

U N C L A S S I F I E D

AGENCY FOR INTERNATIONAL DEVELOPMENT

Washington, D. C. 20523

PROJECT PAPER

MOROCCO: ANHI-LOW Income Housing
(608-HG-003) (608-0200)

December 31, 1988

U N C L A S S I F I E D

AGENCY FOR INTERNATIONAL DEVELOPMENT
PROJECT DATA SHEET

1. TRANSACTION CODE
 A = Add
 C = Change
 D = Delete
 Amendment Number: ORIGINAL
 DOCUMENT CODE: 3

2. COUNTRY/ENTITY: MOROCCO

3. PROJECT NUMBER: 608-HG 003 608-0200

4. BUREAU/OFFICE: USAID/MOROCCO

5. PROJECT TITLE (maximum 60 characters): ANHI-LOW INCOME HOUSING PROGRAM

6. PROJECT ASSISTANCE COMPLETION DATE (FACD): MM DD YY 09 30 92

7. ESTIMATED DATE OF OBLIGATION (Under "E" below, enter 1, 2, 3, or 4)
 A. Initial FY 89 B. Quarter 4 C. Final FY 89

8. COSTS (\$000 OR EQUIVALENT \$1 =)

A. FUNDING SOURCE	FIRST FY 89			LIFE OF PROJECT		
	B. FX	C. L/C	D. Total	E. FX	F. L/C	G. Total
AID Appropriated Total						
(Grant) ESE	(100)	(100)	(200)	(600)	(200)	(800)
(Loan)	()	()	()	()	()	()
Other U.S.						
1. Housing Guaranty (HG)				3,000	7,000	10,000
2. Beneficiary Payments	800	2,600	3,470	3,000	7,500	10,500
Host Country		070	070		270	270
Other Donor(s)						
TOTALS	900	2,770	3,670	6,600	14,970	21,570

9. SCHEDULE OF AID FUNDING (\$000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	C. PRIMARY TECH CODE		D. OBLIGATIONS TO DATE		E. AMOUNT APPROVED THIS ACTION		F. LIFE OF PROJECT	
		1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan
(1) HG	720		862			800	10,000	800	10,000
(2) Grant	ESE	860							
(3)									
(4)									
TOTALS									

10. SECONDARY TECHNICAL CODES (maximum 6 codes of 3 positions each)
 852 867 864 810 721 541

11. SECONDARY PURPOSE CODE
 723

12. SPECIAL CONCERNS CODES (maximum 7 codes of 4 positions each)
 A. Code: BU
 B. Amount: 10,500

13. PROJECT PURPOSE (maximum 480 characters)

1. To increase the production of serviced housing sites that are affordable to Moroccan urban households earning less than the median income.
 2. To encourage the private sector to take on a greater role in the production of affordable shelter.
 3. To strengthen the operating and financial capacity of the ANHI to carry out its task of stimulating appropriate residential land development.
 4. To reduce the cost of residential land development.

14. SCHEDULED EVALUATIONS
 Interim: MM YY 03 91
 Final: MM YY 09 92

15. SOURCE/ORIGIN OF GOODS AND SERVICES
 888 941 Local Other (Specify)

16. AMENDMENTS/NATURE OF CHANGE PROPOSED (This is page 1 of a _____ page FP Amendment.)

USAID Morocco Controller's Approval of proposed method of implementation and financing.

Signature: *Kay A. ...* Title: *BeA Officer.*

17. APPROVED BY
 Signature: *Charles W. Johnson*
 Title: DIRECTOR, USAID/MOROCCO
 Date Signed: MM DD YY 12 31 88

18. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION:
 MM DD YY

MOROCCO
 ANHI, LOW INCOME HOUSING PROGRAM
 608 HG003
 608-0200

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ACTION MEMORANDUM FOR THE USAID/MOROCCO DIRECTOR

DATE: December 31, 1988

Wiebler
 FROM: John Wiebler, Acting Program Officer
 SUBJECT: ANHI, Low Income Housing Program (608 HG-003 and 608-0200)

PROBLEM:

Your approval is requested for the Project Paper and the Project Authorization for the ANHI, Low Income Housing Program (608 HG-003 and 608-0200).

DISCUSSION:

A major bottleneck in the provision of low income shelter in Morocco continues to be the low level of production of affordable serviced and tenured land. The bottleneck has resulted in the proliferation of substandard neighborhoods, (40% of housing production) which require investments for upgrading and servicing well beyond the affordability of households and the capacity of local and central governments. Given the natural preference of private developers towards serving the more profitable higher income groups and in an attempt to address the needs of lower income families the Government of Morocco (GOM) created in 1984 the National Agency for Fight Against Substandard Housing (ANHI).

Since its creation ANHI has maintained a close working relationship with USAID Morocco. As project manager for the Tetouan Urban Development Project, the ANHI has benefited from USAID financed assistance. Over the past year, ANHI held discussions with USAID officials in order to explore the possibility of HG financing to support their shelter program activities.

The proposed \$10 M HG-003 Program and its accompanying 608-0200 \$.8 M grant component will build ANHI's financial and managerial capabilities for carrying out its own land development program and for pilot testing and implementing policies and procedures leading to: higher production levels of serviced land; lower costs and more affordable serviced plots; increased participation by private developers and local governments in the production of low income shelter; and increased access for low income beneficiaries to existing housing finance programs.

Project design preparations began in spring 1988. USAID prepared and submitted the Project Identification Document (PID) for AID/W approval in August 1988. AID/W approved the PID in September 1988 in State 325923. A.I.D. Delegation of Authority 654 permits you to authorize this project and amend the Housing Guaranty Authorization in the field.

On December 15, 1988 the Mission Review Committee reviewed and recommended approval of the ANHI Low Income Housing Program with minor revisions. The Mission Review Committee, was concerned that the grant supported activities under the 608-0200 Program appeared to be underfinanced. At the request of the Mission Review Committee the description of and level of effort for the grant activities have been amplified and more accurately calculated. As a result, the life of project AID funding level has been raised to \$ 800,000. This funding will also include procurement of the short term services of a shelter/financial analyst to specifically assist USAID in HG-003 project implementation. The final, revised document is attached.

The goal of this project is to improve opportunities for below median income families, in Morocco, to acquire affordable shelter.

ANHI will be the Borrower of record of the loan with full Moroccan Government Guaranty. ANHI will receive the DH's equivalent of the loan and will be fully responsible for servicing the loan. The authorization for HG financing for the ANHI program (\$10 million) will result from a reprogramming of the outstanding balance of the \$17 million 608-HG-002 Low-Income Housing Project. Pursuant to the ANPAC PID approval guidance cable the terminal date for authorizing a first HG Loan Borrowing is three years after the date of PP authorization, unless otherwise approved by AID/W.

The grant component of the project 608-0200, has a life of project AID funding level of \$.8 Million and a PACD of September 30, 1992. The 608-0200 Grant will support the strengthening of ANHI's managerial capabilities and finance the studies required to investigate relevant policy issues and as well as facilitate implementation of these policies. Direct technical assistance and training to ANHI will emphasize building or improving in-house capabilities in the vital fields of financial management, project evaluation, planning and monitoring, management information and strategic planning and will include the financing of the services of a shelter/financial analyst to assist the USAID in project management. Sector studies will be undertaken concerning the norms and standards for land servicing, public/private partnerships in the provision of low income housing and low income household access to formal housing finance programs.

A Congressional Notification for this project has been prepared and will be forwarded to Congress by the end of December 1988. No waivers are requested to accompany this project authorization.

RECOMMENDATION:

That, pursuant to the ANPAC Guidance cable State 325923 and according to the authority granted to you in AID Delegation of Authority 654, you (1) sign the Project Paper Data Sheet and the attached Project Authorization, thereby approving the ANHI, Low Income Housing Program with a life-of-project funding of \$.8 million and a PACD of September 30, 1992; and (2) amend the HG-002 Authorization dated September 30, 1981 to permit for Housing Guaranty financing of the ANHI Low Income Housing Program with a life-of-project financing of \$10 Million in accordance with guidance provided in State 411624.

APPROVED: Charles W. Johnson Date: 12/31/88 DISAPPROVED: _____
Charles W. Johnson
Director

Drafting Officer: RHO:HBirnholz:sc HQ

CLEARANCES: B&A:KFreeman KF
RIA:BBarrington BB
DDIR:LMorse LM

- Attachments: 1. Project Authorization
2. Project Paper

PROJECT AUTHORIZATION

Name of Country: MOROCCO
Name of Project: ANHI LOW INCOME HOUSING PROGRAM
Number of Project: 608-0200

1. Pursuant to section 531 of the Foreign Assistance Act of 1961, as amended, I hereby authorize the ANHI Low Income Housing Program for Morocco (the "Cooperating Country") involving the planned obligation of not to exceed \$800,000 in Economic Support grant funds, subject to the availability of funds in accordance with the A.I.D. OYB/allotment process, to help in financing foreign exchange and local currency costs for the project. The planned life of project is September 30, 1992.
2. The project will provide technical assistance and training to support a Housing Guaranty Program (HG003) financing the purchase of land and introduction of basic infrastructure for serviced plots of land affordable to families earning below the median income in Morocco.
3. The Project Agreement shall be subject to the following essential terms and covenants and major conditions, together with such other terms and conditions as AID may deem appropriate.
 - a. Conditions Precedent:

Prior to the first disbursement under the Grant, or to the issuance by A.I.D. of documentation pursuant to which disbursement will be made, the cooperating Country will, except as the parties may otherwise agree in writing, furnish to A.I.D. in form and substance satisfactory to A.I.D.:

(i) The 608-HG-003 ANHI Low Income Program Agreement duly signed by the Government of Morocco; and,

(ii) A statement of the name of the person or persons representing the Cooperating Country, together with a specimen signature of each person specified in such statement; and,

(iii) The designation of a Moroccan project manager responsible for managing the project for the ANHI .

Signature

Charles W. Johnson

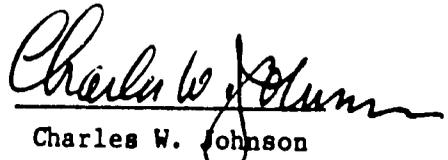
Date:

12/31/88

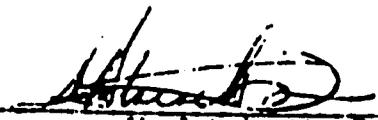
Amendment to Housing Guaranty Authorization
Project 608-HG-002

- Authorization dated September 30, 1981, in the amount of seventeen million dollars

Pursuant to the authority vested in the Assistant Administrator, Bureau for Asia and Near East, Agency for International Development, by the Foreign Assistance Act of 1981, as amended (FAA), and the delegations of authority issued to me by state No.325923 October 5, 1988, I hereby amend the authorization attached hereto, dated September 30, 1981 by adding the following sentence at the end of the first paragraph: "This program may also include financing of land development activities for low income home sites".


Charles W. Johnson
Director.

- 4. Fee: The fee of the United States shall be payable in dollars and shall be one-half percent (1/2%) per annum of the outstanding guaranteed amount of the loans plus a fixed amount equal to one percent (1%) of the amount of the loans authorized or any part thereof, to be paid as A.I.D. may determine upon disbursement of the loans.
- 5. Other Terms and Conditions: The guaranties shall be subject to such terms and conditions as A.I.D. may deem necessary.



W. Antoinette Ford
 Assistant Administrator
 Bureau for Near East

SEP 30 1981

Date

Clearances:

DAA/NE:BLangmaid BL Date 9/20/81
 NE/PD:RBell RB Date 9/20/81
 NE/TECH:LReade LR Date 9/20/81
 NE/NENA:GLewis GL Date 9/20/81
 GC/NE:BJanigan BJ Date 9/30
 PRE/H:PKimm PK Date 9/21

DKW
 GC/H:DKWINKLER:prj:08/12/81

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STATE 417096

ACTION AIL3 INFO: DCM ECON/5 INFO COPY

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CHRG: AID

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DIST: AID

TC RUFHRA/AMEMBASSY RABAT PRIORITY 8558

INFO RUEHTU/AMEMBASSY TUNIS 3053

608-H6-002

BT

UNCLAS STATE 417096

A IAC, RABAT FOR BIRNHOLZ, TUNIS FOR RHUDO

ACTION: RHUDO

E.O. 12356:N/A

USE DATE: 01/03/88

SUBJECT: DELEGATION OF AUTHORITY TO AMEND HG-002

INFO: DIR-DDIR-PRG-

REF: (A) BIRNHOLZ/HEISLER TELCON; (B) STATE 325923; OPM-CHW-RE
(C) RABAT 07854

1. THIS IS TO CONFIRM THAT REF F CONSTITUTES A DELEGATION OF AUTHORITY TO MISSION DIRECTOR TO AUTHORIZE AMENDMENT OF HG-002 AS REQUESTED IN REF C. FYI, REF B WAS AUTHORIZED BY DAA/ANE. WHITEHEAD

BT

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ACTION AID3 INFO: DCM ECON/5

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INFO RUEHTU/AMEMBASSY TUNIS 2967

BT

UNCLAS STATE 411624

AIDAC, RABAT FOR RHUDO

E.O. 12356: N/A

SUBJECT: AMENDED AUTHORIZATION - HG-002

REF: BIRNHOLZ/VERET TELCON ETD 12/19/88

LOC: 430 796
22 DEC 88 1107
CN: 44427
CHRG: AID
DIST: AID

608-HG-002

ACTION: RHUDO

DUE DATE: 12/27

INFO: DER-DIDER

PROG-OFM-CHRON

GC/PRE PROPOSES ADDITION OF LANGUAGE TO HG-002 AUTHORIZATION TO CLARIFY THAT HG FUNDS CAN ALSO BE USED FOR THE KIND OF PROGRAM ENVISIONED WITH ANNI UNDER THE P AMENIMENT. ACCORDINGLY, THE FIRST PARAGRAPH IN THE EXISTING AUTHORIZATION SHOULD BE AMENDED TO ADD THE FOLLOWING SENTENCE:

NOTE THIS PROGRAM MAY ALSO INCLUDE FINANCING OF LAND DEVELOPMENT ACTIVITIES FOR LOW-INCOME HOME SITES. UNQUOTE SHULTZ
1624

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STATE 411624



List of Project and Mission Review
Committee Members

Mission Review Committee

Linda Morse	Deputy Director
Harry Birnholz	Regional Housing Officer
John Wiebler	Acting Program Officer
Kay Freeman	Budget & Accounts Officer
James Smith	Program Economist
Alexandra Braginski	IDI/PDO
Belinda Barrington	Regional Legal Advisor

USAID Project Design Committee

Harry Birnholz	Regional Housing Officer
Kenneth Schofield	Supervising Program Officer
James Smith	Program Economist
Kay Freeman	Budget & Accounts Officer
Alexandra Braginski	IDI/PDO
Belinda Barrington	Regional Legal Advisor

LIST OF ACRONYMS

ANHI	Agence Nationale de lutte Contre l'Habitat Insalubre, National Agency for the Fight Against Substandard Housing.
ALPIM	Association des Lotisseurs et Promoteurs Immobiliers Marocains, Private Developers and Builders Association.
BCP	Banque Centrale Populaire Popular Central Bank
CIH	Credit Immobilier et Hotelier Housing and Hotel Bank
DGAT	Direction de l'Amenagement du Territoire General Directorate for Regional Planning
GOM	Government of Morocco
HG	Housing Guarantee
IBRD	International Bank for Reconstruction and Development
MOF	Ministère des Finances Ministry of Finance
MOI/DCL	Ministère de l'Intérieur/Direction des Collectivités Locales, Ministry of Interior/Directorate of Local Governments.
MHO	Ministère de l'Habitat Ministry of Housing
ONEP	Office National de l'Eau Potable National Office for Potable Water
ONE	Office National de l'Electricite National Office for Electricity
PA	Program agreement
REGIE	Public Utility Company (ie Water, Electricity)
Exchange Rate	US \$ 1.00 = DH 8

MOROCCO
ANHI, LOW INCOME HOUSING PROGRAM
608 HG003
608-0200

I. SUMMARY AND CONCLUSIONS

A) Background

A major bottleneck in the provision of low income shelter in Morocco continues to be the low level of production of affordable serviced and tenured land. The bottleneck has resulted in the proliferation of substandard neighborhoods, (40% of housing production) which when in place, require investments for upgrading and servicing well beyond the affordability of households and the capacity of local and central governments. Given the natural preference of private developers towards serving the more profitable higher income groups and in an attempt to address the needs of lower income families the Government of Morocco (GOM) created in 1984 the National Agency for Fight Against Substandard Housing (ANHI).

Rather than acting as a developer ANHI opted to play the role of a catalyst by channeling private developers initiative towards the production of low income shelter. In this capacity ANHI identifies sites for development, raises the necessary funds from the beneficiaries, subcontracts all studies and works to private engineering and construction firms and coordinates these firms. As a result, with a very light structure (40 staff members) and starting capital of 100,000 DH it has succeeded in becoming, during its four years of existence, the largest producer of serviced land in Morocco. ANHI has a portfolio of 42 projects in various stages of development, which cover the production of 54,000 low income serviced plots at an estimated cost of 511 M DH or \$64 M.

For most of these projects, ANHI acts as project manager on behalf of the regional directorates of the Ministry of Housing which are responsible for implementing Government policy at the regional level. Because of the GOM's objective to limit the use of government resources to the absorption of existing "bidonvilles", the largest proportion of the serviced plots produced by ANHI are earmarked for the relocation of families removed from substandard neighborhoods. However, to preclude further proliferation of substandard neighborhoods, ANHI will have to produce an increased proportion of serviced plots to meet the needs of low-income families other than those relocated from existing "bidonvilles". This can only be done through development programs in which ANHI would act directly as principal rather than as project manager. In order to develop these programs, ANHI needs adequate working capital. Its current 100% reliance on beneficiary advances makes planning and coordination extremely difficult. Currently, works and studies for a particular site can only start when advances from beneficiaries selected for these sites are collected. This leads to lengthy development cycles, low levels of production and otherwise avoidable cost burdens to beneficiaries.

Since its creation ANHI has maintained a close working relationship with USAID RHUDO Rabat. As project Manager for the Tetouan Urban Development Project, ANHI benefited from USAID financed training, technical assistance and computer

equipment. Over the past year, ANHI held discussions with USAID Officials in order to explore the possibility of HG financing to support their shelter program activities.

USAID Officials agreed that HG funding will be extremely useful to support ANHI activities and will help transform current GOM policy decisions in the shelter sector into concrete reality. In May 1988, an official request for a line of credit was presented by ANHI to USAID Morocco. This request was repeated in a meeting between the Ministry of Housing Secretary General, the ANHI Director, PRE/H Director Kimm and RHUDO NENA, during the RHUDO NENA Land Conference held in Lisbon in June 1988.

B) The HG Program

The proposed \$10 M HG Program and its accompanying .8 M grant component will build ANHI's financial and managerial capabilities for carrying out its own land development program and for pilot testing and implementing policies and procedures leading to: higher production levels of serviced land; lower costs and more affordable serviced plots; increased participation by private developers and local governments in the production of low income shelter; and increased access for low income beneficiaries to existing housing finance programs. While resulting in specific production outputs that could easily be identified as HG financed; the program will also help develop policies and procedures congruent with AID Shelter Strategy for Morocco aimed at better meeting low income shelter needs.

C) Conformity with GOM strategy:

The HG program conforms with Morocco's 1988-92 Development Plan which limits the use of GOM budget resources in the shelter sector by:

- Emphasizing programs financed with beneficiary advances.
- Limiting the use of GOM budgetary resources to finance only low income shelter/infrastructure projects.
- Accepting continued GOM responsibility for "bidonville" absorption;
- Upgrading clandestine (informal) settlements and rehabilitating Medina areas;
- Increasing local government responsibility for shelter production; and
- Encouraging greater participation of the private sector in the provision of low-income housing.

The HG program supports this GOM thrust by supplying an adequate production of serviced plots financed by beneficiaries at little or no cost to the GOM.

D) Relationship to the CDSS:

The HG program will contribute to the achievement of three CDSS objectives (a) increased economic growth, (b) improved efficiency and productivity of public services and indirectly (c) improved primary health.

E) Elements of the HG Program:

Specifically, the 10 Million HG Loan, will contribute to finance the working capital requirements for starting and sustaining a land development program

where ANHI acts as principal. This program covers a nominal yearly production of 60 hectares or approximately 3000 residential plots earmarked primarily for families earning below the median income exclusive of families relocated from existing "bidonvilles". The first 60 hectares will be delivered no later than the end of third year after the first disbursement.

The total working capital requirement for such a program is \$20.5 M. The \$10.5 M not covered by the proposed loan will come from beneficiary advances. While carrying out this program ANHI will seek to:

- i/ Lower the cost of serviced land by persuading the relevant decision makers to adapt land development norms and standards to the purchasing power of low income beneficiaries and by reducing the production period.
- ii/ Lower the sales price to low income households through full valorization of land and adequate cross subsidies. Plots earmarked for commercial use and apartment buildings will be sold at full market price and benefits accrued from such sales will serve to subsidize, as appropriate, residential plots delivered to low income households.
- iii/ Assure its financial equilibrium and maintain its production level by strictly recovering its costs including an allowance for land replacement.
- iv/ Facilitate access of its beneficiaries to the existing housing finance programs through the delivery, along with the land plots, of all necessary documents for a mortgage loan particularly clear individual land titles.
- v/ Increase the participation of private developers, small builders, and local governments in the production of low income shelter through whole-sale of land tracks and through pilot testing of various forms of partnerships, including partnerships similar to the ones being developed in the Tetouan Project.
- vi/ Provide technical assistance for housing construction to its beneficiaries.

Assurances will be sought during negotiations to achieve the above policies and procedures. Such assurances will be further specified in the Program Agreement as conditions precedent or covenants, as appropriate.

The \$800,000 Grant will be provided to support strengthening ANHI's managerial capabilities and to finance the studies required to investigate relevant policy issues and to facilitate implementation of these policies. An estimated \$512,000 are earmarked for consultant services, \$98,000 for training and \$90,000 for commodities. Direct technical assistance and training to ANHI will emphasize building or improving in-house capabilities in the vital fields of financial management, project evaluation planning and monitoring, management information and strategic planning. Sector studies will be undertaken concerning the norms and standards for land servicing, public/private partnerships in the provision of low income housing, and low income household access to formal housing finance programs.

ANHI will be the Borrower of record of the loan with full Moroccan Government Guaranty. ANHI will receive the DH's equivalent of the loan and will be fully responsible for servicing the loan. Detailed cash flow analysis carried out on the basis of the current foreign exchange of 8 DHS = 1 US \$ revealed that sufficient cash flow will be generated to allow ANHI to carry out the program and service the HG Loan. These analyses further indicate that a disbursement of \$6 M will be required at program start, expected to occur by the end of 1989.

A second disbursement of \$4 M will be required 24 months later. Of the first disbursement \$3 M or 30% of the total HG Loan will be disbursed as an advance and the remaining \$3 M against serviced land plots resulting from projects carried out by ANHI as principal and delivered after approval of the Project Paper.

The foreign exchange risk coverage policy is currently being reviewed by the GOM/MOF. Although the relevant authorities indicated their willingness to accept that the Government bears the full foreign exchange risk, assurances will be sought at each disbursement that ANHI is adequately covered against foreign exchange fluctuations.

Pursuant to the ANPAC PID approval guidance cable the terminal date for authorizing the first HG Loan borrowing is three years following the date of authorization of the Project Paper, unless otherwise agreed upon by AID/W.

