assistance, for example, is equally accessible to all occupants of a project. Although we have little control on these aspects of the projects, it is still very important to have accurate records of the efforts undertaken in this regard by the executing agency (number of community development agents, their location, the frequency of meetings held, the number of participants to these meetings, etc.).

84. Even when the origin of increased differences between experimental and control groups at the post-treatment stage is not easily identifiable, it is still necessary to ascertain which components of the treatment make a difference (i.e., plot size, access to water and sewerage, etc.). In the same vein it will be important to carefully check the characteristics of the individuals dropping out of the projects and their motivations for doing so.

85. With regard to data collection, we have noted the influence that the reactions of the subjects to the interview could exert on the results obtained. It will thus be important to use as many unobtrusive measures as possible. These unobtrusive measures are of two types. First, we may use measurements of water consumption for basic subareas. The advantage of this type of measurement is both its low cost and its unobtrusiveness. Yet, we should remain aware of its equivocations. An increase in water consumption may be considered as an indicator of an increase in living standards as long as we are sure that the boundaries of the area served by a particular tap are distinct and that the number of peoples served by that particular tap has not increased. Under certain conditions an increase in this consumption could reflect a decrease rather than an increase in the standard of living of individual occupants. The same, of course, holds true for indicators of economic exchange (traffic indexes, sales of a particular product, etc.).

86. Second, we may use archival data kept by the delivery agency. However, we should keep in mind that archives may sometimes be self-serving. Crime statistics, for instance, may be used by police to justify their requests for larger appropriations, and thus not reflect relative changes in violence or alienation within a given area.

87. Third, we must keep in mind the fact that the validity of the research might be jeopardized by attrition in both experimental and control groups. Insofar as there is a high mobility on the part of marginal populations living in the urban centers of newly developed countries, it is recommended to keep frequent contacts with experimental and control subjects.

DRAFT
R Clignet/C Long:dh
August 27, 1974

DISCUSSION NOTE ON THE ASSUMPTIONS UNDERLYING A COMPARISON OF SHELTER STRATEGIES IN DIFFERENT COUNTRIES

1. The importance of undertaking an in-depth social and economic evaluation of the Bank's new efforts in the shelter field has been recognized on numerous occasions. This note is intended to explain as succinctly as possible our assumptions underlying the benefits to be derived from: a) analyzing projects in at least three different countries[1/] over time, and b) choosing a sample of projects[2/] that include a variety of components.

2. There are two primary reasons for comparing projects located in different countries. The first relates to determining the effects of intervening variables on the apparent results of the treatment. It is important to assess whether the relationship between treatment and effect is contingent upon certain characteristics of the society and/or the community, or whether such a relationship is universal and thus independent of such characteristics. The second is that such a comparison should permit us to isolate the effects of the various components of the treatment, since the treatments offered in different contexts contain varying types and amounts of project components. Each of these reasons is discussed below.

Effects of Intervening Variables

3. It is reasonable to expect that the effects of the treatment are related to the size and function of the city where it is located. Whenever

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[1/] Our analysis will include projects in Senegal, El Salvador and Zambia.

[2/] Hereafter referred to also as "treatments."

a project aims at causing changes in patterns of income formation, the number and the accessibility of opportunities offered by the local labor market will influence the effects of the treatment. We must then examine to what extent the effects of sites and services and upgrading strategies are affected by local and regional rates of economic growth.

4. The impact of the treatments may also be related to the proportion of recent urban migrants within the city. This impact may differ between countries where the majority of the population are new migrants with little urban experience and those countries where city dwellers have considerable urban experience. In the former case, we may be most concerned with the effects caused by the creation of new housing amenities, while the latter case may call for analyzing the effects of relocation on the existing urban population. We may therefore need to consider whether the effects of the project vary with the rate of in-migration to the city where it is located.

5. We also assume that the effects of treatments may depend on the historical conditions existing within individual countries. Project participants, executing agencies, and government institutions are likely to respond differently in locations where there has been previous experience with sites and services or upgrading strategies (e.g., Zambia) and in those where there has not been (e.g., Senegal). In addition, the centralized ideology historically prevalent in some cultures may influence the degree of self-help which takes place within the project. (See paragraph 12.)

Effects of Project Components

6. There are variations among projects in different countries as to the scale of the project and as to the number, type, and amounts of components

included within the project. Disaggregation of each of these characteristics should enable us to better isolate the effects of each. Assumptions regarding the variations are discussed below.

7. Plot Size. Plots differ in size in each of the three countries chosen for analysis. To the extent that there are relatively few variations in household composition of the local target populations (both in terms of number and of kinship structure), we should be in a position to assess the differing effects of variations in plot size on the economic and social behavior of the project households.

8. Land Tenure Arrangements. In certain projects, land is allocated on a lease-hold basis, in others on a free-hold basis. Variations in land tenure and in payment arrangements may be associated with parallel differences in participant behavior. The evaluation of this assumption will require an assessment of cultural factors, since local populations do not necessarily share similar orientations towards land ownership and time. It is not certain, for example, that all participants associate in their minds the regular payment of specific sums of money over n years with the acquisition of permanent rights over the land they occupy.

9. Selection of Target Populations. The geographical spread of information concerning the project and the selection of project participants also differ among countries. In El Salvador, information and selection are centered on neighborhoods near the project; in Senegal and Zambia, they are organized on a larger spatial scale. Contrasts in these approaches may be associated with parallel variations in the degree to which the income of the project population differs from that of the target population, as it is

defined by the local income distribution curve. In addition, the short and long term economic and social performance of plot occupants may vary among the projects. We may assume, for example, that populations who move to the project area from nearby neighborhoods will experience fewer and less intense disruptions to their social networks, occupational lives, and patterns of consumption.

10. Differential Pricing. In some projects, the plot charges vary with site location and the types of amenities offered (i.e., individual versus communal water supply, etc.). In some, there is also a cross-subsidization element introduced. We may assume that contrasts in the degree to which free market principles operate within the project itself may be associated with parallel contrasts in patterns of self-help and of domestic consumption. We may find, for example, that in Senegal and Zambia the consumption patterns of occupants of different types of plots will vary over time, as will their modes of interaction.

11. Differing Amenities. Sites and services and upgraded areas vary in the different countries according to the amenities that are provided on each plot and for the project site as a whole. These differences may account for contrasts in the patterns of land occupancy, the time required for dwelling construction, the patterns of consumption and the amount and nature of housing investment. We may assume that the response of the project populations will vary with the type of incentives provided and that there will be differences in economic behavior within projects of the three countries.

12. Executing Agencies. Because sites and services and upgrading strategies stress decentralization and self-help, we may assume that the organizational

structure of the executing agencies will influence the behavior of the project population. We may expect differences in this regard between Senegal (where the executing agency is a part of a highly centralized government structure) and Zambia (where there is a longer tradition both of decentralization and of self-help). One would expect that there will be contrasts in both the number and type of interactions between executing agencies and plot occupants. Such interactions may influence the rate of defaults.

13. Self-Help and Mutual-Help. In the El Salvador project there is an opportunity offered for participants to make their down payments in the form of work performed for the benefit of the entire project population. This system may encourage more lower-income populations to enter the project, and thus may affect the composition of the project population. In addition, participation in the El Salvador project's mutual-help program begins before plot occupancy, a situation which may encourage a different form and amount of social cohesiveness. Mutual-help may thus cause self-help to take place earlier in El Salvador than in the other two countries, and participation in cooperative ventures to be more marked there than in other projects.

14. Selection Criteria. Selection criteria and procedure vary considerably for different projects. These variations may be associated with parallel contrasts both in the population composition of each project and in its homogeneity. These contrasts may, in turn, be accompanied by differences in the long-term social and economic behavior of individual participants.[3/]

15. Social and Economic Incentives Within the Project Area. The

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[3/] It should be noted, however, that evaluation literature presents conflicting evidence as to whether social and cultural homogeneity exerts a positive effect on the long-term cohesiveness of a residential population.

incentives offered to participants in sites and services and upgrading programs after they move to the project area may also aid in explaining differences in population performance in different countries. Each project may be distinguished in terms of: a) facilities for small industrial and commercial activities; b) amounts and types of loans offered to individual occupants; c) types and amounts of educational and health facilities; d) nature and amount of technical assistance. Because the three projects do not offer the same incentives in this respect, it should be possible to test what kind of incentives have what types of effects on which types of population over what period of time.

Conclusions

16. The definition of sites and services and upgrading strategies are not standardized, but imply different solutions in various locations. The above paragraphs have attempted to circumscribe the assumptions made with respect to evaluating the differential impact of shelter strategies in a variety of geographical contexts. The evaluation of experiences in a variety of projects and countries should aid the Bank in formulating more educated hypotheses regarding the design of future projects. Disaggregation of the treatment variables (i.e., sizes of plot, types of land tenure arrangements, amount and terms of building materials, loans, etc.) should enable us to better understand the influence of each variable, and of combinations of variables, on the economic and social behavior of the population. We realize that our analysis is based on a small sample, and that we cannot make definitive determinations of the interactions between dependent and independent variables. Yet we expect that to compare the magnitude and direction of the

interactions between treatment and effects with the overall social and economic characteristics of the countries under study will provide a much greater understanding of the influence that the environment exerts on the effects of various shelter strategies.

August 15, 1974

SUGGESTED CONTENT OF EVALUATION QUESTIONNAIRE

El Salvador Sites and Services Project

House No. ______________ Settlement ______________________

Location of House ______________ Sample ______________________

Completed ____

Respondent Name ____

Interviewer Name _______________________________________

Date Interview Begun ____________________________________

Date Interview Completed _________________________________

Appointments or time available ____________________________

Additional Comments:

This Section to be completed by the Interviewer:

A. Interview Status (Tick all that apply)
   1. Not at home 1 ____
   2. Language difficulties 2 ____
   3. Respondent refusal 3 ____
   4. Interference by others 4 ____
   5. Other (Explain 5 ____

B. Quality of Interview (Tick one)
   1. Very interested and cooperative 1 ____
   2. Interested and reasonably cooperative 2 ____
   3. Indifferent 3 ____
   4. Slightly disinterested and resistant 4 ____
   5. Very resistant and opposed to interview 5 ____

C. In most questions concerning facts, do you believe the respondent: (Tick one)
   1. Always told the truth 1 ____
   2. Most of the time told the truth 2 ____
   3. Did not tell the truth sometimes 3 ____
   4. Did not tell the truth most of the time 4 ____

D. When he or she gave their opinion, did they (Tick one)
   1. Give their actual opinion 1 ____
   2. Give only part of what they felt 2 ____
   3. Confused and did not understand many questions 3 ____
   4. Did not give real opinions 4 ____

Questions for Contact Person

1. What is the name of the head of this household? ____________

2. Is he/she now staying in this house? Yes ____ No ____

3. Is he/she married? Yes ____ No ____

   If yes, is the spouse living in the same house?

Ask of Head of Household

4. I want to ask you about all the people you live with in this house this week.

First, what are the names of all those who are 17 years or below 17 years?

Now, for each person that is named, ask the following questions as are appropriate and record the information in the table below:

4a. How old is (NAME)?

4b. Is (NAME) a male or female?

4c. What is the standard or grade (NAME) has completed?

4d. Is (NAME) in school?

4e. Has (NAME) changed schools in the last 12 months?

4f. If child not in school, did you try to look for a place in school for him or her?

RESIDENTS OF HOUSE AGE 17 AND UNDER

Child of: Female Head	Child of: Other Females	NAME	(4a) AGE YRS/MOS	(4b) SEX	(4c) SCHOOL GRADE LAST COMPLETED	(4d) Y/N	(4e) Y/N	(4f) Y/N

5. Second, what are the names of all the people living in this house who are 18 years and above?

Now, for each person named, ask the following questions as are appropriate and record the information in the table below:

5a. How old is (NAME)?

5b. Is (NAME) male or female?

5c. For how long has (NAME) been staying in this house?

5d. What job does (NAME) currently hold?

5e. How much does (NAME) contribute to the household?
(Help in domestic chores? If so, what?)
(Money? How much? How often?)

RESIDENTS OF HOUSE AGE 18 AND OVER

NAME	(5a) AGE YRS/MOS	(5b) SEX	(5c) LENGTH OF RESIDENCE IN THIS HOUSE	(5d) JOB	(5e) CONTRIBUTION
Male Head					
Female Head					

6. Does this house have electricity? Yes _____ No _____

7a. How many buildings are a part of this household? (Do not include latrine enclosures) No. of buildings _________
Use of each building _________________

7b. What is the shape of the main house? (Do not include porches) ___________

LEAVE SPACE TO SKETCH HOUSE BELOW

7c. What type of building do you live in? (One-family apartment, multi-family apartment building, etc.) ____

8. What is the total lot size? _____ sq. paces

9. What is the main material out of which this house's roof is made? __________

10a. What is the basic material out of which the walls of this house are made?
____

10b. What is the basic material out of which the floors are made?
____

11. How many years of your life have you lived in the city? _______

12. Where were you born? Village _____ City _______ Town _____

12a. If city or town, what was its name? ______________________

12b. Before you were 18 years old, how many years did you live in a village? _______

13. Up to what grade or standard did you reach in your education? _______________

Total years of education ________________

(14a and 14b to be asked about the wife of the head of household who lives in the house or of the female heads of households:)

14a. What was her(your)age when you were first married? __________

14b. Is this her(your)first marriage? Yes _____ No _____

15. What kind of full-time work are you doing now?
    1. No job ____ (go to question 21)
    2. Subsistence farming _____
    3. Cash-crop farming _____
    4. Self-employed _____ (How many people work for you including members of your farmily?)_____
    5. Other work (type of work) __________
       (job title) __________
       (employer) __________

16. Could you tell me specifically what kind of work you are doing where you work now? (If he sells, find out what he sells) __________

17. Where is your work located? __________

18. How many days did you work last week? __________

19. How much money do you receive at the job you are working presently?
    __________ Amount per month

20. Do you have any jobs that you do to earn money (apart from your full-time job)--jobs like selling beer or food, as a driver, as a builder? Tell me each of the things you do or make. __________
    ____
    How much money do you make from each of these other jobs each month?
    Job(s)__________ earned per month __________

21. During the last thirty days, how many times did anyone in your family go to a hospital or clinic, or to a private doctor?

Family Member	Source of Treatment	Travel Time to Source	Reason for Treatment

22a. In the last thirty days, how many days were you unable to work because of illness? ____________

22b. From what did you suffer? ____________

23a. Who was the man who played the most important part in your life when you grew up? Your father ____________ Another man ____________

23b. What was the educational standard attained by the man who raised you? ____________

23c. How many children did he have? ____________

23d. Were you the oldest, the youngest, or in-between? ____________

24a. What was this man's first full-time job? ____________

24b. If self-employed, how many people worked for your father, including members of your family? ____________

25. What job did this man do when you were 18? ____________

26a. Who was the woman who played the most important part in your life when you grew up? Your monther ____________ Another woman ____________

26b. What was the educational standard she attained? ____________

27a Do you have any children who are living somewhere else? (Do not include nephews or nieces) Yes ________ No ________

27b. How old are they and what are their sexes? ____________

28. Altogether now, how many children do you have who are still living? ____________

29. How many children have died? ________ (If none died, go to question 31)

30a. How old was the child when he died? ________

30b. At that time, were you staying in this settlement, in IVU housing, in another sites and services area, or in a village? ____________

31. What things do you like best about this settlement? ____________

32. What things do you dislike the most about this settlement? ____________

33. What is your principal source of water? ____________

34. How far away is your principal source of water? ____________

35. How many houses share it with you? ____________

36a. When do you pay for water? ____________

36b. How much do you pay for water? ____________

37. Do you have toilet facilities? Individual _____ Communal _____

38a. If communal, with how many houses do you share toilet facilities? ________

38b. Where are they located? ________________

39. What type* are they? ________________

40. Do you have sewerage available? Yes ___ No ___ If yes, what type*? ________

41a. Do you cultivate a garden? Yes ____ No _____

41b. Where is it located? ____

42a. When you came to this town for the first time, in whose house did you stay?
____

42b. In what settlement was this house located? ________________________________
(Name of settlement/Type of settlement)

43. How long did you live there? Number of years __________

44. In what settlement in this city did you live before you moved to this settlement?
____
(Name of Settlement - Type of Settlement)

45. In the settlement where you were staying before you came here, how much were you paying per month? __________ amount/month for rent
__________ amount/month for water and other things

46. How many rooms did you have in your previous dwelling? ____________________

47a. Why did you choose to settle in this settlement rather than another?
1. ________________________ 2. ____________________________
(Indicate the most important reason for your choice)

47b. Do you rent or own this house? Own _____ Rent _____

48. Did you or your family build any part of this house? Yes ____ No _____

49. Who assisted you in building this house? How much did you pay them? (in cash or in kind) 1. ______________________ 1. ______________
2. ______________________ 2. ______________

50a. Did you help other people build their houses? No ____
If yes, whom? ______________ ______________ ______________

50b. Did they pay you? Yes ____ No ____ If yes, how much? ______________

51a. Did you borrow money to build this house? No _____ Yes ______

51b. From whom did you borrow the money? How much did you borrow from each?
1. ____________________________ 1. ____________________________
2. ____________________________ 2. ____________________________

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* i.e., aqua privy, pit latrine, septic tank, waterborne sewerage, other

51c. Altogether, how much did it cost you to build this house? __________

52a. If you bought the house already built, how much did you pay for it? ________

52b. When did you buy it? _________________

52c. When did you move to this plot? _________________

52d. How many rooms do you have in this house? _______________

52e. For what is each used? ____

53a. Did you make any improvements on your house in the last 12 months such as adding an extra room or a window frame? No _____ Yes ______

If yes, what did you improve? ____

53b. What materials did you use? ____

53c. Where did you get them? ____

53d. Are there any other people who helped you make these improvements?
No ____ Yes _____ Who? ____
Kind of repayment ____________________________________

53e. Did you borrow money to improve this house? No _____ Yes _____

If yes, how much? _________________ From whom? ______________________

53f. Did you help others improve their houses? No ___ Yes ____ If yes, how many? ____

53g. Do you do community work? No ___ Yes ___ If yes, what kind? ________________

54a. What repairs need to be carried out on this house? ______________________

54b. What do you like most about your house (building)? _____________________

54c. What do you like least about your house (building)? ____________________

55. How much money do you and your family spend on living in this house each month?

For rent _____ amount per month
For electricity _____ amount per month
For water _____ amount per month
For other municipal services _____ amount per month
For transport _____ amount per month
All together _____ amount per month

56. Do you have anybody in this house who pays rent to you? No ___ Yes ___

If yes,

Age of Renter	Sex	Occupation	Amount of Rent

57. Not included in the money that you and your wife earn per month, are there any other people in this house who bring in extra money for food and other things needed in the house? Do not include the rent which you have just mentioned.