F) Summary of Analyses:

ANHI is chartered as a private law enterprise (Société Anonyme) with a clear mandate to serve low-income households. Although it is wholly owned by the State, its management has the necessary autonomy and flexibility to conduct its operation in a fashion very similar to that of a private enterprise. ANHI's comparative advantages in assembling land and obtaining clear titles, its bargaining power with other public bodies particularly those in charge of the various authorizations, approvals, and norms and standards, its role as catalyst of private participation in meeting the shelter needs of lower income households and its observed high performance make it an appropriate recipient of the proposed HG Loan.

Detailed institutional analyses concluded that ANHI and other institutions involved directly or indirectly in the various stages of land development are capable of carrying out the proposed program. It was also concluded that beneficiary selection and other procedures are adequate and do not raise concerns. Experience to date testifies to ANHI's strict adherence to its mandate of serving low-income households.

The main area of concern is the reliance of ANHI on the public Treasury and its regional cashiers for handling its funds. While reliance on the Treasury and regional cashier permits the adequate operation of the program, ANHI's operation could be enhanced through free access to primary banks, particularly those involved in housing finance. Direct access to primary banks is likely

to result in improved access of the target group to housing financing. Assurances will be sought that ANHI be authorized to deal with primary Banks particularly those involved in housing finance for handling the proceeds of the HG Loan.

Another area of concern is the capacity of ANHI to handle the increased volume of activities resulting from the implementation of the HG' program. Increased volume will require ANHI to develop additional in-house capacity to handle project accounting, cost recovery, evaluations monitoring, and coordination. Grant funds will provide the necessary technical assistance, training and computer equipment to develop increased capacity.

A third area of concern is the monopoly exercised by the regional water and electricity companies (Regies) in the execution of all works pertaining to on-site and off-site water and electricity networks. This monopoly complicates coordination and causes unnecessary delays. Under this program ANHI will seek to have an authorization to directly subcontract all water and electricity works to specialized private firms. Regies can approve the studies and monitor the works for a fee.

Detailed technical studies concluded that the program is technically feasible. The studies revealed that the duration of site development can be reduced from the current 60 months to 36 months. The duration could be further reduced if the monopoly exercised by the Regies were removed, as suggested above. Cost reductions could be achieved through the revisions of norms of standards. As a first step towards cost reduction ANHI will increase its land use factor from current 45 to 50% to approximately 55%

Affordability studies have also been carried out and have concluded that the sales prices applied to low income beneficiaries are affordable and very competitive with prices applied in the informal sector. An income survey of beneficiaries of ANHI's Fez Land Development Project revealed that 70% of the beneficiaries earn below the median income and that 13% of all beneficiaries are women. Despite nonexistence of credit, experience to date shows that defaults are lower than 10%. Although with some delay, beneficiaries have been able to pay for their serviced plots. Beneficiaries usually sell the right to build a second floor in order to raise part of the money required for building their houses. In order to permit low income beneficiaries to continue to sell air rights to build a second floor and from the point of view of air circulation and light, plots smaller than 90 square meters are not readily marketable nor desirable. Density increases will be achieved by reducing the number of large villa plots on the development site, reducing road widths and the amount of public space and by increasing the percentage of land assigned to apartment building use.

An Initial Environmental Examination has been carried out by the design team and cleared by USAID-Rabat Environmental Officer and by ANE/PD (State 406598). It concluded that there is no negative environmental impact associated with the program.

G) Program Implementation and Monitoring:

The Regional Housing Officer/Housing and Urban Development Division will be responsible to USAID/Morocco for monitoring the project. This includes maintaining the schedules of program activities, recommending authorizations for loan disbursements, coordinating with the Mission Contracting Officer for the procurement of Grant funded Technical Assistance, Training and Equipment and providing liaison with relevant Moroccan authorities. ANHI will be responsible for day to day program monitoring and carrying out timely reviews as appropriate. Semi annual program reports will be prepared by AID contracted local consultants together with ANHI staff. ANHI will annually provide AID with a program update duly approved by its board.

Approximately 18 months after the first disbursement a mid-term evaluation will be carried out to assess the progress and to recommend eventual corrections. A final evaluation will be undertaken by the end of the third year of the program and will assess the degree to which program's objectives have been reached.

H) GOM Dollars Repayment Capability:

While Morocco's external debt is still heavily discounted in the secondary market, the economic policy environment is now sound and continued progress is expected. The additional HG borrowing of \$10 million will add less than 1/2 of one-tenth of a percent to Morocco's current debt service. In addition, the HG Loan maturity falls outside the loan limitations accepted by Morocco in the IMF Stand-By arrangement. The 1989 borrowing limit of 700 million SDRS (about 910 million dollars) in 1-12 year maturities thus does not apply to the HG 20-year loan. Morocco may engage in as much concessional borrowing and non-concessional borrowing at maturities greater than 12 years as it judges appropriate.

G) Conclusion:

Given the soundness of current economic policies and the solid prospects for continued strong economic performance coupled with the absence of restrictions on longer-term borrowing, and the appropriateness of investment in low-income housing, the HG loan is appropriate to make in Morocco's current economic situation. The level of country risk is moderate and should not therefore preclude the issuing of the HG loan.

II. PROJECT RATIONALE AND DESCRIPTION

A) Background

In Morocco, a major problem in meeting the housing needs of a rapidly growing urban population, particularly the lower income families, has been the inability of municipal governments and private land developers to finance primary infrastructure, and to open up new areas for shelter development. As a result, nearly 40% of the shelter production is clandestine neighborhoods, which are below Moroccan housing norms (lack of basic infrastructure and public services), and which, when in place, require even larger investments by local governments to upgrade and service. The major bottleneck in the provision of low income shelter continues to be a lack of tenured affordable, serviced land.

Furthermore, the existence of high norms and standards for all housing development elevates the cost of serviced land and housing beyond the means of most lower income households.

The land and infrastructure problem is compounded by the inaccessibility of the housing finance system to below median income households. Banks prefer to lend to customers of higher incomes, and they observe that in many cases lower income households do not have clear title to their land, creating a major obstacle to proper collateralization of a loan.

Similarly, private sector developers often are not interested in creating developments for households below the median. The potential for profit is low, given the limited financial means of these customers, and the infrastructure norms in place.

The Agence Nationale pour la Lutte Contre l'Habitat Insalubre (ANHI), the National Agency for the Fight Against Sub-standard Housing, was created in 1984 to impact on this situation. Since its creation, RHUDO and USAID have maintained close working ties with the institution and provided it with technical assistance, training and computer equipment. The ANHI is an important counterpart in the implementation of the HG001 Tetouan Upgrading Project.

Through 1987 the Agency had signed development commitments amounting to DH 238 million (\$32 million) for projects having a total cost of DH 511 million (\$64 million) and had become the largest developer of land for low-cost housing neighborhoods in Morocco. It currently has 42 approved projects in various stages of development. These will provide shelter for 135,000 low-income households (700,000 persons). Of the 42 projects, ANHI acts as principal in two, and as agent/project manager for the Ministry of Housing and local governments in 40. The majority (80%) of these projects will provide replacement housing for families being relocated from shanty-towns ("bidonville") neighborhoods which cannot be upgraded at reasonable cost.

Because of its very low capitalization (100 000 DH), however, ANHI relies entirely on beneficiary advances to carry out its operations. Detailed studies or work on a particular site can only start when advances from the beneficiaries selected for that project are collected.

As a result, planning and coordination are extremely difficult and on-site work must closely follow the plan for collection of advances from beneficiaries. This leads to lengthy development periods and otherwise avoidable cost burdens.

Over the past year the ANHI has held discussion with USAID officials to explore the possibility of HG financing to support their rapidly expanding shelter program activities. ANHI officials and USAID agreed that HG funding would be extremely useful to support ANHI in a programmatic instead of a site specific manner, while maintaining specific production outputs that could easily be identified as HG financed.

In May 1988 the ANHI officially requested USAID/Morocco to consider providing a line of credit to support ANHI shelter programs. This request was repeated

in a meeting between the Ministry of Housing Sec Gen, ANHI Director, PRE/H Director and RHUDO/NENA during the RHUDO/NENA Land Conference held in Lisbon in June 1988.

A written request was sent by the Ministry of Economic Affairs on December 21, 1988 to formally request USAID contribution to the program.

B) Orientation of the Program

The proposed HG program will provide vital support to achievement of the ANHI five year program, designed to help support the development of a gross area of 1445 hectares, producing fifty-four thousand plots, and allowing for construction of 128,000 housing units for a population of 714,000 persons.

Although ANHI is chartered to serve the needs of the urban poor, it takes due account of the character of the urban area where it operates, the desire to create mixed income neighborhoods and of the need to optimize returns from the sites it develops. A reasonable part of the sites are, therefore, earmarked for commercial use and for upper income housing. The benefits accrued from sales of these sites are used to cross subsidize, and, thereby, reduce the price of the plots earmarked for low income housing, making them more affordable. In most of its current projects, ANHI acts as project manager on behalf of the regional directorates of housing and the local government. The proposed program and its accompanying grant will help support building ANHI financial and managerial capacity for undertaking, as principal, a land development program covering the production of 60 hectares of land per year or about 3000 serviced plots. The new flexibility resulting from the program will permit it to negotiate standards related to zoning changes and levels of infrastructure investment with local governments.

It will also permit ANHI to improve marketing strategies and facilitate participation of private developers in its projects.

The proposed project conforms with Morocco's 1988-92 Development Plan which is designed to limit the use of GOM budget resources in the shelter sector, by:

- emphasizing programs financed with beneficiary advances.
- limiting the use of GOM budgetary resources to finance only low income shelter/infrastructure projects.
- accepting continued GOM responsibility for "bidonville" absorption;
- upgrading clandestine (informal) settlements and rehabilitating Medina areas;
- increasing local government responsibility for shelter production;
- and
- encouraging greater participation of the private sector in the provision of low-income housing.

GOM Development Plan production targets are 164,000 housing units per year to be achieved as follow: central government 20%, municipal government 30% and the private sector 50%.

AID views these moves as positive steps to both encourage dialogue with the private sector and to meet the shelter needs of the urban poor. The proposed AID capital resources (HG Loans) and grant financed technical assistance and training, can assist the GOM to translate its policy objectives into physical outputs.

C) Program Goal

The goal of this project is to improve opportunities for below median income urban families, in Morocco, to acquire affordable shelter.

D) Program purposes

1. To increase the production of serviced housing sites that are affordable to Moroccan urban households earning less than the median income.
2. To encourage the private sector to take on a greater role in the production of affordable shelter.
3. To strengthen the operating and financial capacity of the ANHI to carry out its task of stimulating appropriate residential land development, and
4. To reduce the cost of residential land development.

E) Detailed Program Description

1. The HG program

The proposed \$10 Million HG Loan and its accompanying \$.8 Million grant are intended to assist ANHI to expand its capacity to carry out land development projects and to support the urban upgrading activities of Moroccan municipalities with the active involvement of the private sector.

ANHI will carry out market studies, undertake planning and engineering analysis, acquire land, provide infrastructure (primary and secondary as appropriate) and sell parcels to individual developers and for low-cost shelter and other compatible uses as set forth in each plan.

Land to be sold for purposes other than low cost shelter will be priced at full market value and the proceeds shall be used as needed to write down the cost of specific sites intended for lower income beneficiaries not able to participate in the purchase of plots at full market price as well as to support ANHI's bidonville upgrading programs in the same region.

a) Physical Outputs

The HG loan will supplement other resources available to ANHI (particularly pre-payment from beneficiaries) to carry out that portion of the program intended to house low income beneficiaries. As a direct output of HG resources, and beginning in the third year, ANHI will produce either directly, or in conjunction with private developers, approximately 3000 plots of serviced land (60 hectares) targeted to the low cost housing market. The plots shall have an average size of 90 square meters. With the plot, each beneficiary will receive all documents (including guaranty of legal title) required to start construction and eventually to access the existing formal housing finance system. The beneficiaries will also benefit from on-site technical assistance by ANHI during construction.

HG funds will finance only development of ANHI's own portfolio of projects. Relocation sites and other land development projects undertaken by ANHI as project manager acting on behalf of third parties are excluded from the program.

Prior to any borrowing under the program, USAID/Morocco and ANHI will agree on the location of the sites to be purchased and developed for the first three years of the program. Seventy-five percent of the plots developed will be earmarked for beneficiaries below the median income. ANHI and USAID/Morocco will also agree on a program implementation plan specifying the delivery schedules and the financial flows for the portion of the program concerning the HG loan. ANHI will establish and replenish its land reserves at a rate at least equal to its annual land consumption. To assure continued financial viability, it will calculate the future replacement cost of land at the time of sales, rather than using the actual acquisition cost. As a rule-of-thumb, land sales should factor in a mark-up of 20 percent over the acquisition cost, corresponding to an annual 10 percent inflation rate over a period of two years.

b) Technical Assistance (TA) and training

Grant funded TA, training and equipment will support building the additional capacity and capabilities resulting from the program and be geared towards encouraging efficient operations. Grant funded TA will also support sector studies in the fields of norms and specifications, housing finance and private sector involvement in low income shelter provisions; all of which impact on both ANHI operations and the overall shelter sector in Morocco.

c) Policy Outputs

In addition to the physical outputs discussed above, ANHI will agree to institute the following policies and procedures:

i. ANHI will work to increase the involvement of private developers in the production of land and housing for low-income groups, by gradually shifting its emphasis from sale of plots to individual beneficiaries to the sale of tracts of serviceable land to private developers with conditions ensuring that a negotiated proportion of the plots will benefit low-income families.

ii. ANHI will promote land development ventures with private and local government participation building on the research and design efforts currently underway the 608-0194 Tetouan Urban Development Project Study examining in the public/private development scheme (the "ZAC). Such operations could receive partial financing from the Municipal Development Bank currently being created with technical assistance from USAID/Morocco.

iii. ANHI will facilitate the access of its beneficiaries to the existing housing finance system by providing all documents necessary to apply for a shelter loan including a clear title, and by actively assisting the most credit-worthy beneficiaries to obtain credit from the banking system.

iv. ANHI will seek ways to lower the costs of land development and subsequent housing construction through site design, architectural research and the development of appropriate standards and specifications and will collaborate with the Private Developers Association (ALPIM) and the Directorate of Local Governments of the Ministry of Interior (MOI/DCL) to rationalize major infrastructure standards (water, electricity, sewerage) imposed on developers by public utility companies (Regies) and other administrations in charge of norms and standards.

2. The Technical Assistance Grant 608-0200

A new USAID/Morocco Grant Project (608-0200) totalling \$800,000, to be implemented during FY89 through FY92 would support achievement of HG loan project objectives and institutional development of the ANHI. Grant funds will finance technical assistance for ANHI, whose needs were formally evaluated in May 1988 as a part of the Technical Assistance and Training Needs Assessment under the 608-0194 Tetouan Grant Project. In addition, as recommended in the ANPAC PID Review cable (State 325923) funding will be provided to examine broader sectorial issues that address constraints and policy reform. Costs figures are based in part upon level of efforts determined in the 0194 Needs Assessment and agreed upon with ANHI which reviewed the report. ANHI needs identified beyond the assistance being provided in conjunction with the Tetouan Project, include:

a. Project Planning and Monitoring

Local and third country consultant assistance is required for establishing computerized project planning and monitoring systems which will allow ANHI to plan and coordinate and control all aspects of site development. In the first phase consultant services will be required for the identification of the various components of the system as well as the software and the hardware requirements. A second phase which will take place after procurement of the hardware and the software; the consultants will test the system, identify the eventual complications at the level of the users and make the necessary modification. Finally, in a third phase training will be provided to the project managers and relevant staff at headquarters on the use of the system and the interpretation of its outputs. Costs of this component are estimated as follows.

US and Third Country Consultants	2 man/months at \$ 20 000	= \$ 40 000
Local Consultants	6 h/months at \$ 7 000	= \$ 42 000
Equipment	6 microcomputers + software	= \$ 90 000
Physical and price Contingencies		= <u>\$ 18 000</u>
T O T A L		\$190 000

b. Accounting and Financial Management

Consultant services are required to assist ANHI in developing computerized accounting systems covering both general accounting and specialized project accounts, invoicing and cost recovery. These services will be provided in three phases; a) conception of the system, b) installation of the system, c) training of the staff on operating the system and interpreting its outputs and preparing a procedures manual.

Training will be required both in Morocco and abroad in the field of financial management, particularly short and medium term forecasting, planning and budgeting and cash management.

The estimated cost for this component is as follows:

Local Consultants: 6 months at \$ 7000	=	42 000
Training: 3 persons, 3 months each at \$2000/person/month	=	18 000
Contingencies	=	10 000
S/TOTAL	=	<u>70 000</u>

c. Management Information System

The system will be designed to provide the ANHI with a short and medium term computerization plan and with concrete application to meet immediate priority needs in management information systems. To meet these objectives, three phases of technical assistance are proposed:

- phase 1. an organization-wide assessment of existing information systems, both automated and manual leading to a hardware procurement list, a list of priority applications and an implementation schedule, and
- phase 2. analysis of priority applications and implementation of the programming.
- phase 3. identification and provision of any additional training for ANHI computer management staff.

The cost of this component is estimated as follows:

US Consultants: 2.5 months at \$ 20 000	=	50 000
Contingencies:	=	10 000
TOTAL	=	<u>60 000</u>

d. Strategic Planning/Marketing

ANHI requires assistance in carrying out a strategic planning exercise to help orient the agency to its changing mission and expanding client base (municipal governments). Such an exercise should not be a conventional assessment and set of recommendations conducted by outside management consultants.

Rather it should be a longer term collaboration between ANHI management and consultants which occurs over a period of 12-18 months, building on the experience of the HG-001 Tetouan project involvement and examination of models from other countries.

The Cost of this component is estimated as follows:

US Consultants: 1.5 man/month at \$ 20 000	=	30 000
Contingencies:	=	5 000
S/T	=	<u>35 000</u>

e. Norms and Specifications

Outside consulting services will be directed at improving ANHI capacity to advise government leaders regarding policy reform, as well as increasing the delivery of low-cost shelter solutions. Of special interest will be the possibility of reducing land development and housing construction norms and specification. The assistance will also help quantify the impact of possible reductions as well as develop familiarity with use of computer-assisted design applications (e.g. the Bertaud Model).

Training will be required for the technical staff of the Regies (public utility companies) on the design and pricing of efficient electrical and water grids.

The cost of this component is estimated as follows:

US Consultants services : 3 man/months at \$ 20 000/m/m	=	60 000
Workshops: 2 at 25 000 each	=	50 000
Contingencies:	=	15 000
S/T	=	<u>125 000</u>

It should be stressed that a comprehensive coverage of the norms and specification issue will require higher amounts of funds. In this component USAID will concentrate its efforts on water and electricity grids and on architectural and urbanistic research.

f. Private/Public Partnership

Consultant services will be required for identifying opportunities and strategies for promoting partnerships between ANHI and the private builder developers particularly small developers. In addition to the consultant services three information visits for ANHI high level staff and private developers aiming at learning from successful experiences in other countries are planned. Seminars and workshops will be organized on an adhoc basis benefiting developers and builders and aiming at encouraging their increased involvement in low income shelter provision and at informing them about possible partnerships with ANHI or other local and central government agencies active in low income shelter provision. These workshops and seminars will be

offered in collaboration with ALPIM.

In addition, information visits aimed at benefiting from successful experience in third countries will be organized for ALPIM designated builders and developers on an adhoc basis.

The cost of this component is estimated as follows:

Consultants Services :	2 man/month at \$ 20 000	= 40 000
Local Consultants:	*2 man/month at \$ 7 000	= 15 000
Information Trips:**	5 trips at \$ 3 000/ea	= 15 000
Workshops:	2 workshops at \$ 5 000/ea	= 10 000
Contingencies:		= 10 000
TOTAL		= 90 000

* rounded to 15,000

** does not include airfare to be paid by participants themselves

g. Housing Finance

Technical assistance will be required to evaluate the housing finance system and to identify ways in which this system could tailor an increased proportion of its services to the needs and the capabilities of below median income families. Such assistance will benefit the MOF, the Banks involved in housing finance and ANHI. Technical assistance is also required to assist ANHI in defining and negotiating the procedures for handling its accounts in primary banks involved in housing finance particularly in the field of beneficiary advance collection, reporting and access of ANHI beneficiaries to housing finance.

The cost of this component is estimated as follows:

US Consultants:	4 months at \$ 20 000	= 80 000
Contingencies:		= 10 000
S/TOTAL		= 90 000

h. Program Evaluation

Three types of evaluations are planned in this program as mentioned in the program evaluation section. It is estimated that these evaluation will require 3.5 man months of local consultants and one man/month of US Consultants.

The cost of these evaluations is estimated as follows:

US Consultants:	One man/month at \$ 20 000	= 20 000
Local Consultants:	3.5 man/month at \$ 7 000	= 24 000*
Contingencies:		= 6 000
TOTAL		= 50 000

* rounded to 24 000

1. Program Management Support

In order to assure adequate project monitoring and to assist the ANHI in the preparation and revision of the annual program delivery plan grant funds will be used to contact the services of a senior shelter/financial analyst expert.

U.S and/or Third Country Consultant Services:

4.5 m/m at \$20 000	=	\$ 90 000
Contingencies	=	\$ 10 000
TOTAL	=	\$100 000

3. HG Loan Financing

a. The Proposed Loan

ANHI will be the borrower of record. The foreign exchange proceeds will go to the Central Bank which will credit the equivalent in local currency to the ANHI account. The GOM, represented by the Ministry of Finance, will provide a full guarantee of the dollar HG loan. The exchange risk will be borne by the GOM, except to the extent that a new national exchange risk coverage policy (currently under study) may provide for a partial and capped contribution by all foreign currency borrowers in Morocco. Short of total and unconditional Foreign Exchange risk coverage by the Government AID will require that at each disbursement GOM will provide proof that ANHI is adequately shielded against any adverse impact of foreign exchange fluctuations for that particular disbursement.

The detailed Cash flow analysis revealed that two disbursements will be required. A First disbursement of up to 6 Millions Dollars at the start of the program and a Second disbursement of 4 Million dollars. The first disbursement includes \$ 3 Million which are disbursed as an advance to be liquidated within two years and 3 Millions Dollars to be justified as reimbursement for eligible expenses. Serviced plots delivered to below median income beneficiaries after the date of the PP approval are considered eligible expenditures for the purposes of justifying the disbursements and the liquidation of the advance. These serviced plots are exclusively those resulting from the projects where ANHI acts as principal. Their delivery should be evidenced by duly signed occupancy permits.

At the time of the first disbursement, ANHI will be required to have designated the first 60 hectares to be developed under the program and to have taken the initial steps with regard to the policy objectives described in C.2 above.

F) Project Fit to USAID/Morocco Strategy

1. CDSS

The project will contribute to achievement of two USAID Morocco CDSS objectives: (1) increased economic growth, (2) improved efficiency and productivity of public services.

a. Increased economic growth

Project activities will support housing investment which has an income multiplier that is typically above the average for all types of investment. Empirical estimates of the multiplier for a number of developing countries place its value at roughly two. Both the high labor intensity of construction and its low import (in the case of Morocco) content contribute to the size of the multiplier.

The country's construction industry has been in decline since the late 1970's. In fact, stimulation of this industry has been declared one of the major objectives of economic policy for Morocco. The current slump is likely to have generated some excess capacity - which should allow for the exploitation of the employment and income generating potential without leading to any inflationary pressures.

The design of the program should also encourage private sector development particularly among small and medium-size enterprises. These enterprises tend to be involved in disproportionate numbers in any construction activity, particularly low-income housing construction and upgrading in secondary cities.

ANHI will also be developing projects that are integrated across socio-economic classes and physical development categories. In this way ANHI will be able to manage a land sales process that recognizes that land values for certain areas will come to reflect market conditions (proximity to commercial and public facilities such as hospitals, schools markets) that allow recapture of added value. By incorporating provisions for this added value into project planning, ANHI will be able to use higher returns on certain properties to offset narrow or slightly negative margins on others, thereby keeping prices in line with the financial capacity of lower-income families.

b. Improved efficiency and productivity of public services

The project will support continued application of cost-recovery mechanisms, and careful attention to the flow of advances from benefiting families, practices that, to date, have forced ANHI to operate conservatively, and with careful attention to the financial viability of each transaction. The process will result in a minimum need for public sector support. The project will also support a rationalization of the land development process leading to higher volumes of production, and a consequent increase in the private sector resources (beneficiary advances) invested in production of low-cost housing.

2. USAID/Morocco Shelter and Urban Development Strategy

In support of the specific objectives of the shelter and urban development strategy, the project will increase the output of serviced land suitable for low-cost housing, applying new concepts of public/private collaboration in both production and commercialization. This will be particularly true as conditions develop that encourage development by private developers within an ANHI site.

The project will also serve to carry forward experience gained in the 608-HG001/0194 Tetouan Upgrading Project that demonstrates the viability of neighborhood upgrading, the most efficient forms of municipal government planning and intervention, and provision and financing of infrastructure systems.

Finally, the project will contribute to better understanding of the needs related to housing finance and land tenure issues.

G) Other Donor Activity

The World Bank is the other major donor active in the shelter sector in Morocco. The focus of the Bank's activities has been to strengthen the Credit Immobilier et Hotelier (CIH). The principal housing finance agency, so as to generate sufficient resources to meet shelter needs. These efforts are not specifically directed at the below-median-income population. USAID/Morocco will continue to work with the Bank and the CIH to develop easier access to housing finance for those target population families who are interested.

Another area of World Bank attention has been decentralization and municipal finance. USAID/Morocco and the Bank are both supporting the creation of a sound financial intermediary capable of mobilizing the resources necessary to support GOM decentralization programs and greater investment in municipal resources.

H. Special Program issues

Following review of the PID, ANPAC provided guidance on several key issues to be addressed and clarified with the GOM during the preparation of the project paper. These issues include program beneficiaries; credit availability, ANHI role and management capability, the need to increase private sector involvement in the program. GOM shelter policy change, content of Grant supported technical assistance, cross subsidization of housing cost, foreign exchange risk, GOM Dollar repayment capability. Apart from the above issues ANPAC noted four concerns for clarification namely site identification, environment, other donors, and women in development. The summary response to the issues is given below.

Issue : Program beneficiaries: ANHI is currently completing the Oued Fez project, the project most likely to resemble ANHI production under the proposed program. A detailed survey of the beneficiaries of this project indicated that on the basis of income data obtained, nearly 70% of the households served by the project may be classified as eligible beneficiaries for HG program support. Since the HG loan finances only 50% of the total cost of the program the above percentage of target beneficiaries is more than satisfactory to assure that HG resources are made available to eligible beneficiaries.

The same Oued Fez experience indicates that smaller size lots can not readily be marketed to HG target population. The reason being that Morocco's laws authorize the sales of air rights. Most target beneficiaries sell the right to build a second floor in order to raise part of the funds needed for house construction, smaller size plots do not allow the construction of two (2) independent housing units. Rather than ask ANHI to adopt smaller lot sizes which is deemed harmful to its marketing strategy the design team convinced ANHI to raise the net to gross area from about 45% to close to 55%.

These increased densities will reduce the appeal of ANHI's development to higher income groups and the risks of speculation. Finally as specified in the project paper, ANHI will continue to rely on the selection commissions which have criteria insuring that the program will serve our target group.

Selection criteria include that the beneficiaries: a) be over 21 years of age, married and have at least one child, b) resident of the city in which the Program is being implemented, c) never previously benefitted from a government housing program (verified on a data bank cross checking national identity card numbers), d) having an income of less than 2200 DH/Month (1983).

Issue: Credit Availability: Given the backlog in serviced land production and the low level of supply, sizable pockets of beneficiaries exist which have enough occasional saving to access propriety of shelter without using credit.

Despite the limited availability of credit, ANHI has always been able to collect the necessary advances. In the Oued Fez development, being principal of the project and not being tied to beneficiaries relocated from "bidonvilles" ANHI is able to collect the advances on schedule and with no sizable defaults. This shows clearly that beneficiaries are able to raise the cash needed for the purchase of land plots. Part of the funds needed to build the house are usually raised through the sale of the air right as mentioned above.

Under this program ANHI will seek to increase the accessibility of its beneficiaries to the formal housing finance system; by making itself known to the Housing Finance Sector, by trying to make its developments eligible for Housing Finance loan programs, by informing its beneficiaries about the Housing Finance possibilities and by delivering, along with the sites all administrative papers required to apply for a mortgage loan particularly a clear title.

Issue : ANHI Management Capability:

ANHI has been established to serve the shelter needs of low income households and all evidence gathered indicates strict adherence to this mandate. As for ANHI capability it should be stressed that ANHI is not a direct developer. Rather ANHI identifies the sites, assembles the land and subcontracts all site related studies and works to private engineering and constructions firms. Most of the additional production resulting from the program will be borne by these firms which have enough slack capacity.

The increased production will call for some additional in-house capacity which will be met through additional recruitments.

Under this program ANHI will act as principal rather as project manager. As a result, it will have to develop in house capabilities in such vital fields as land acquisition and financial management. Equipment, technical assistance and training for the development of these in-house capabilities will be financed by the grant.

Issue: Need to increase private sector intervention:

ANHI acts as catalyst of private sector participation in low income shelter provision. 94% of the cost of a serviced plot represent payments for land acquisition and for works and services subcontracted to private firms. The natural preference of private developers to serve the needs of higher income groups makes ANHI a useful and necessary intermediary. ANHI's comparative advantages in assembling land and obtaining clear titles, its bargaining power with other public bodies particularly those in charge of the various authorization and approvals and norms and standards, its role as catalyst of private participation in the satisfaction of the shelter needs of lower income households and its observed high performance make it an appropriate recipient of the proposed HG Loan.

Grant funds will finance studies related to the increase of private sector involvement and public private partnerships will be pilot tested. It should be mentioned that as a result of work on the Tetouan Project, USAID Morocco

has been already asked by the MOH to finance studies leading to drafting national legislation which will provide the legal instruments for public private partnerships such as the ZAC.

Issue: GOM Policy Change.

Of the \$800,000 Grant, \$305,000 are earmarked for study of such policy issues as lowering norms and standards, increasing private sector involvement in low income shelter provision and improving low income households access to formal housing finance programs.

Issue: Content of Grant supported Technical Assistance.

Grant funded technical assistance; training and equipment will support program implementation and policy dialogue as summarized in the table below.

(\$000)

Component	Consultants	Training	Commodities	Contingencies	TOTAL
A. ANHI					
1. Project planning and monitoring	82*		90		
2. Financial management	42*	18			
3. Management information system	50				
4. Strategic planning/marketing	30				
B. Sector Studies					
1. Norm and specifications	60	50			
2. Private/Public partnership	34	30			
3. Housing finance	80				
C. Evaluations					
	44				
D. Program Evaluation and Monitoring					
	90				
E. Contingencies					
					100
TOTAL	512	98	90	100	800

* includes Training

Issue: Cross-subsidization

Approximately 20% of the land developed will be earmarked for commercial use and apartment buildings and sold at full market price. Benefits from the sales of such land will subsidize low income residential plots. All beneficiaries of low income residential land will benefit equally from this subsidy.

Issue: GOM Dollar repayment capability

The IMF projects that the growth of Morocco's external debt will slow considerably over the next few years, declining to 204% of exports of goods, non-factor services and private transfers in 1993 as compared to 275% in 1988.

IMF projections include gradually increasing external reserves to 3-4 months of import coverage to protect against an unexpected external shock. Morocco's balance of payments position is expected to remain manageable and to strengthen over the medium term. The government is committed to maintaining external account equilibrium in order to resume payment of its external debts on schedule. Neither the World Bank nor the IMF foresee the need for Morocco to reschedule its debt after 1991.

Given the soundness of current economic policies, the solid prospects for continued strong economic performance, the absence of restrictions on longer-term borrowing, and the appropriateness of investment in low-income housing, the HG Loan is appropriate to make in Morocco's current economic situation. The level of country risk is moderate and should not therefore preclude the making of the HG Loan.

Issue: Foreign Exchange Risk:

GOM indicated its willingness to bear the foreign exchange risk of this HG program. In case of changes during negotiations, a condition will be incorporated in the Program Agreement stating that at each disbursement proof should be provided to USAID that ANHI is adequately covered against any negative foreign exchange fluctuation resulting from that disbursement.

III. FINANCIAL AND IMPLEMENTATION PLAN

A. Program Cost estimate

The Total cost of the program is 20,5 \$ Millions representing the working capital requirement for capacity build up leading to a yearly production of 60 Hectares of serviced land. These costs are derived on the basis of a careful analysis of ANHI past experience. They take into account expected improvements in the duration of site construction which will be reduced from about 60 months to about 36 months. For the purposes of calculating the cost of the program, the 10 million GH Loan conditions have been assumed to be 11% interest rate, and 30 years maturity period including a 10 years grace period. Physical contingencies (15%) have been incorporated in the calculations as well as an annual inflation rate of 7%. All calculation have been made on the basis of an exchange rate of 1\$ = 8DH. The total program cost is covered by the 10 millions Dollars GH Loan and 10,5 millions in beneficiary advances accumulated during the first three years of capacity build-up. Beginning the fourth year enough cash will be generated from sales and new beneficiary advance payments to sustain a yearly production of 60 hectares, to service the loan and to allow a modest growth as will be explained in Section V.A.1. and detailed in annex VII.E1.

HG funds will be appropriated at ANHI's discretion to cover any part of land development expenses. These expenses are as follows for the development of one hectare of land including physical and price contingencies:

	<u>DHS (000)</u>	<u>US \$</u>
a) Land acquisition and regularization	327	40,875
b) Technical studies and monitoring	70	8,750
c) Development costs (roads, sewer, water & electricity)	966	120,750
D) Staking and titling	21	2,625
e) ANHI's fees and Misc. (10%)	155	19,375
f) Interest charges (HG loan)	130	16,250
g) Final servicing and landscaping	110	13,750
h) Total	<u>1779</u>	<u>222,375</u>

B. Grant component of the program.

In addition to the HG loan USAID will provide an additional \$.8 Million grant to support program objectives. This grant will be spent as follows including a 10% price contingency:

608-202 Grant Project Financial Summary By Activity
(\$000 U.S.)

	Quantities				Cost				ST	Contin- gencies	TOTAL
	USC (in pm)	LC	T	C	USC	LC	T	C			
a/ Program Planning and Monitoring	2.	6	*	6 PC	40	42	90	172	18	190	
b/ Accounting and Financial Management		6	+	-		42	18	- 60	10	70	
c/ Management information System	2.5	-	*	-	50	-	-	- 50	10	60	
d/ Strategy Planning and Marketing	1.5	-	-	-	30	-	-	- 30	5	35	
e/ Norms and Specifications	3	-	+	-	60	-	50	- 110	15	125	
f/ Public Private partnerships	1	2	+	-	20	14	30	- 64	16	80	
g/ Housing Finance	4	-	-	-	80	-	-	- 80	10	90	
h/ Program Evaluations	1	3.5	-	-	20	24	-	- 44	6	50	
i/ Program Implementation and Monitoring	4.5	-	-	-	90	-	-	- 90	10	100	
T O T A L S	19.5	17.5	-	-	390	122	-	- 700	100	800	

USC : US Consultant
 LC : Local Consultant
 T : Training
 C : Commodities
 * : Training Component included
 Consultant effort
 + : Specific Training Component

The above activities include consultant fees, training expenses, and commodities, summarized in the table below:

Grant Project Summary Cost Estimate
(\$000 U.S.)

Component	USAID	GOM	Total
Technical assistance	400	135	535
Commodities	100	35	135
Training	100	35	135
Sector Studies	200	65	265
TOTAL	800	270	1,070

The technical assistance Grant funds during the first three years of the program is summarized in the table below:

608-0200 Grant Project Projected Disbursements By Fiscal Year
(in current dollars)

(\$000 U.S.)

YEAR	1989 (mid)	1990	1991	1992 (mid)	Total
TOTAL	225	340	200	35	800

C. HG disbursement

All HG funds will be required during the first three years of the program. A 6 million dollar disbursement will be required at the start of the program, expected during the third quarter of calendar year 1989, and a second disbursement of 4 million dollars will be required 24 months later. Of the first 6 Million dollar disbursement 3 Million dollar will be an advance of 30% of the total HG loan and the remaining 3 milion dollars will be justified against plots delivered by ANHI to low income beneficiaries. Eligible plots are those plots delivered after approval of the project paper to beneficiaries other than those relocated from "bidonvilles". They should result from projects undertaken by ANHI as principal rather than as project manager on behalf of regional directorates of Housing or local Governments. Finally delivery of plots should be evidenced by sales contracts and duly signed occupancy permits. The 3 Million dollar advance and the second disbursement will also be justified against delivery of plots eligible beneficiaries.

Five sites currently in progress are eligible for justification of the first disbursement under the proposed program. The main characteristics of these sites and their delivery schedule are summarized in the table below.

Site	Area	Date Star- ted	Total Plots	Resid Plots	Commer Plots	Delivery schedule		
						1989	1990	1991
Oued Fès	101	Nov.86	2057	1845	212	800	1000	257
AL WAFAE	34.5	Mar.87	1675	1662	13	910	700	65
AL QODS	23.4	Nov.87	908	890	18	650	240	18
MASSIRA	32.7	Dec.87	1593	1585	8	800	845	8
NARJIS	35.6	Jun.88	947	911	16	400	441	86
TOTAL	228.1		7160	6893	267	3560	3166	434
Estimated sales price (Million DHS)						84.9	75.5	8.2
Estimated sale prices in Million \$						10.61	9.44	1.02

Since the first disbursement is not expected to take place before the 4th quarter CY 1989; ANHI will be able to produce enough finished plots to justify the proposed \$3 million reimbursement in addition to the proposed 30% advance (3 Million Dollars).

Pursuant to the ANPAC PID approval guidance cable the terminal date for authorizing the first HG Loan borrowing is three years following the date of authorization of the Project Paper, unless otherwise agreed upon by AID/W.

D. Cost recovery and reflows:

Under this program ANHI will continue to recover the full cost of its developments. It will further continue to rely on beneficiary advances to finance its operations and to cross subsidize prices of residential plots sold to below median income households from profits resulting from the sale of plots earmarked for commercial use and apartment buildings sold at full market price.

Advances from beneficiaries will be collected as follows in percent of total plot price :

- 40% at the start of works on site.
- 30% in the middle of site construction (12 month from start work)
- 30% at completion and delivery (24 month from start of works).

Sales of plots earmarked for commercial use (apartment buildings) will occur one year after delivery of residential plots in order to reach a higher value.

Pricing of serviced land takes into account the replacement cost of land rather than the acquisition cost. This practice will allow ANHI to constantly replenish its land reserve in order to maintain the production volume of 60 hectares per year. It has been assumed that the replacement cost of land is equal to the acquisition cost inflated at 10% over two years.

E. Program Implementation Plan

1. HG Program Implementation Plan

It is expected that all HG funds will be required during the first three years of the program. During this period ANHI will reach full capacity and thereafter revenues from sales of residential and commercial plots as well as new beneficiary advances will generate enough cash to sustain a yearly production of 60 hectares.

Implementation schedules have been developed for a typical 20 hectares site with the relevant PERT diagrams and critical paths, based on expected reductions in site development durations resulting from the proposed HG loan, see Annex VII E2 B. The program implementation plan based on these schedules is represented as follow for the first five years, beginning at the date of disbursement :

	<u>YEAR 1</u>	<u>YEAR 2</u>	<u>YEAR 3</u>	<u>YEAR 4</u>	<u>YEAR 5</u>
Land Acquisition and architectural and urban studies:	<u>60 ha</u>	<u>60 ha</u>	<u>60 ha</u>	<u>60 ha</u>	<u>60 ha</u>
Site development		<u>60 ha</u>	<u>60 ha</u>	<u>60 ha</u>	<u>60 ha</u>
Sales of Residential plots			Plots <u>2933</u>	Plots <u>2933</u>	Plots <u>2933</u>
Sales of Commercial plots Housing construction				<u>230</u>	<u>230</u>

The first three years are required for capacity build up. Beginning the end of the third year 60 hectares of developed land will be produced and delivered to eligible beneficiaries. Construction on the sites will start the fourth year at a density of about 80 to 90 housing units per hectare as each plot receives an average of 1,6 to 1,8 housing units.

2. Grant Program Implementation Plan

The Grant will be implemented during a three year period beginning in the second half of CY 1989 according to the schedule shown on the table below.

Grant Project Implementation Plan

Grant project implementation plan and disbursement schedule is summarized as follows:

(\$000 U.S.)

	1989 2nd Semester	1990	1991	1992	TOTAL
a/ Project planning and Monitoring	140	50			190
b/ Accounting and Financial Management	30	20	20		70
c/ Management information systems		40	20		60
d/ Strategic planning and Marketing	15	10	10		35
e/ Norms and specification		50	75		125
f/ Public/private partnerships	10	40	30		80
g/ Housing Finance		90			90
h/ Program Evaluations		10	15	25	50
i/ Program Management Support	30	30	30	10	100
Planned disbursements	215	340	200	35	800

IV. MONITORING AND EVALUATION PLANS

A. Monitoring Plan

The Regional Housing Officer/Housing and Urban Development Division will be responsible to USAID/Morocco for monitoring the Project. This will include maintaining the schedule of Project activities, recommending authorizations for loan disbursements, coordination with the mission contracting officer to procure USAID Grant funded Technical Assistance, Training and Commodities and liaising with the ANHI and other COM entities.

The ANHI will be responsible for daily project monitoring. On a regular basis, monthly and quarterly, the Project Unit Chief reviews project implementation activities with the project manager focusing on project implementation issues; meeting schedules, expenditures and projections and reviewing problems and new opportunities. On a less frequent basis (every 3-4 months) the Director of Technical Operations conducts detailed reviews with

project managers and regularly undertakes site visits to resolve specific issues. On a semi-annual basis the Board of Director reviews ongoing ANHI activities and approves new initiatives.

USAID and ANHI have as a result of the HG 001 Tetouan Upgrading Project developed direct monitoring and information exchange procedures. The experience to date has shown that the ANHI is very receptive to USAID monitoring, feedback on management activities and advises USAID in a timely manner of upcoming technical and policy issues that impact on project implementation.

B. Evaluation Plan

USAID and the ANHI will conduct reviews of program activities, examine progress towards achievement of production objectives and towards institutional strengthening and meeting specific shelter sector objectives.

The fact that this program will be attempting to improve the operating efficiency and develop a sustainable shelter production output to meet the needs of the urban poor while addressing constraints that impact on the sector merit careful evaluation. Three types of evaluation are planned: semi-annual progress reports, a mid-term and final evaluation.

1. Semi annual progress reports

Semi-annual progress reports will be prepared by USAID contracted local consultants (procedure used in HG-002 Program) together with ANHI staff. These reports will compare program progress with agreed upon program delivery plans including progress to date on land acquisition, contracting of infrastructure works, sales program and inflows of beneficiary advances. The report will also monitor the scheduling and implementation of technical assistance and training being provided with grant resources. The reports will make recommendations to USAID and ANHI concerning issues to be resolved, modifications to be made in program delivery plans and new program opportunities to be examined. A condition precedent to be included in the Program Agreement will be the annual updating of the Program Delivery Plan. This will also provide an additional opportunity to monitor program progress.

2. Mid term evaluation

Approximately 18 months after the first HG loan disbursement a mid-term evaluation will be scheduled. At that point the ANHI will have had sufficient time to implement the land development program as herein conceived. The purpose of this evaluation is to identify institutional bottlenecks and recommend adjustments in planned program activities. The evaluation will:

- i. assess progress towards the achievement of the program goal and purpose;
- ii. determine the number of hectares of land that ANHI has acquired under the program;
- iii. assess adequacy of the pricing policy adapted by the ANHI to include land replacement values and the effectiveness of the internal cross-subsidization pricing formula;

iv. determine the number of serviced plots delivered to eligible beneficiaries;

v. assess ANHI effort to increase the participation of private developers and small builders in the production of shelter for eligible beneficiaries;

vi. appraise progress made by the ANHI to provide access to housing finance facilities for eligible beneficiaries;

3. Final evaluation

A final evaluation will be conducted at the end of the program to assess the achievement of program objectives. It will determine the ANHI success at establishing a self sustaining land banking and delivery program and evaluate the institutional development of the ANKI to include the impact of the grant funded technical assistance and training provided. Using ANHI records the evaluation will measure how effective the program was in increasing the participation of private developers and small builders in meeting the needs of the urban poor and will evaluate what changes have been made to re-orienting the housing finance system towards addressing the needs of urban poor.

4. Funding

Funding of the above evaluations estimated at \$50,000 will be provided by the grant. The evaluation will rely principally in local professional consultant services.

5. Audit

USAID intends to procure technical assistance, training and commodities under the grant through AID direct contracting procedures. As such, no funds are budgeted for independent audits.

C. Procurement/Contracting Plan

Contracting and procurement procedures of ANHI are described in the institutional analysis section and detailed in Annex VII.E2 A. These procedures conform with government regulations as stated in decree NO 2-76-479 dated October 1976. Almost all large scale contracts are let by competitive bid. They may be awarded to the lowest bidder or to the most qualified bidder provided due justification.

ANHI will prepare, let and manage all contracts for preliminary studies, detailed engineering studies and access roads, sewer and water drainage works. Studies and works contracts for water and electricity will be awarded to the Regies the ONEP or ONE through direct negotiations. The ONEP, ONE and the Regies subcontract in turn the works for water and electricity networks to specialized private firms.

Procurement of technical assistance training and commodities to be financed under the 508-0200 Grant Program will be obtained through the issuance of a Request for Bids to qualified consulting firms in the U.S. It is anticipated that with the exception of the evaluations and the Public/Private Partnership

and Housing Finance Studies all services can be obtained from one supplier using U.S., third country and local resources.

In furtherance of the Agency's Gray Amendment objectives, the following language will be included in the Commerce Business Daily notice, and in the Instructions to Offerors or Bidders (Section L) of the related solicitation document when full and open competition procedures are used.

"AID encourages the participation to the maximum extent possible of small business concerns, small disadvantaged business concerns, and women-owned small business concerns in this activity as contractors or sub-contractors in accordance with Part 19 of the Federal Acquisition Regulation. In this respect, it is anticipated that the prime contractor will make every reasonable effort to identify and make maximum practicable use of such concerns. All other selection evaluation criteria being found equal, the participation of such concerns may become a determining factor for selection."

D. Methods of Implementation and Financing of Grant Activities

Technical assistance and training will be procured through AID Direct Contracts (\$700,000). Commodities will be procured through Direct Letters of Commitment (\$100,000). All services will be reimbursed through Direct Payment by AID (\$800,000).