No _____ Yes _____ How much per month? __________ amount per month

58. How do you get to work? ______________________________

59. Do you do any gainful employment in your house? No ___ Yes ___

If yes, what type? ______________________________

60. How did you hear of the place where you live now? ______________

61. I have some questions to ask you about the things you own. (List to be established in the field)

62. Have you lived anyplace outside this city for more than one year?
No ___ Yes ___ What was the last place you stayed before you came to this city? Was it a village or city?

____

63. In what El Salvador region or in what country was this place?

Foreign country ______________ El Salvador region ______________

64. During the last 12 months, have you suffered from things such as being robbed, or being beaten, or other crimes of this nature in this settlement?
No ________ Yes __________

65a. (To be asked about spouse) What kind of full-time work is she doing now?
1. No job ___
2. Subsistence farming ___
3. Cash-crop farming ___
4. Self-employed ___
(How many people work for her including members of her family?) ______
5. Other work (type of work) ______________
(job title) ______________
(employer) ______________

65b. Could you tell me specifically what kind of work she is doing where she is working now? (If she sells, find out what she sells) ______________

65c. Where is her work located? ______________________________

66. When you think about all the jobs you have done, including farming, what would you say was your first full-time job--that is, when you went to work in the morning and came back at evening? ______________

67. What was the first full-time job you did for which you received money?
____

68a. What kind of work were you doing in 1968--five years ago?
____

68b. In what year did you start that job? ______

68c. How much money were you earning on this job each month? _______

68d. Was this a full-time job--that is to say, you went to work in the morning and came back in the evening? No ___ Yes ___

68e. At the time you were doing this job, where were you living--in a village or in the city? _______________
If city, what was its name? _______________

69. Without mentioning sickness, strikes or holidays, did you at any time go without a job in the last 12 months? No ___ Yes ___
If yes, how many weeks would you say you stayed without a job in the last 12 months? _______________

70. What is needed most in this compound that the government can spend money on; houses, jobs, schools, hospitals, or things like water, garbage collection, or roads? _______________

71. We want to ask you about the clubs and other such groups of which you are a member. List the clubs of which you are a member.

71a. Over the past few months, have you attended some of the meetings, just a few of the meetings, or almost all of the meetings?

71b. Do you hold office in any of these clubs? What is that office?

(71)	(71a)			(71b)
Name of Club	None	A Few	Almost All	Office

72a. How much have you saved in the last 12 months? ________

72b. Where did you place it? _______________

73a. How many of your children go to school? ____________________

73b. Where is the school located?

73c. How does he get there?

73d. How long does it take him to get there?

Name of Child	(73b) Location of School	(73c) Means of Transportation	(73d) Length of Time

August 13, 1974

SUGGESTED CONTENT OF EVALUATION QUESTIONNAIRE

Lusaka Squatter Upgrading and Sites and Services Project

House No. ______________ Settlement ______________________

Location of House ______________ Sample ______________________

Completed ____

Respondent Name ____

Interviewer Name ____

Interviewer Language _____________________________________

Date Interview Begun _____________________________________

Date Interview Completed __________________________________

Appointments or time available ____________________________

Additional Comments:

This Section to be completed by the Interviewer:

A. Interview Status (Tick all that apply)
1. Not at home 1 ____
2. Language difficulties 2 ____
3. Respondent refusal 3 ____
4. Interference by others (e.g. wife) 4 ____
5. Other (Explain 5 ____

B. Quality of Interview (Tick one)
1. Very interested and cooperative 1 ____
2. Interested and reasonably cooperative 2 ____
3. Indifferent 3 ____
4. Slightly disinterested and resistant 4 ____
5. Very resistant and opposed to interview 5 ____

C. In most questions concerning <u>facts</u>, do you believe the respondent: (Tick one)
1. Always told the truth 1 ____
2. Most of the time told the truth 2 ____
3. Did not tell the truth sometimes 3 ____
4. Did not tell the truth most of the time 4 ____

D. When he or she gave their opinion, did they (Tick one)
1. Give their actual opinion 1 ____
2. Give only part of what they felt 2 ____
3. Confused and did not understand many questions 3 ____
4. Did not give real opinions 4 ____

Questions for Contact Person

1. What is the name of the head of this household? ____________

2. Is he/she now staying in this house? Yes ____ No ____

3. What language does he speak? ____________

4. Is he/she married? Yes ____ No ____

If yes, ask the following about each wife:

4a. How many wives does he have? ______

4b. How many are living with him? ______

Ask of Head of Household

5. I want to ask you about all the people you live with in this house this week.

First, what are the names of all those who are 17 years or below 17 years?

Now, for each person that is named, ask the following questions as are appropriate and record the information in the table below:

5a. How old is (NAME)?

5b. Is (NAME) a male or female?

5c. What is the standard or grade (NAME) has completed?

5d. Is (NAME) in school?

5e. Has (NAME) changed schools in the last 12 months?

5f. If child not in school, did you try to look for a place in school for him or her?

RESIDENTS OF HOUSE AGE 17 AND UNDER

Child of:			(5a)	(5b)	(5c)	(5d)	(5e)	(5f)
Female Head	Other Females	NAME	AGE YRS/MOS	SEX	SCHOOL GRADE LAST COMPLETED	Y/N	Y/N	Y/N

6. Second, what are the names of all the people living in this house who are 18 years and above?

Now, for each person named, ask the following questions as are appropriate and record the information in the table below:

6a. How old is (NAME)?

6b. Is (NAME) male or female?

6c. For how long has (NAME) been staying in this house?

6d. What job does (NAME) currently hold?

6e. How much does (NAME) contribute to the household?
(Help in domestic chores? If so, what?)
(Money? How much? How often?)

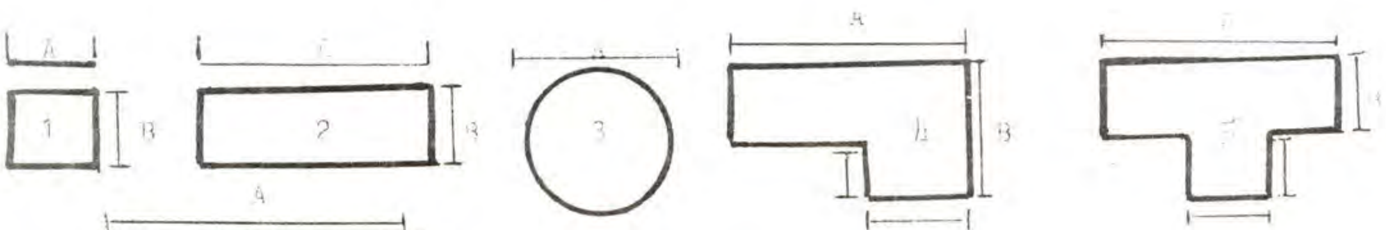
RESIDENTS OF HOUSE AGE 18 AND OVER

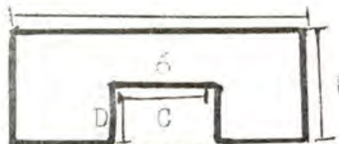
NAME	(6a) AGE YRS/MOS	(6b) SEX	(6c) LENGTH OF RESIDENCE IN THIS HOUSE	(6d) JOB	(6e) CONTRIBUTION
Male Head					
Female Head					

7. Does this house have electricity? Yes ____ No ____

8a. How many buildings are a part of this household? (Do not include latrine enclosures) No. of buildings ________
Use of each building ________________

8b. What is the shape of the main house? (Do not include porches) __________





(Sketch other shapes here)

	SHAPE					
Dimension	House 1	House 2	House 3	House 4	House 5	House 6
A						
B						
C						
D						

9. What is the total plot size? _____ sq. paces

10. What is the main material out of which this house's roof is made? __________

11a. What is the basic material out of which the walls of this house are made?
____

11b. What is the basic material out of which the floors are made?
____

12. How many years of your life have you lived in town? __________

13. Where were you born? Village ____ Mission ____ Boma ____ Town ____

13a. If town, what was the name of the town? ______________

13b. Before you were 18 years old, how many years did you live in a village? ______

14a* What tribe are you? ________________

14b* What is your religion? ______________ Name of church ______________

15. Up to what grade or standard did you reach in your education? __________

Total years of education __________

* The inclusion of this question should be discussed in the field.

16. How many years did you spend at a school run by a mission? ________________

(17a and 17b to be asked about all wives of the head of household who are present in the compound or of female heads of households)

17a. What was her(your)age when you were first married? _________

17b. Is this her(your)first marriage? Yes ____ No ____

18. What kind of full-time work are you doing now?
   1. No job ___ (go to question 26)
   2. Subsistence farming ____
   3. Cash-crop farming ____
   4. Self-employed ____
   (How many people work for you including members of your farmily?)____
   5. Other work (type of work) ________
   (job title) ________
   (employer) ________

19. Could you tell me specifically what kind of work you are doing where you work now? (If he sells, find out what he sells) ________________

20. Where is your work located? ________________

21. How many days did you work last week? ________________

22. How much money do you receive at the job you are working presently?
   _________ Kwacha per month

23. Does your employer set aside any money for you in a savings program such as the National Provident Fund? Yes ___ No ___ If yes, how much? ____________

24a. Do you get a housing allowance for your job? Yes ____ No ____

24b. If yes, how much is it per month? ________Kwacha per month

25. Do you have any jobs that you do to earn money (apart from your full-time job)--jobs like selling beer or food, as a driver, as a builder? Tell me each of the things you do or make. ________________

   ____

   How much money do you make from each of these other jobs each month?
   Job(s)________________ Kwacha earned per month ____________

26. During the last thirty days, how many times did anyone in your family go to a hospital or clinic, nganga, or private doctor?

Family Member	Source of Treatment	Reason for Treatment

27a. In the last thirty days, how many days were you unable to work because of illness? ____________

27b. From what did you suffer? ________________________________

28a. What was the man who played the most important part in your life when you grew up? Your father __________ Another man __________

28b. What was the educational standard attained by the man who raised you? ________

28c. How many children did he have? ________

28d. Were you the oldest, the youngest, or in-between? ________________

29a. What was this man's first full-time job? ____________________

29b. If self-employed, how many people worked for your father, including members of your family? _________

30. What job did this man do when you were 18? ____________________

31a. What was the woman who played the most important part in your life when you grew up? Your monther _________ Another woman ___________

31b. What was the educational standard she attained? __________________

32a Do you have any children who are living somewhere else? (Do not include nephews or nieces) Yes ______ No _______

32b. How old are they and what are their sexes? ____________________

33. Altogether now, how many children do you have who are still living? __________

34. How many children have died? _______ (If none died, go to question 36)

35a. How old was the child when he died? ______

35b. At that time, were you staying in this settlement, in a council house, in a site and service area, or in a village? ____________________

36. What things do you like best about this settlement? ______________

37. What things do you dislike the most about this settlement? ________

38. What is your principal source of water? ______________________

39. How far away is your principal source of water? _______________

40. How many houses share it with you? ___________

41a. When do you pay for water? _________________

41b. How much do you pay for water? _______________

42. Do you have toilet facilities? Individual ____ Communal ____

43a. If communal, with how many houses do you share toilet facilities? ________

43b. Where are they located? ________________

44. What type* are they? ________________

45. Do you have sewerage available? Yes ___ No ___ If yes, what type*? ________

46a. Do you cultivate a garden? Yes ____ No _____

46b. Where is it located? ____

47a. When you came to this town for the first time, in whose house did you stay?
____

47b. In what settlement was this house located? ________________________________
(Name of settlement/Type of settlement)

48. How long did you live there? Number of years __________

49. In what settlement in this city did you live before you moved to this settlement?

____
(Name of Settlement - Type of Settlement)

50. In the settlement where you were staying before you came here, how much were you paying per month? __________ kwacha/month for rent
__________ kwacha/month for water and other things

51. How many rooms did you have in your previous dwelling? ____________________

52a. Why did you choose to settle in this settlement rather than another?
1. __________________________ 2. __________________________
(Indicate the most important reason for your choice)

52b. Do you rent or own this house? Own _____ Rent _______

53. Did you or your family build any part of this house? Yes ____ No ____

54. Who assisted you in building this house? How much did you pay them? (in cash or in kind)
1. ______________________ 1. ______________________
2. ______________________ 2. ______________________

55a. Did you help other people build their houses? No ___ Yes ___
If yes, whom? ______________ ________________ __________________

55b. Did they pay you? Yes ___ No ___ If yes, how much? ______________

56a. Did you borrow money to build this house? No _____ Yes ______

56b. From whom did you borrow the money? How much did you borrow from each?
1. ____________________________ 1. ____________________________
2. ____________________________ 2. ____________________________

---

* i.e., aqua privy, pit latrine, septic tank, waterborne sewerage, other

56c. Altogether, how much did it cost you to build this house? _________ kwacha

57a. If you bought the house already built, how much did you pay for it? _______

57b. When did you buy it? _______________

57c. When did you move to this plot? _______________

57d. How many rooms do you have in this house? _____________

57e. For what is each used? _______________________________________

58a. Did you make any improvements on your house in the last 12 months such as adding an extra room or a window frame? No ____ Yes _____

If yes, what did you improve? ___________________________________

58b. What materials did you use? ____________________________________

58c. Where did you get them? _______________________________________

58d. Are there any other people who helped you make these improvements?
No ___ Yes ____ Who? ______________________________________
Kind of repayment ______________________________

58e. Did you borrow money to improve this house? No ____ Yes ____

If yes, how much? _______________ From whom? ___________________

58f. Did you help others improve their houses? No ___ Yes ___ If yes, how many? ____

58g. Do you do community work? No ___ Yes ___ If yes, what kind? ______________

59. What repairs need to be carried out on this house? _____________________

60. How much money do you and your family spend on living in this house each month?

For rent _____ kwacha per month
For electricity _____ kwacha per month
For water _____ kwacha per month
For other municipal services _____ kwacha per month
For transport _____ kwacha per month
All together _____ kwacha per month

61. Do you have anybody in this house who pays rent to you? No ___ Yes ___

If yes,

Age of Renter	Sex	Occupation	Amount of Rent

62. Not included in the money that you and your wife earn per month, are there any other people in this house who bring in extra money for food and other things needed in the house? Do not include the rent which you have just mentioned.

No _____ Yes _____ How much per month? __________ kwacha per month

63. How do you get to work? ______________________________

64. Do you do any gainful employment in your house? No ___ Yes ___

If yes, what type? ______________________________

65. How did you hear of the place where you live now? ______________

66. Are you currently on the waiting list for a municipal council house in this town? No ___ Yes ___

67. I have some questions to ask you about the things you own. (List to be established in the field)

68. Have you lived anyplace outside this city for more than one year?
No ___ Yes ___ What was the last place you stayed before you came to this city? Was it a rural area, mission, boma or town? ______________

69. In what Zambian district or in what country was this place?

Foreign country ______________ Zambian district ______________

70. During the last 12 months, have you suffered from things such as being robbed, or being beaten, or other crimes of this nature in this settlement?
No ________ Yes __________

71a. (To be asked about wife) What kind of full-time work is she doing now?
1. No job ___
2. Subsistence farming ___
3. Cash-crop farming ___
4. Self-employed ___
(How many people work for her including members of her family?) _____
5. Other work (type of work) ______________
(job title) ______________
(employer) ______________

71b. Could you tell me specifically what kind of work she is doing where she is working now? (If she sells, find out what she sells) ______________

71c. Where is her work located? ______________________________

72. When you think about all the jobs you have done, including farming, what would you say was your first full-time job--that is, when you went to work in the morning and came back at evening? ______________________

73. What was the first full-time job you did for which you received money?
____

74. What kind of job were you doing in 1964, at the time of Independence?
____

75. What kind of work were you doing in 1968--five years ago?
____

75a. In what year did you start that job? ______

75b. How much money were you earning on this job each month? ______

75c. Was this a full-time job--that is to say, you went to work in the morning and came back in the evening? No ___ Yes ___

75d. At the time you were doing this job, where were you living--in a rural area, a mission, a boma, or in town? ____________________
If town, what was its name? ________________

76. Without mentioning sickness, strikes or holidays, did you at any time go without a job in the last 12 months? No ___ Yes ___
If yes, how many weeks would you say you stayed without a job in the last 12 months? ___________

77. What is needed most in this compound that the government can spend money on; houses, jobs, schools, hospitals, or things like water, garbage collection, or roads? ____________________

78. We want to ask you about the clubs and other such groups of which you are a member. List the clubs of which you are a member.

78a. Over the past few months, have you attended some of the meetings, just a few of the meetings, or almost all of the meetings?

78b. Do you hold office in any of these clubs? What is that office?