V. SUMMARY OF ANALYSES

A. Financial Analysis

1. Financial plan

The total cost of the program estimated at 20,5 \$ millions represent the working capital required in order to build up ANHI's capacity to acquire and develop 60 hectares of land per year. This cost is financed by the proposed 10 Million dollars HG Loan and by 10,5 million dollars of beneficiary advances. The loan will be paid in two tranches; 6 million dollars at the start of the program and 4 million dollars 24 months later. Beneficiary advance payments will be collected at a rate of 3,5 Million dollars during the first year, 6,25 Million dollars during the second year and 0,75 million during the third year. Beginning the end of the third year HG proceeds and beneficiary advances are consolidated into beneficiary payments for delivered residential plots and revenues from sales of plots earmarked for commercial use and apartment buildings.

The program will thus be rolled over indefinitely and enough cash will be generated to cover the costs, service the HG loan and allow a modest growth as shown in the cash flow table given in annex VII. E1. and summarized below:

Summarized Program Cash flow
in DHS 000 and US\$ Millions

	Year 1		Year 2		Year 3		Year 4		Year 5	
	DH	US\$	DH	US\$	DH	US\$	DH	US\$	DH	US\$
CASH OUTLAYS										
Investments	21.90	2.74	89.82	11.23	100.92	12.61	116.22	14.58	125.70	15.10
HG Debt Service	1.32	0.17	5.30	0.66	8.80	1.10	8.80	1.10	8.80	1.10
Sub Total	23.22	2.90	95.12	11.89	109.72	13.72	125.02	15.63	134.50	16.20
CASH INFLOWS										
Beneficiary advances	27.54	3.44	50.46	6.31	54.48	6.81	58.80	7.35	63.54	7.80
Sales of resd. plots	-	-	-	-	20.70	2.58	22.38	2.80	24.12	3.00
Sales of commerce. plots	-	-	-	-	-	-	43.90	5.48	47.46	5.50
HG loan disbursement	48.00	6.00	-	-	32.00	4.00	-	-	-	-
Sub Total	75.54	9.44	50.46	6.31	107.18	13.40	125.08	15.64	135.12	16.30
CASH SURPLUS OR DEFICIT	52.34	6.54	-44.64	-5.58	-2.48	-0.31	-0.32	-0.04	0.62	0.10
CUMULATIVE CASH FLOW	52.32	6.54	7.66	0.96	5.12	0.64	5.18	0.65	5.80	0.70
CUMULATIVE HG PROCEEDS	48.00	6.00	48.00	6.00	80.00	10.00	80.00	10.00	80.00	10.00
ACCUMULATED NET BENEFICIARY ADVANCES	27.54	3.44	78.00	9.75	84.18	10.50	90.82	11.35	98.16	12.30

2. Financial equilibrium of the program

The financial equilibrium of the program is attained through the strict adherence of ANHI to the following essential rules: a) pricing policy based on full cost recovery of expenses. Such pricing policy should not preclude price differentiations of plots according to the expected use, the location within the site and the size and cross subsidies benefiting beneficiaries of below median income residential plots. b) prompt collection of beneficiary advances, 40% of the the plot price at start of works, 30%, 12 months later; c) building in replacement cost of land rather than acquisition cost. d) the reduction of the duration of site development from 60 months currently to an expected 36 months. Experience with the Oued Fez project which is more likely to resemble projects under the proposed program indicates that ANHI can successfully observe the above mentioned rules .

3. Beneficiary advances

Beneficiary advance payments are a major source of financing for the program. Under the proposed program ANHI reliance on beneficiary advances for prefinancing its operations will be reduced from 100% to 50%. The timing of advance collections will also be modified by rescheduling the first advance collection until the start of works on the site thus increasing the willingness of beneficiaries to make prompt payments. Reduced reliance of ANHI on beneficiary advance payments will allow better coordination and shorter project durations.

Continued reliance on beneficiary advance payments is considered a sound alternative to prefinancing operations through formal housing finance credits. With some delays beneficiaries have been able to come up with the necessary payments. Defaults have been less than 10% and defaulting beneficiaries have been rapidly replaced by other low income beneficiaries on the beneficiary selection waiting lists.

Under the proposed program ANHI will directly manage advance payment collections as opposed to the current situation where this activity is left to the regional directorates of housing. As a result advance payment collection is expected to be timely as evidenced in the Oued Fez development project.

4. Interest rate and loan conditions

All the calculation pertaining to this financial analysis have been made assuming a foreign exchange rate of 1\$ = 8 DHS. The interest rate on the HG loan has been assumed at 11% and the maturity period at 30 years with a grace period on principal of 10 years. Each 1% increase in the interest rate will result in a cost escalation of 0.07%. Repercussion of this cost escalation on the beneficiaries will eliminate any adverse impact on the cash flow.

5. Pricing and cross subsidies

ANHI will continue its pricing policy based on full cost recovery and allowing for price differentiations between different land uses and plot locations within the site aimed at a maximum valorization of land and a cross subsidy benefiting the poor. In the proposed program ANHI further agrees to price gross land at its replacement value rather than at its cost of acquisition. Such measures will shield ANHI against monetary erosion and will allow it to

constantly replenish its land reserve. The replacement cost has been assumed to be at least the acquisition cost inflated at ten percent during the two years required for development.

Approximately 20% of the land developed will be earmarked for commercial use or apartment buildings and will be sold through competitive bidding at full market price. This price is estimated on the basis of current transactions at a conservative 700 DHS per square meter or two times the average cost. With such prices for commercial plots, low income residential plots could be sold for as low 265 DHS per square meter or about 75% of the real cost.

Each site includes approximately 5% of land earmarked for community and public facilities which are usually transferred to local government or public administrations free of charge.

It should be stressed that the above figures are average figures. In real practice both pricing and different land use proportions are site specific. They are based on a thorough market study and negotiated with the local authorities. While never allowing prices to fall short of a total cost recovery, ANHI will continue to fully take advantage of profit potentials allowed by the market without seriously affecting affordability to low income groups.

6. Current ANHI financial situation

For all of its past and ongoing projects ANHI successfully applies the principles of full cost recovery. It acts as a project manager on behalf of regional directorates of housing and levies a 6% fee on all project payments to cover its operating expenses. This 6% fee along with some other minor revenues resulting from the sale of technical specifications and tender bid documents, and from investing its excess cash in short term treasury notes (3 month CDS) allows it to cover its expenses and to generate a small profit (DHS 2,2 million in 1987).

ANHI capital allows it only to act as a project manager on behalf of others and is commensurate with its fixed assets and working capital requirement for its internal functioning under the current arrangements. Works in progress and three month certificates of deposits are strictly covered by advances from beneficiaries and principals.

With the advent of the current program, works in progress will slightly more than double. The financing of the works in progress resulting from the program will however change to approximately 50% from beneficiary advances and 50% from the HG Loan.

With the advent of the proposed program the structure of the income statement will not be subject to any major changes. Increases in revenue will more than offset by increases in ANHI's personnel and other expenses and therefore the 6% fee level will be maintained. Interest charges resulting from the HG loan will not be considered as part of ANHI operating expenses. They will be considered capital expenses charged to the works in progress account and recovered directly from the beneficiaries.

7. Financial arrangements

The loan will be made to ANHI as borrower of record. The foreign exchange proceeds of the loan will go to the central bank, which will credit the local currency equivalent to ANHI's account. HG loan proceeds will be out of the GOM budget circuit, thereby avoiding the structural problems of the HG 002 loan. This procedure was agreed upon with the MOF in the HG 001 Program Agreement. The Government of Morocco represented by its Ministry of Finance, will provide a full US Dollars guaranty for the HG loan. The foreign exchange risk will be borne by the GOM, except to the extent that a new national exchange risk coverage policy (currently under study) may provide for partial and capped contribution by all Moroccan foreign currency borrowers to cover the underlying exchange risks assumed by the GOM.

8. Foreign exchange risk coverage

The financial viability of the program and of ANHI can be seriously handicapped by foreign exchange fluctuations. Although foreign exchange fluctuation can have a positive impact for ANHI (foreign exchange gains in the case of an upward valuation of the Dirham against the Dollar in the case of the HG borrowing), the downward risk could compromise the very existence of ANHI especially for a foreign exchange borrowing of long duration. It would not therefore be prudent for ANHI to assume full exchange risk, and hence it would not be reasonable to put the full foreign exchange burden on ANHI's beneficiaries.

What would be reasonable however is for ANHI to set aside some reserves against foreign exchange losses. These reserves could amount to one to two percentage points of the remaining loan principal balance per year.

A foreign exchange reserve build up equal to 2% per annum on the balance loan principal will result in a price increase of about 0.13% in the least favorable case of a lump sum repayment of the principal at maturity loan.

Discussions to date with the Directorate of Treasury/MOF indicate an intention to provide full exchange risk coverage at no cost. However, per ANPAC PID review guidance USAID will include a condition precedent to any HG borrowing that requires an analysis of the financial impact of any proposed contribution by ANHI for FX risk coverage before approving that borrowing.

B. Affordability Analysis

1. Urban Median income

The Urban Median income for 1987 has been estimated at 2380 DH per household per month in HG 001 Program Agreement. Although this income has not been revised; the calculations pertaining to this affordability analysis took into account a general inflation rate of 8% thus raising this median income to 2554 DH per month in 1988 and 2776 DHS per month in 1989.

Detailed affordability analysis is provided in annex VII. E3 and concluded that the plots delivered as a result of this program are affordable to target beneficiaries. This section will outline some important factors which will further improve affordability.

2. Cross subsidies

In a typical site developed by ANHI 75% of the net serviced area is earmarked for residential use, 10% of this area is earmarked for commercial use, 10% for apartment buildings and 5% for community facilities. The 5% area earmarked for community facilities is transferred to relevant administrations free of charge and the 20% area earmarked for commercial use and apartment buildings is sold through competitive bidding at full market price estimated currently at about 700 DHs per the square meter. With an average development cost is 324 DH per square meter, the net benefits accrued from the sales of commercial and the free transfer of land for community facilities will allow to reduce the cost of residential land for lower income beneficiaries from the average cost of 324 DHs per square meter to an average sales price of 265 DH per square meter. These sale prices compare very favorably with current prices of up to 400 DH per square meter in clandestine settlements.

3. Sales of Air rights

Moroccan regulations authorize the sales of the right to build a second floor (air rights). Accordingly ANHI encourages this practice and takes into account the increased densities resulting from this practice in its marketing strategy and in the design of its sites. Beneficiaries usually sell the right to build a second floor and use the proceeds for financing their shelter. As a result affordability is reasonably enhanced and ANHI could reach a higher percentage of household in the lower percentiles of the below median income families.

4. Land use coefficient and plot size

In current ANHI project the land use coefficient varies between 45% to 50%. Under the proposed program ANHI will commit to raise this land use coefficient to 55%. The increase of the land use coefficient will result in substantial cost reduction making the serviced plots more affordable. It will also reduce the appeal of ANHI sites to high income groups and reduce the risks of speculations.

The average plot size under the proposed program will be 90 square meters per plot. Because of the prevailing practice among low income beneficiaries to sell the rights to build a second floor, and from the point of view of air circulation and light, plots smaller than 90 square meters are not readily marketable nor desirable. Density increases will be achieved by reducing the number of large villa plots on the development site, reducing road widths and the amount of public space and by increasing the percentage of land assigned to apartment building use.

5. Cost reduction

Cost reduction is an important component of the proposed program. Grant funds have been earmarked to support the undertaking of studies aimed at modifying the norms and specifications pertaining to land development to the purchasing power of low income household. ANHI will commit to undertake such studies and to persuade relevant decision makers of the importance of adapting norms and specifications to the needs and purchasing power of low income beneficiaries.

C. Social soundness

1. The Informal Housing Phenomenon

In the last 15 years Morocco has experienced rapid urbanization, with almost 43% (8.4 million persons) of the total population now living in urban areas. The delivery of authorized shelter has lagged far behind, resulting in the continued existence of areas called bidonvilles and the more recent and rapid development of informal housing settlements referred to as "Zones d'Habitat Clandestin". Clandestin housing in Morocco is different from bidonville in that the later consists of dense, unserviced neighborhoods of low quality, rudimentary shelter, while the former are made of more conventional building materials and of higher quality spatial standards, Annex VII.E2 A.

Both types of housing serve the needs of low income groups, with clandestine housing residents having devoted more of their financial resources to housing than bidonville residents.

The 1983 World Bank Morocco Informal Sector Housing Study identified five basic elements that typify most clandestine neighborhoods:

Absence of formal authorizations for land development and individual housing construction;

Inadequate provision of physical and social infrastructure;

Prevalence of owner built construction with housing development occurring in phases;

Lack of registered title to the land, which nevertheless generally belongs to homeowners (through sales using traditional contracts);

Median household income 40% lower than the urban median.

The main reason for the development of informal housing has been the size and speed of urbanization in Morocco. The specific form it has taken results from an inadequate supply of serviced land interacting with a dynamic response by land speculators and the informal sector to meet the demand for low-income housing.

The proposed program is specifically designed to support GOM effort to increase the amount of serviced land offered to lower income families in a context of clear title and ease of access to public services, be they water sewer, electricity or education and health facilities.

2. Economic situation of ANHI low income beneficiaries

Beneficiaries of residential land plots under the proposed program are very likely to resemble those of the current Oued Fez development. The following table summarizes the socio economic profile of these beneficiaries:

Oued Fez : Profile of beneficiaries

Head of Household	MEN	WOMEN	BOTH
Percentage	86.9	13.1	100
Average Age Years	44	40	
Occupation			
Civil Service	50.5	52.4	50.7
Teachers	19.7	21.4	19.9
Commerce	2.1	0.0	1.8
Artisan	9.2	13.6	9.8
Laborer	0.3	0.0	0.2
Workover seas	8.8	0.0	7.7
Other occupations	8.3	4.9	7.9
Retired	1.0	0.0	0.8
Unemployed	0.1	7.8	1.1
TOTAL	100	100	100
Average Income 1985 (dirham) 1988	2000 2332	1692 1974	1975 2302
Median Urban 1985 Income 1988 (dirham)	1480 1726	1300 1516	1555 1814

The distribution of monthly income of these beneficiaries is given in the table below; it suggests that nearly 70% of the population served by the Oued Fez project, the project most likely to resemble future ANHI production, can be considered as eligible for HG Program support. This proportion of Target population for HG program support is acceptable, given ANHI desire to develop mixed income neighborhoods that HG funds finance only 50% of the total cost of the program.

Oued Fez - DISTRIBUTION OF MONTHLY BENEFICIARY INCOME

Decile	Percent (Cumulat.)	Income Strata (dirham)	Average Income	Avg. Size (M2) Plot acquired
1	10	490 to 1030	820	113
2	20	1030 to 1200	1117	123
3	30	1200 to 1420	1323	126
4	40	1420 to 1550	1492	132
5	50	1550 to 1800	1680	137
6	60	1800 to 2330	2077	128
7	70	2330 to 2680	2535	149
8	80	2680 to 2950	2870	185
9	90	2950 to 4420	3505	214
10	100	4420 to 9000	5479	279

3. Social Benefits

Employment: The infrastructure works and house construction activities will provide new employment opportunities for resident laborers. The development of commercial zones and community facilities in site will directly and indirectly contribute to employment generation after the site is completed.

Health: For low income population, the main alternative to settlement in ANHI development is to settle in a "bidonville" or in a clandestine settlement. Both these settlements are susceptible to water and air borne disease pollution as a result of their poor nonexistent sewer and rain water drainage, of the proximity to industrial zones or nonexistent limited access to public health centers.

Women in Development: Review of the procedures for beneficiary selection in plot allocation in ANHI programs has been found to provide adequate access for women head of households. ANHI beneficiary profile requirements allow women head of households to participate in their land sales programs. In the Oued Fez Project 13% of the program beneficiaries were women. ANHI beneficiary record keeping permits access to gender disaggregation. USAID will, as part of the annual evaluation of the program delivery plan, request gender disaggregation data be provided by ANHI to monitor the participation of women beneficiaries in the HG-003 program.

D. Economic Analysis

1. Overview and Summary

The proposed program to be financed through the HG loan represents an attractive economic opportunity. While the empirical evidence pertaining to Morocco itself is scant, what we know about housing investments in developing countries in general and the Moroccan situation in particular suggests that the proposed projects will yield significant net economic benefits in several major areas:

- (1) employment and income effects are likely to be important, both overall and in their spatial impacts,
- (2) as proposed program financing arrangements are not only consistent with, but contribute directly to the financial sector and other economic policy reforms now underway,
- (3) the program will contribute to resource mobilization by encouraging investments in the areas where ANHI sites will be located,
- (4) the HG loan represents an important source of foreign exchange during a period of acute need.

2. Employment and income effects.

With respect to employment and income, economic analysis traditionally distinguishes between the short-term impacts of the construction itself and the long-term impact of improved shelter. Much of the attention has focused on the immediate consequences of the investment, rather than on economic benefits flowing from higher-quality housing services.

With respect to construction, the available evidence for developing countries suggest a number of conclusions. Most importantly, housing construction appears to create more jobs per dollar invested than, say, manufacturing. Moreover, a higher percentage of the jobs created is for unskilled labor. Construction has often provided the entry-level jobs for migrants from the countryside to the cities.

Housing investment also appears to have an income multiplier that is typically above the average for all types of investment. Empirical estimates of the multiplier for a number of developing countries place its value at roughly two. Both the high labor intensity of construction and its low import (in the case of Morocco) content contribute to the size of the multiplier.

These general conclusions are likely to hold for Morocco. The country's construction industry has been in decline since the late 1970's. In fact, stimulation of this industry has been declared one of the major objectives of economic policy for Morocco. The current slump is likely to have generated some excess capacity - which should allow for the exploitation of the employment and income generating potential without leading to any inflationary pressures.

The design of the program should also encourage private sector development, particularly among small and medium-size enterprises. These enterprises tend to be involved in disproportionate numbers in any construction activity, particularly low-income housing construction and upgrading in secondary cities.

Long-term employment and income effects from improved shelter in low income shelter projects are more difficult to assess. In the case of the proposed program, sanitary improvements for both beneficiaries of plots and residents currently affected by improper disposal of sewage are likely to contribute to better health.

With respect to long-term employment and income effects, the major element is likely to be commercial development that forms an integral part of the program design.

3. Financial sector reform and related issues.

The project design incorporates several principals that relate both to the financial sector reform currently underway and to other aspects of economic policy reform. The application of these principals can contribute significantly to the progress of these reforms. Several areas can be identified.

(a) The financial arrangements for the proposed program emphasizes the principal of pricing capital as close as possible to its "true" economic cost. The acceptance of this principle constitutes a departure from past practice of providing subsidies through lower pricing with little regard for the impacts of such hidden subsidies on the efficiency of resource allocation. The program clearly pertains only to a very small segment of the financial sector; even so, the signal value can be significant. Moreover, the program will contribute tangibly to the development of institutional infrastructure and standard mechanisms of cost recovery that can be applied to other activities.

(b) The project design also emphasizes the importance of adequate cost recovery mechanisms and continuing financial viability. Such an emphasis has been sadly lacking in public investment planning and public service provision in Morocco - mostly with reference to widespread poverty and the prohibitive costs of recovering costs. By building cost recovery mechanisms into the design, the program will demonstrate the importance as well as the feasibility of such mechanisms. Although, the precise economic value of such a demonstration is difficult or even impossible to assess, it should not be neglected in the appraisal of the program.

4. Resources mobilization.

The program incorporates the principal of beneficiary involvement in construction and financing. This factor will contribute to the mobilization of savings by the beneficiaries in project areas. Its impact will be enhanced by the clarification of legal claims and titles that form an integral part of the program. By providing clear title and reducing risks, the program will encourage additional investments by beneficiaries.

Preliminary estimate of the magnitude of beneficiary investments suggest a "multiplier" effect in the order of 5; for every dirham of ANHI investment, beneficiaries will invest 4 dirham in final constructed units.

This mobilization of resources represents an important contribution to GOM structural adjustment efforts. Domestic resource mobilization figures high on the list of policy priorities agreed upon by the GOM and the World Bank.

5. Foreign exchange benefits.

The HG loan for the proposed program represents an important source of foreign exchange for the Government of Morocco, at least on the margin, during a period of stabilization and structural adjustment. As foreseen in the current design, much of this loan will be drawn down during a difficult period characterized by debt rescheduling and extreme shortages of foreign exchange. As suggested in the debt risk analysis, repayment of this loan will commence after Morocco has weathered the current period of financial austerity and will have improved its debt service capacity significantly.

E. Debt Risk Analysis

The Moroccan structural adjustment of 1983-1988 has been decidedly successful in re-establishing a correctly valued dirham, promoting non-traditional exports and improving thereby both the trade and current account balances. While the large external debt and debt-service remain problems for economic management, the direction of economic adjustment is well established and continued improvement is expected without additional major policy reforms. There is no macro-economic reason which would militate against making the HG loan proposed in this paper.

Over the period 1984 to 1987 Morocco improved its trade balance, increased tourism earnings, and benefited from an increase in worker remittances, thus bringing its current account into near balance from a deficit of 11% of GDP in 1984. This excellent recovery is due in large measure to the economic policy reforms adopted under the IMF Stand-By arrangements and World Bank adjustment loans of this period. The reforms include devaluation of the Moroccan dirham and maintenance of a flexible exchange rate system (the rate is set daily by the central bank), price deregulation, fiscal reforms and budget austerity gradually reducing the overall Treasury deficit, export promotion and trade simplification, and reduction of protectionism and gradual elimination of import licensing. While further debt rescheduling of modest proportions is still required in 1988 and 1989, continued strong economic performance is expected on the basis of existing macroeconomic policies. No major policy realignments are indispensable to the continuation of the successful economic adjustment and liberalization. Thus we are confident that Morocco can engage in an appropriate level of external borrowing (including this HG loan) and, provided the policy reforms are not reversed and budget discipline is maintained, expect a strong economic recovery through the 1990's.

Morocco's debt service ratio exceeded 70% before rescheduling in 1986, however, strict debt management and adherence to IMF Stand-by arrangements have resulted in rapid growth of non-traditional exports and a reduction of the debt service ratio to 50% before rescheduling in 1988. The current IMF Stand-by arrangement projects progressive reductions in the debt service ratio to 30% by 1993. Debt management remains one of the key macroeconomic issues facing the country. Estimated total debt outstanding is \$19.3 billion or 93% of GDP in 1988. Morocco's foreign debt is among the twenty largest LDC debts in the world. Debt management will continue to be a priority for Morocco.

The IMF projects that the growth of Morocco's external debt will slow considerably over the next few years, declining to 204% of exports of goods, non-factor services and private transfers in 1993 as compared to 275% in 1988.

IMF projections include gradually increasing external reserves to 3-4 months of import coverage to protect against an unexpected external shock. Morocco's balance of payments position is expected to remain manageable and to strengthen over the medium term. The government is committed to maintaining external account equilibrium in order to resume payment of its external debts on schedule. Neither the World Bank nor the IMF foresee the need for Morocco to reschedule its debt after 1991.

While Morocco's external debt is still heavily discounted in the secondary market, the economic policy environment is now sound and continued progress is expected. The additional HG borrowing of \$10 million will add less than 1/2 of one-tenth of a percent to Morocco's current debt service. In addition, the HG loan maturity falls outside the loan limitations accepted by Morocco in the IMF Stand-By arrangement. The 1989 borrowing limit of 700 million SDRS (about 910 million dollars) in 1-12 year maturities thus does not apply to the HG 20-year loan. Morocco may engage in as much concessional borrowing and non-concessional borrowing at maturities greater than 12 years as it judges appropriate.