(78)	(78a)			(78b)
Name of Club	None	A Few	Almost All	Office

79. How much have you saved in the last 12 months? ________kwacha

79b. Where did you place it? ____________________

DRAFT
RClignet/CLong:dh
August 5, 1974

NOTE REGARDING PROPOSED EVALUATION QUESTIONNAIRE

There are certain assumptions contained within the attached questionnaire. First, the effects of distinct housing strategies on economic and social behavior are unlikely to be global. They will differ as functions of the varying characteristics of the subpopulations under study. Thus, we posit that all variables mirroring the social origin of individual residents (age, sex, socio-economic profile of family of origin and of place of origin, ethnicity and religion) affect concurrently individual attainment in the opportunity structure (education, occupation, employment type, income); migratory experiences (distance, number of intermediary steps, length of exposure to the urban milieu); life style (composition of households, social networks, use of health and educational facilities); and residential experiences within the urban milieu itself (intra-urban mobility, residential constraints and choices). The overall underlying model is summarized in Figure 1 attached to the present note.

As is often the case, both the ultimate choice of a questionnaire as an instrument of evaluation research and the items to be included in the questionnaire rest upon a number of compromises between conflicting demands:

(A) Evaluation techniques should be as unobtrusive as possible. The more intense the reaction of experimental populations to the questionnaire, the less valid the measurements we will obtain. Wherever possible, it should be more appropriate to use pure observation techniques.

(B) The questionnaire should not be overly long and should not necessarily include a large number of attitudinal items. On the whole, attitudinal questions are less economical than those pertaining to behavior, and are less unobtrusive. In a cross-cultural context, it is very difficult to ascertain the relationship between reported and actual behaviors. For example, questions about type of marriage (polygyny) or about construction style may lead the respondent to answer what he thinks the interviewer likes or dislikes most to hear (depending on the rapport established).

(C) At the same time, the questionnaire should be rich enough both to allow cross validation of the information gathered and to limit the possibility of arbitrarily cutting out measurements of unexpected effects of the "treatment" used (here, housing strategies). After all, if we know off hand all the types of effects expected from the treatment, we do not need evaluation research. Thus, a questionnaire must involve a minimal amount of a "fishing expedition". By fishing expedition, we refer to the verification of hypotheses, which, although justified by the existing literature, may *prima facie* appear only tangentially relevant.

Administration of the Questionnaire

This process includes three steps:

(A) Identification of the household to be interviewed and brief interview with the first adult encountered to identify the head of the household (in our case this head is defined as the person contributing most significantly to household economic resources);

(B) Interview of the head of household;

(C) Possible interview of his wife (this may be necessitated by the marked division of labor along sex lines operating in African societies).

Content of the Questionnaire

We will summarize here the items we intend to use in the questionnaire over time.

A. Socio-economic origin of head of household and wife

1. Age and sex
2. Ethnic origin
3. Place of birth (to be coded in terms of distance from Lusaka, in terms of size and of selected socio-economic characteristics: literacy rates, percentages of wage earners in the modern sector, etc.)
4. Sibling rank order (the rules of inheritance in sibling rank order are associated not only with contrasts in the propensity to migrate toward urban centers, but also with contrasts in social mobility within urban centers)

5. Parental level of education and occupation (for the latter, two tests are possible: at the time of birth of the respondents and at the time the respondent entered the labor force, i.e. age 18, in order to test the effect of parental mobility on the respondent's own mobility)
6. Religion (this is because religious participation is the most significant form of participation in voluntary associations and as such may affect self-help)

B. Individual attainment variables in opportunity structures

1. Educational attainment: years of education and type of school attended (it is not unlikely that networks used for finding employment differ between the graduates of public and private schools)
2. Current and past occupations (kind of work, number of others employed, job classification, weeks unemployed during the last year, job held when first moved in the house, first full-time job, job held in 1964 and 1968, other activities)
3. Current wages, current additional sources of income (from additional jobs or in terms of housing allowance), income from lodgers

C. Migration variables

1. Years lived in town and age at arrival in town (the notion being that early socialization to urban norms and values may affect adaptation to the urban scene)

2. Steps involved in the migration (the notion being that the greater the number of these steps, the more "urban" the person and the easier the adaptation to the urban scene)

D. Life style

1. Composition of the household (number, age and educational status of children present and absent; number, age, sex, kinship relation and occupational status of adult dependents, plus assessment of the income they bring to the household budget)
2. Child bearing and child rearing activities (number of children ever born to the women present in the household; current fertility; number of children dead in the past--age, cause; deaths occuring among children born the past year--cause and age; assessment of the sicknesses having occured among children in the past month--note that recall becomes more difficult when we expand the period)
3. Estimation of current patterns of expenses (with regard to water, electricity and housing, transportation to and from work); estimation of domestic assets (valuables owned and/or used by respondents)
4. Estimation of health of the respondent (number of days not worked during the last month; duration and type of the symptoms incurred--note that this information should be supplemented by records of health services serving the particular areas under study)
5. Housing choices and constraints (intra-urban mobility experiences and type of settlement occupied prior to the current one--note that this is to test the assumption that individuals may repeat

over time certain residential choices; borrowing money and/or help for repairing or maintaining the house including the repairs; estimation of positive and negative aspects about the house and the neighborhood, current patterns of use of space both within and outside of the house)

6. Social networks (form, intensity and frequency of participation in voluntary associations and in the maintenance of kinship relations)

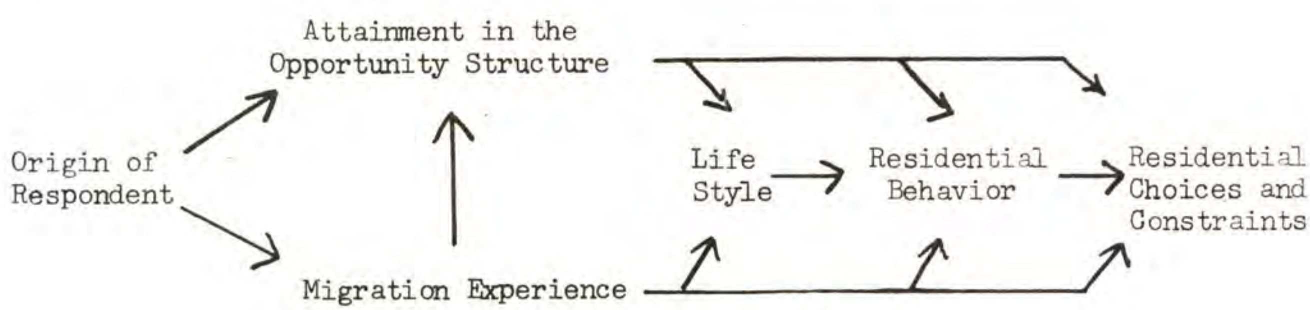
Three remarks are necessary before closing this brief description of the questionnaire to be used:

(A) Certain questions will be repeated over time to assess the reliability of the information given by the respondent;

(B) Certain information will be hopefully gathered by the use of a multi-trait approach (i.e., the use of differing techniques), in order to get at the same information: for example, in the field of health and use of medical facilities;

(C) In the case of a careful analysis of budgets and family expenses, it will be necessary to take a smaller sample and make a more systematic survey of the expenses effectively incurred by the respondent.

Figure 1. THEORETICAL MODEL OF INDIVIDUAL RESIDENTIAL BEHAVIOR



REPUBLIQUE DU SENEGAL

OFFICE DES HABITATIONS
A LOYER MODERE

DIRECTION PARCELLES ASSAINIES

SECTION D'ASSISTANCE
AUX COMMUNAUTES

FICHE DE RENSEIGNEMENTS

0.00	Code Carte		1 - 2 / 1/ 1/
0.01	N° Dossier	...(année)...mois)..(N°d'ordre)	3-4-5-6-7-8-9-I0 / / / / / / / / /
0.02	Nom de l'enquêteur	....	
0 0.03	Date de l'enquête	.... (Coder le mois en 2 chiffres et l'année en 2 chiffres) Exemple: Juin I973 =06 73	11 - I2 - I3- I4 / / / / /
0.04	Nom du Contrôleur	....	

1.01 — 15

Caractère de candidature	Candidat individuel	1	/__/
	Candidat, membre d'une association	2	

1.02 — 16

Quelle est votre date exacte de naissance ?

Enquêteur : le candidat connait la date exacte	oui	1	/__/
	non	2	

l'année de naissance .. — 17 - 18

(coder les deux derniers chiffres de l'année) .... /__/__/

1.03 — 19

Sexe	- Masculin	1	/__/
	- Féminin	2	

1.04 — 20 - 21

Ethnie	Woloff	01	
	Toucouleur	02	
	Lébou	03	
	Sérère	04	
	Peul	05	
	Diola	06	/__/__/
	Bambara	07	
	Malinké	08	
	Mandingué	09	
	Sarakolé	10	
	Sousou	11	
	Socé	12	
	Autre	13	

1.05 — 22

Religion

Sans religion	0	
Tidjane	1	
Mouride	2	
Khadria	3	
Layenne	4	/__/
Autre musulman	5	
Catholique	6	
Protestant	7	
Animiste	8	
Autre religion	9	

1.06 — 23

Quel est votre état matrimonial	Célibataire	1	
	Marié (e)	2	
	Union libre	3	
	Divorcé (e)	4	
	Veuf (ve)	5	

1.07 — 24

Si marié	- Sans objet (célibataire, veuf)	0	
Combien d'épouses avez-vous ?	- Une	1	
	- Deux	2	
	- Trois ou plus	3	

- **Enquêteur :** Si le candidat est une femme mariée demander combien d'épouses a son mari

1.08 — 25

Quel est votre niveau d'instruction ?	- n'a jamais été à l'école	0	
	- a été à l'école coranique seulement	1	
	- a été à l'école primaire mais n'a pas terminé	2	
	- a eu le C.E.P. mais n'a pas été au-delà	3	
	- a été jusqu'au B.E.P.C. ou au CAP mais n'a pas été au-delà	4	
	- a été au-delà du B.E.P.C. ou du CAP	5	
	- autre	6	
	- ne répond pas	9	

1.09 — 26

Quelle est votre connaissance de l'arabe	- ne parle pas l'arabe	1	
	- lit l'arabe mais ne l'écrit ~~et~~ ne le parle pas	2	
	- lit et écrit l'arabe mais ne le parle pas	3	
	- écrit et parle l'arabe	4	
	- parle l'arabe mais ne le lit et ne l'écrit pas	5	
	- sans réponse	9	

2.01 — 27

Avez-vous toujours habité à Dakar et agglomération ?	Oui	1	
	Non	2	

2.02

Si non
Où êtes-vous né ? .... Ville/village .... 28 /__/

Enquêteur :
pour les codes, utiliser la liste de codification n° I

Région .... 29 /__/

Pays .... 30 /__/

Sans objet (né à DKR et Agglomération) 0

2.03

Si non, où habitiez-vous avant de venir à Dakar et agglomération pour vous y installer ? Ville / Village .... 31 /__/

Enquêteur : Pour les codes, utiliser la liste de codification n° I

Région .... 32 /__/

Pays .... 33 /__/

Sans objet (né à Dakar et agglomération) 0

2.04

En quelle année êtes-vous venu à DAKAR et agglomération pour vous y installer définitivement ?

(coder les deux derniers chiffres de l'année)

Sans objet (né à et jamais quitté DAKAR et agglomération) 00 — 34 -35

Venu en .... /__/__/

Avant 1901 marque 01
Ne sait pas 99

2.05 — 36

Combien de fois avez-vous déménagé depuis que vous êtes à DAKAR ?

Enquêteur : Cette question aussi pour ceux qui sont nés à DAKAR -

.... fois
(coder en 1 chiffre) /__/

8 fois ou plus - code 8
ne répond pas - ne sait pas 9

2.06

Où était votre premier logement à DAKAR ? — 37-38-39 /__/__/__/

Enquêteur :
Utiliser la liste de codification n° II

2.07

Quel est le nom du quartier où vous habitez maintenant ? (au moment de l'enquête) — 40-41-42 /__/__/__/

Enquêteur :
Pour la réponse suivez le système de la question 2.06.

2.08

Nature du logement occupé exclu les constructions Secondaires : cuisine douche etc..)	Construction en aggloméréé	1	43
	aggloméréé plus autres	2	
	Autres matériaux	3	

2.09

Composition du logement occupé par le candidat :			44
Nombre de pièces ?	.......pièces Codez le nombre en 1 chiffre		
	9 et plus	9	
W . C . ? (soulement W.C. en aggloméré)	sans W.C.	0	45
	W.C. avec chasse d'eau	1	
	W.C. sans chasse d'eau	2	
Douche ? (seulement douche en aggloméré)	sans douche	0	46
	douche avec eau courante	1	
	douche sans eau courante	2	

3.01

Etes-vous propriètaire ou co-propriètaire d'une parcelle au Cap-Vert avec titre foncier ou permis d'occuper	- Propriétaire: Titre Foncier	1	47
	- " Permis d'occuper	2	
	- Co-Propriétaire : T.F.	3	
	- " " : P.O.	4	
	- Non	5	

3.02

Etes-vous propriécaire ou co-propriétaire d'une maison au cap-Vert avec titre foncier ou permis d'occuper	- Propriétaire : Titre Foncier	1	48
	- " Permis d'occuper	2	
	- Co-propriétaire : T.F.	3	
	- " " : P.O.	4	
	- Non	5	

3.03 | 49

Statut de propriété du logement occupé par le candidat au moment de l'enquête	Propriétaire	1	
	Co-propriétaire	2	
	Location-vente	3	
	Location-simple	4	
	Logé par l'employeur	5	
	Gardien de la concession	6	
	Logé gratuitement par parent Ou ami	7	/__/
	Logé par l'épouse ou l'époux	8	
	Autre (spécifier)	9	

3.04 | 50-51-52-53

Payez-vous un loyer			
Si oui	Sans objet (NON)	0000	
Quel est le montant De votre loyer par mois ?	.... FRANCS/MOIS (coder le montant en 4 chiffres 9999 FRS C.F.A. ou plus	...9999	/__/__/__/__/

4.01 | 54

Quelle est la source principale d'approvisionnement en eau de votre ménage ?	Robinet dans la concession exclusivement pour son ménage	1	
	Robinet dans la concession, partagé avec d'autres	2	
	Robinet dans une autre concession	3	
	une borne fontaine	4	/__/
	un édicule public	5	
	un puits	6	
	un vendeur d'eau	7	
	autre	8	

4.02 | 55

Utilisez-vous une autre source d'eau ?	Non sans objet	0	
	Robinet dans la concession exclusivement pour son ménage	1	
	Robinet dans la concession, partagé avec d'autres	2	
	Robinet dans une autre concession	3	
	une borne fontaine	4	/__/
	un édicule public	5	
	un puits	6	
	un vendeur d'eau	7	
	autre	8	

.../...

4.03

Où se trouve la principale source d eau ? — 56

Enquêteur :
estimez la distance entre la source d'eau et le logement

Sans objet (dans la concession même ou vendeur d'eau)	0	
de 0 à 10 m	1	
10 à 50 m	2	
50 à 100 m	3	
100 à 200 m	4	
200 à 300 m	5	
300 à 400 m	6	
400 à 500 m	7	
plus que 500 m	8	

4.04 — 57

Si vous avez un robinet dans la concession quand payez-vous? l'eau

sans objet (sans robinet)	0
par jour	1
par semaine	2
par mois	3
par 2 mois	4
par trimestre	5
ne paye rien	6
autre (spécifier)	7
ne sait pas ne répond pas	9

4.05 — 58-59-60-61

Si vous avez un robinet dans la concession, combien payez-vous pour l'eau ?

sans objet (sans robinet)	0000
.... frs	
inclus dans le loyer et ne connait pas le montant	9999

4.06 — 62 - 63

Combien de barriques achetez-vous par semaine chez les vendeurs d'eau

Grandes barriques ?

rien du tout	00
.......nombre par semaine (codez le nombres en deux chiffres)	
- ne sait pas, ne répond pas	99

64 - 65

Petites barriques ?

rien du tout	00
.... nombre par semaine	
- ne sait pas, ne répond pas	99

4.07				66 - 67
		sang objet................	00	
	Combien payez-vous la barrique ?	grande barrique........ codez le montant en 2 chiffres		/__/__/
				68 - 69
		sans objet.............	00	
		petite barrique .... Codez le montant en 2 chiffres		/__/__/
5.01				70
	Avez-vous l'électricité ?	Oui	1	
		Non	2	/__/
5.02				71
	Quand payez-vous l'éléctricité ?	sans objet (pas d'électricité)	0	
		par jour	1	
		par semaine	2	
		par mois	3	
		Par 2 mois	4	/__/
		par trimestre	5	
		ne paye pas	6	
		autre (spécifier)	7	
		ne sait pas/ne répond pas	9	
5.03				72-73-74-75
	Combienpayez-vous ?	rien - sans objet	0000	
		.... francs....		
		inclus dans le loyer et ne connait pas le montant	9999	/__/__/__/__/
5.04				76
	Si vous n'avez pas l'électricité, comment vous éclairez-vous?	sans objet	0	/__/
		bougie	1	
		pétrole	2	
		autre	3	
		combinaison	4	

DEUXIEME CARTE

			1 - 2
Code carte			/_1_/_2_/
N° dossier (reprenez code 3 à IO de 0.01)			3-4-5-6-7-8-9-10
			/__/__/__/__/__/__/__/__/

6.01

Disposez-vous d'un article de la liste suivante ?	une radio	oui	I	11
		non	0	
	un réfrigirateur	oui	I	12
		non	0	
enquêteur :	un vélomoteur/motocyclette	oui	I	13
marquer par article		non	0	
Oui = 1 ou non = 0 dans la case correspondante	un scooter/moteur	oui	I	14
ne répond pas		non	0	
coder 9	une voiture	oui	I	15
		non	0	

6.02

Dernière profession du père (description) ....

Décrire aussi l'employeur ....

....

16 - 17

Catégorie professionnelle du père
pour les codes voir liste de codification n° III

7.01

Occupation du Candidat : — Description :

enquêteur : donnez une description précise du

- genre de travail :

- Nom et adresse de l'employeur :

- Lieu du travail : (avec nom du quartier ou zône)

7.02 — I8

Caractère d'occupation ?

Salarié dans une convention	1	
Salarié sans convention	2	
Salarié, mais inconnu si avec ou sans convention	3	/__/
A propre compte	4	
Sans travail	5	
Retraité	6	
Autre	7	

Enquêteur :
Les retraités qui exercent une profession actuellement doivent être codés retraités .

7.03 — I9 - 20

Catégorie professionnelle /__/__/

Pour les codes voir liste de codification n°III (Catégorie socio-professionnelle) .

7.04 — 2I - 22

Depuis combien de temps exercez-vous votre présente profession?
(Coder les années révolues)

....	ans	/__/__/
moins d'un an	00	

7.05 — 23

Avez-vous jamais exercé un autre métier ?

Oui	1	
Non	2	/__/
Ne répond pas	9	

7.06 — 24

Nature de l'emploi actuel ?

Sans travail	0	
A son compte	1	
Salarié permanent	2	/__/
Salarié temporaire	3	
Salarié journalier	4	

7.07

25

Sur quelle base gagnez-vous votre revenu ?	ne gagne rien............	0
	par jour.................	1
	par semaine..............	2
	par quinzaine............	3
	par mois.................	4
	par trimestre............	5
	indéterminé (à son compte)	6
	autre....................	7

7.08

26-27-28-29-30

Sur cette base, quel est votre revenu ?
enquêteur :
codez seulement le montant

Pour tous salariés, indiquez le montant et la base
....
....

sans objet............ 00000

Pour non-salariés

Si le candidat ne peut pas donner le revenu exact (bulletin de salaire) demandez-lui dans quelle catégorie son revenu tombe par mois et notez le montant maximum de cette catégorie.

exemple : entre 15.000 et 20.000
code : 20.000

Catégories de revenu mensuel

0 - 5.000	
5.000 - 10.000	
10.000 - 15.000	
15.000 - 20.000	
20.000 - 25.000	
25.000 - 30.000	
30.000 - 35.000	
35.000 - 40.000	
40.000 - 45.000	
45.000 - 50.000	
plus que - 50.000	50.000
ne sait pas/ ne répond pas	99.999

7.09

31

Avez-vous encore une autre profession, et recevez-vous un revenu de cette profession ?	sans objet (chômeur)	0
	non	1
	oui, sans revenu	2
	oui, avec revenu	3

7.10

Si oui : laquelle ?

Description de la professsion.....
....
....
....
....

7.11 32 - 33

Catégorie professionnelle /_/_/

enquêteur :

Si plusieurs, codez seulement le plus important;

Pour les codes voir liste de codification n° III (catégorie socio-professionnelle)

7.12 34

Avez-vous d'autres sources de revenu ?	- oui	1	/_/
	- non	2	
	- ne répond pas	9	

7.13

Si oui lesquelles ? /..................................

(quelles sources) ....

(description) ....

....

....

....

....

....

7.14

Si oui, quel est le total par mois de ces autres revenus inclus les revenus des autres professions (voir question 7.08)

sans objet 00000 35-36-37-38-39

.... F/mois /_/_/_/_/_/

(coder le montant par mois en 5 chiffres)

marquer derrière chaque source de question 7.13 le revenu, additionner le et transférer le, Coder le total dans la question 7.14

catégorie de revenus mensuels

0	-	5 000
5 000	-	10 000
10 000	-	15 000
15 000	-	20 000
20 000	-	25 000
25 000	-	30 000
30 000	-	35 000
35 000	-	40 000
40 000	-	45 000
45 000	-	50 000
plus que		50 000

ne sait pas/ ne répond pas 99999

7.15

40-41

Quel moyen de transport utilisez-vous le plus souvent pour aller au travail (une seule possibilité) ?

- sans objet (ceux qui travaillent dans la concession ou qui sont sans emploi)........ 00
- à pied........................ 01
- à bicyclette/motocyclette/ scooter.................... 02
- voiture personnelle.......... 03
- association d'utilisateurs de voiture...................... 04
- car rapide.................... 05
- autobus....................... 06
- taxi.......................... 07
- taxi arrangement............. 08
- transport organisé par l'employeur..................... 09
- autres (spécifier)........... 10

7.16

42 - 43 - 44

Quel est votre présent lieu de travail ? (Au moment de l'enquête)

- sans objet............... 000

répéter le code de la liste de codification n° II

....

....

ne répond pas/ne sait pas 999

7.17

45

Avez-vous connu des périodes sans travail ?

Non......................... 1

Si oui combien de temps la dernière fois ?

moins d'1 mois.............. 2
entre un et trois mois....... 3
entre trois et six mois...... 4
plus de six mois............. 5
ne sait pas/ne répond pas.... 9

7.18

46 - 47

Si salarié :

Quelle est votre convention collective et votre catégorie

Convention ;................

....

Enquêteur :

Catégorie.:................ 48 - 49

ne pas coder

demander de montrer le bulletin de salaire

7.19 Si salarié : 50

Depuis combien de temps êtes-vous dans votre catégorie actuelle ?	sans objet (chômeur, à son compte	0	
	moins de six mois	1	
	entre six mois et un an	2	
	entre un et deux ans	3	
	plus de deux ans	4	
	ne sait pas, sans réponse	9	

7.20 51-52

Si salarié

	sans objet (chômeur, à son compte)	00
Depuis quand êtes-vous chez votre présent employeur ?	ne sait pas, sans réponse	99

Enquêteur : coder les deux derniers chiffres de l'année.

7;21 53

Si à votre propre compte

Exercez-vous votre métier chez vous ? (dans votre concession)	sans objet	0
	oui	1
	non	2

7.22 54

Si à votre propre compte

avez-vous une construction spécifique, utilisée pour votre métier ?	sans objet	0
	oui	1
	non	2

(ex : boutique, magasin, bureau, atelier, etc.)

7.23

55

Si à votre compte

Avez-vous une machine ou moteur pour exécuter votre travail ?	- sans objet	0	
	- oui	1	
	- non	2	
	- ne répond pas	9	

7.24

Si oui lesquelles ?
(description)

....
....
....
....
....
....
....

7.25

56 - 57

Si à votre compte

Combien d'employés (ou d'ouvriers) avez-vous ?	- sans objet	00	
	- ...... nbre d'employés		
enquêteur : les apprentis ou élèves ne sont pas employés	- n'a pas d'employés	99	

7.26

58 à 59

Si à votre compte

Combien d'apprentis avez-vous ?	- sans objet	00	
	- ..... nbre d'apprentis		
	- n'a pas d'apprentis	99	

7.27

60

Si à votre compte

En cas d'entreprise, (atelier, commerce, étalage) avez-vous l'intention de transférer l'entreprise aux P.A. ?	- sans objet	0	
	- oui	1	
	- non	2	
	- ne sait pas	9	

COMPOSITION DU MENAGE

N°	NOM	Lien de parenté	Sexe	Age	Occupation	Ira aux P.A. oui ou non
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

Enquêteur : Remplissez cette feuille en donnant les renseignements demandés pour toutes les personnes présentes dans le ménage au moment de l'enquête. En cas d'un enfant écolier écrire dans la colonne occupation qu'il est élève.
Ne remplissez pas les questions 10 - allez directement à la question 11.

COMPOSITION DU MENAGE

N°	NOM	Lien de parenté	Sexe	Age	Occupation	Ira aux P.A. oui ou non
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

Enquêteur : Remplissez cette feuille en donnant les renseignements demandés pour toutes les personnes présentes dans le ménage au moment de l'enquête. En cas d'un enfant écolier écrire dans la colonne occupation qu'il est élève.

Ne remplissez pas les questions 10 - allez directement à la question 11.

9.0I 6I

Nombre d'épouses habitant avec le candidat
.... nombre d'épouses
- sans objet ou aucune épouse 0
- 9 et plus 9 / /

9.02 62

Nombre d'épouses n'habitant pas avec le candidat ?
.... nombre d'épouses
- sans objet ou aucune épouse 0
- 9 et plus 9 / /

9.03 63

Nombre d'épouses allant avec candidat aux P.A.?
.... nombre d'épouses
- sans objet ou aucune épouse 0 / /
- 9 et plus 9

9.04 64 - 65

Première femme (monogame ou polygame)
- âge / / /
- sans objet 00

- nombre d'enfants du candidat: 66 - 67
- sans objet ou pas d'enfant 00 / / /

- Occupation 68 - 69

Enquêteur : Pour le code voir liste de codification n°III (Catégorie socio-professionnelle) / / /

- Revenu(indiquer le montant et la base) 70-7I-72-73-74
- ....
- sans objet 00000
- sans réponse 99999 / / / / / /
- pour non salariés

Si la personne ne peut pas donner le revenu exact (bulletin de salaire)demandez-lui dans quelle catégorie son revenu tombe par mois et notez le montant maximum de cette catégorie. Exemple: entre I5.000 et 20.000 - code : 20.000 .

Catégories de revenu mensuel
- 0 - 5.000
- 5.000 - I0.000
- I0.000 - I5.000
- I5.000 - 20.000
- 20.000 - 25.000
- 25.000 - 30.000
- 30.000 - 35.000
- 35.000 - 40.000
- 40.000 - 45.000
- 45.000 - 50.000

plus de 50.000 ....50.000

T R O I S I E M E   C A R T E — 1 - 2

C O D E   C A R T E — / / /

N° Dossier — 3-4-5-6-7-8-9-10

(reprenez code 3 à 10 de 0.01 — / / / / / / / / /

9.05

Deuxième femme (polygame) — 11 - 12

- âge — / / /
- sans objet — 00
- nombre d'enfants du candidat : — 13 - 14

  sans objet ou pas d'enfant — 00 — / / /

Pour les codes voir liste de codification n° III (catégorie socio-professionnelle)

- Occupation .... 15 - 16 — / /

- Revenu .... 17-18-19-20-21 — / / / / / /

Enquêteur :

même code que pour le revenu de la première épouse.

9.06 22-23

Nombre total d'enfants de moins de 15 ans du candidat /__/__/

- sans objet ou pas d'enfant 00

....

9.07 24-25

Nombre total d'enfants dans le ménage à la charge du candidat /__/__/

- aucun 00

....

9.08 26-27

Nombre total d'enfants dans le ménage ayant entre 6 et 14 ans. /__/__/

....

9.09 28-29

Nombre total d'enfants dans ménage de 6 à 14 ans allant à l'école française /__/__/

....

9.10 30-31

Nombre total d'enfants du candidat de 6 à 14 ans n'habitant pas avec lui allant à l'école française . /__/__/

....

9.11 32-33

Nombre total de personnes dans le ménage /__/__/

....

9.12 34-35

Nombre total de personnes accompagnant Chef de ménage aux P.A. (le candidat exclu)

....

- sans objet (pas de personne) .... 00 /__/__/
- Ne sais pas (ne répond pas)...... 99

Nombre total d'adultes <u>masculins</u> (15 ans et plus) accompagnant candidat aux P.A. et exerçant couramment une occupation dans les catégories suivantes :

Secteur Public	01		36
	02		37
	03		38
Secteur Privé moderne	04		39
	05		40
	06		41
	07		42
	08		43
Secteur Traditionnel	09		44
	10		45
	11		46
Services Militaires et Agents en tenue	12		47
Autres	13	Ménagères	48
	14	Autres	49
[illegible]			
Ne répo[illegible]/Ne [illegible]	15		50

9.14

Nombre total d'adultes <u>féminins</u> (15 ans et plus) Accompagnant candidat aux P.A. et exerçant couramment une occupation dans .... ?

51 □ 52 □ 53 □ 54 □ 55 □ 56 □ 57 □ 58 □ 59 □ 60 □ 61 □ 62 □ 63 □ 64 □ 65 □.

<u>Enquêteur</u>

Même code pour la question précédente

10.01

Etes-vous membre d'une association ?
Si Oui laquelle (lesquelles) ?
Description de l'association (s) ....
....
....
....

Enquêteur :
Une association à l'exception
de l'association des acquéreurs
de Parcelles Assainies

10.02

Quel est le type d'association à laquelle ou
les-quelles vous appartenez ?
Cotisez-vous dans cette association ?

			66
- Professionnelle	non 1	1	
	oui non payant	2	
	oui payant	3	
			67
- Religieuse	non	1	
	oui non payant	2	
	oui payant	3	
			68
- Ethnique	non	1	
	oui non payant	2	
	oui payant	3	
			69
- Politique	non	1	
	oui non payant	2	
	oui payant	3	
			70
- Entr'aide	non	1	
	oui non payant	2	
	oui payant	3	
			71
- Culturelle	non	1	
	oui non payant	2	
	oui payant	3	
			72
- Autre	non	1	
	oui non payant	2	
	oui payant	3	

10.03. **73**

A laquelle de ces associations payez-vous les cotisations les plus élevées ?

- sans objet 0
- professionnelle 1
- Religieuse 2
- Ethnique 3
- Politique 4
- Entr'aide 5
- Culturelle 6
- autres 7

Enquêteur : si plus d'une association, faire choisir la plus importante par le candidat

---

10.04 **74**

Quand payez-vous cette cotisation ?

- sans objet 0
- par semaine 1
- par mois 2
- par trimestre 3
- par année 4
- cela dépend 5
- autre (spécifier) 6

10.05

A combien s'élève cette cotisation ?

.... Frs CFA par 75-76-77-78-79

Enquêteur : Codez le montant en 5 chiffres / / / / / /

sans objet 0000

../...

10.06 — 11

Depuis combien de temps êtes-vous dans cette association ?

- sans objet 0
- I an 1
- 1 à 5 ans 2
- 5 à 10 ans 3
- plus de 10 ans 4

/ /

10.07 — 12

Quelle est votre fonction dans cette association ?

- sans objet 0
- président 1
- vice-président 2
- secrétaire 3
- trésorier 4
- membre du bureau ou du Conseil d'Administration 5
- membre simple 6
- autre

/ /

10.08 — 13

Si vous avez une fonction depuis combienù de temps ?

- sans objet 0
- moins d'un an 1
- 1 à 5 ans 2
- 5 à 10 ans 3
- plus de 10 ans 4

/ /

TROISIEME CARTE

CODE CARTE — 1 - 2 / 1 / 3 /

N° Dossier
(reprenez code 3 à 10 de 0,01) / / / / / / / / /

10.09 — 14-15-16

Si vous êtes candidat au titre d'une association à quelle association appartenez-vous ?

____
____
____

/ / / /

Enquêteur ne pas coder

10.10 17.

Si vous êtes candidat au titre d'une association

Quel est le type d'association à laquelle vous appartenez ?

- sans objet (candidat individuel) 0
- professionnelle 1
- religieuse 2
- ethnique 3
- politique 4
- entr'aide 5
- culturelle 6
- autres (spécifier) 7

10.11 18

Cette association a-t-elle été créée spécifiquement pour l'obtention des Parcelles Assainies, ou existait-elle déjà avant ?

- sans objet (cand. indivi.) 0
- créée pour le projet P.A. 1
- déjà existante 2

10.12 19

Depuis combien de temps appartenez-vous à cette association ?

- sans objet (candidat individuel) 0
- moins d'un an 1
- 1 à 5 ans 2
- 5 à 10 ans 3
- plus de 10 ans 4
- ne sait pas 9

10.13 20

Quelle est votre fonction dans cette association ?

- Sans objet (candidat individuel) 0
- Président 1
- vice président 2
- Secrétaire 3
- Trésorier 4
- membre du bureau ou du cons. d'ad. 5
- Membre Simple 6

10.14 21

Si vous avez une fonction, depuis combien de temps avez vous cette fonction

- sans objet (candidat individuel ou membre sans fonction) 0
- moins d'un an 1
- 1 à 5 ans 2
- 5 à 10 ans 3
- plus de 10 ans 4
- ne sait pas / ne répond pas 9

10.15 | 22

Payez-vous une cotisation à cette association
et quand ?

- sans objet (candidat individuel)		0
- non		1
- si oui :	par semaine	2
	par mois	3
	par trimestre	4
	par année	5
	cela dépend	6
	autre (spécifier)	7

/ /

Enquêteur :
Uniquement la cotisation régulière
et la dernière fixée.

10.16 | 23-24-25-26-27

A combien s'élève cette cotisation ?

.... Frs.CFA par ....

Enquêteur : codez le montant en 5 chiffres / / / / / /

sans objet .... CCCCO

En dehors des gens qui habitent chez vous, avez-vous de la famille qui habite DAKAR et agglomération ?

Si oui - qui ?

Enquêteur (retenir seulement les deux premières personnes mentionnées) les plus importantes pour lui.