Given the soundness of current economic policies, the solid prospects for continued strong economic performance, the absence of restrictions on longer-term borrowing, and the appropriateness of investment in low-income housing, the HG loan is appropriate to make in Morocco's current economic situation. The level of country risk is moderate and should not therefore preclude the authorization of the HG loan.

F) Institutional Analysis

1) Overview

The institutional analysis is detailed in annex VII. E4. This Analysis concludes that ANHI is an appropriate agent for implementing the proposed program. This analysis also concludes that ANHI has been chartered to serve the shelter needs of low income beneficiaries and that evidence gathered to date indicates strict adherence to this objective. The paragraphs below summarize the main findings of the Institutional Analysis.

2) Historical background

ANHI was chartered in 1984 as a private corporation (Societe Anonym) owned by the state. As stated in its charter "The State assigns ANHI the task of eliminating sub-standard housing. This task covers but is not limited to:

- The purchase and servicing of land located outside or inside slum neighborhoods.
- The elaboration of studies concerning the servicing of slum neighborhoods and the construction of relocation housing and community facilities.

- The marketing of serviced land plots, housing units and eventually any other residential or commercial buildings it may have built.
- The recovery of advance payments and other expenses from the beneficiaries of its programs.

ANHI's charter gives it a full range of operational authority, including the authority to contract loans from external sources subject to prior approval of the Ministry of Finance.

In most of its current projects, ANHI acts as project manager on behalf of the Ministry of Housing, regional authorities and local governments, which are responsible for implementing Government policy at the regional level. Because of GOM priority to eradicate substandard housing a sizeable proportion of ANHI's production is earmarked for low income families relocated from slums and shanty Towns; "Bidonvilles".

In order to preclude further proliferation of substandard neighborhoods ANHI should produce an increased proportion of serviced land plots to meet the needs of low income families other than those relocated from existing "bidonvilles". This can only be done through land development programs in which ANHI will act directly as principle rather than as a project manager on behalf of the regional directorates of housing.

3) Operational Characteristics

Since its creation ANHI has acted as a catalyst of private sector participation in low income shelter provision rather than as a direct land developer. Most of the activities involved in the design and construction of the sites are subcontracted to private developers either directly or through the "Regies"; ANHI limits its role to activities where it has clear comparative advantage such as project identification, land assembly, financing, pricing and marketing. 90% of land development costs represent payments for land acquisition and for contracts awarded to private firms for design and public works.

Although wholly owned by the state ANHI has the necessary autonomy, authority and flexibility to allow it to manage its operations in a fashion very similar to that of a private enterprise. ANHI's comparative advantages in assembling land and obtaining clear title, its bargaining power with other public institutions, particularly those in charge of the various authorizations, approvals and norms and standards, its recognized high performance and its adherence to its chartered objective of serving the shelter needs of low income families make it an appropriate agent for implementing the proposed program.

4) Ability to handle additional production.

Most of the additional production resulting from the proposed program will be borne by private engineering and construction firms and the administrations in charge of the various authorizations and approvals and land titling. Moroccan engineering and construction firms currently have enough slack capacity to

meet additional production. Approvals and authorization are decentralized at the regional level as well as land titling and the additional work load resulting from the program will be shared among the various regions where the sites will be located. In house additional capacity for monitoring and coordination will be required and will be met through additional recruitment of project managers and support staff as appropriate.

Under the proposed program ANHI will act as principal rather than as project manager on behalf of other administrations. Accordingly it will have to develop new in-house capabilities particularly in the fields of cost accounting, financial management and planning, project planning and monitoring. Grant funds have been earmarked to support ANHI in the development of these capabilities.

ANHI will also have to strengthen its advance payments collection and management capabilities. A condition precedent has been incorporated that requires that ANHI be authorized to open bank accounts in primary banks particularly those active in housing finances. This condition also requires that ANHI negotiate arrangements with these banks for payment collections and cash handling with appropriate accounting and control procedures.

In the current situation all payments to ANHI and all disbursements transit through a checking account opened at the public treasury. This account functions exactly like a banking account and is outside the budget circuit. However it is expected that managing the HG loan local currency proceeds through primary banks involved in housing finance would result in more flexibility and will provide opportunities for access of target beneficiaries to the housing finance system.

5) Beneficiary selection and other procedures;

Under the proposed program ANHI will continue to use the current beneficiary selection procedures detailed in Annex VII.E2.B. Such procedures involve local authorities in the process and insure adequate delivery of residential plots to target beneficiaries. The involvement of the local authorities in the beneficiary selection procedures will enhance the acceptance of ANHI developments by these authorities, ease the negotiation of norms and standards and facilitate prompt delivery of the various authorizations and approvals.

The procedures for land acquisition, land titling, formal reception, contracting and revised orders are clear, well established and mastered by both ANHI's staff, contractors, and regional authorities. The delays for all the approvals are reasonable particularly when the site design strictly complies with the prevailing urban codes and regulations and where such regulations exist. Areas not covered by an urban plan or where ANHI lowers the norms for road design or other aspects require somewhat longer approval periods. The procedures for land titling are simple and delays are reasonable except in case where the land track is not originally titled. In such case six to twelve months are required for the various legal inquiries and title delivery preparation steps.

G. Technical Analysis

1. Site Selection

As a general practice, ANHI selects land at the perimeter of urban areas which is either undisturbed or agricultural land. In the past much of the land has been under municipal, state, or other public ownership.

Prior to land acquisition, ANHI conducts preliminary topographic, architectural and urban planning studies to verify suitability of the land and to define the major project elements. These preliminary project designs are made in accordance with the Urban Plan and Land-Use Plan processes. Under the Master Plans, which have been elaborated for most major cities and towns in Morocco, peripheral areas for future residential development are delineated. Industrial zones are grouped and separated away from residential zones. Areas with physical constraints (excessive slope, susceptibility to seasonal flooding) are not authorized for residential development. These planning instruments are implemented by the Ministry of Housing in direct collaboration with Municipalities, which adopt them once they are enacted into law.

The master plans require proper consideration of access to green spaces, provision of services such as schools, clinics, mosques, proximity to water mains, transport routes, etc. If such services are not located near a new development, then ANHI, the Municipalities, the local regie and the local offices of relevant ministries will jointly program their implementation.

2. Site Design

Detailed site planning and design is conducted by licensed architects, under contract to ANHI. The architects, under the guidance of ANHI project managers will determine site layout, number and size of lots, roads (primary, secondary, pedestrian access), parking, green spaces and zones for public services. Typically designers allocate 25-35% for access roads, about 5-10% for green space, and 5-10% for service infrastructure (schools, clinics mosques, etc.) leaving 45-50% as built-up land. Lot shapes and sizes, and grouping of lots into blocks follow concerns of market demand, infrastructure requirements, land use goals, and cost constraints. A mix of lots for different income level groups, and for commercial establishments is made. Commercial activities are limited to shops (food and other essentials), offices, and service operations. No manufacturing or light industrial activities are allowed in ANHI projects.

The site plans must follow municipal regulations regarding lot frontage, road width, sidewalk widths, distance between secondary roads, etc... However, ANHI has had the ability to negotiate many of these factors with the Municipalities. This has led to relaxation of some norms to achieve desired cost reductions. Given the social objective associated with ANHI's mission the Municipalities are more flexible with ANHI designs than with those of a private developer.

3. Norms and Standards

a. Overview

Roads designs are based on two types - vehicular and pedestrian. Vehicular streets vary from 20m for the largest site access roads, down to a minimum of 8m for secondary access roads. Sidewalks of 1.5 - 2m width are included. Vehicular roads have one or two layers of asphalt over compacted crushed stone. Pedestrian access paths are generally close to 6m in width, with a single asphalt or concrete layer.

Storm drainage systems, sewer systems are designed under standards outlined by Ministry of Interior. Storm drain standards are based on a 10 year storm, and on-site run-off coefficients. Sewers norms are based on uniform direct household connections and on the use of high quality materials for long life. Sometimes sewer and storm drains are combined, sometimes separate depending on flows, allowable slopes, cover requirements, costs, etc.

ANHI is compelled to work with local public utilities companies (Regies) to procure installation of water supply and electricity systems. In most major urban areas water supply and electricity networks are designed, constructed, and maintained by these utilities (known as "Regies"). In smaller urban areas, the national water and electric utilities ONEP and ONE take over this function. These institutions have a complete legal monopoly on these operations.

The Regies assume responsibility for designing and implementing this infrastructure. The systems are designed "in-house" in keeping with national norms followed by all utilities. Thus the water and electricity supply in ANHI projects conforms completely to national standards. For water supply service level consists of a metered house connection. Network designs are based on daily consumption of about 150/l/day, an ample supply of clean potable water. Electricity supply is based also on direct metered service, with residential service reaching about 0.5 kw per household, sufficient for basic lighting and small appliances.

Off-site infrastructure is designed to link the development to the existing urban water supply, sewer drainage and electricity networks. If a trunk main must be extended, then its costs are built into the project. As will be discussed below, ANHI does not design for sewage treatment, as this is the responsibility of the Municipalities under the overall Sewerage Master Plans.

House plans are developed, with architectural harmony between different plot types and sizes, and uses (residential and residential/commercial). The house plans conform to local building codes which stipulate structural aspects, minimum room sizes, etc. The plans are formally approved by the Municipal office in charge of administering building codes. ANHI usually provides whole series of house plans are developed to suit different plot shapes and sizes. Plans are developed for both single and dual family dwellings, and units with a commercial ground floor and a residential second floor. these design are provided to beneficiaries free of charge.

b. Comments

Norms and standards adopted for site design are a determining factor of the final cost of the serviced lots produced. If norms and standards are reduced considerable savings can be made reducing the costs of serviced plots for target beneficiaries. However, standards cannot be reduced to the point where the quality of neighborhood declines and the marketability of plots suffers.

As a first step to adapting the Norms to the purchasing power of our target beneficiaries ANHI will commit to increase the Land-Use Factor. From the current 45 to 50% to about 55% reducing the development costs by 10 to 20% percent.

ANHI will further commit to undertake the necessary studies for further adaptation of the Norms and Standards to the needs and the affordability of the program target beneficiaries. Grant funds have been earmarked to support such activity. In the meanwhile ANHI will continue to negotiate norms and standards reduction on a site by site basis particularly concerning pedestrian roads, vehicular roads and sidewalks.

4. ANHI costs and cost reductions potentials

ANHI's costs have been summarized in section III and are detailed in Annexes VII E2A and VII E2B. Possibilities for cost reduction exist through the revision of norms and standards as discussed above but also through negotiation of prices with the Regies and the national offices for water and electricity. The Regies are joint Stock regional companies owned by the local governments. These companies have the monopoly of water and electricity distribution in urban areas. The national offices for drinkable water and for electricity ONEP and ONE have the monopoly for water and electricity production in all the Kingdom and water and electricity distribution in rural communes not served by the Regies. Because of these monopolies all studies and works pertaining to water and electricity are subcontracted by ANHI to the regies or the ONEP and ONE, who generally conduct the studies in house and subcontract the works to specialized private firms.

Such procedure is very common in North Africa and results in higher costs and difficult coordination of works on site. Under the proposed program ANHI is expected to negotiate with the Regies the ONEP and the ONE the possibility of subcontracting directly the works and design pertaining to water and electricity to specialized private firms. All plans would be approved by the regies, and construction monitored by them for a fee. The ONEP and the ONE have on occasion authorized ANHI to subcontract water and electricity works directly to private firms and this has resulted in an improved coordination of on site work and lower costs.

5. ANHI expected production cycle

For the purposes of planning ANHI direct operations, a detailed study of the project implementation process was made (see Annex VII E2B). The goal was an optimal implementation plan for a typical operation of 20 ha, and for an operation of 100 ha split into 5 phases of 20 ha each. The full details are given in VI. E.2.B. Detailed Technical Background Data. Four ANHI projects

which have been recently completed or are nearing completion were studied in detail, and data adapted to take into account reduced reliance on beneficiary advances direct implementation of projects by ANHI and the resulting improved planning control and coordination.

For a typical 20 ha operation, site development duration is expected to be reduced from current 5 years to approximately 3 years. The initial phase of land acquisition, initial studies and Municipal approval will last approximately one year, and the completion of all works and the delivery of plots another two years. For a 100 ha operation the initial phase of land acquisition and technical studies will last about 15 months, and the works and lot delivery about 4 years.

Further reductions in site development durations could be achieved if ANHI is authorized to contract the design and construction of the water and electricity networks directly to specialized private firms as discussed in the section above.

H. Environmental Analysis:

An initial Environmental Examination resulted in a negative determination which has been approved by AID/Washington (State 406598) (see Annex VII E5).

VI CONDITIONS AND COVENANTS

The following are conditions which are intended at this time to be included in the Program Agreement(s). These conditions may be modified during the course of the negotiations.

a) Conditions precedent to first HG Loan borrowing:

- 1) A copy of the statement of terms and condition of the relevant agreement between ANHI and the MOF insuring the timely disbursement and use of HG Loan Funds. The interest rate, the grace period, the maturity period, the local currency debt servicing arrangement and the coverage of the foreign exchange risk should be integral parts of this statement.
- 2) Evidence that the first 60 hectares of land earmarked for the program have been identified by ANHI and that legal procedures have begun for their acquisition.
- 3) Submission of a program delivery plan for the first three years of the program. This program delivery plan is to be up dated revised and resubmitted annually.
- 4) Board of direction resolution authorizing ANHI to take into account replacement cost of land rather than acquisition cost in determining sales prices

b) Conditions precedent to the final HG Loan Borrowing:

- 5) Authorization by the Ministry of Finance and the Board of Directors allowing ANHI to deposit local currency proceeds of the HG

loan and beneficiary payments and advance payments collected from the program into banking accounts in any primary bank active in housing finance.

6) Negotiation by ANHI of a payments collection program with primary banks active in housing finance with indication of accounting and control procedures.

c) Condition precedent to first disbursement under the grant:

7) The signing the HG-003 Program Agreement.

Covenants

1) Assurance by the ANHI of its intention to increase the density of land use in its programs consistent with the technical recommendations herein described (50 to 55% of salable land per hectare of undeveloped land).

2) Assurance that the GOM will examine current Regie norms and standards and pricing policies for servicing land.

3) Written assurance that the ANHI agrees to provide potential eligible project beneficiaries with the necessary documentation and assistance in order to take necessary steps in order to make its programs eligible for shelter construction financing from the CIH and the BCP.

4) Written assurance that the ANHI agrees to expand the participation of private developers and small builders in ANHI land development programs for the production of low income shelter programs through the wholesaling of tracts of land for further servicing and or housing construction and through partnerships for affordable core housing and finished housing construction.

5) The ANHI will continue to respond to its chartered objectives, including medina and bidonville upgrading, while pursuing preventative action programs (i.e., land servicing).

ACTION AID INFO: ECM ECON/5

ANNEX VII A

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R5 RUFHRA
ZL RUEHC #0920/01 2791255
ZNR UUUU ZZH
R 05125+2 OCT 88
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TO RUFHRA/AMEMBASSY RAPAT 7206
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CN: 27755
CERG: AID
DIST: AID

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UNCLAS SECTION 01 OF 03 STATE 325923

AIDAC FOR RHUDO

P.O. 12556: N/A

TAGS:

SUBJECT: ANPAC REVIEW OF MOROCCO NATIONAL UPGRADING AGENCY (ANHI) LOW INCOME HOUSING PROGRAM (608-H-003)

ACTION: RHUDO

DUE DATE: 10.13

INFO: DIR-AD/DIR-PROC

Cont-PE-Cham-24

1. ANPAC, CHAIRED BY DIRECTOR ANE/PD RONALD F. VENEZIA, MET ON 9/10/88 TO REVIEW SUBJECT PROJECT. ANPAC APPROVED MISSION REQUEST TO PROCEED TO AMEND PG 002 TO REPROGRAM DOLS 10 MILLION IN AVAILABLE LOAN GUARANTEE AUTHORITY TO CARRY OUT A PROPOSED PROGRAM WITH ANHI, AND TO AUTHORIZE A COMPLEMENTARY DOLS 500,000 GRANT TO PROVIDE ANHI WITH TECHNICAL ASSISTANCE. ANPAC GUIDANCE ON THE FOLLOWING ISSUES IS PROVIDED BELOW:

2. PROJECT DESIGN THESIS: THE ANPAC EXPRESSED CONCERN THAT ASSURANCES PROVIDED THAT LOWER THAN MIDDLE INCOME GROUPS WOULD PURCHASE PROJECT-SUPPORTED ANHI LOTS, AS OPPOSED TO HIGHER INCOME GROUPS PURCHASING EITHER FOR SPECULATION OR FOR CONSTRUCTION OF UPPER INCOME HOUSING. THIS IS IN RECOGNITION THAT NO ELIGIBILITY CRITERIA, PER SE, WOULD BE EMPLOYED AND THE PURCHASES ARE ON A FIRST-COME-FIRST-SERVE BASIS. THE PROJECT DESIGN IS BASED UPON THE THESIS THAT THE SMALL SIZE OF PROJECT LOTS TO BE PROVIDED WILL AUTOMATICALLY

RESULT IN LOWER INCOME BENEFICIARIES. GIVEN THE LACK OF INCOME DATA THAT COULD BE GATHERED, NO WAY EXISTS TO VERIFY THIS ASSERTION, AND NO REMEDY SEEMS APPARENT IF IT PROVES NOT TO BE THE CASE. THE EXPERIENCE OF THE FEZ PROJECT WHERE MIXED-SIZED LOTS ARE CURRENTLY BEING SOLD SHOULD INDICATE TO WHAT EXTENT BELOW MEDIAN INCOME LOTS ARE INDEED SOLD TO BELOW-MEDIAN INCOME BUYERS. THE ANPAC RECOMMENDED THAT THE MISSION EVALUATE ANEI'S FEZ PROJECT EXPERIENCE WITH VARIOUS INCOME LEVEL LOT BUYERS AND DRAW FROM SUCH EXPERIENCE IN FOCUSING THE DESIGN OF THE NEW PROJECT MORE TOWARD BELOW-MEDIAN INCOME BENEFICIARIES. IF PROBLEMS OF ECONOMIC STATUS OF BENEFICIARIES EMERGE, THE MISSION WILL TIGHTEN DESIGN OF THE PROJECT (E.G. BY SPECIFYING EVEN SMALLER LOT SIZES LIKELY TO BE UNATTRACTIVE TO UPPER INCOME BUYERS, BY POSSIBLE AID APPROVAL OF ANHI BENEFICIARY INCOME ELIGIBILITY REQUIREMENTS, AND/OR BY INCREASING MARKETING/PROMOTION OF PROJECT LOTS AMONG BELOW-MEDIAN



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INCOME FAMILIES) SO AS TO LESSEN THE LIKELIHOOD THAT HC RESOURCES WOULD SUPPORT SITES AND SERVICES DESTINED TO BENEFIT OTHER THAN BELOW MEDIAN INCOME GROUPS.

3. CREDIT AVAILABILITY: THE ANPAC EXPRESSED CONCERN OVER LIMITED PUBLIC AND PRIVATE SECTOR CREDIT FOR ULTIMATE PURCHASERS OF ANHI DEVELOPED LAND. PRE/H CONTENDED THAT MANY PROSPECTIVE BELOW-MEDIAN INCOME BUYERS POSSESS ADEQUATE SAVINGS TO MAKE CASH PURCHASE OF LAND OR HAVE ACCESS TO INFORMAL CREDIT. SOME MORTGAGE FINANCING FOR HOUSING CONSTRUCTION WILL BE AVAILABLE TO BUYERS FROM FAMILIES, INFORMAL CHANNELS, AND FROM LENDERS SUCH AS CIH. THE NEW PROPOSED MUNICIPAL DEVELOPMENT BANK WILL HELP EXPAND FINANCING AVAILABLE TO ANHI FOR DEVELOPING HOUSING SITES AND SERVICES, GIVEN PROJECT FINANCING AND CONTINUING SIZEABLE BENEFICIARY ADVANCES, BUT THE ANPAC DID NOT VIEW ESTABLISHMENT OF THIS BANK AS A CRITICAL CONSTRAINT FOR THE SUCCESS OF THE PROJECT. CONSEQUENTLY, THE ANPAC RECOMMENDED THAT THE PP PROVIDE ANALYSIS ON THE FINANCIAL CONDITION OF BOTH ANHI AND PROSPECTIVE LOW INCOME BENEFICIARIES, AND HOW THE ISSUE OF CREDIT ACCESSIBILITY FOR BELOW MEDIAN INCOME PEOPLE WILL BE ADDRESSED IN THE POLICY AGENDA OF THE PROJECT.

4. ANHI ROLE AND MANAGEMENT CAPABILITY: ANPAC REVIEWERS DISCUSSED TO WHAT EXTENT ANHI (A RELATIVELY NEW AGENCY) WOULD BE ABLE TO HANDLE (IN ADDITION TO ITS CURRENT PROJECT MANAGEMENT LOAD) THE ADDED RESPONSIBILITIES ASSOCIATED WITH BUYING, DEVELOPING AND

MARKETING LAND TRACTS AS ENVISIONED UNDER THE PROPOSED PROJECT. THE PRE/H REPRESENTATIVE STATED THAT ANHI HAD GAINED AMPLE EXPERIENCE IN IMPLEMENTING THE PROPOSED PROJECT BASED ON ITS WORK ON BOTH THE FEZ AND TETUAN PROJECTS. ALTHOUGH A RELATIVELY NEW AGENCY, ANHI HAS BEEN ABLE TO HIRE WELL QUALIFIED PERSONNEL AND HAS GREAT OPERATIONAL FLEXIBILITY DUE TO THE OFF-BUDGET NATURE OF ITS MANDATE. BASED ON THE ABOVE REVIEW, THE ANPAC RECOMMENDED THAT THE INSTITUTIONAL ANALYSIS OF THE PP DETAIL ANHI'S CAPACITY TO CARRY OUT PROJECT TASKS AND THAT SUCH ANALYSIS INCLUDE A VULNERABILITY ASSESSMENT TO INSURE THAT LOW-INCOME PEOPLE ARE SERVED ACCORDING TO THE SOCIAL OBJECTIVES OF THE PROGRAM.