1ère personne

a - lieu de parenté

- sans objet	0	27
- père ou mère	1	
- frère ou soeur	2	
- enfant	3	
- autre	4	

b - lieu derésidence

		28-29-30
- sans objet	00	
voir liste de codification n° II		

c - date de la dernière visite du candidat à cette personne

- sans objet	0	
- il y a moins d'une semaine environ	1	31
- il y a moins d'un mois	2	
- il y a moins de 3 mois	3	
- il y a moins de 6 mois	4	
- il y a moins d'un an	5	
- il y a plus d'un an	6	
- sans réponse, ne sait pas	9	

.../...

d - date de la dernière visite de cette personne au candidat - 32

- sans objet 0
- il y a moins d'une semaine environ 1
- il y a moins d'un mois 2
- il y a moins de 3 mois 3 / /
- il y a moins de 6 mois 4
- il y a moins d'un an 5
- il y a plus d'un an 6
- sans réponse / ne sait pas 9

2ème personne 33

a - lien de parenté

- sans objet 0
- père ou mère 1
- frère ou soeur 2 / /
- enfant 3
- autre 4

b - lieu de résidence 34 - 35 - 36

- sans objet 00
  voir liste de codification n° II................. / / / /

c - date de la dernière visite du candidat à cette personne 37

- sans objet 0
- il y a moins d'une semaine environ 1
- il y a moins d'un mois 2
- il y a moins de 3 mois 3 / /
- il y a moins de 6 mois 4
- il y a moins d'un an 5
- il y a plus d'un an 6
- sans réponse - ne sait pas 9

d - date de la dernière visite de cette personne au candidat 38

- sans objet 0
- il y a moins d'une semaine environ 1
- il y a moins d'un mois 2
- il y a moins de 3 mois 3 / /
- il y a moins de 6 mois 4
- il y a moins d'un an 5
- il y a plus d'un an 6
- sans réponse/ne sait pas 9

../...

12.

Comment avez-vous entendu parler du projet P.A. ? 38

- par famille	1	39
- par amis	2	
- par collègues de travail	3	
- par syndicat	4	
- par journal	5	
- par radio	6	
- par voisins	7	
- par association	8	
- autre - (spécifier) ____________	9	

13.01

Avez-vous un compte chèque postal 40

- oui 1
- non 2

13.02

Avez-vous un compte bancaire ? 41

- oui 1
- non 2

13.03

Sachant qu'une parcelle sans robinet coûte approximativement 80.000 FRS et une parcelle avec robinet approximativement 130.000 FRS, 42

voulez-vous une parcelle avec robinet ?

- oui 1
- non 2
- ne sait pas 9

14.01

Décision prise sur la sélection 43

- approuvée 1
- rejetée 2
- sans décision 3

14.02

Motif de la décision

14.03

Identification de la parcelle attribuée 44-45-46-47-48

OBSERVATIONS : (l'enquêteur note ici ses observations, ses remarques et ses impressions)

DRAFT
Carroll Long:dh
July 15, 1974

PRELIMINARY RESEARCH DESIGN FOR THE EVALUATION OF THE EL SALVADOR SITES AND SERVICES PROJECT

I. Introduction

1. The purpose of this document is to provide an initial research design for the evaluation of the El Salvador Sites and Services Project. It does not represent a finalization of opinion but an initial discussion of the goals, hypotheses and methodologies that appear appropriate to the project. Final decisions regarding the components of the research design, as well as the position of the evaluation team within the local institutional framework should be made after consultations among the Fundacion Salvadrena de Desarrollo y Vivienda Minima (FSVM), the Bank, and other participating agencies.

II. Objectives of Evaluation

2. This document is deliberately simple in its approach to the evaluation of the El Salvador project. It is based on the assumption that evaluation should not be disruptive of project execution, but must serve to provide policy makers with information upon which decisions regarding future programs can be made.

3. The specific goals of the El Salvador project are contained within the Appraisal Report. Evaluation will seek to determine whether these goals are being met in the project over time, and whether project components (both physical and institutional) have the intended social and economic impacts on project participants and on related institutions. If they do

not, evaluation should attempt to provide explanations for the unexpected effects. It should also test assumptions concerning the project's goals, and thus provide the basis for recommendations on future project design and policy for the Government, the Foundation, and the Bank.

4. El Salvador appears to be a particularly appropriate focus for an in-depth evaluation. Its unique blend of private and public sector resources both within the project area and within the country's housing sector, and its mixture of services levels, could provide useful guidelines for the preparation of sites and services projects in other areas. The interest the Foundation has demonstrated in analyzing its own past experiences and the institutional base offered within the Foundation for future studies of a similar nature strengthen the case for undertaking such an evaluation.

5. In order to keep the approach to evaluation simple and nondisruptive, a limited number of questions should be addressed in the evaluation effort. Only questions which have not been answered in the past, which are capable of being answered in the available time frame, and which are likely to yield valid responses that can be adequately measured should be included. The evaluation proposed for the El Salvador project will attempt to test the relationship between the goals (the dependent variables in the analysis) and the means of achieving those goals (the independent variables), taking into account in each case individual and neighborhood attributes (the intervening variables). The goals, the means, and the contextual attributes to be considered in the El Salvador case are discussed below.

III. Methodology

6. Evaluation in El Salvador will be carried out in three phases, the first before actual occupancy begins, the second during project occupancy, and the third after the building materials loans have been distributed. The exact timing of the phases will therefore depend on the progress of project execution. Phasing the evaluation over a period of years including pre- and post-project execution should provide the most valid information and analysis possible for the evaluation. Similarly, interviewing the same households at least three times should serve to provide information which is based on the true relationship between the various factors; limiting to two the number of interviews might improperly suggest a linear relationship that is not actually present.

7. The first phase of the evaluation will be known as the baseline survey. It should serve to provide information on project participants and non-participants before the project is implemented, or before occupancy has taken place. A census of all project applicants will be provided on the normal preselection form. The information thus provided should serve to provide an analysis of the universe from which random samples may be chosen before they are accepted or rejected for the project. The random samples so chosen will then fall into both accepted and rejected applicants for the project; they should thus provide the samples which may be followed in both project and non-project ("control") areas over time. If possible, the random samples should be first stratified according to income and age. A more extensive questionnaire which seeks to ascertain information for

purposes of the evaluation will then be administered to each of the households that are chosen as random samples.

8. Time and budget constraints do not permit the questionnaire to be administered to all households in both areas. It is for this reason that the questionnaire is to be administered to only selected samples. It is expected at this point that approximately 2000 interviews will be administered to heads of households. In the case of a change of plot occupancy, the new person with responsibility for payment would become the primary respondent and a baseline interview would be administered to the new household. The initial respondent previously in the sample would be traced if possible and re-interviewed on the same schedule even though no longer living at the initial location. Following individuals permits answers to questions regarding the contribution of the project to socio-economic mobility, while following plots provides information on physical investment and improvement over time.

9. As mentioned above, the questionnaire will be administered a second time to the chosen households in each control and project area at some point after they have moved onto the project site, and a third time after the building materials loans have been disbursed. Information regarding questions which may not be answered by household interviews may be gathered through special studies. At the same time as the interviews are administered, for example, information regarding housing conditions will be gathered. The information recorded for the special studies will be gathered whenever possible through the use of previously existing information from the project records, official statistical sources, and previous research undertaken by

other groups, especially that carried out by the evaluation teams at the Universidad Centroamericana Jose Simeon Canas. These sources should provide information upon which to test hypotheses concerning the evaluation effort and in cross-validating the information gathered through the household interviews. The precise content of the special studies will be agreed upon by the Foundation and the Bank before field work begins. Standardized indicators or measures to be used in the studies and interviews will also be agreed before that time.

IV. Information Requirements

10. The Bank evaluation seeks to determine whether the objectives mentioned in the Appraisal Report are being met over time, and whether project components (both physical and institutional) yield the intended social and economic impacts on project participants and on associated institutions. In order to do so, the relationship between the objectives and the means chosen must be analyzed.

11. The means through which the objectives are to be reached in the El Salvador project involve material, human, and financial ones. They include, inter alia, the following:

(a) The provision of urbanized building lots incorporating two service levels;

(b) Self-help and mutual-help housing construction.

(c) Provision of credit in the form of construction materials loans;

(d) Provision of community facilities, including health clinics, community centers, sports fields, markets and schools;

(e) Programs of technical assistance and credit for small scale industries.

12. Information relating to each of the objectives may be gathered as follows:

Objective 1: Improvement in the living conditions and community services for 8,000 families.

(a) Components of Analysis:

Changes in type of dwelling unit, size of units, and area of surrounding land. Increases in levels of school enrollment of project participants, in student/teacher ratios, and drop-out rates. Levels of mortality and nature and amount of illness within a specified time frame; use of clinics for preventive and curative purposes. Occupancy of previously utilized land from which project participants came.

(b) Measurement:

Records kept by the Ministry of Education or other official statistics will be cross-validated within the project and control areas by the questionnaire and by the records of the executing agency. The questionnaire should provide information on the number of days household members were ill and for what reasons within the past month. This will necessitate more frequent interviewing for this particular question than for others.

Information could also be gained from the questionnaire on the usual place of treatment for illness. Clinics themselves should provide additional information on types of illness and number of patients from certain geographical areas. Records of the executing agency should provide information on the use of all community facilities provided within the project area; special surveys will have to be made of the use of other community facilities in other areas of the cities.

Objective 2: To demonstrate a successful alternative shelter solution to conventional fully-built Government housing projects.

(a) Components of Analysis:

Interviews at the household levels should yield information regarding the satisfaction of the project participants with housing provided through the project in comparison with other solutions available within the cities. Analysis of rates of turnover and of reasons for such turnover should yield additional information as an indirect measure of satisfaction.

(b) Measurement:

The questionnaire should provide information on the levels of satisfaction over time for the households in both project and control areas. Project records should indicate the rate of and reasons for turnover and default of payments.

Objective 3: Expansion of employment opportunities through the organization of small commercial ventures and labor-intensive construction methods.

(a) Components of Analysis:

Use of small industrial sites for employment, participation in cooperative ventures, and creation of new enterprises due to the increased demand for building materials and increased participation in self-help and mutual help. The question of whether the growth of such activities is incremental or substitutional will have to be addressed, i.e. whether they represent a net addition to past stock of such enterprises, or only a relocation or new ownership of the relevant activities.

(b) Measurement:

Some of these aspects can be dealt with through the questionnaire, others through special studies of the cooperative ventures and the use of plots for employment-creating activities. The two may be used together for cross-validation where deemed appropriate.

Objective 4: To cause changes in the patterns of household expenditures due to increased capital formation and the inclusion of particular project components such as waterpipes.

(a) Components of Analysis:

Changes in household income, in consumption patterns, and in savings and investment patterns. Information should be gathered on basic household consumption, employment and other activities (educational, etc.) of household members, and the use of project components such as waterpipes, etc.

(b) Measurement:

Answers to these questions will be determined through the questionnaire (for household composition, activities, and savings) and through participant observation or more frequent interviewing (for consumption patterns). The use of project components such as waterpipes and transportation routes will have to be determined in order to provide information of questions such as the increase in water consumption and types of transportation due to the inclusion of related infrastructure in the project.

Government and other records will be compared with the questionnaire information to determine the relationship between population characteristics and the use of such facilities.

Objective 5: Improvement of Government planning for low-income settlements.

(a) Components of Analysis:

Changes in the direction of major Government institutions and budgeting in reaching the lower-income populations within the cities. Information should be gathered on the effects of the project on tax structures, on municipal and governmental budgeting, and on changes in the decision-making processes.

(b) Measurement:

Special studies will be necessary in order to determine variations in resources and expenditures at various governmental levels, the degree of any changes in administrative structure and processes that result, and the reasons for such changes.

13. It will be necessary to determine whether the relationship between the means and the goals are affected by certain cultural, demographic or socio-economic characteristics of the population. Individual attributes (matrimonial status, sex, age, education, income level, employment history and migratory history) and neighborhood attributes will have to be taken into account in determining that relationship.

14. Special studies regarding the use of community facilities, and the wider spatial and economic effects (such as those involving transportation and land use patterns) might be desirable. The content of these studies should be decided with the Government and FSVM. Possible studies regarding the reasons for defaults in payments could also be included.

V. Research Team

15. As stated in the Terms of Reference, a locally-based research team would be desirable. The director of the evaluation team should

participate fully in the final design of the evaluation study, and in the hiring of interviewers and auxiliary personnel to aid in undertaking the evaluation. The team should, if possible, be associated with a local institute. This would permit the phasing of their work to coordinate more easily with the progress of the project, and the expansion of their work force to allow for times when a heavier participation in the evaluation is required. It is hoped that the same research team may be retained to undertake all three phases of the evaluation. If this is not possible, however, the institutional affiliation should aid in permitting a continuity of activity over the years. The institutional affiliation as well as the hiring of the principal researcher should be agreed upon by the Bank and the Government. Professor Remi Clignet, Bank Consultant, will assist the research team in the methodological aspects of the evaluation.

TERMS OF REFERENCE FOR THE MONITORING AND EVALUATION OF URBAN DEVELOPMENT PROJECTS INVOLVING SHELTER

Introduction

This document outlines procedures for the establishment of monitoring and evaluation systems to be attached to Bank-funded projects involving shelter components. It is based on the assumption that project appraisals and project completion reports are necessary but not sufficient to explain the progress and effects of projects in relatively new sectors of activity such as urban development.

Guidelines are provided in this document for the establishment of:
a) a monitoring system for all projects involving shelter. Monitoring includes procedures for increased reporting to the executing agency and to the Bank for the purpose of discovering problems and seeking their early resolution.

b) an evaluation system for selected projects. Evaluation provides an analysis of the effects of the project on the target population both during and after project execution. It also tests assumptions concerning the objectives of the project. The conclusions drawn from evaluation efforts should serve to form bases for both Government and Bank recommendations on future project design and policy.

These terms of reference should serve to form a basis from which research designs for the monitoring and evaluation of individual projects will be made. The discussion of specific hypotheses to be tested and methodologies to be employed remains general in this document, but would be specified in research designs prepared for individual projects.

The following subjects are discussed in this document:

I. Monitoring

A. Definition

Monitoring is a recording and analysis of information for feedback into project implementation. It serves as a management tool for control of project execution by focusing attention on critical aspects of project development. It thus provides continuous information for the executing agency during the execution of projects, and may serve to suggest possible improvements and/or savings in their implementation. In the case of all site and services and upgrading projects, monitoring is to be carried out by the executing agency during the period of disbursement. The cost of administering monitoring should be included in the project loan; the information gathered is to be reported to Government and to the Bank Group unit concerned with the individual project.

B. Components of Monitoring

Monitoring of all site and services and upgrading projects should consist of the following components:

a) A baseline survey of those households chosen to be within the project areas; 1/

b) Periodic reports on the progress of all project components and services.

These essential components are described below. Others may be added if and when deemed necessary by the Government, the executing agency or the Bank.

Baseline Survey

The purpose of the baseline survey is to indicate whether or not the target population has been included within the project area, and to provide information on the particular characteristics of the population chosen. It should also be useful in forming the basis from which any later studies may be made of the population within the project area by Government or by local institutions undertaking research.

The baseline survey will consist of questionnaires administered to households before actual upgrading or plot occupancy begins. The normal plot application form may be used as the questionnaire in the case of site

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1/ The population chosen to be within the project area should be synonymous with those that actually occupy the lots. Checks may be necessary to insure that the households interviewed are indeed the same as those on the plots after the project begins.

and services and overspill[1] areas. Because it will be impossible to interview all families in the areas to be upgraded, random samples of households to which the questionnaire is to be administered should be drawn from information currently available on these areas. Information on such areas may be provided through the official census of the city, through past surveys of the areas, or, if necessary, through other means.[2]

Where there is an evaluation team attached to a project, that team may aid in carrying out the baseline surveys and/or in tabulating the information. The role of the evaluation team in this respect will be established before field work begins for individual projects through agreements reached among the Government, the Bank, and the executing agency. Where there is no evaluation team attached, a technical assistant may be employed to undertake the surveys. Agreements on this point should be reached among the above-mentioned parties before field work begins.

The questionnaire used for the baseline survey should contain a basic core of questions which will be asked of representative populations in all Bank-funded project areas in order to allow later comparisons across projects concerning the response of various areas and groups to project requirements and conditions.

Periodic Reports on the Provision and Use of Essential Infrastructure, Services, and Other Project Components

Periodic reports on project development should serve as information tools to executing agencies as well as to the Government and to the Bank. A Project Management Report should be completed by the executing agency at periodic intervals and should be provided to both parties. It would serve to analyze operational progress for purposes of increasing efficiency in implementation and could provide information on the use or consumption associated with specific project components.

Project Management Reports should also contain a comparable core of items for all projects. The precise format for the reports (and the frequency with which they should be submitted) should be decided by the executing agency and the Bank.

1/ Overspill areas are located adjacent to the major upgraded squatter areas and serviced to the same standard.

2/ If adequate information is not available on the population within the upgraded areas before project execution begins, random samples will be drawn through whatever means of sampling are most appropriate to the individual project and context. Where aerial photographs are available, for example, these may be used to determine clusters of households within which random samples may be taken.

II. Evaluation

A. Definition

An evaluation examines the degree to which a project meets the objectives stated in the Appraisal Report, and the reasons for which any unanticipated effects of the project occur. Evaluations will be based on information gathered before plot occupancy or upgrading, and will be phased to take place both during project execution and after the closing date in order to assure the validity of the results. The exact timing of each phase of evaluation within the project cycle will be determined according to the characteristics of the individual project.

Project appraisals lay out the objectives of individual projects and the assumptions upon which they are based. Their statements set the stage for longitudinal evaluation, which should serve to show whether project design is still valid over time or should be changed in view of changing circumstances and/or knowledge. The results of a longitudinal evaluation should also permit more informed judgments concerning the probability of achieving stated objectives with available resources and methods. It should thus be of significant use to both the Government and to the Bank in planning future projects.

At least three Bank Group projects will be chosen for evaluation of the type described below. The choice of projects for evaluation efforts funded by the Bank will be based on a combination of design, historical and practical criteria. The universe of projects includes the following at the present time: Senegal, Nicaragua, India (Calcutta), Botswana, Jamaica, Tanzania, Zambia, El Salvador, Indonesia, Kenya and Korea.

B. Objectives of Evaluation

Urban development projects involving housing which receive loans from the Bank Group seek to create an environment of incentives1/ for the low-income population which serve to adjust the housing product and auxiliary services to the needs and capabilities of that population. The evaluation effort should attempt to determine the rates and magnitude of change in 1) housing investment, 2) income-earning opportunities and savings patterns and 3) access to urban services for households both within and outside project areas.2/ It should be concerned with identifying the social, economic and institutional factors which affect changes in these areas.

1/ These incentives include secure land tenure, access to building materials loans, sewerage, and other urban services, such as schools and clinics.

2/ This list includes the major components of real income. Additional information required to relate them to welfare will be defined in the context of individual project conditions.

Evaluation will attempt not only to determine the effects of the project on individual households, but will seek also to relate the significance of the project to larger sectors of the economy wherever this is possible. It will, for example, attempt to study the impact of the project on land use patterns within the city, on real estate prices, on rates of taxation and on municipal budgets. Where it is not possible to study each of these areas in depth, the Government in conjunction with the Bank will decide which areas of inquiry are most useful for the planning of future projects.

Particular attention will be given to the concept of the project as a delivery system, i.e. as an organization designed to increase the access of poor people to benefits. Evaluation will thus be concerned with comparing the relative effectiveness of projects executed through different institutional forms. Comparative studies of the internal administrative structure of the implementing agency, and of the choice and location of the executing agency within the local or national framework, should permit more informed judgment as to future project orientation and administration.

Because the above objectives are intended to assist both the Government concerned in the preparation of its future projects and the Bank in its future lending policies, all information gathered should be reported to both parties.

C. Methodology

The evaluation will be carried out in three stages: (1) before occupancy or upgrading, (2) during project execution, and (3) after the closing date. As stated earlier, the exact timing of the stages will depend on the circumstances of individual projects and will be included in the individual research designs. A baseline questionnaire should be administered to households in both project areas and in other areas of similar income groups (i.e., the control populations) during each of the stages. It should thus be possible to trace the progress of the same populations through time as well as to determine effects due to the project intervention.

EVALUATION PROCESS

	Phase 1 (Before Project Execution Begins)	Phase 2 (During Execution)	Phase 3 (After Closing Date)
Experimental Population	X_1	X_2	X_3
Control Population	Y_1	Y_2	Y_3

The purpose of the comparison between X_3 and Y_3 is to compare the relative effects of social and economic change due to time and due to the project. Thus, if the treatment is effective, $X_3 - Y_3$ should be significantly greater than $X_1 - Y_1$ which should be minimal.

Questionnaires will be administered to samples drawn from a) site and services areas within the project; b) upgraded areas within the project; c) any other project areas; and d) control areas outside the project which contain populations with similar economic and social characteristics to those of the project participants. The determination of the control areas will be made by first studying the basic structure of the housing stock and socio-economic characteristics prevalent in the city as a whole; representative groups of low-income settlements will then be chosen for sampling purposes. The selection criteria for respondent sub-sampling will be determined according to the individual project goals. The specific questions to be included in the questionnaire or ascertained through special studies will be determined by both the Government and the funding agencies involved in individual projects.

Appropriate measures to indicate the rate and magnitude of change in housing investment, income-earning opportunities and access to urban services will be defined. They will be placed into a matrix of the sample areas chosen for the individual projects. An analysis of the data will then be made both within and between sample areas.[1/] The data gathered will be explained within the context of the individual project.

Duplex sampling will be used where necessary to obtain some information (such as patterns of consumption) which is required at more frequent intervals or through more intensive studies than the basic core of questions contained within the interview questionnaire. Wherever possible, a thin sample of the city as a whole should be interviewed both before and after project execution in order to properly interpret the variance that may have emerged over time between the project areas and their urban context.

Different types of information necessary for the evaluation will involve different forms of measurement. Some of the necessary information can be gathered through household surveys at the plot level as discussed above. Others (such as effects on municipal finances, land use and transportation patterns, health improvement and consumption patterns) must be examined through special studies. The determination of which special studies will be undertaken in each project will vary across projects depending on the advice of the Government concerned, the Transportation and Urban Projects Department of the Bank, and, where applicable, other lending agencies. The choice of special studies to be undertaken will depend on the objectives stated in the Appraisal Reports of the individual projects.

1/ The methods of analysis used will include correlations and cross tabulations, multiple regression and multiple discrimination, and time series analysis.

The evaluation team should undertake a simple physical survey for the city as a whole before the project begins. Aerial photographs may be available to aid in this effort. Aerial photographs and physical surveys taken before and after implementation of the project should form the basis for comparative land use pattern studies where these are deemed advisable.

III. Affiliation with a Local Institution

In order to assure continuous local involvement in the evaluation effort, each of the field teams should, where possible, be affiliated with a local institution involved in research. Such an affiliation could facilitate future study of the project after the project's closing date as well as encourage local participation by interested researchers.

Access to the data collected during the evaluation will be made available to the Government and to the Bank units involved. Additional access should be made in agreement with those parties. Project Management Reports and specific financial data about the project could be kept confidential, while more general data about living conditions within the project could be made available for further local research.

IV. Staff Requirements

Each field team will be directed by a primary researcher responsible for the evaluation design and its implementation in the field. An assistant researcher and local interviewers will be hired to carry out the required surveys. Where possible, the primary researcher should be a citizen of the country in which the project is located. The assistant researcher should be a citizen of the country in all cases. The disciplinary background of the two researchers should be complementary, combining urban economics and sociology with quantitative analytic skills and experience in survey research. Reports of the evaluation team should be sent to the Government and to the Bank. In projects where other agencies participate in the funding of the evaluation effort, reports should also be provided to those agencies.

Carroll Long
Michael Cohen
June 17, 1974

PRELIMINARY EVALUATION PROGRAM FOR THE LUSAKA SQUATTER UPGRADING AND SITE AND SERVICES PROGRAM

I. Introduction

1. The purpose of this document is to provide an initial research design for the evaluation of the Lusaka Squatter Upgrading and Site and Services Project. It does not represent a finalization of opinion but an initial discussion of the goals, hypotheses and methodologies that appear appropriate to the Lusaka case. Final decisions regarding the components of the research design, as well as the position of the evaluation team within the local context, should be made after consultations among the Government, the Bank and other participating agencies.

II. Objectives of Evaluation

2. This document is deliberately simple in its approach to evaluation. It is based on the assumption that evaluation should not be a force that is disruptive of project execution, but rather an element which should provide policy makers with information upon which decisions regarding future programs can be made--i.e., whether such programs should be undertaken at all, and what specific features they should contain.

3. The specific goals of the Lusaka project are contained within the Appraisal Report. Evaluation will seek to determine whether these goals are being met in the project over time, and whether project components (both physical and institutional) have the intended social and economic impacts on project participants and on related institutions. If they do not, evaluation should attempt to provide explanations for the unexpected effects.

4. In order to keep the approach to evaluation simple and non-disruptive, a limited number of questions should be addressed in the evaluation effort. Only questions which have not been answered in the past and which are capable of being answered in the available time frame should be addressed. The evaluation proposed for the Lusaka project will attempt to test the relationship between the goals (the dependent variables) and the means of achieving those goals (the independent variables), taking into account in each case individual and neighborhood attributes (the intervening variables). The goals, the means, and the contextual attributes to be considered in the Lusaka case are discussed below.

III. Methodology

5. Evaluation in Lusaka will be carried out in three phases, the first before actual occupancy or upgrading begins, the second during the execution, and the third after the project's closing date. The exact timing of the phases will depend on the progress of project execution. Both surveys at the household level and special studies will be used to gather the necessary information. The first phase of evaluation will be known as the baseline survey.

6. The baseline survey will consist of a questionnaire administered to households both in project areas and in non-project areas. Households in non-project areas will be referred to as the control groups. Because it will be impossible to administer the questionnaire to all families in both areas, the population will be stratified according to income, and random samples will then be drawn within each stratum to obtain the sample size discussed below.

7. Basic social and economic information should be available on the entire population in the area to be surveyed before representative samples can be drawn. In the case of site and services and overspill areas, this information will be available in the normal Plot Application and Enquiry Form. In the case of upgraded and non-project areas, this information should be available through the official census of the city, through past surveys of the areas, through information held by the collection agencies, or, if necessary, through other means.[1/] Comparisons of stratified random samples in both project and control areas over time should permit an understanding of the effects of the project on the individual household, on specified geographical areas of the city, and thus of implications of the project for the city as a whole.

8. In the Lusaka case it is currently recommended that 1500 questionnaires be administered within the project and control areas during each of the three phases of evaluation. There should be 100 interviews within each of 15 areas distributed between project and control populations. Sample groups chosen from upgraded, site and services, and overspill areas will allow a cross-section of the significant universe in project areas. Control areas should include previous government site and services areas and non-upgraded areas. They might also include samples drawn from the non-chosen applicants to site and services and overspill areas. These interviews will be administered to the head of household. If at all possible, it is recommended that a larger number of interviews be administered, and that another person

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1/ Clusters could be determined from aerial photographs, for example, and then random samples chosen within the clusters.

in addition to the head of household be the respondent. At this point, however, the more limited number of 1500 seems most appropriate in view of time and budget constraints. The same samples should be followed in each of the evaluation phases. In the case of a change of plot occupancy, the new person with responsibility for payment would become the primary respondent and a baseline interview would be administered to the new household. The initial respondent previously in the sample would be traced if possible and re-interviewed on the same schedule even though no longer living at the initial location. Following individuals permits answers to questions regarding the contribution of the project to socio-economic mobility, while following plots provides information on physical investment and improvement over time.

9. The questionnaire to be administered will contain approximately 90 questions. Other information may be obtained through the use of project records, other official statistical sources, and special studies which should provide information on subjects such as the use of community facilities, building materials loans, and the rates of default. At the same time that families are interviewed, information regarding housing conditions will be gathered by the interviewers. Specific indicators or measures to be used for each subject will be decided before field work begins.

IV. Information Requirements

10. The Lusaka Squatter Upgrading and Sites and Services Project aims at obtaining a series of goals through a variety of means. The

Appraisal Report lists clearly the means through which changes are to be effected in Lusaka:

1. To provide for self-help in the provision and improvement of housing, community facilities and basic infrastructure.
2. To widen the range of servicing levels and provide security of tenure.
3. To improve the collection procedures.
4. To provide building materials loans and technical assistance at the housing construction stage.
5. To provide early construction of community facilities.
6. To provide better access roads.

11. The goals which the project expects to accomplish include the following:

(1) To encourage self-help activities.

a) Components of Analysis: Investment in self-help housing construction and improvement, construction of community facilities, the construction of community infrastructure. One should attempt to measure the order in which individual and communal self-help activities develop and the characteristics of the participants in each self-help activity. One should be particularly concerned with increases in the amount of housing investment, the nature of the investment, use of technical assistance and building materials loans, and the number of employment-generating activities dealing with construction that emerge.

b) Measurement: Special studies will have to be made on-site and through an analysis of records kept by the executing agency and agencies offering technical assistance and building materials loans. This information will be supplemented by information gathered in the household surveys. The rate of construction may be measured through the use of aerial photographs.

(2) To cause changes in the household budget.

a) Components of Analysis: Changes in household income, in consumption patterns, and in savings and investment patterns. Information should be gathered on basic household consumption, employment and other activities (educational, etc.) of household members.

b) Measurement: Answers to these questions will be determined through the questionnaire (for household composition, activities, and savings) and through participant observation or more frequent interviewing (for consumption patterns).

(3) To promote growth of employment opportunities.

a) Components of Analysis: Use of small industrial sites for employment and the creation of new enterprises due to the increased demand for building materials and increased participation in market activities. The question of whether the growth of such activities is incremental or substitutional will have to be addressed, both in terms of markets and industrial use.

b) Measurement: Some of these aspects can be dealt with through the questionnaire, others through special studies of small industrial site use, etc. The two may be used together for cross-validation where deemed appropriate.

(4) To reduce the rates of default.

a) Components of Analysis: Differentiating characteristics of the households which have paid from those which have not, i.e., to determine whether there are different default rates in different areas or populations, and whether such variations are dependent on the household characteristics of sub-groups (such as household composition, educational level, etc.).

b) Measurement: The collection agency may be asked to provide a small questionnaire on each person from which collection is to be made that indicates the age, name, education, occupation, number of children, number of wives and employment of household members. A multiple regression should permit the analysis of the variations in project defaulters. Effects on the municipal budget may be gained from executing agency reports and municipal records.

(5) To increase levels of education.

a) Components of Analysis: Levels of school enrollment, student/teacher ratios, and drop-out rates.

b) Measurement: Records kept by the Ministry of Education or other official statistics will be cross-validated within the project and control areas by the questionnaire.

(6) To improve transportation.

a) Components of Analysis: Changes in routes and amounts of bus and other transport service, changes in the means and costs of transportation used.

b) Measurement: Local transportation authorities should provide some information. Additional information would be provided by the questionnaire (i.e. consumption patterns).

(7) To improve health.

a) Components of Analysis: Levels of mortality and nature and amount of illness within specified time frame, use of clinics for preventive and curative purposes.

b) Measurement: The questionnaire should provide information on the number of days household members were ill and for what reasons within the past two months. This will necessitate more frequent interviewing for this particular question than for others. Information could also be gained from the questionnaire on the usual place of treatment for illness. Clinics themselves should provide additional information on types of illness and number of patients.

12. It will be necessary to determine whether the relationship between the means and the goals are affected by certain cultural, demographic or socio-economic characteristics of the population. Individual attributes (i.e. age, sex, education, income level, employment history and migratory history) and neighborhood attributes will have to be taken into account in determining that relationship.

13. Special studies regarding wider spatial and economic effects of the project might be desirable. The content of these studies should be decided with the Government. Possible studies which would be useful to the Government, however, might be the effects of the project on the municipal budget and the tax structure. Rates of default will naturally affect the municipal budget and are already included as one of the studies to be undertaken.

V. Research Team

14. As stated in the Terms of Reference, a research team should consist of a primary and assistant researcher. It is hoped that both may be recruited locally; preference will be given to Zambian citizens. The evaluation team should participate in the final design of the evaluation study, and should hire interviewers to carry out the necessary surveys. It is anticipated that 12 interviewers will be necessary for this study and that they should be directly responsible to three supervisors who have had training in undertaking surveys. The team should be recruited initially for 1 year beginning, if possible, three months before actual occupancy or upgrading begins. Either the same team or another similar one will undertake the second and third phases of the evaluation. The research team should be located so as to assure the maximum flow of information to and from the project unit. The institutional affiliation will be decided by agreement between the Government and the Bank. Professor Remi Clignet, Bank Consultant, will assist the research team in the methodological aspects of the evaluation.

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File: Evaluation; Sites and Services

OFFICE MEMORANDUM

Mr Stern

TO: Douglas H. Keare

DATE: April 10, 1973

FROM: Michael A. Cohen MAC

SUBJECT: A Brief Summary of the Site and Services Seminar, March 8-9, 1973

The seminar on site and services projects held in the Bank on March 8-9, 1973, raised more questions than it answered. Whilst the results of the sessions might not be a subject of agreement among those attending the almost 10 hours of discussion, it is clear to all that many issues concerning the identification, preparation, appraisal, and supervision of site and services projects are far from resolved at this time. Individual aspects of these processes, as well as the broader goals of such projects, are not yet objects of consensus, and it is neither likely nor desirable that they should be for some time to come. This memorandum will briefly describe the seminar proceedings under the following two headings:

1. The Sessions and Major Issues Raised
2. Conclusions

1. The Sessions

The first session was centered around the presentation of Professor Remi Clignet. His remarks covered a broad area, including: 1) the problem of defining objectives of projects, 2) the problem of not imposing Western social science criteria of modernization on non-Western social phenomena, 3) the political prerequisites to project implementation, and 4) some of the inconsistencies between the possible goals of such projects, e.g. income redistribution, self-help, and community development. These questions were posed to the Bank staff in an attempt to point up issues raised by the Dakar site and services project which are as yet unresolved. Emphasis on these questions was relevant because the design of monitoring, supervision, and evaluation of that project is now under consideration.

Objectives of Site and Services Projects

Whilst the introductory questions initially appeared to be unnecessarily general and, perhaps, a bit abstract to some participants, these issues were quickly clarified and became quite real in the course of subsequent discussion, particularly when an attempt was made to develop a list of agreed objectives of site and services projects. Many objectives were mentioned, but few participants agreed on all of them; in fact, we were unable to proceed even to the attempt to place objectives into any framework whereby they might be related to one another. The following objectives were discussed:

1. economic organization of urban areas;
2. reduction of unemployment through self-help and ancillary activities;
3. increased flow of resources to housing;
4. adaptation of standards to meet needs of low-income groups; and
5. income redistribution

Specific Issues in Project Preparation

After this admittedly frustrating attempt to agree on the objectives of projects, the discussion focused on specific issues including population selection, repayment incentives and penalties, and land tenure. These issues were then examined in the context of specific projects in El Salvador, Jamaica, Nicaragua, Senegal, and Zambia.

In the discussions which followed, particular attention was given to self-help construction, flexibility for later land use change, and the recapture of betterment values in land. Disagreement existed concerning the degree to which households, rather than public authorities, should receive benefits as a result of the arrangements surrounding land development. While compensation for demolished superstructures was favorably regarded, it was unclear whether full ownership of land was nécessary to generate the desired level of private investment.

March 9

The turnout for the final morning session on March 9 was surprising in view of the frustrating efforts to reach conclusions on the previous day. However, the discussion which followed was quite fruitful, suggesting that much interest exists concerning these policy issues, and that much more remains to be discussed.

The discussion focused on two alternative urban development strategies: 1) one designed to meet the total demand for land development and housing within a city within a relatively short period of time; versus 2) a short-run project approach which will satisfy a smaller portion of the demand and will require greater control of the distribution of benefits. It was stated that cities fail to meet demand because 1) they are unwilling to expropriate land, and 2) building standards are too high. The issue of speculation was raised, leading to the observation that speculation in itself need not be harmful, but is, among other things, an indicator of changing characteristics in land development and the imbalances between demand and supply of land.