5. NEED TO INCREASE PRIVATE SECTOR INVOLVEMENT IN THE PROJECT: THE ANPAC DISCUSSED WHETHER IT WOULD BE POSSIBLE FOR A PRIVATE SECTOR ORGANIZATION TO TAKE OVER ANHI'S FUNCTIONS, AND WHETHER OTHER ASPECTS OF THE PROJECT WERE SUITABLE FOR INCREASED PRIVATE SECTOR PARTICIPATION. A RELATED QUESTION WAS THAT, ASSUMING

LOW-COST BARRIERS TO INCREASED PRIVATE SECTOR PARTICIPATION, WOULD THE PRIVATE SECTOR (IN LIGHT OF SIMILAR HG'S DIFFICULTY IN ATTRACTING PRIVATE SECTOR PARTICIPATION) BE INTERESTED IN EXPANDING ITS PARTICIPATION IN A BELOW-MEDIAN INCOME SITES AND SERVICES PROJECT. DESPITE AID'S GENERAL POLICY TO STEER AWAY FROM FINANCIALLY SUPPORTING PARASTATALS, THE ANPAC CONCLUDED THAT ALTHOUGH ANBI IS A PARASTATAL, IT HAS PROVEN VERY FLEXIBLE AND EFFECTIVE IN COMPLETING SHELTER SITES AND SERVICES GIVEN ITS SEMI-AUTONOMOUS BUDGETARY AND HIRING AUTHORITY. ITS GOVERNMENTAL CONNECTIONS ALSO ENABLE IT TO BETTER OBTAIN CLEAR TITLE TO LAND THAN WOULD A PRIVATE ORGANIZATION ATTEMPTING TO PLAY THE SAME ROLE. (CENTRAL TO THE ISSUE OF PRIVATE SECTOR INVOLVEMENT IS THE ISSUE OF "PROPERTY RIGHTS." A KEY CRITERION FOR JUDGING THE ESTABLISHMENT OF ADEQUATE PROPERTY RIGHTS IS THE ABILITY OF LOW/MIDDLE INCOME FAMILIES TO BUY AND SELL WITHOUT UNDUE RESTRICTION THE PROPERTIES WITHIN FIVE YEARS AFTER PURCHASE.) FINALLY, AID'S ROLE IS LIMITED TO LAND ACQUISITION AND ENGINEERING ANALYSIS WITH ACTUAL INSTALLATION OF INFRASTRUCTURE CONTRACTED OUT TO PRIVATE FIRMS. BASED ON THE ABOVE DISCUSSION, THE ANPAC RECOMMENDED THAT THE PP DETAIL THE APPROPRIATENESS OF ANBI IN IMPLEMENTING THE PROJECT IN LIEU OF A PRIVATE SECTOR ORGANIZATION, THAT IT DISCUSS MORE FULLY PRIVATE SECTOR INVOLVEMENT AT ALL LEVELS OF PROJECT IMPLEMENTATION, AND THAT IT DISCUSS HOW PROPOSED PROJECT-FUNDED TECHNICAL ASSISTANCE

WILL HELP ADDRESS CONSTRAINTS TO INCREASED PRIVATE SECTOR INVESTMENT AND FINANCE FOR LOW-COST SHELTER.

6. "PAUL" FOR HG PROGRAM: THE ANPAC NOTED THAT THE ANPAC WHICH AUTHORIZED THE ORIGINAL HG PROVIDED FOR TERMINAL DATES ON GUARANTEE AUTHORITY IN VIEW OF CONCERNS OVER THE IMPLEMENTING CAPABILITY OF THE GOM MINISTRY OF HOUSING. THE LATEST DEADLINE FOR GOM USE OF HG GUARANTEE AUTHORITY EXPIRED ON MARCH 31, 1988. IN ORDER TO PREVENT AGAINST AN INDEFINITE ALLOCATION OF HG AUTHORITY FOR THE REPROGRAMMED PROJECT, THE ANPAC APPROVED A NEW TERMINAL DATE, OCCURRING THREE YEARS FOLLOWING THE DATE OF FIELD HG AUTHORIZATION. PRIOR TO THE EXPIRATION OF THIS DATE, THE INITIAL BORROWING UNDER THE REPROGRAMMED HG MUST TAKE PLACE. IF THE BORROWING DOES NOT TAKE PLACE BEFORE THIS DATE, AID/W REQUESTS THAT THE MISSION REQUEST AND JUSTIFY AN EXTENSION OF THIS TIME PERIOD TO THE BUREAU, IF APPROPRIATE.

7. GOM SHELTER POLICY CHANGE: THE ANPAC DISCUSSED WHETHER THE PP SHOULD EXPAND FURTHER UPON THE FID'S LIST OF POLICY CHANGES TO ASSIST BELOW-MEDIAN HOUSING CONSTRUCTION AND DEVELOPMENT OF SITES AND SERVICES, AND LISTING WHICH POLICY CHANGES ARE CRITICAL TO PROJECT SUCCESS AND MIGHT APPROPRIATELY BE INCLUDED AS CONDITIONS PRECEDENT TO THE TRANCHING OF HG RESOURCES. THE ANPAC RECOMMENDED THAT THE PP SPECIFY THE MENU OF SHELTER POLICY CHANGES (INCLUDING THOSE MOST CRITICAL TO PROJECT SUCCESS) THAT WILL BE ADDRESSED BY GRANT FUNDED

TECHNICAL ASSISTANCE, AND THAT THE PP ADD, IF THE MISSION FEELS APPROPRIATE, ANY CONDITIONS TO DISBURSEMENT RELATED TO ACHIEVEMENT OF SHELTER POLICY CHANGES DURING THE LIFE OF PROJECT.

2. CONTENT OF GRANT-SUPPORTED TECHNICAL ASSISTANCE: REVIEWERS NOTED THAT THE PID PROPOSES THAT THE DOLS AND GRANT COMPONENT BE USED TO SUPPORT ANHI IN PROJECT PLANNING AND MONITORING, FINANCIAL MANAGEMENT, AND SECTORAL STUDIES. WHILE IMPROVEMENT OF ANHI'S ABILITY TO UNDERTAKE AND MANAGE SHELTER PROJECTS IS CERTAINLY WORTHWHILE, THE ANPAC SUGGESTED THAT THE MISSION MAY ALSO WISH TO EMPHASIZE, IN ITS ALLOCATION OF GRANT RESOURCES, POLICY-ORIENTED TECHNICAL ASSISTANCE WITH POTENTIAL FOR MORE GENERAL SECTORAL BENEFIT. SUBJECTS OF SUCH TECHNICAL ASSISTANCE MIGHT INCLUDE HOUSING FINANCE, PRIVATE SECTOR PROVISION OF HOUSING, DECENTRALIZATION, ENVIRONMENTAL PLANNING, AND MUNICIPAL FINANCE. CONSEQUENTLY, THE ANPAC RECOMMENDED THAT THE

PP DETAIL A BALANCE BETWEEN PROJECT IMPLEMENTATION AND POLICY DIALOGUE SUPPORT FOR GRANT-FUNDED TECHNICAL ASSISTANCE.

3. CROSS-SUBSIDIZATION OF HOUSING COSTS: IT WAS DISCUSSED THAT GIVEN THE SCARCITY OF DEVELOPED, URBAN LAND WITH CLEAR TITLE IN MOROCCO, SUCH LAND IS EXPECTED TO SELL AT A PREMIUM, THUS WARPENTING ANHI'S CONFIDENCE THAT COMMERCIAL LAND SALES WILL HELP CROSS-SUBSIDIZE SALES OF LOTS TO BELOW-MEDIAN INCOME PURCHASERS. IT WAS ALSO NOTED THAT ALTHOUGH AID POLICY IS NOT GENERALLY FAVORABLE TOWARD SUBSIDIES, IT WAS FELT THAT THE PRESENT CROSS-SUBSIDIZATION PLAN IS PERMISSIBLE SINCE IT IS SELF-FINANCING BY OFF-SETTING THE TARGETTED SUBSIDY FOR LOW INCOME BUYERS WITH HIGH ANTICIPATED INCOME FROM BUYERS OF LAND FOR COMMERCIAL DEVELOPMENT. CONSEQUENTLY, THE ANPAC RECOMMENDED THAT THE THE PP'S

FINANCIAL ANALYSIS DETAIL HOW THE CROSS-SUBSIDIZATION MECHANISM IS EXPECTED TO WORK, INCLUDING CRITERIA FOR SELECTING LOW INCOME BENEFICIARIES OF SUBSIDIES.

10. FOREIGN EXCHANGE RISK: REVIEWERS NOTED THAT THE PID STATED THAT THE GOM IS CONSIDERING A NEW FOREIGN EXCHANGE RISK POLICY WHICH WOULD REQUIRE "CONTRIBUTIONS" FROM MOROCCO FOREIGN CURRENCY BORROWERS TO COVER GOM RISK. MISSION CONSULTATIONS WITH THE GOM MINISTRY OF FINANCE, HOWEVER, INDICATE THAT THE MINISTRY IS WILLING TO COVER THE FULL FOREIGN EXCHANGE RISK OF THE LOAN TO ANHI, BUT MAY CHARGE SOME FORM OF LOCAL CURRENCY INSURANCE PREMIUM. CONSEQUENTLY, THE ANPAC RECOMMENDED THAT THE PP INCORPORATE APPROPRIATE FINANCIAL ANALYSES TO INDICATE THAT ANHI WILL BE ABLE TO ABSORB THE COST OF ANY PROSPECTIVE INSURANCE PREMIUM REQUIRED FOR GOM FOREIGN EXCHANGE COVERAGE. THE ANPAC ALSO CONCURRED WITH THE PRE/H REPRESENTATIVE'S PROPOSAL THAT THE PROGRAM AGREEMENT INCLUDE A CONDITION PRECEDENT TO APPROVING WHICH WOULD REQUIRE THAT USAID DETERMINE THAT ANHI WILL BE ABLE TO PAY ANY SUCH PREMIUM TO BE CHARGED.

11. GOM DOLLAR REPAYMENT CAPABILITY: IN VIEW OF MOROCCO'S BALANCE OF PAYMENTS PRESSURES AND DEBT BURDEN, THE ANPAC DISCUSSED THE PROSPECTS FOR TIMELY PAYMENT OF NEW DOLLAR BORROWINGS UNDER THE HG. IT WAS NOTED THAT MOROCCO'S BALANCE OF PAYMENTS POSITION HAS BEGUN TO IMPROVE, EVEN THOUGH THE COUNTRY FACES A LUMPING OF DEBT REPAYMENTS IN THE EARLIER 1990'S. NONETHELESS, IN VIEW OF MOROCCO'S SATISFACTORY AND TIMELY PAYMENT OF ITS INITIAL REPAYMENT ON ITS ONGOING HG AND EXPECTED

IMPROVEMENT OF ITS BALANCE OF PAYMENT OUTLOOK DUE TO CONTINUING ECONOMIC STRUCTURAL ADJUSTMENT UNDER IMF STAND-BY ASSISTANCE, IT WAS NOT FELT THAT THE COUNTRY WOULD EXPERIENCE DIFFICULTY IN MEETING ITS HG DOLLAR REPAYMENT RESPONSIBILITIES. THE ANPAC RECOMMENDED THAT THE PP'S ECONOMIC ANALYSIS DISCUSS MOROCCO'S ANTICIPATED ECONOMIC ABILITY TO SERVICE THE DOLLAR HG LOAN DEBT.

12. APART FROM RESOLUTION OF THE ABOVE ISSUES, THE ANPAC NOTED THE FOLLOWING CONCERNS AND CLARIFICATIONS:

A. IDENTIFICATION OF HG SITES: THE PID INDICATES THAT ANHI IS ALREADY EITHER DEVELOPING OR NEGOTIATING THE PURCHASE OF OVER 600 HECTARES WHICH MIGHT BE ELIGIBLE FOR COVERAGE UNDER THE NEW HG PROGRAM. IT WOULD BE HELPFUL IF THE PP COULD ELABORATE ON THE LOCATION, SCOPE AND BENEFICIARIES SERVED BY SUCH PROJECTS, AND THE SELECTION CRITERIA DEVELOPED BY ANHI IN DETERMINING PROJECTS ELIGIBLE FOR HG FINANCING.

B. ENVIRONMENT: ANE/PD/ENV WAS INFORMED DURING THE ANPAC REVIEW THAT AN IEE FOR THE SUBJECT PROJECT IS UNDER PREPARATION IN THE MISSION, AND THAT A NEGATIVE DETERMINATION IS ANTICIPATED. ANE/PD/ENV UNDERSTANDS THAT THE NEGATIVE DETERMINATION WILL BE BASED ON THE FACT THAT HOUSING DEVELOPMENT WILL TAKE PLACE ONLY ON

UNCLAS DISTURBED SITES AND THAT THE PROJECT WILL NOT FINANCE THE DESIGN AND/OR CONSTRUCTION OF WATER/WASTEWATER TREATMENT AND DISPOSAL SYSTEMS. MISSION IS REQUESTED TO FORWARD THE DRAFT IEE AND SUPPORTING DOCUMENTATION TO AID/* AS SOON AS POSSIBLE IN ORDER TO ALLOW ADEQUATE TIME FOR BUREAU REVIEW AND CLEARANCE OF THE IEE WELL IN ADVANCE OF PP COMPLETION. ANP/PP/ANP RECOMMENDS THAT THE IEE CONSIDER POTENTIAL IMPACTS OF DEVELOPING HOUSING SITES IN URBAN AREAS WHICH MAY HAVE A HISTORY OF PREVIOUS INDUSTRIAL OR WASTE DISPOSAL USE.

C. IERD SHELTER AND INFRASTRUCTURE ACTIVITIES: THE MISSION'S PID MENTIONS AN ONGOING IERD PROJECT IN SUPPORT OF CREDIT IMMOBILIER ET HOTELIER (CIH), THE HOUSING FINANCE INTERMEDIARY, AS WELL AS OTHER PROJECTS IN DECENTRALIZATION AND MUNICIPAL FINANCE. IT WOULD BE HELPFUL IF THE PP COULD MORE FULLY DESCRIBE THE COMPLEMENTARITY OF THESE ACTIVITIES TO THE PROPOSED ANHI PROGRAM, AS WELL AS OTHER PROJECTS BEING DEVELOPED WHICH WOULD COMPLEMENT THE ANHI PROGRAM.

D. WOMEN IN DEVELOPMENT: THE ANPAC SUGGESTED THAT THE PP DESIGN TEAM INCLUDE SPECIALIST(S) ABLE TO CARRY OUT SOCIAL SOUNDNESS ANALYSIS, SUCH AS HOW THE PROGRAM WILL AFFECT WOMEN. IT WAS ALSO SUGGESTED THAT THE PP ADDRESS ANY CURRENT CONSTRAINTS ON WOMEN ACQUIRING PROPERTY, AND TEST IT PROVIDE FOR GENDER-DISAGGREGATED MEASURES OF THE PROJECT'S IMPACT ON WOMEN. WHITEHEAD

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ANNEX VIIB

VII.B. LOGICAL FRAMEWORK

608-HG-003 ANHI LOW INCOME HOUSING PROGRAM

I. Sector Goal	Measure of Goal Achievement	Means of Verification	Assumptions for Achieving Goal
Improve opportunities for below-median-income families in urban areas in Morocco to acquire affordable shelter	Improvement in census housing indicators for urban areas	Comparison of 1982 and 1990 census data	GOM continues to support program shelter goals with priority for low-income groups
II. Purpose	End of Project Status	Means of Verification	Assumptions for Achievement of Purpose
1. To increase production of serviced housing sites that are affordable to below-median-income urban households in Morocco	1. Increased availability of serviced land suitable for low cost housing.	1. ANHI and MUI records, USAID evaluations reports	1. Continuation of political and economic conditions that maintain demand for and permit acquisition of appropriately priced land neighboring principal Moroccan cities.
2. To encourage private sector to take greater role in production of affordable shelter	2. Low cost housing produced by home building companies on land developed by ANHI.	3. Increased rhythm of ANHI production of serviced land.	2. Continued GOM support for ANHI objectives and operations.
3. To strengthen operating and financial capacity of Slum Elimination Agency (ANHI) to carry out task of stimulating appropriate residential land development	4. Tighter control of land development cost by land developer.	3. Adoption by ANHI of procedures allowing private sector builders opportunity to produce low-cost housing on developed sites.	4. Increased ANHI control over design and installation of utility systems on project sites.
4. To reduce cost of residential land development			

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III. Project Outputs	Magnitude of Outputs	Means of Verification	Assumptions for Achieving Outputs
1. Provision of fully serviced plots to beneficiaries.	1. 3500 plots delivered to justify \$10 million HG loan.	Program Records.	1. Beneficiary payments made.
2. Establishment of available, developable land owned by ANHI.	2. 60 hectares of land purchased every year by ANHI, and 2500 plots sold to beneficiary families beginning in year 3.		2. Market demand exists for serviced plots.
3. Increased participation of private sector in low-cost shelter production.	3. 20% increase in area of partially serviced land sold to developers.		3. Targeted purchasers develop sites.
4. Institutional strengthening of ANHI.	4. Two to three years of T/A, training and commodities.		4. Land (public and private) is available for purchase by ANHI.
5. Sector Studies Completed.	5. Joint studies examine key sector constraints.		5. GUM decides that studies proposed are relevant to resolution of sector production constraints.

IV. Program Inputs	Implementation Target	Means of Verification	Assumptions for providing inputs
1. HG Program Loan	1. \$10 million HG loan for land procurement and servicing.	1. Program agreements.	1. Approval of program by USAID and GUM.
2. ESF Grants	2. \$500,000 ESF Grant for T/A, training, commodities and sector studies.	2. ANHI and USAID records.	2. HG loan authorized.
3. GUM Contribution			3. Appropriate T/A and training available.
4. Beneficiary Payments	3. 10 to 12 \$10.5 million		4. Conditions precedent met by GUM.

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THE HOUSING GUARANTY PROGRAM

STATUTORY CHECKLIST

NAME OF COUNTRY

PROJECT NO. 608 -HG- 003

ANSWER YES OR NO PUT
PP PAGE REFERENCES
AND/OR EXPLANATIONS
WHERE APPROPRIATE

A. General Criteria Under HG Statutory Authority.

Section 221(a)

Will the proposed project further one or more of the following policy goals?

- (1) is intended to increase the availability of domestic financing by demonstrating to local entrepreneurs and institutions that providing low-cost housing is financially viable;
- (2) is intended to assist in marshalling resources for low-cost housing;
- (3) supports a pilot project for low-cost shelter, or is intended to have a maximum demonstration impact on local institutions and national; and/or;
- (4) is intended to have a long run goal to develop domestic construction capabilities and stimulate local credit institutions to make available domestic capital and other management and technological resources required for low-cost shelter programs and policies?

YES. Mobilization of Beneficial resources for land acquisition and shelter construction (pp. 8, 10, 12)

YES. (pp. 8, 10, 35)

YES. (pp. 110)

YES. (pp. 8, 10, 12)

Section 222(a)

Will the issuance of this guaranty cause the total face amount of guaranties issued and outstanding at this time to be in excess of \$1,555,000,000?

NO.

Will the guaranty be issued prior to September 30, 1989

YES. (\$6 million during FY 89)

Section 222(b)

Will the proposed guaranty result in activities which emphasize:

- (1) projects providing improved home sites to poor families on which to build shelter and related services; or

YES. (pp. 8, 9)

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- (2) projects comprised of expandable core shelter units on serviced sites; or
- (3) slum upgrading projects designed to conserve and improve existing shelter; or
- (4) shelter projects for low-income people designed for demonstration or institution building; or
- (5) community facilities and services in support of projects authorized under this section to improve the shelter occupied by the poor?

NO. Beneficiaries have this option after purchase of a serviced site

NO.

YES. (pp. 10)

YES. Water, electricity, sanitation, sewage and maintenance, land for community facilities. (pp. 14).

Section 222(c)

If the project requires the use or conservation of energy, was consideration given to the use of solar energy technologies, where economically or technically feasible?

N/A.

Section 223(a)

Will the A.L.D. guaranty fee be in an amount authorized by A.L.D. in accordance with its delegated powers?

YES.

Section 223(f)

Is the maximum rate of interest allowable to the eligible U.S. Investor as prescribed by the Administrator not more than one percent (1%) above the current rate of interest applicable to housing mortgages insured by the Department of Housing and Urban Development?

YES.

Section 223(h)

Will the Guaranty Agreement provide that no payment may be made under any guaranty issued for any loss arising out of fraud or misrepresentation for which the party seeking payment is responsible?

YES.

Section 223(j)

- (1) Will the proposed Housing Guaranty be coordinated with and complementary to other development assistance in the host country?
- (2) Will the proposed Housing Guaranty demonstrate the feasibility of particular kinds of housing and other institutional arrangements?

YES. 608-0202

YES.

(3) Is the project designed and planned by A.I.D. so that at least 90 percent of the face value of the proposed guaranty will be for housing suitable for families below the median income, or below the median urban income for housing in urban areas, in the host country?

YES

(4) Will the issuance of this guaranty cause the face value of guaranties issued with respect to the host country to exceed \$25 million in any fiscal year?

NO.

(5) Will the issuance of this guaranty cause the average face value of all housing guaranties issued in this fiscal year to exceed \$15 million?

NO.

Section 238(c)

Will the guaranty agreement provide that it will cover only lenders who are "eligible investors" within the meaning of this section of the statute at the time the guaranty is issued?

YES.

B. Criteria Under General Foreign Assistance Act Authority.

Section 620/620A

1. Does the host country meet the general criteria for country eligibility under the Foreign Assistance Act as set forth in the country eligibility checklist prepared at the beginning of each year?

YES.

2. Is there any reason to believe that circumstances have changed in the host country so that it would now be ineligible under the country statutory checklist?

NO.

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5C(2) PROJECT CHECKLIST

Listed below are statutory criteria applicable to projects. This section is divided into two parts. Part A. includes criteria applicable to all projects. Part B. applies to projects funded from specific sources only: B(1) applies to all projects funded with Development Assistance; B(2) applies to projects funded with Development Assistance loans, and B.3. applies to projects funded from ESF.

CROSS REFERENCES: IS COUNTRY CHECKLIST UP TO DATE? HAS STANDARD ITEM CHECKLIST BEEN REVIEWED FOR THIS PROJECT?

A. GENERAL CRITERIA FOR PROJECT

1. FY 1989 Appropriations Act Sec. 523; FAA Sec. 634A.

If money is sought to^v obligated for an activity not previously justified to Congress, or for an amount in excess of amount previously justified to Congress, has Congress been properly notified?

Congress will be notified in December 1988. The Project Agreement will not be signed until the waiting period has expired.

2. FAA Sec. 611(a)(1). Prior to obligation in excess of \$500,000, will there be (a) engineering, financial or other plans necessary to carry out the assistance and (b) a reasonably firm estimate of the cost to the U.S. of the assistance?

Yes

3. FAA Sec. 611(a)(2). If legislative action is required within recipient country, what is the basis for a reasonable expectation that such action will be completed in time to permit orderly accomplishment of the purpose of the assistance?

No legislative action is required.

- 4. FAA Sec. 611(b); FY 1989 Appropriations Act Sec. 501. If project is for water or water-related land resource construction, have benefits and costs been computed to the extent practicable. In accordance with the principles, standards, and procedures established pursuant to the Water Resources Planning Act (42 U.S.C. 1962, et seq.)? (See A.I.D. Handbook 3 for guidelines.) N/A

- 5. FAA Sec. 611(e). If project is capital assistance (e.g., construction), and total U.S. assistance for it will exceed \$1 million, has Mission Director certified and Regional Assistant Administrator taken into consideration the country's capability to maintain and utilize the project effectively? N/A

- 6. FAA Sec. 209. Is project susceptible to execution as part of regional or multilateral project? If so, why is project not so executed? Information and conclusion whether assistance will encourage regional development programs. NO

- 7. FAA Sec. 601(a). Information and conclusions on whether projects will encourage efforts of the country to: (a) increase the flow of international trade; (b) foster private initiative and competition; and (c) encourage development and use of cooperatives, credit unions, and savings and loan associations; (d) discourage monopolistic practices; (e) improve technical efficiency of industry, agriculture and commerce; and (f) strengthen free labor unions. The Project will promote role of the private sector in production of low income shelter.

- 8. FAA Sec. 601(b). Information and conclusions on how project will encourage U.S. private trade and investment abroad and encourage private U.S. participation in foreign assistance programs (including use of private trade channels and the services of U.S. private enterprise).
- 9. FAA Sec. 612(b), 636(h). Describe steps taken to assure that, to the maximum extent possible, the country is contributing local currencies to meet the cost of contractual and other services, and foreign currencies owned by the U.S. are utilized in lieu of dollars.
- 10. FAA Sec. 612(d). Does the U.S. own excess foreign currency of the country and, if so, what arrangements have been made for its release?
- 11. FY 1989 Appropriations Act Sec. 521. If assistance is for the production of any commodity for export, is the commodity likely to be in surplus on world markets at the time the resulting productive capacity becomes operative, and is such assistance likely to cause substantial injury to U.S. producers of the same, similar or competing commodity?
- 12. FY 1989 Appropriations Act Sec. 549. Will the assistance (except for programs in Caribbean Basin Initiative countries under U.S. Tariff Schedule "Section 807," which allows reduced tariffs on articles assembled abroad from U.S.-made components) be used directly to procure feasibility studies, prefeasibility studies, or project profiles of potential investment in, or to assist the establishment of facilities specifically designed

The services of US private enterprise will be utilized the fullest extent practicable

The GOM is contributing approximately 25% of total estimated costs/ HC contribution will be used to finance in-kind services.

The USG does not own excess currencies of Morocco.

N/A

No

for, the manufacture for export to the United States or to third country markets in direct competition with U.S. exports, of textiles, apparel, footwear, handbags, flat goods (such as wallets or coin purses worn on the person), work gloves or leather wearing apparel?

- 13. FAA Sec. 119(q)(4)-(6). Will the assistance (a) support training and education efforts which improve the capacity of recipient countries to prevent loss of biological diversity; (b) be provided under a long-term agreement in which the recipient country agrees to protect ecosystems or other wildlife habitats; (c) support efforts to identify and survey ecosystems in recipient countries worthy of protection; or (d) by any direct or indirect means significantly degrade national parks or similar protected areas or introduce exotic plants or animals into such areas?
 - NO.
 - NO
 - NO
 - NO

- 14. FAA 121(d). If a Sahel project, has a determination been made that the host government has an adequate system for accounting for and controlling receipt and expenditure of project funds (either dollars or local currency generated therefrom)?
 - N/A

- 15. FY 1989 Appropriations Act. If assistance is to be made to a United States PVO (other than a cooperative development organization), does it obtain at least 20 percent of its total annual funding for international activities from sources other than the United States Government?
 - N/A

16. FY 1989 Appropriations Act Sec. 538. If assistance is being made available to a PVO, has that organization provided upon timely request any document, file, or record necessary to the auditing requirement of A.I.D., and is the PVO registered with A.I.D. ? N/A
17. FY 1989 Appropriations Act Sec. 514. If funds are being obligated under an appropriation account to which they were not appropriated, has prior approval of the Appropriations Committees of Congress been obtained? N/A
18. FY 1989 Appropriations Act Sec. 515. If deob/reob authority is sought to be exercised in the provision of assistance, are the funds being obligated for the same general purpose, and for countries within the same general region as originally obligated, and have the Appropriations Committees of both Houses of Congress been properly notified? N/A
19. State Authorization Sec. 139 (as interpreted by conference report). Has confirmation of the date of signing of the project agreement, including the amount involved, been cabled to State L/T and A.I.D. LEG within 60 days of the agreement's entry into force with respect to the United States, and has the full text of the agreement been pouched to those same offices? (See Handbook 3, Appendix 6G for agreements covered by this provision). N/A

3. Economic Support Fund Project
Criteria

- | | | |
|----|--|-----|
| a. | <u>FAA Sec. 531(a)</u> . Will this assistance promote economic and political stability? To the maximum extent feasible, is this assistance consistent with the policy directions, purposes, and programs of part I of the FAA? | Yes |
| b. | <u>FAA Sec. 531(c)</u> . Will assistance under this chapter be used for military, or paramilitary activities? | Yes |
| c. | <u>ISDCA of 1985 Sec. 207</u> . Will ESP funds be used to finance the construction of, or the operation or maintenance of, or the supplying of fuel for, a nuclear facility? If so, has the President certified that such country is a party to the Treaty on the Non-Proliferation of Nuclear Weapons or the Treaty for the Prohibition of Nuclear Weapons in Latin America (the "Treaty of Tlatelolco"), cooperates fully with the IAEA, and pursues nonproliferation policies consistent with those of the United States? | No |
| d. | <u>FAA Sec. 609</u> . If commodities are to be granted so that sale proceeds will accrue to the recipient country, have Special Account (counterpart) arrangements been made? | N/A |

5C(3) STANDARD ITEM CHECKLIST

Listed below are the statutory items which normally will be covered routinely in those provisions of an assistance agreement dealing with its implementation, or covered in the agreement by imposing limits on certain uses of funds.

These items are arranged under the general headings of (A) Procurement, (B) Construction, and (C) Other Restrictions.

A. PROCUREMENT

- 1. FAA Sec. 602(a). Are there arrangements to permit U.S. small business to participate equitably in the furnishing of commodities and services financed?
- 2. FAA Sec. 604(a). Will all procurement be from the U.S. except as otherwise determined by the President or under delegation from him?
- 3. FAA Sec. 604(d). If the cooperating country discriminates against marine insurance companies authorized to do business in the U.S., will commodities be insured in the United States against marine risk with such a company?

Yes - Compliance with Grey Amendment. AID will encourage participation to the maximum extent possible of small business as contractor or sub-contractor in accordance with Part 19 of the FAR.

Yes

N/A

5. FAA Sec. 604(q). Will construction or engineering services be procured from firms of advanced developing countries which are otherwise eligible under Code 941 and which have attained a competitive capability in international markets in one of these areas? (Exception for those countries which receive direct economic assistance under the FAA and permit United States firms to compete for construction or engineering services financed from assistance programs of these countries.) No.
6. FAA Sec. 603. Is the shipping excluded from compliance with the requirement in section 901(b) of the Merchant Marine Act of 1936, as amended, that at least 50 percent of the gross tonnage of commodities (computed separately for dry bulk carriers, dry cargo liners, and tankers) financed shall be transported on privately owned U.S. flag commercial vessels to the extent such vessels are available at fair and reasonable rate? N/A. No ocean shipping of commodities is anticipated under the Project.
7. FAA Sec. 621(a). If technical assistance is financed, will such assistance be furnished by private enterprise on a contract basis to the fullest extent practicable? Will the facilities and resources of other Federal agencies be utilized, when they are particularly suitable, not competitive with private enterprise, and made available without undue interference with domestic programs? Yes
8. International Air Transportation Fair Competitive Practices Act, 1974. If air transportation of persons or property is financed on grant basis, will U.S. carriers be used to the extent such service is available? Yes

9. FY 1989 Appropriations Act Sec. 504. If the U.S. Government is a party to a contract for procurement, does the contract contain a provision authorizing termination of such contract for the convenience of the United States? Yes
10. FY 1989 Appropriations Act Sec. 524. If assistance is for consulting service through procurement contract pursuant to 5 U.S.C. 3109, are contract expenditures a matter of public record and available for public inspection (unless otherwise provided by law or Executive Order)? Yes
11. FY 1989 Appropriations Act Sec. 584. For all direct AID contracts or solicitations, and all subcontracts entered into under such contracts, does the contract, solicitation or subcontract include a clause requiring that United States marine insurance companies have a fair opportunity to bid for marine insurance when such insurance is necessary or appropriate? Yes
- B. CONSTRUCTION**
1. FAA Sec. 601(d). If capital (e.g., construction) project, will U.S. engineering and professional services be used? N/A
2. FAA Sec. 611(c). If contracts for construction are to be financed, will they be let on a competitive basis to maximum extent practicable? N/A
3. FAA Sec. 620(k). If for construction of productive enterprise, will aggregate value of assistance to be furnished by the U.S. not exceed \$100 million (except for productive enterprises in Egypt that were described in the CP), or does assistance have the express approval of Congress? N/A

C. OTHER RESTRICTIONS

- 1. FAA Sec. 122(b). If development loan repayable in dollars, is interest rate at least 2 percent per annum during a grace period which is not to exceed ten years, and at least 3 percent per annum thereafter? N/A
- 2. FAA Sec. 301(d). If fund is established solely by U.S. contributions and administered by an international organization, does Comptroller General have audit rights? N/A
- 3. FAA Sec. 620(h). Do arrangements exist to insure that United States foreign aid is not used in a manner which, contrary to the best interests of the United States, promotes or assists the foreign aid projects or activities of the Communist-bloc countries? Yes
- 4. Will arrangements preclude use of financing:
 - a. FAA Sec. 104(f); FY 1989 Appropriations Act, Sect. 525 and 536. (1) To pay for performance of abortions as a method of family planning or to motivate or coerce persons to practice abortions; (2) to pay for performance of involuntary sterilization as method of family planning, or to coerce or provide financial incentive to any person to undergo sterilization; (3) to pay for any biomedical research which relates, in whole or part, to methods or the performance of abortions or involuntary sterilizations as a means of family planning; or (4) to lobby for abortion? Yes

- b. FAA Sec. 483. To make reimbursements, in the form of cash payments, to persons whose illicit drug crops are eradicated? Yes
- c. FAA Sec. 620(q). To compensate owners for expropriated or nationalized property, except to compensate foreign nationals in accordance with a land reform program certified by the President? Yes
- d. FAA Sec. 660. To provide training, advice, or any financial support for police, prisons, or other law enforcement forces, except for narcotics programs? Yes
- e. FAA Sec. 662. For CIA activities? Yes
- f. FAA Sec. 636(1). For purchase, sale, long-term lease, exchange or guaranty of the sale of motor vehicles manufactured outside U.S., unless a waiver is obtained? Yes
- g. FY 1989 Appropriations Act Sec. 503. To pay pensions, annuities, retirement pay, or adjusted service compensation for prior or current military personnel? Yes
- h. FY 1989 Appropriations Act Sec. 505. To pay U.N. assessments, arrearages or dues? Yes
- i. FY 1989 Appropriations Act Sec. 506. To carry out provisions of FAA section 209(d) (transfer of FAA funds to multilateral organizations for lending)? Yes

- j. FY 1989 Appropriations Act Sec. 510. To finance the export of nuclear equipment, fuel, or technology? Yes
- k. FY 1989 Appropriations Act Sec. 511. For the purpose of aiding the efforts of the government of such country to repress the legitimate rights of the population of such country contrary to the Universal Declaration of Human Rights? Yes
- l. FY 1989 Appropriation Act Sec. 516; State Authorization Sec. 109. To be used for publicity or propaganda purposes designed to support or defeat legislation pending before Congress, to influence in any way the outcome of a political election in the United States, or for any publicity or propaganda purposes not authorized by Congress? Yes

Ministère des Affaires Economiques

INFO COPY

SOC 4
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5-2219

MONSIEUR LE DIRECTEUR DE L'USAID/MAROC

B.P. 120

RABAT

ACTION: RHWD

DUE DATE: 01/03/89

INFO: Dir Dir PROG-

OFT RIA CHRON RF.

OBJET /

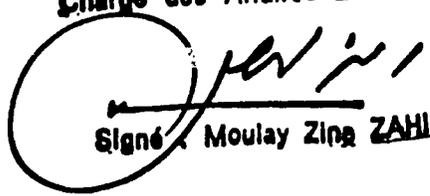
Elaboration d'un projet de coopération entre le Royaume du Maroc et l'USAID dans le secteur de l'Habitat -

Monsieur le Directeur,

J'ai l'honneur de vous informer que Monsieur le Ministre de l'Habitat m'a fait part du souhait de son département d'élaborer un projet à financer par une ligne de crédit USAID à long terme de 10 millions de dollars, en vue de promouvoir les activités d'aménagement foncier développées par l'Agence Nationale de Lutte Contre l'Habitat Insalubre (ANHI)

En vous demandant de bien vouloir examiner favorablement cette proposition, je vous prie d'agréer, Monsieur le Directeur, l'expression de mes sentiments les meilleurs.-

Le Ministre Délégué
auprès du Premier Ministre
Chargé des Affaires Economiques


Signé: Moulay Zina ZAHIDI



CAH - 4000 PROGRAM - CASE FLOW TABLES
DHS' 000 PER ONE HECTAR

Y E A R	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
REVENUES PER ONE HECTAR										
BENEFICIARIES ADVANCES										
First batch 60 hectares	459	345	345							
Second batch 60 hectares		496	373	373						
Third batch 60 hectares			525	412	412					
Fourth batch 60 hectares				573	455	455				
Fifth batch 60 hectares					624	466	466			
Total beneficiary adv.	459	841	1250	1353	1461	1578	1705	1841	1966	2147
SALES COMMERCIAL PLOTS				732	791	654	922	996	1076	1152
TOTAL REVENUES PER HECTAR	459	841	1250	2085	2252	2432	2627	2837	3064	3309
EXPENCES PER ONE HECTAR										
Land acquisition	327	360	396	435	479	527	579	637	701	771
Topographic studies	5	5	5	6	6	7	7	8	8	9
Other studies		17	18	20	21	23	25	27	29	31
VRD studies		13	14	15	16	18	19	21	22	24
VRD off-site		69	75	80	87	94	101	109	118	128
VRD in site		347	375	405	437	472	510	551	595	642
Archit. studies housing			36	39	42	45	49	53	57	62
Water		257	275	294	315	337	360	386	413	441
Electricity		293	314	335	359	384	411	440	470	503
Slaking and tilling			21	22	24	26	28	29	32	34
Final serv. and landscap				110	119	128	139	150	162	175
S/Total Direct Expences	332	1361	1529	1761	1905	2061	2229	2411	2607	2821
ANHI's fees	33	136	153	176	191	205	223	240	261	282
TOTAL EXPENCES PER HEC.	365	1497	1682	1937	2096	2266	2451	2651	2868	3103

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CASH FLOW FOR A YEARLY PRODUCTION OF 60 HECTARS

CZ 000

CASH REVENUES	27540	50460	75180	125100	135120	145920	157620	170220	183840	198540
CASH EXPENCES	21900	39620	101920	116220	125760	135960	147060	159060	172080	186180
CASH FLOW BEF. HG LOAN	5640	-19360	-25740	8880	9360	9960	10560	11160	11760	12360
HG DISBURSMENTS	48000		32000							
HG DEBT SERVICE	1020	5280	8800	8800	8800	8800	8800	8800	8800	8800
CASH SURPLUS/DEFICIT	52200	-44640	-25440	60	520	1160	1760	2360	2960	3560
CUMULATIVE CASH FLOW	52200	7660	5140	5220	5780	6940	8700	11060	14020	17580

CASH FLOW FOR A YEARLY PRODUCTION OF 60 HECTARS

US \$ MIO

CASH REVENUES	3.4425	6.3075	9.3975	15.6775	16.69	18.24	19.7025	21.2775	22.98	24.8175
CASH EXPENCES	2.7375	11.3275	12.615	14.5275	15.72	16.995	18.3825	19.8825	21.51	23.2725
CASH FLOW BEF. HG LOAN	0.705	-4.92	-3.2175	1.11	1.17	1.245	1.32	1.395	1.47	1.545
HG DISBURSMENTS	6	0	4	0	0	0	0	0	0	0
HG DEBT SERVICE	0.165	0.66	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
CASH SURPLUS/DEFICIT	6.54	-5.58	-3.3175	0.01	0.07	0.145	0.22	0.295	0.37	0.445
CUMULATIVE CASH FLOW	6.54	0.96	0.6425	0.6525	0.7225	0.8675	1.0875	1.3825	1.7525	2.1975

ANNEX CONDENSED BALANCE SHEET
DECEMBER 31, 1987

<u>ASSETS</u>		<u>LIABILITIES</u>	
CASH ON HAND	1622.14	ACCOUNTS PAYABLE	8151.89
3 MONTHS ADS	25000	BENEFICIARY ADVANCES	128714.3
RECEIVABLES	617.27	ADVANCES FROM PRINCIPALS	22430
WORKS IN PROGRESS	134995.68	MISC.	2011.72
OTHER ASSETS	0.63	ACCUMULATED PROFITS	1271.12
FIXED ASSETS	627.31	SPECIAL GRANTS	420
		SHARE CAPITAL	100
TOTAL ASSETS	163095.03	TOTAL LIABILITIES	163095.03

ANNEX CONDENSED INCOME STATEMENT
DECEMBER 31, 1987

<u>REVENUES</u>		<u>EXPENSES</u>	
ANNEX'S FEES	4162.43	PERSONNEL EXPENSES	1852.77
FINANCIAL REVENUES	895.01	OTHER EXPENSES	687.34
MISC.	68.0	OVERHEAD	277.75
		DEPRECIATION	156.56
		GROSS INCOME	2145.32
TOTAL REVENUES	5119.74	TOTAL	5119.74

VII. E.2A **TECHNICAL ANALYSIS**

1.0 **TECHNICAL DESCRIPTION OF PROJECT**

1.1 **Project Description**

A major problem in meeting the housing needs of a rapidly growing urban population, particularly the lower income families, has been the inability of Moroccan municipalities and others to finance primary infrastructure, and to open up new areas for shelter development. As a result, nearly 40% of the shelter production is carried out by the informal sector, creating clandestine neighborhoods, which are below Moroccan housing norms (lack of basic infrastructure and public services), and which when in place, require even larger investments by local governments to upgrade and service. The major bottleneck in the provision of low income shelter continues to be a lack of affordable, serviced land.

An important problem is the existence of high norms and standards for all housing development in Morocco. These norms elevate the costs of serviced land and housing beyond the means of many lower income households. The issues surrounding norms and standards will be discussed in detail below.

Another problem in the sector is the inaccessibility of the housing finance system to below median income households. Banks prefer to lend to customers of higher incomes, and in many cases lower income households do not have clear title to their land. Similarly, private sector developers often are not interested in creating developments for households below the median. The potential for profit is low, given the limited financial means of these customers, and the infrastructure norms in place.

In the short time since its creation (1985), ANHI has rapidly become the largest land developer and public sector producer of shelter for the poor in Morocco. As of the end of 1987 ANHI had identified 37 distinct projects, most in collaboration with local government. ANHI's total delivery of serviced lots has risen from 1521 in 1986, to 4754 in 1987, and is expected to reach about 5300 in 1988. ANHI's current objective is to reach a lot delivery rate of about 8000 per year. ANHI provides a serviced lot in a well planned development, as well as a guaranteed title to the plot, a house plan, and follow-up technical assistance so that beneficiaries can access the credit system and build suitable housing.

Under this project, USAID will provide \$US 10 million HG loan financing to carry out a program with ANHI. The goal of the project is to improve opportunities for urban families below the median income to acquire affordable shelter. The program purposes include:

- * to increase the production of serviced housing sites that are affordable to Moroccan urban households earning less than the median income;
- * to encourage the private sector to take a greater role in the production of shelter affordable to below median income beneficiaries;

- * to strengthen ANHI's capacity as the key public sector land development agency;
- * to reduce costs by adopting more affordable norms and standards.

Under the USAID program, ANHI will carry out market studies, undertake planning and engineering analyses, acquire land, provide infrastructure (roads, water, sewer, electricity) and sell parcels to low income beneficiaries. Plots for commercial development will be priced at full market value to allow parcels for low income beneficiaries to be sold at an affordable price. The program will support only development of ANHI's own portfolio of projects, and will not support ANHI operations as project manager for other agencies. As a direct output of the HG resources, and beginning in the third year, ANHI will deliver approximately 3000 lots on 60 ha of land, each year. ANHI will continually replenish its land reserves and continue production at a steady rate.

Eight sample projects have already been selected, including 520 ha of land and over 15000 lots identified for the target population. Technical details of these projects are given in Table 1. These sites have been selected as candidates based on the fact that they have:

- * ANHI acting as full project implementor (as opposed to project manager for another public sector agency);
- * a significant portion of the lots addressed to USAID's target population;
- * land acquisition complete or in-progress;
- * and evidence of considerable progress on project identification and project studies.

It must be stressed that these are tentative sample projects. If ANHI should identify other projects in the near future which meet the above criteria, they could also be eligible for incorporation into the USAID program. As program implementation begins, ANHI will present a complete lot delivery plan for the first year to USAID for approval.

TABLE 1

ANHI CANDIDATE PROJECTS

SITE CITY	OUED FES FES	OODS 11 TAZA	WARRISS TANGER	MASSIRA BENI MELLAL	OUAFA 1 LARACHE	SOLK SEBT KENITRA	OUAED OUIJH KENITRA SIDI	JOUITA RACER	TOTAL	AVERAGE
AREA - RAW	101 00	23 41	35 55	32 65	34 53	100	140	55 00	522	65 27
AREA - MET	45 11	10 75	19 48	14 36	18 51			23 64	131 85 **	21 97 **
TOTAL # OF LOTS	2057	908	927	1593	1675	3015	4487	2207	16869	2109
LOTS PER HECTARE	20 4	38 8	26 1	48 8	48 5			40 1	32 3 **	37 11
COEFF. OF LAND USE	45%	46%	55%	44%	54%			43%		48% **
NUMBER OF LOTS										
ECONOM. HOUSING	1380	890	841	1585	1382	2900	4256	1873	15107	1888
VILLAS	415				231				546	323
APARTMENT BLOCKS	50		70		49	100	192	159	620	103
COMMERCIAL	181	10	7	4	7	5	16	50	280	35
PUBLIC SERVICES	31	8	9	4	6	10	23	125	216	27
TOTAL	2057	908	927	1593	1675	3015	4487	2207	16869	2109
PERCENTAGE BREAKDOWN OF LOTS										
ECONOM. HOUSING	67.1%	98.0%	90.7%	99.5%	82.5%	96.2%	94.9%	84.9%	WEIGHTED AVG	89.6%
VILLAS	20.2%				13.0%					3.0%
APARTMENT BLOCKS	2.4%		7.6%		2.9%	3.3%	4.3%	7.2%		3.7%
COMMERCIAL	8.8%	1.1%	0.8%	0.3%	0.4%	0.2%	0.4%	2.3%		1.7%
PUBLIC SERVICES	1.5%	0.9%	1.0%	0.3%	0.4%	0.3%	0.5%	5.7%		1.3%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		100.0%
PERCENTAGE BREAKDOWN OF AREA										
ECONOM. HOUSING	34.7%	88.0%	71.4%	96.2%	53.0%				WEIGHTED AVG	57.9%***
VILLAS	28.6%				31.1%					17.2%***
APARTMENT BLOCKS	5.6%		10.3%		6.3%					5.3%***
COMMERCIAL	10.2%	2.7%	5.9%	1.9%	2.0%					6.2%***
PUBLIC SERVICES	20.9%	9.2%	12.5%	1.8%	7.5%					13.4%***
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%					100.0%***
AVERAGE LOT SIZE										
ECONOM. HOUSING	113	106	165	87	71				WEIGHTED AVG	103 ***
VILLAS	311				250					289 ***
APARTMENT BLOCKS	504		286		238					336 ***
COMMERCIAL	254	293	1629	698	535					320 ***
PUBLIC SERVICES	3045	1243	2700	655	2327					2504 ***
TOTAL										1994 ***
TOTAL ESTIMATED COST(000DH)										
LAND COST (000DH)	114459	25090	45753	34468	40910	125420	174724	70000	630824	78853
LAND AS % OF TOTAL	14041	1276	4142	5000	2490	5000	7000	16500	55449	6931
LAND COST PER M2 RAW	12.3%	5.1%	9.1%	14.5%	6.1%	4.0%	4.0%	23.6%	8.8%	9.8%
LAND COST PER M2 MET	31.1	11.9	21.3	34.8	13.5	5.0	5.0	30.0	10.6	11.7
SITE DEVELOPMENT COSTS	100418	23814	41611	29468	38420	120420	167724	53500	575375	71922
DEVEL COST PER HA RAW	994	1017	1170	903	1113	1204	1198	973	1102	1072
DEVEL COST PER M2 MET	223	221	214	205	208			226		218 **
ESTIM. COST / LOT (DH)										
ESTIM COST/HA RAW (000DH)	55644	27632	49356	21637	24424	41599	38940	31717	37395	36369
ESTIM. COST PER M2 MET	1133	1072	1287	1056	1185	1254	1248	1273	1208	1188
	234	233	235	240	221			296		247 **
DATE OF										
ACREEMENT	1/85	11/87	11/87	11/87				11/87		
START STUDIES		8/87		3/87	6/85			6/88		12/87
START WORKS	11/86	11/87	7/88	12/87	3/87	3/89	3/89	3/89		
START LOT DELIVERY	1989	1989	1989	1989	1989	1990	1990	1990		
STATE OF ADVANCEMENT										
- STUDIES	75%	90%	80%	100%	95%	0%	50%	65%		60%
- WORKS	30%	40%	5%	35%	45%	0%	0%	0%		10%
LOT DELIVERY:										
1989	800	650	400	800	910	0	0	0	3560	
1990	1000	240	441	785	700	1200	1270	1200	6836	
1991	257	18	86	8	65	1200	1908	830	4372	
1992	0	0	0	0	0	600	1270	177	2047	
1993	0	0	0	0	0	15	39	0	54	
TOTAL	2057	908	927	1593	1675	3015	4487	2207	16869	

NOTES:
** NOT INCLUDING SOLK SEBT, OUAED OUIJH
*** NOT INCLUDING SOLK SEBT, OUAED OUIJH, AND JOUITA

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1.2 Existing conditions in low-income housing

For the low-income population, the main alternative to settlement in ANHI developments is to settle in existing low-income housing areas. There are two existing types of low-income housing: squatter settlements ("bidonvilles"), and clandestine neighborhoods ("quartiers clandestins"). Both types of housing lack basic infrastructure (water supply and sewerage), and limited access to public services such as schools or health centers. The squatter settlements involve temporary shelters, while the clandestine areas have more conventional structures, built without legal authorization. Estimates indicate that as of 1983 about 7% of the urban population lived in the squatter areas, and 13% in the clandestine neighborhoods.¹ Land development and housing construction under ANHI projects make vast improvements over these existing conditions.