A comparison of these two strategies led to the introduction of a series of two categories of related questions which are briefly mentioned below. 1) institutional involvement, and 2) costs. It was noted that institutional mechanisms were required to deliver benefits to specific designated target populations. This prospect, however, raised some realistic queries about the efficiency of bureaucracy and public institutions in LDC's and a general concern that the Bank might be attempting to coordinate too many related activities within specific urban development projects. While accepting the premise that urban processes are closely interconnected, participants were skeptical of the possibility of efficiently implementing overly-complicated projects. The conclusion of some participants was that strategies which sought to increase the supply of land and housing in order to satisfy a larger portion of total demand could avoid the difficulties of close involvement with institutions by avoiding the rationing and distribution of benefits. This assertion was challenged, however, on the grounds that institutions would be intimately involved in general land development schemes as well. In all cases, policy change in urban areas will require decisions and their implementation by public institutions. Moreover, an approach which seeks to satisfy total demand must recognize that it cannot be achieved at one point in time, but rather in steps, leading back again to choices among groups to receive the first benefits. It was concluded that the Bank can avoid neither institutional involvement nor the social consequences of projects.

A second subject of discussion related to the satisfaction of demand was the costs of various types of projects. At the present time, it is not clear whether the progressive upgrading of existing squatter settlements or the creation of new residential areas is less expensive. The pilot project and criteria study in Dakar will provide some initial conclusions on this subject. The discovery of least-cost solutions would allow clearer choices among possible objectives of projects within urban areas.

II. Conclusion:

1. The seminar demonstrated, among other things, a need for agreed-upon procedures whereby "study" and "action" could be combined in the proper proportions. Throughout the sessions, it was noted that a clear understanding of urban processes and the impact of specific urban development choices requires considerable data collection and analysis. This requirement, however, could delay the project cycle quite significantly. Clearly, the Bank must operate in environments of less than perfect information. Nevertheless, there do appear to be informational preconditions for formulation and implementation of specific objectives.

Concluding statements which emphasize the need for more information are common to such exercises and not frequently very helpful. However, the next step should be to ask: more information at what point? If initial projects operate in relatively uninformed circumstances, there should be information-collection mechanisms, i.e. monitoring processes, built into these projects to ensure that later efforts growing out of them will proceed on the basis of experience and improved knowledge. Projects should have "memories" which can be consulted by those attempting to replicate them elsewhere.

2. Despite the difficulty of defining objectives of site and services projects and urban development efforts more generally, it is nonetheless true that "performance" cannot be evaluated unless objectives are established. While urban development projects attempt to confront a whole range of difficult problems and, therefore, should not be expected to provide immediately either effective methodologies or precise conclusions, certain efforts are required if the Bank is to be able to justify these projects over time. Lending for

projects explicitly called "urban" has only recently begun; however, it will soon have lost its novelty and its advocates will be expected increasingly to justify their efforts according to many difficult but critically important criteria. Therefore, continuing efforts are required to develop analytic frameworks to appraise such projects and their consequences for urban development.

MAC:ap

cc.: Messrs. Stevenson, Sadove, Bohr, Dunkerley, Iverson, Strombom, Venkateswaran, Stern, Hofmeister, Hansen, Balcazar, Ms.Farmer, Urban Projects Department members, Urban and Regional Economics Division members

Mr. W. Baum, VPS

January 15, 1973

Ernest Stern, VPD

Monitoring of Sites and Services Projects

Attached is the draft Terms of Reference for the Monitoring of Sites and Services Projects developed jointly by the CPS and DPS staffs. I should like to discuss this with you at your convenience. Specifically we should discuss:

- The utility of the proposed work for the CPS and DPS. The research is project oriented and will help in the design, preparation, appraisal, implementation and supervision of present and future sites and services projects. It will also provide data for a comparative urban analytic framework.

- The proposal to hire a consultant and research assistant to start work in Dakar in the spring of 1974.

- The funding of the proposed work program. Alternatives are Departmental consultant budgets, loan financing, research budget or a combination of the three.

If the work program is agreed to, discussions with consultants must start in the next few months to assure availability of any university personnel in the 1973/74 academic year. Would you let me know when we might meet.

Attachment

bcc: Messrs. Stevenson, Keare

EStern/lm

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

file

OFFICE MEMORANDUM

TO: Mr. Ernest Stern

DATE: January 5, 1973

FROM: Douglas H. Keare DHK

SUBJECT: Monitoring of Sites and Services Projects

On the basis of our meeting on January 4, and your upcoming contact with Warren Baum concerning the proposal for monitoring of sites and services projects, I would like to suggest the following areas of agreement or types of decisions which are needed for continuing progress for the project:

1) A general agreement concerning the value of this work for both the CPS and the DPS. The present draft of the proposal represents a collaborative effort between the Urban Projects Department and the Urban and Regional Economics Division. While the research is project-oriented, and indeed will help in the design, preparation, appraisal, implementation, and supervision of the many sites and services projects now under consideration, it will also provide much data of direct use for a comparative urban analytic framework being developed by the Urban and Regional Economics Division.

2) Agreement that a consultant and a research associate should be hired to start work in Dakar in the spring of 1974. Funding for these individuals, as contained in the proposed terms of reference, must be agreed on, to be drawn against the FY 74, FY 75, and FY 76 budgets.

3) In view of the above, it should be agreed that discussions can begin with possible consultants for these positions during the spring of 1973. This is necessary in view of the procedure of securing leaves of absence for university personnel.

DHK:ap

cc.: Mr. A. Stevenson

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5

set up short mtg

OFFICE MEMORANDUM

TO: Mr. E. Stern (through Mr. A. Stevenson)

DATE: December 29, 1972

FROM: Douglas H. Keare DHK

SUBJECT: Monitoring of Sites and Services Projects

In response to your memorandum of December 26 concerning the proposed monitoring effort, I would like to discuss this with you at the earliest opportunity. The following are points you might wish to consider beforehand:

1. You are correct in noting that other research projects will stem from this monitoring effort. In preparing the draft Terms of Reference of December 11, 1972, we included only those aspects of the field work which are central to monitoring and referred to the fact that other research will be considered after some conclusions have been drawn from the first phases of monitoring and specific hypotheses can be defined.

2. You are also correct in describing much of the proposed monitoring as being "project-oriented." Within the draft Terms of Reference, we have established two categories of monitoring: The first would include specific procedures within credit and project agreements, such as censuses of project occupants, standardized project manager reports and added technical assistance (e.g. in the case of Dakar, more would have been incorporated). The second would involve more detailed research, which would go beyond what the assigned technical assistants are asked to do.

3. In other important respects, I must disagree with your memorandum. Without arguing at this stage that research funds are the most appropriate source of support for such a monitoring effort, I would argue strongly that two principles should apply:

1. Since much of the monitoring, and all of Category II work, is primarily for the Bank's own edification, the Bank, and not individual countries, should finance the work. It would be an unreasonably large burden for three countries to have to pay for two years' research on projects which, while located within their boundaries, were chosen for the Bank's own reasons and the results of which will also benefit other countries.

2. The entire monitoring effort should be financed and managed as a package in order to permit: 1) better overall coordination within the research design, and 2) some flexibility for the Bank in carrying out the work. Coordination of research which is supported in three separate credit agreements and perhaps involving different activities would be difficult; comparison of data collected across 14 countries would be impossible if not centrally managed.

4. Given the above, I would suggest that two possible courses of action be considered: either that Chenery and Baum should "reason together" and decide that this is a joint venture and that the costs should be shared accordingly, or that they should present this proposal to management as worthy of resources from special funding separate from both the Research Budget and whatever fund the CPS now possesses for financing "studies."

DHKeare/gc

file

Mr. D. Keare

December 26, 1972

Ernest Stern

Monitoring of Sites and Services Project

The proposed approach to monitoring of sites and services projects seems a thorough and appropriate approach. I agree that the proposal is ready for management consideration.

I do not see, however, where the research budget can, or should be, of assistance. The research proposed can readily be financed as part of each loan or credit since it is project oriented. The fact that it will yield broader benefits should be no bar to the loan financing of research. It may well be that additional research projects will evolve out of the monitoring work and these can, of course, be considered for financing from the research budget once they are defined.

I would be glad to discuss this further, if you think it desirable. Also, before putting this in final, it might be useful to send a copy to Mr. Willoughby for his comments.

cc: Messrs. Stevenson, Ray

EStern/lm

INTERNATIONAL DEVELOPMENT ASSOCIATION | INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT | INTERNATIONAL FINANCE CORPORATION

OFFICE MEMORANDUM

TO: Mr. Ernest Stern (through Mr. Alexander Stevenson) DATE: December 22, 1972

FROM: Douglas H. Keare DHK

SUBJECT: Monitoring of Sites and Services Project

The attached draft describes the requirements for monitoring sites and services projects and the proposed approach to be taken. This has been developed in close consultation with Messrs. Sadove, Dunkerley, Venkateswaran, Strombom and Carrere of the Urban Projects Department. And, at a meeting yesterday, we agreed that -- apart from minor editorial changes -- this proposal is now ready for consideration by management. As a first step in this process, we would like to call your attention particularly to the two following matters:

1. The terms of reference spell out some of the direct benefits to be derived from the proposed monitoring effort; however, it is clear that such an enterprise will also have substantial additional returns for our research program on urban matters and for the Bank's research program in general.

2. This proposal involves a substantial commitment of manpower and funds by both the Urban and Regional Economics Division and the Urban Projects Department through FY 78. A substantial portion of these requirements will be met from the annual divisional and departmental operating budgets. In this proposal we have singled out only the requirements for establishment of expatriate personnel and support of research efforts in the field. It seems to us appropriate that such requirements should be met from the Bank's research budget, and we are therefore seeking your advice concerning the approach to be taken and the scope of the proposed effort before proceeding further.

DHK:ap

Cc.: Messrs. Sadove, Dunkerley, Venkateswaran, Strombom, Carrere
Messrs. Stevenson, Gulhati, Hawkins, Cohen

Attachment

Draft
Michael A. Cohen
December 11, 1972

Terms of Reference for the Monitoring of Sites and Services Projects

Summary

Annex:

Draft
Michael A. Cohen
December 11, 1972

Terms of Reference for the Monitoring of Sites and Services Projects

Summary

I. The Objectives of Monitoring

a. To provide continuous information for the implementation of projects by executing agencies
b. To provide standardized data for project supervision
c. To provide information for the preparation of reports as requested by IBRD management
d. To evaluate the costs and benefits of sites and services projects
e. To provide information on desirable improvements in the design of similar projects for future lending
f. To provide data for research concerning the effects of sites and services projects on urban development processes

II. Monitoring Operations and Methods

Monitoring operations will be divided into two categories: 1) operations for all Bank sites and services projects, and 2) operations for selected projects. The first category of activities will include:

1. A standardized baseline census of project occupants at the time of plot assignment
2. A standard format for project manager reports concerning specific project components
3. Checklists for supervision missions to complete to insure correct project implementation

These three methods of evaluation will be applied in all sites and services projects and,if possible, will be included in the credit and project agreements between the Bank and the respective governments.

The second category of monitoring operations will apply to three sites and services projects in order to examine and evaluate project design in greater detail. These operations will include:

1. Periodic surveys at the plot level to gather data about plot finance, construction, and the self-help process
2. Case studies of specific project components such as community development, commercial growth, public services, schools, and transportation
3. Studies of the wider effects of the project for the city as a whole

The magnitude of these three types of operations will vary among the three projects chosen for in-depth evaluation according to the availability of local personnel to carry out such studies and resources within the Bank. Efforts will be made, where possible, to involve local institutions and individuals in monitoring efforts.

III. Selection of Projects for Monitoring

The first project to be monitored will be in Dakar, Senegal, for the following reasons:

1. It is presently in the implementation phase
2. Its successful implementation requires as much information as possible
3. Progress reports on its development have been requested by management
4. It represents the Bank's first effort to undertake a large-scale urban development project

The other two sites to be selected for intensive monitoring will be chosen according to the following criteria in order to insure a broad basis of evaluation of the sites and services concept:

1. Different project design components, including different target population, characteristics, building standards, credit availability, and technical assistance levels
2. Different regional location

While it would be impossible to "test" individual components by holding others constant in these comparisons, some effort will be made to select projects in order to generate conclusions about particularly critical or problematic project components.

Starting with Dakar, all sites and services projects will be monitored according to the operations listed under category 1.

IV. Staff Requirements

The coordination of this effort will be shared by the Urban Projects Department and the Urban and Regional Economics Division of the Development Economics Department. Supervision missions for sites and services projects will use the monitoring procedures established within the overall monitoring effort. Staff for the three intensive monitoring efforts will be drawn from local institutions, where possible, and will be supplemented by expatriate researchers supported by the Bank.

For the monitoring of Dakar, two expatriate researchers will be sent to Senegal for two years to carry out the surveys and case studies as listed in section II above. Their work will be aided by Senegalese researchers and survey assistants. The lack of available, trained personnel in Dakar to perform the monitoring function requires that twice the level of foreign personnel be assigned that project than subsequent ones.

The two other projects will be chosen in part according to the availability of local researchers to perform monitoring functions.

The complexity of site and services projects requires that where possible, an interdisciplinary team of researchers work together on the monitoring effort. Many of the important areas to be studied lie outside strictly economic studies and, therefore, require the assignment of a sociologist or urban geographer to pursue data found at the individual plot level as well as within the community as a whole.

V. Affiliation with a Local Research Institution

In order to assure continuous local involvement in the monitoring efforts, each of the three monitoring teams will be affiliated with a local research institution. This affiliation will permit future study of the project after initial Bank studies are completed and encourage local participation by graduate students and other researchers.

VI. Scheduling

The greatest part of this monitoring effort will start in FY74 and continue through FY78. The establishment of the baseline census for the Dakar effort will occur in the spring of 1973 and will be supported by research funds and consultant budgets of the Urban Projects Department and the Urban and Regional Economics Division.

The intensive effort in Dakar will start in the spring of 1974, or four months after plot occupancy. Each intensive monitoring operation will extend for two years in order to collect longitudinal data about the project's development. The second and third intensive monitoring operations will start in the spring of 1975 and spring of 1976. The entire effort, therefore, will be phased, according to the progress of project preparation, appraisal, and implementation.

VII. Cost Estimates

The greatest single cost item will be personnel expenses for foreign researchers located in the three cities. According to the Bank's Personnel Department, it will cost approximately $36,000 per principal researcher per year, including salary and benefits under a standard Bank-UNDP scale. A less-qualified research associate would cost approximately $30,000 per year. Therefore, the following cost estimates can be made:

I. Dakar:

Foreign Principal	$72,000 (2 yrs.)
Research Associate	$60,000 (2 yrs.)
Fixed Costs	$15,000 (2 yrs.)
Research Costs	$25,000 (2 yrs., computer costs, Senegalese part-time researchers and assistants)
Total	$172,000

II. Project II

Foreign Principal	$72,000 (2 yrs.)
Fixed Costs	$15,000 (2 yrs.)
Research Costs	$50,000 (2 yrs., includes major responsibility for local personnel)
Total	$137,000

III. Project III same as Project II $137,000

IV. Census - Projects II and III $10,000

V. Comparison of Data from Three Projects:

$5,000 (computer analysis within Bank)

VI. Total $461,000 from FY 74 through FY 78

When distributed over FY74-78, the following breakdown of expenditures occurs:

		FY 74 (US$)	FY 75 (US$)	FY 76 (US$)	FY 77 (US$)	FY 78 (US$)
	Dakar	21,500 1/	86,000	64,500		
El Salvador	Project II	5,000 2/	34,250	68,500	34,250	
JAMAICA Nairobi	Project III		5,000 3/	34,250	68,500	34,250
Tanzania	Comparisons					5,000
Djakarta	TOTALS	26,500	125,250	167,250	102,750	39,250

1/ Operations start 4th. quarter FY74.
2/ Census starts one year before survey research.
3/ Census starts one year before survey research.

I. The Objectives of Monitoring

a. To provide continuous information for the implementation of projects by executing agencies:

The implementation of sites and services projects requires continuous information about the simultaneous development of project components. There are many potentially difficult aspects of these projects which, if not observed continuously, could compromise the success of the project as a whole. While information about the project will be collected on a daily basis by project managers and technical assistants, the latter will be unable to systematically assemble quantities of data sufficient for long-term judgments. The monitoring operations proposed under Category I are intended to facilitate the general information requirements of project implementation. For the three projects selected for intensive monitoring, there will be a steady stream of detailed information available to the executing agency during the first two and a half years of project implementation.

b. To provide standardized data for project supervision:

The supervision of sites and services projects will require considerably more information, both in quantity and variety, than the supervision of most Bank projects. At a time when the Bank anticipates lending for a number of these projects, it would be extremely useful to develop a standardized procedure for supervision, including some specification of necessary information to evaluate the progress of the project. By standardizing this procedure and information, it will be possible for Bank staff to determine the condition of a project at any point in time, in comparison with the histories of other projects.

c. To provide information for the preparation of reports as requested by IBRD management:

Information collected from the Dakar monitoring effort will be the basis for the yearly reports to the Board, as requested by Mr. McNamara at the time of approval of the credit to Senegal. Conclusions from the monitoring of all sites and services projects will inform any housing and urban sector papers to be prepared in the future.

d. To evaluate the costs and benefits of sites and services projects:

One of the most difficult aspects of appraisal of sites and services projects is the determination of economic return to the country where the project is located. Detailed study of the process of self-help and of the wider effects of the project will be essential to any future systematic evaluation of costs and benefits resulting from projects of this type. One major product of the monitoring effort, therefore, will be a more precise method of analysis of these projects, allowing better project preparation and more realistic appraisal. (See Annex A).

e. <u>To provide information on desirable improvements in the design of similar projects for future lending:</u>

It has frequently been asserted that the Bank lacks experience with sites and services projects and, therefore, there will be a continual process of improvement of project design within the Bank. This process will be greatly assisted by systematic information concerning previous projects. Monitoring attention can also be focused on specific project components to evaluate their utility within the overall project.

f. <u>To provide data for research concerning the effects of sites and services projects on urban development processes:</u>

This objective of monitoring is shared by many parts of the Bank, including management, the Urban Projects Department, other CPS Departments, and the Urban and Regional Economics Division of the Development Economics Department. Data from monitoring operations will not only permit clearer understanding of the effects of specific projects on a country's urban sector, but also suggest more general conclusions about the consequences of this type of low-cost housing on overall housing supply, urban public finance, land use patterns, delivery of public services, and income distribution. Serious research focused on projects of this type will provide an opportunity for important advances in our practical understanding of urban development.

II. <u>Monitoring Operations and Methods</u>

In view of the many objectives to be achieved by monitoring, and the varying interests within the Bank, it is suggested that a dual monitoring mechanism be employed to both collect general information on all sites and services projects and detailed information concerning selected projects. This section divides monitoring into two categories, I and II, to indicate the different methods and questions to be raised by each. All projects would be monitored according to the procedures of I, only three projects would be examined in greater detail according to Category II.

1. <u>Category I Monitoring:</u>

This level of monitoring is intended to supply general data concerning individual projects, in order to focus attention of project managers within executing agencies and supervision missions to critical aspects of project development. Attention to specific questions, as presented below, will insure that the entire project is being observed, thereby helping to identify possibly troublesome elements.

1. <u>Category I Methods</u>

a. <u>Standardized Baseline Census of Project Occupants</u>

1. This procedure will help to insure that the target population has in fact been assigned plots. A census questionnaire can be completed at the time of plot assignment with little cost and effort by the executing agency. At specified intervals, this data can be analyzed within the country in order to examine changes within the project community. Studies by the institutions within the country could be undertaken with the knowledge that baseline data was available.

2. For the Bank, particularly for the Category II monitoring efforts, this census data will be essential for sampling and later surveys concerning changes at the plot and community levels.

3. While some census questionnaires will include questions with specific country referents, such as polygamous marriage in Africa, most questions will be standardized to allow later cross-project comparisons concerning the response of various groups categorized by income, education, health, occupation, or any other variable, to project requirements and conditions.

4. Where possible, some effort will be made to coordinate national or city-wide censuses with the project census, in order to allow comparisons between groups within and outside of the project. (A census will be held in Senegal during 1974, and the Bank could profitably coordinate its work with this effort.)

b. Standardized Format for Project Manager Report

1. The Project Manager's reports to the Bank on the progress of the project will be a major source of information for the Bank. In order to assure that this information is both complete and appropriately detailed in certain areas, it would be very useful to establish a standard format to be completed by project managers at least on a yearly basis, if not at six month intervals.

2. These reports would be invaluable for effective supervision missions which will be unable to spend extended periods gathering data about individual project components.

3. The standardization of these reports, over time, might also allow some secondary analysis of the rate of progress of sites and services projects to allow more realistic preparation, appraisal, and supervision.

c. Checklists for Supervision Missions

1. Standardized checklists should be developed to allow complete supervision of individual projects. These lists could be changed for individual missions, depending on the contents of project manager reports which should arrive at the Bank before supervision missions are undertaken.

d. Inclusion of Monitoring Arrangements in Project Agreements

A and B should be included in project agreements in order to assure that these steps will be taken. They will operate as quality controls on project implementation, while at the same time impressing the executing agencies with the need to collect information on a regular basis in order to improve their own decisions concerning project administration.

2. Category I Questions

a. The questions included in the Category I monitoring procedure would follow the methods outlined above. The level of detail contained in the answer will be minimal, enough to simply make a judgment about a specific aspect of the project in a narrow sense. Aside from the long-term research value of the baseline census, Category I monitoring will not be concerned with generating data for research, but rather for effective project implementation and supervision.

b. The following list of questions is categorized by the specific monitoring method as outlined above.

Census

1. Is the target population in the project?
2. What are the characteristics (income, family size, employment, etc.) of the project population?

See Annex B for a tentative list of variables to be included in the census.

Project Manager Reports

1. Site Preparation: Are the promised infrastructure and services in place? List of specific questions concerning water, etc.
2. Occupant Selection: Number of occupants selected, plots assigned, and questions from census.
3. Project Finance:
   1) Plot level: rate of debt default, land speculation and prices
   2) Total project: expenditures, transfers, accounting, etc.
4. Housing Construction and Credit
   1) Number of houses built, materials used, availability of materials, costs
   2) Community involvement, credit arrangements.

5. Public Services: Are these of a quality and quantity satisfactory to the project population?

Checklists for Supervision Missions

1. All of the above areas should be included, as well as project administration, technical assistance, and efficiency of operations.

c. Under each of the above questions, specific indicators, quantitative if appropriate, will be developed to allow comparisons across projects and between various phases of individual projects.

2. Category II Monitoring:

In contrast to the above, Category II monitoring will occur in three selected projects, where operations will focus on projects in greater detail, with more attention to longer-term evaluation and research questions. Category II efforts will supplement Category I operations in the three projects, providing additional information to project managers and supervision missions, as well as to the Urban Projects Department and the Urban and Regional Economics Division of the Bank. Although the methods and questions of Category II monitoring are listed below, they can be supplemented either by additional Bank research funds, as small studies, or by support for local institutions to carry out additional work.

1. Category II Methods

a. Sample Surveys of Plots

1. Every six months during the first two years after occupancy, sample surveys of 100 to 250 plots will be conducted to collect data about 1) the self-help process (construction, finance), 2) changes in household budgets, 3) improved educational and health experiences, and 4) changes in family organization.

2. These surveys will be repeated within samples in order to observe changes over time, with particular regard for the rate of change or rate of self-help.

3. They will be carried out by local survey assistants, speaking the local language.

4. Survey data will be stored on computer tape for later analysis.

5. Surveys will be timed according to supervision missions where possible.

b. Case Studies of Project Components

1. Case studies of specific project components such as schools, markets, public services, community organization, credit mechanisms, transportation, and spatial planning will be undertaken. Their depth will vary according to the availability of personnel, money, and time.

c. Studies of Wider Effects of Projects

1. In addition to in-depth analysis of the projects, an effort will be made to examine the wider effects of projects, including changes in the total housing supply of the city, intra-urban migration, demands for public services, and effect on rural-urban migration. While these issues cannot be resolved simply by analysis of a single low-cost housing project, some analysis is possible within the context of the three intensive monitoring efforts.

d. The magnitude of these operations will vary among the three projects according to the availability of local personnel to carry out such studies and resources within the Bank. Efforts will be made, where possible, to involve local institutions and individuals in monitoring efforts.

2. Category II Questions

   a. The general headings of questions are listed above under the various methods.

   b. These questions will be supplemented and developed in greater detail for specific projects. Suggested questions for the Dakar study are listed in Annex C.

III. Selection of Projects for Monitoring

All projects will be monitored under the procedures established in Category I. Three of these projects will receive additional attention under procedures included in Category II. At the present time, there are sites and services projects being discussed and/or prepared to varying degrees in 14 countries: Senegal, Jamaica, El Salvador, Guatemala, Ecuador, Peru, Kenya, Tanzania, Zambia, Botswana, Thailand, Korea, Philippines, and Indonesia. These projects will vary according to several dimensions, including size, target populations, executing agencies, and land tenure arrangements. An effort will be made to select two projects, in addition to the Dakar, Senegal project, already selected for study, which will permit a balanced view of the sites and services concept. The choice of the two projects will be influenced by regional location and specific project characteristics. Interest by academic researchers in coordinating monitoring efforts may further affect the choice of projects for intensive monitoring.

IV. Staff Requirements

The coordination of the monitoring of sites and services projects will be shared by the Urban Projects Departments and the Urban and Regional Economics Division of the Development Economics Department. Supervision missions for projects will be staffed primarily by members of the Urban Projects Department, but when necessary, will be supplemented by members of the Urban and Regional Economics Division. Staff for the three intensive monitoring efforts will be drawn from local institutions, where possible, and will be supplemented by foreign researchers supported by the Bank. Consultants will be used to set up baseline censuses a year before the survey operations begin in the field. These will be coordinated by the Urban and Regional Economics Division.

In view of the lack of available, trained social scientists in Senegal, two foreign researchers will be sent to Dakar for two years to carry out the surveys, case studies, and studies of wider project effects as listed above. Their work will be aided by part-time Senegalese researchers and survey assistants. This requirement of two researchers, a principal and an associate, in Dakar is twice the personnel to be sent to the other two projects. If possible, the projects chosen for intensive monitoring will be located in cities where local researchers are available to perform the monitoring functions.

The complexity of sites and services projects requires that an interdisciplinary team of researchers work together on the monitoring effort. Many of the important areas to be studied lie outside strictly economic studies and, therefore, require the assignment of a sociologist, urban geographer, or someone trained in social survey techniques to pursue data found at the plot level as well as within the community as a whole.

V. Affiliation with a Local Research Institution

In order to assure continuous local involvement in monitoring efforts, each of the monitoring teams should be affiliated with a local research institution. This affiliation will permit future study of the project after initial Bank studies are completed and encourage local participation by graduate students and other researchers.

In Dakar, on the basis of an information mission in October 1972, there appear to be several opportunities for institutional affiliation which could be useful for the Bank and helpful to the local institutions.

If possible, data collected concerning the projects should be made available to the local institutions, in form of socio-economic surveys, etc. for later use by local researchers. Project managers' reports and specifically financial data about the project could be kept confidential, but more general data about living conditions within the project would be useful for further local research into local conditions.

VI. Scheduling

The greatest part of the monitoring activities will start in FY 74 and continue through FY 78.

The establishment of the baseline census for the Dakar effort will occur in the spring of 1973 and will be supported by research funds and consultant budgets of the Urban Projects Department and the Urban and Regional Economics Division.

VII. Cost Estimates

The greatest single cost item will be personnel expenses for foreign researchers located in the three cities. According to the Bank's Personnel Department, it will cost approximately $36,000 per principal researcher per year, including salary and benefits under a standard Bank-UNDP scale. A less-qualified research associate would cost approximately $30,000 per year. Therefore, the following cost estimates can be made:

I. Dakar:

Foreign Principal	$72,000 (2 yrs.)
Research Associate	$60,000 (2 yrs.)
Fixed Costs	$15,000 (2 yrs.)
Research Costs	$25,000 (2 yrs., computer costs, Senegalese part-time researchers and assistants)
Total	$172,000

II. Project II

Foreign Principal	$72,000 (2 yrs.)
Fixed Costs	$15,000 (2 yrs.)
Research Costs	$50,000 (2 yrs., includes major responsibility for local personnel
Total	$137,000

III. Project III same as Project II $137,000

IV. Census - Projects II and III $10,000

V. Comparison of Data from Three Projects:

$5,000 (computer analysis within Bank)

VI. Total $461,000 from FY 74 through FY 78

When distributed over FY74-48, the following breakdown of expenditures occurs

(In US dollars)

	FY 74	FY 75	FY 76	FY 77	FY 78
Dakar	21,500 1/	86,000	64,500		
Project II	5,000 2/	34,250	68,500	34,250	
Project III		5,000 3/	34,250	68,500	34,250
Comparisons					5,000
TOTALS	$26,500	$125,250	$167,250	$102,750	$39,250

		Unit Cost ($)	Total
Fixed Costs: per project	Office Space	150/month	$3,600
	Small car		3,000
	Office Equipment		1,000
	Operating Costs	300/month	7,200
			$14,800
			(rounded off to $15,000)

1/ Operations start 4th. quarter FY74.
2/ Census starts one year before survey research.
3/ Census starts one year before survey research.

Research Methodology and Economic Return

The theoretical and methodological issues involved in the monitoring study focus on the measurement of economic return. These issues will hopefully be informed by the conclusions of this study, but are far from being resolved at this time. In order to assure the utility of the results of the monitoring project for other Bank operations, consultations between the principal researchers and Bank staff will precede the final definition of the research design. The most current theoretical and methodological positions available will be used in this research.

As stated in Monitoring Objective D, an attempt will be made to evaluate the economic return of the project in contrast to simply its financial return. Thus, data concerning real income and other benefits accruing to project occupants will be included in the overall analysis of project costs and benefits. This effort, however, must be regarded as experimental in the sense that accurate quantification of real benefits may be difficult to achieve. Nevertheless, it is a necessary aspect of the appraisal and evaluation of urban development projects.

Census Variables for Dakar

1. phase unit
2. neighborhood
3. quartier
4. cluster
5. plot no.
6. age of head of household
7. place of birth
8. length of time in Dakar
9. previous residence pattern
10. marital status
11. family size
12. age of children
13. employment
14. education
15. income
16. source of funds for repayment
17. ethnic group
18. religion
19. relatives in project
20. expected no. in household
21. method of transport
22. distance to work/work location
23. residence of father
24. residence of mother
25. participation in associations
26. type of house envisaged
27. family budget
28. literacy
29. wives' employment

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* This list is subject to expansion, contraction or revision by the principal researchers after agreement with IBRD staff.

Suggested Range of Questions for Dakar Category II Monitoring

1) Household economics, socio-economic consequences for the households:

Project objectives: "Project should be planned according to the target population's capacity to pay."

a) What are the project costs. vs. the cost of living and capacity to pay?

b) What percentage of household income is being spent on housing (including utilities, taxes, and other related costs)?

c) Have there been changes in occupant household real income, employment, family size, migration patterns, and household stability since moving to the project?

d) Has residence in the project improved employability of the target population for both occasional and permanent employment? How close is the project to employment and services?

e)

e) What has been the social impact of moving out of the center of the city?

e.g., What are the advantages and disadvantages as seen by

- participants, and
- non-participants?

To what extent does obtaining a house cause other relatives to migrate?

f) What is a typical family budget (including all project related payments) and what is the range of variation by item?

g) Compare the pilot project to site and services. Are they complements or substitutes? If substitutes which is a preferable investment?

2) Plot economics and self-help capacity:

Project objective: "Projects should act directly or indirectly as a method of economic redistribution." *

a) Has the project stimulated private investment in individual dwellings? What are the determining factors in the different capacities to improve individual plots? Are these different capacities linked to location or organization of the project in terms of clusters, quartiers, or neighborhoods?

b) How are savings converted into investment? Can they be measured (after 6 months, a year?) Does it vary at the same stage of different phases?

c) Are actual costs (land, services, administration) higher than planned costs at the plot level? Why and by how much?

d) Are debt collection problems developing? Why? How are hardship cases being dealt with?

e) Are credit mechanisms available to facilitate investment? (At any level?)

f) Are tenure arrangements (succession, transferability, relationship to credit) stimulants of investment?

g) Is the supply of housing so limited, or so good, as to make it profitable to sell? To whom? Is it being done before the 5-year stipulations?

3) Building construction and self-help capacity

Project objectives: "A site and services project should generate investment in individual household dwellings."

a) What type of materials and labor are being used in housing construction?

b) What are the sources and amounts of materials used in housing investment?

c) Do external constraints exist on the supply of these materials?

d) What are the various housing designs found within the project? Are these choices linked to specific factors?

e) What is the quality of construction?

f) What is the role of technical assistance in building construction?

g) Is the labor from within the project community, the squatter settlements, or from the city proper? If all forms of labor are used, what are their relative proportions? What is the structure of the labor that is used: self-help community cooperatives, individual households, individuals hired from the outside or from construction groups?

h) What is the total amount of investment?

4) Nature of the target population over time:

Project objective: "The inhabitants of a site and services project should be the 'target population' for whom it was originally planned."

a) How was the original population selected?

b) Are plot occupants the intended target population?

c) How does the demographic profile and the ownership and renting profile of the population change over time?

d) Can these changes be attributed to the characteristics of the project?

e) Is there a difference in the ability of groups existing prior to settlement to benefit from the project, as compared with those formed for the purpose of settlement in the project areas?

f) Where do the "renters" come from? What is their employment status?

5) Project and community services:

a) Has the provision of education, sanitation and other community services been sufficient to satisfy the community's demand?

b) Is there an internally-generated momentum and capacity to expand and improve these services?

c) What is the impact on health? e.g., to what extent do participants suffer less from malnutrition relative to non-participants (breakdown) and to their own past?

d) What is the impact on education? e.g., do project participants absorb and desire more education than non-participants?

e) What has been the impact of renting on environmental conditions in the project areas?

i) average plot density
ii) average project density
iii) are public services and utilities adequate for this density?

f) What are the limits on upgrading the services and sites which might cause occupants to seek other areas of town for improved living due to income increase or change in imployment structure (i.e., how can one insure that the project does not degenerate into a slum due to external limits on improvement?)

6) Community organization process:

Project objective: "A site and services project should promote community organization."

a) Have community groups organized to meet specific community needs, i.e., debt servicing, savings mobilization, housing improvement, public utilities installation, and the construction and staffing of neighborhood facilities?

b) What are the community relationships with the administrative agency?

c) Are community organizations effective?

d) Do community authority patterns conform to pre-existing religious, ethnic or functional affiliations?

e) What is the level of responsibility of community organizations? What innovations are suggested by the participants themselves?

7) Project relationships with Dakar Metropolitan Area:

a) What are the relationships of the project population and economy to the Dakar Metropolitan Area as a whole?

b) Does this project satisfy housing demand in quantitative and qualitative terms?

c) What has been the impact of the project on housing densities in other parts of the city?

d) Can similar projects be integrated into the national urban fabric and keep abreast of demand with the rotating fund created by this project?

e) How many small scale businesses and/or commercial enterprises have been opened in the project? Are they subsidized, and if so, can they become self-sustaining? Is the co-op mechanism being used and with what results?