Squatter settlements are occupied by the poorest of the poor, many of whom have migrated from rural to urban areas. These settlements appear at the edge of urban areas, on un-used public lands, in ravines, or on steep hill-sides. The topographic conditions are generally unsuitable for residential use. Many are located close to industrial zones, and are susceptible to air or water pollution. These settlements are created in a completely unplanned fashion, outside of the master plan / zoning process. The squatters typically have no title to the property, and are occupying the land illegally.

Conditions in the "bidonvilles" are very poor. Housing consists of poor quality wood, brick and sheet metal shacks, typically 25-50 m². Dirt floors are common. The shelters are densely packed, with narrow, meandering dirt alleys. Water supply is obtained from public standpipe water (at a significant distance), or from vendors. Storm water runs-off on the unpaved surfaces, leading to significant erosion. There are no sewerage facilities. Solid waste is dumped indiscriminately. In general, very poor sanitary conditions exist. In addition, there is no electric power or street lighting service.

Conditions are better in the clandestine areas. Buildings consist of concrete/brick construction, of generally acceptable quality. Plot sizes average about 100m². Nearly all buildings are two stories, but many have 3, 4, or 5 floors. Road and alley widths between buildings are small, around 4 to 6m. Such access ways are rarely paved, and storm water runs-off on the surface. Estimates show that about 35% of the houses have direct water connections from public utilities.² Those houses connect to rudimentary (often open) sewers, which drain out to adjacent land in a haphazard fashion. About 40% of the houses have electric service connections, and some areas have street lighting.³ Due to the narrow meandering streets solid waste collection is difficult and often ineffective. While conditions in the clandestine neighborhoods are better than

¹ Informal Housing: Upgrading and Prevention Policies and Programs - Morocco, The World Bank, 1983

² Ibid

³ Ibid

in the "bidonvilles", they still lack basic infrastructure, and are developed outside of the GOM land-use and permit process.

Overall, it is clear that housing conditions in these low-income areas are sub-standard. In addition, the existence of these conditions creates significant erosion and pollution of land and water, both on and off these sites, creating a public health and environmental hazard for the resident population, and others nearby.

1.3 The ANHI Land Development Process

The paragraphs below describe the basic steps in the current ANHI land development process, which will continue to be followed during the AID financed program. Precise details on the length, timing and inter-relationship of the implementation steps are described in Annex F.7, Detailed Technical Background Data, and are summarized in Section 1.4, below.

1.3.1 ANHI land selection and project design

The first step in project implementation is the selection and acquisition of land. As a general practice, ANHI selects land at the perimeter of urban areas which is either undisturbed or agricultural land. In the past much of the land has been under municipal, state, or other public ownership.

Prior to land acquisition, ANHI conducts preliminary topographic, architectural and urban planning studies to verify suitability of the land and to define the major project elements. These preliminary project designs are made in accordance with the Urban Master Plan and Land-Use Plan processes. Under the Master Plans, which have been elaborated for most major cities and towns in Morocco, peripheral areas for future residential development are delineated. Industrial zones are grouped and separated away from residential. Areas with physical constraints (excessive slope, susceptibility to seasonal flooding) are thus not used for residential development. These planning instruments are implemented by the Ministry of Housing in direct collaboration with Municipalities, which adopt them once they are enacted into law.

The master plans require proper consideration of access to green spaces, provision of services such as schools, clinics, mosques, proximity to water mains, transport routes, etc. If such services are not located near a new development, then ANHI, the Municipalities, the local utilities, and local offices of relevant ministries will jointly program these to ensure their implementation.

Once these preliminary studies are complete, all ANHI projects are approved by the Municipalities.

1.3.2 Site design

Once a site is selected, the main project elements defined, and the project approved, detailed site planning & design is conducted by licensed architects, under contract to ANHI. The architects, under the guidance of ANHI project managers will determine site layout, number and size of lots, roads (primary, secondary, pedestrian access), parking, green spaces and zones for public services. Typically designers allocate 25 - 35% for roads, about 5-10% for green space, and 5-10% for service infrastructure (schools, clinics, mosques, etc.), leaving 45-50% as built-up land. Lot shapes and sizes, and grouping of lots into blocks follow concerns of market demand, infrastructure requirements, land use goals, and cost constraints. A mix of lots for different income level groups, and for commercial establishments is made. Commercial activities are limited to shops (food and other essentials), offices, and service operations. No manufacturing or light industrial activities are allowed in ANHI projects. Some sample site plans are given in Appendix 1.

The site plans must follow municipal regulations regarding lot frontage, road width, sidewalk widths, distance between secondary roads, etc. For example Municipal regulations stipulate road width as a function of the height of the buildings that will front on them. Road widths must equal or exceed building heights.

Next the on-site and off-site service infrastructure is designed by private A&E firms, under contract to ANHI, under the guidance of the Project Manager.

Roads designs are based on two types - vehicular and pedestrian. Vehicular streets vary from 20m for the largest site access roads, down to a minimum of 8m for secondary access roads. Sidewalks of 1.5 - 2m width are included. Vehicular roads have one or two layers of asphalt over compacted crushed stone. Pedestrian access paths are generally close to 6m in width, with a single asphalt or concrete layer.

Storm drainage systems, sewer systems are designed under standards outlined by Ministry of Interior. Storm drain standards are based on a 10 year storm, and on-site run-off coefficients. Sewers norms are based on uniform direct household connections and on the use of high quality materials for long life. Sometimes sewer and storm drains are combined, sometimes separate depending on flows, allowable slopes, cover requirements, costs, etc.

Regarding water supply and electricity for the lots, ANHI is compelled to work with local public utilities. In all most major urban areas water supply and electricity networks are designed, constructed, and maintained by these utilities (known as "Regies"). In smaller urban areas, the national water and electric utilities take over this function. These institutions have a complete legal monopoly on these operations.

Once an ANHI project has been identified, and the site plan developed, the Regies assume responsibility for designing and implementing this infrastructure. The systems are designed "in-house" in keeping with national norms followed by all utilities. Thus the water and electricity supply in ANHI projects conforms completely to national standards. For water supply the service level consists

of a metered house connection. Network designs are based on daily consumption of about 150/l/day, an ample supply of clean potable water. Electricity supply is based also on direct metered service, with residential service reaching about 0.5 kw per household, sufficient for basic lighting and small appliances.

Off-site infrastructure is designed to link the developments to the existing urban water supply, sewer drainage and electricity networks. If a trunk main must be extended, then its costs are built into the project. As will be discussed more below, ANHI does not design for sewage treatment, as this will be the responsibility of the Municipalities, in their overall sewerage Master Plans.

Overall, a very good infrastructure standard is achieved, greatly improving the housing conditions of the target population.

Once the site plan and infrastructure design is complete, house plans are developed, with architectural harmony between different plot types and sizes, and uses (residential and residential/commercial). The house plans conform to local building codes which stipulate structural aspects, minimum room sizes, etc. The plans are formally approved by the Municipal office in charge of administering building codes. Usually a whole series of house plans are developed to suit different plot shapes and sizes. Plans are developed for both single and dual family dwellings, and units with a commercial ground floor and a residential second floor. These designs are provided to beneficiaries free of charge. Some sample house plans are given in Appendix 1.

1.3.3 Current ANHI Implementation process

Once a full design is elaborated, works can begin. Tender documents are prepared, bids evaluated, contracts awarded and work begun. All civil works are conducted by registered private construction contractors, with considerable experience. Due to a reputation for strict control, and rapid payment, ANHI claims that bid prices are often under provisional estimates. A detailed discussion of ANHI contracting procedures is found in Section 6, below.

ANHI maintains three levels of control on all contractors to ensure good quality work completed on time. First of all, the private A&E firms which have prepared the designs are retained to maintain continual oversight of all works, even on a daily basis. If work has been done incorrectly it must be redone at contractors expense. Second, all major materials (concrete, pipe, asphalt, reinforcing steel, etc.) used at a project are sampled and tested to ensure proper conformity to material specifications (strength, pressure resistance, compactness, etc.). This work is carried out, under contract by a private materials laboratory, known as the Laboratoire d'Essais. Third, ANHI project managers visit the work sites frequently, overseeing all operations, and formally accepting work completion.

Specific contract clauses require contractors to maintain the work areas in good condition during the construction phase so as to avoid safety problems, erosion, or other environmental degradation. Contractors must completely clean

a project site within 15 days of contract completion. Strict penalties for lateness are imposed.

As lots are completed and staked, they can be delivered when beneficiaries make the final installment (payments are made in three lumps over the construction process). Along with the lot, beneficiaries receive the land title, a construction permit, and a house plan which they must follow. ANHI does provide follow-up technical assistance to beneficiaries in house construction. House plans can be modified in individual cases, with payment of additional architectural fees, and permitting. Nonetheless architectural harmony is achieved on the ANHI projects. With the construction permit, the owner can obtain a water system hook-up.

Beneficiaries can now address formal or informal credit to finance construction of their house. Actual construction may proceed in stages, with phases being accomplished as their means allow. In a typical ANHI project different lot owners will proceed at different paces, but after a period of 5 years about 90% of the houses will be complete.

In order to get an electricity hook-up, the owner must present a "residence permit" ("permit d'habiter"), which can be obtained only at the completion of the house, and full clean-up of the construction site, including removal of excess construction debris.

It should be added that, as an incentive for the beneficiaries to complete their houses, an extra municipal tax charge will be imposed on those lot owners who have not completed their houses within 5 years of receiving their lot.

Final site clean-up, sidewalk paving and landscaping (trees along streets and plantings in green spaces) is done by private contractors once 90% of the dwellings are completed.

As the final lots are delivered to buyers, and construction begins, the entire development is turned over to the Municipality, and the local public utilities for the "operational" phase. The lot owners are now residents, and pay taxes in accordance to their house size, and location. As tax payers they now have every right through their elected officials to demand all relevant municipal services, such as garbage collection, street maintenance, street cleaning and public, etc.

It should be added that in approving the project in the early stages the Municipality testified to its eventual acceptance of the operation and maintenance of these developments.

Once a project is complete, ANHI is still informally "on-site", providing technical assistance to lot owners, and can verify Municipality's performance of these tasks.

The "Regies", by the very fact that they have installed the water and electricity network, and collect monthly payments, must perform O&M on their networks.

1.4 Precise implementation planning

For the purposes of planning ANHI direct operations, a detailed study of the project implementation process was made. The goal was an optimal implementation plan for an operation of 20 ha, and for an operation of 100ha split into 5 phases of 20 ha each. The full details are given in VI.F.7 Detailed Technical Background Data. Four ANHI projects which have been recently completed or are nearing completion were studied in detail, and data adapted to the ANHI direct implementation process. This discussion will not repeat all the information presented in Section VI.F.7, but will outline a few key lessons from that exercise.

The process is divided into 5 major phases:

- 1) Land acquisition;
- 2) Technical studies;
- 3) Off-site works;
- 4) On-site works;
- 5) Commercialization

Each of these phases was further subdivided into discrete steps, with definitions of the required proceeding steps, expected duration and the length of possible delays. A critical path or PERT analysis was made to determine the precise sequence of events that would minimize the project implementation period.

For the case the 20 ha operation, the initial phase of land acquisition, initial studies and Municipal approval will last approximately one year, and the completion of all works and the delivery of lots another two years. For the case of the 100 ha operation the initial phase of land acquisition and technical studies will last about 15 months, and the works and lot delivery about 4 years.

The larger projects are usually divided into "tranches" or phases for several reasons. The implementation of road, sewer and other infrastructure networks at the scale of 100 ha is generally considered to be beyond the means of most Moroccan contractors. The process of monitoring the works at such a scale becomes more difficult for ANHI to control properly. Also, if the projects were taken on at that large a scale, the implementation period will surely exceed one year, allowing the contractor to apply automatic price increase formulas allowed under Moroccan law.

The interdependence of the construction of road, sewer, and water networks is potentially an important "bottleneck" in the process. Once the road and sewer networks are designed, construction bids are collected and evaluated (Month 14). At the same time the "Regies" can design the water distribution network, and collect bids for its construction.

Road and sewer construction can then begin immediately (Month 15). The contractor will start with site leveling, grading and definition of roadways. The curbs are placed next so that sewer manholes can be located and installed, and the entire sewer system built. For the 20 ha operation this sub-step should take about 3 to 6 months. Then, water supply network construction should begin.

According to the PERT, this step should take about 6 months. Once it is done the road and sewer contractor can complete the gravel road underlayment and road paving. Thus the overall length of the road and sewer contract then reaches about 11 months.

However, in the past, some of the Regies have not been able to implement their work on schedule, delaying the road and sewer works, delaying the entire project. In fact, if the entire road and sewer contract extends beyond one year, the contractor can legally apply standard unit-price revision formulas, adding to the cost. Since the Regies, and the contractors who implement the networks they design, are not under the direct control of ANHI, the implementation delays are almost impossible for ANHI to control.

One solution which ANHI has considered would be to split the road and sewer contracts into two parts, avoiding the possibility of automatic price increases. However this doubles the tender and bid evaluation effort. Another solution which ANHI feels would be appropriate would be an ability for ANHI to contract for the design and construction of the water networks. These activities could be done by local engineering firms and construction companies, under contract to ANHI. All plans could be approved by the Regie, and construction also monitored by them. However under current law the Regies have a full monopoly of these operations. A high level policy dialogue between ANHI, the Ministry of Housing, and the Ministry of Interior (which oversees all Regies) may help to find solutions to this problem.

1.5 ANHI Contracting Mechanisms

All studies and construction of infrastructure under ANHI projects is carried out by private architects, private architectural and engineering firms and by private construction contractors. In fact, 90% of all resources involved in ANHI projects are fed through private concerns. In all cases, licensed firms and licensed architects are used.

In issuing tenders, evaluating bids, and signing and paying contracts, ANHI conforms to standard Moroccan practice and legal regulations. All solicitations are formally advertised, and sufficient allowance is made for interested firms to respond. Tender documents for construction works are based on detailed designs by previously contracted A&E firms. The bidder must specify unit prices for all excavation, leveling, materials, components and accessories. Necessary quantities will have been outlined in the tender documents. In general offers are required to be valid for 90 days. Bid bonds are typically requested, and refunded to the unsuccessful bidders.

To evaluate bids ANHI assembles a commission, including the associated ANHI Project Manager, the Director General of ANHI, a representative from Ministry of Housing, and a representative from Ministry of Finance. These two representatives are designated to work with ANHI, so the commission can be assembled very quickly. Bid are opened and evaluated immediately. Evaluation criteria include technical responsiveness and completeness, implementation schedule, and price. The evaluation process will usually be accomplished within hours.

The successful bidder is notified immediately. As outlined in the tender document, each bid is prepared in the form of a contract, so when signed by ANHI and the contractor, a valid contract has been established. The bid stipulates the start-up date and duration of the works.

Under Moroccan law, contractors can apply automatic price revision formulas if contract duration exceeds 1 year. Price revision rules are based on standard formulas which incorporate indices for the price of labor, cement, steel, pipe, etc. These indices are determined regularly by the Moroccan government for use in all construction contracts.

All ANHI contracts include standard clauses to ensure that contractors conform to all regulations concerning labor relations, compensation, etc. In addition the contracts include clauses requiring prompt and conscientious execution of all works. Clauses also outline stiff penalties for lateness.

As described in Section 1.3 above, ANHI maintains three levels of control on all construction contracts, including the A&E firms which carried out the designs, the Laboratoire d'essais for the verification of materials, and the ANHI Project Managers. In one recent case in Taza, a contractor executed a particular roadway incorrectly, and the firm was required to rip up the pavement and redo the road at its own expense.

Physical over-runs are allowed under these contracts. If the various control parties agree that additional unforeseen materials, labor or other expenses are justified, then they can be billed and paid. Unit price over-runs are not allowed, except under the annual price revision formulas, as described above.

Payment is made as the work progresses. A minor percentage is retained until the work is complete and formally accepted by ANHI. Payments are made by check from ANHI's Treasury account, which can be accessed immediately by the payee. ANHI maintains that it receives favorable bids due to its ability to rapidly and promptly pay its contractors, unlike many government operations.

In general ANHI prefers to split large jobs into smaller phases. As mentioned in Section 1.4 above, this keeps prices moderate, and streamlines monitoring.

Procedures for solicitation and contracting of architectural services are less stringent. ANHI can quickly and simply execute small contracts to individual licensed architects at its own discretion.

In conclusion, ANHI's contracting mechanism conforms to all Moroccan practice and legal requirements. In addition it is obvious that the speed and efficiency with which it can contract for services and works is a main contributor to ANHI's impressive track record.

2.0 COST OF LAND DEVELOPMENT

2.1 Estimate of ANHI land development costs in 1989

This section outlines the cost of ANHI land development, in 1989. It is based on the data collection effort described in Annex VI.F.7 Detailed Technical Background Data, where cost were compiled from eight projects executed in 1987. A 7% inflation rate was applied to estimate average costs in 1989. Additional cost were added, including:

- * allotment for land replacement (10% inflation for 2 years);
- * physical and price contingencies (5% to 10%);
- * repayment of HG loan (total interest and principal repayment over 30 years, prorated across 60 hectares in each of the 30 years)

The results are shown in Table 4. The total cost is close to 1,840,000 DH (\$230,000) per hectare (raw). Based on land use coefficient of 50%, a net cost of 368 DH/m² is found. If the land use factor can be increased to 55%, a cost will be 334 DH/m², and at 60%, the value falls to 315 DH/m². Over the past few years ANHI projects have averaged about 50% land use factor. It should be feasible to reach 55%, but achieving 60% would probably hamper the quality of the housing conditions in the developments.

The average cost of plots (rounded to the nearest hundred DH) would be:

SIZE, m ²	LAND USE FACTOR @		
	50%	55%	60%
60	22100	20100	18400
80	29500	26800	24600
90	33100	30100	27600
100	36800	33500	30700
120	44200	40200	36800

2.2 Breakdown of costs

Table 2 also shows the percentage breakdown of costs. Clearly land and infrastructure works are the main expenses. Roads, sewerage and storm drains make up the largest portion of the costs, reaching about 23% of the total.

TABLE 2

ANHI LAND DEVELOPMENT COST BREAKDOWN

COST BREAKDOWN IN DH 000's PER HECTARE (RAW)

COST COMPONENT	1987	1988	1989 BASE	PHYSICAL		PRICE CONTINGENCY 10%	TOTAL	COST BREAKDOWN	TOTAL COST / M2 SOLD Land use factor @		
				CONTINGENCY					50%	55%	60%
LAND ACQUISITION			300.00				300.00	16.3%	60.00	54.55	50.00
ACQUISITION EXPENSES (9%)			27.00				27.00	1.5%	5.40	4.91	4.50
ALLOWANCE FOR LAND REPLACEMENT			60.00				60.00	3.3%	12.00	10.91	10.00
TECHNICAL STUDIES + MONITORING	53.10	56.82	60.79	5%	3.04	6.08	69.91	3.8%	13.98	12.71	11.65
ROADS, SEWER, DRAINAGE	303.00	324.21	346.90	10%	34.69	34.69	416.29	22.6%	83.26	75.69	69.38
WATER SUPPLY	187.00	200.09	214.10	10%	21.41	21.41	256.92	14.0%	51.38	46.71	42.82
ELECTRICITY	213.00	227.91	243.86	10%	24.39	24.39	292.64	15.9%	58.53	53.21	48.77
STAKING & TITLING	15.00	16.05	17.17	10%	1.72	1.72	20.61	1.1%	4.12	3.75	3.43
FINAL SERVICING & LANDSCAPING	80.00	85.60	91.59	10%	9.16	9.16	109.91	6.0%	21.98	19.98	18.32
SUBTOTAL			1361.42		94.40	97.44	1553.27	84.5%	310.65	282.41	258.88
ANHI FEES + MISCELLANEOUS (10%)			136.14				155.33	8.4%	31.07	28.24	25.89
SUBTOTAL			1497.57				1708.60	92.9%	341.72	310.65	284.77
LOAN INTEREST/PRINCIPAL REPAYMENT			130.00				130.00	7.1%	26.00	23.64	21.67
TOTAL			1627.57				1838.60	100.0%	367.72	334.29	306.43

NOTE: Interest & principal repayment based on loan of 80,000,000 DH, 11%, 30 years, 50 ha/year

An analysis of the sensitivity of total cost to various input parameters was made. An input/output model was developed where the cost of a particular element could be independently raised a fixed percentage, say 20%, and the resulting impact on the total cost assessed. If the total cost changes dramatically, say more than 20%, this would reveal a great sensitivity of costs to that particular parameter. Such an analysis was conducted for each cost component independently. The results given in Figure 1, show that costs are highly sensitive to the land use factor, but less sensitive to other factors such as land cost, water supply network, and other infrastructure.

In reflecting on the results of the sensitivity analysis, it is important to realize there are physical limits on how much a given input variable can be changed. As mentioned above, the land use factor could only realistically be changed up from the current 50%, to about 55%. There is very little lee-way with this factor. Still this modest change results in major cost savings. As will be discussed later in this Annex, the cost of water supply, electricity networks could be significantly reduced through the adoption of different norms. If water supply costs could be reduced 30%, 40%, or even 50%, significant savings could be made.

Figure 1 can be used to assess the impact of alternative cost reduction strategies. For example, reducing the costs of roads, sewer and storm drains by 30%, would reduce land development costs from 334 DH/m², to around 310 DH/m². Alternatively, this same cost reduction could be achieved by increasing the land use factor to about 60%, or reducing the water supply network costs 40%. Costs and benefits of alternative cost reduction approaches are possible.

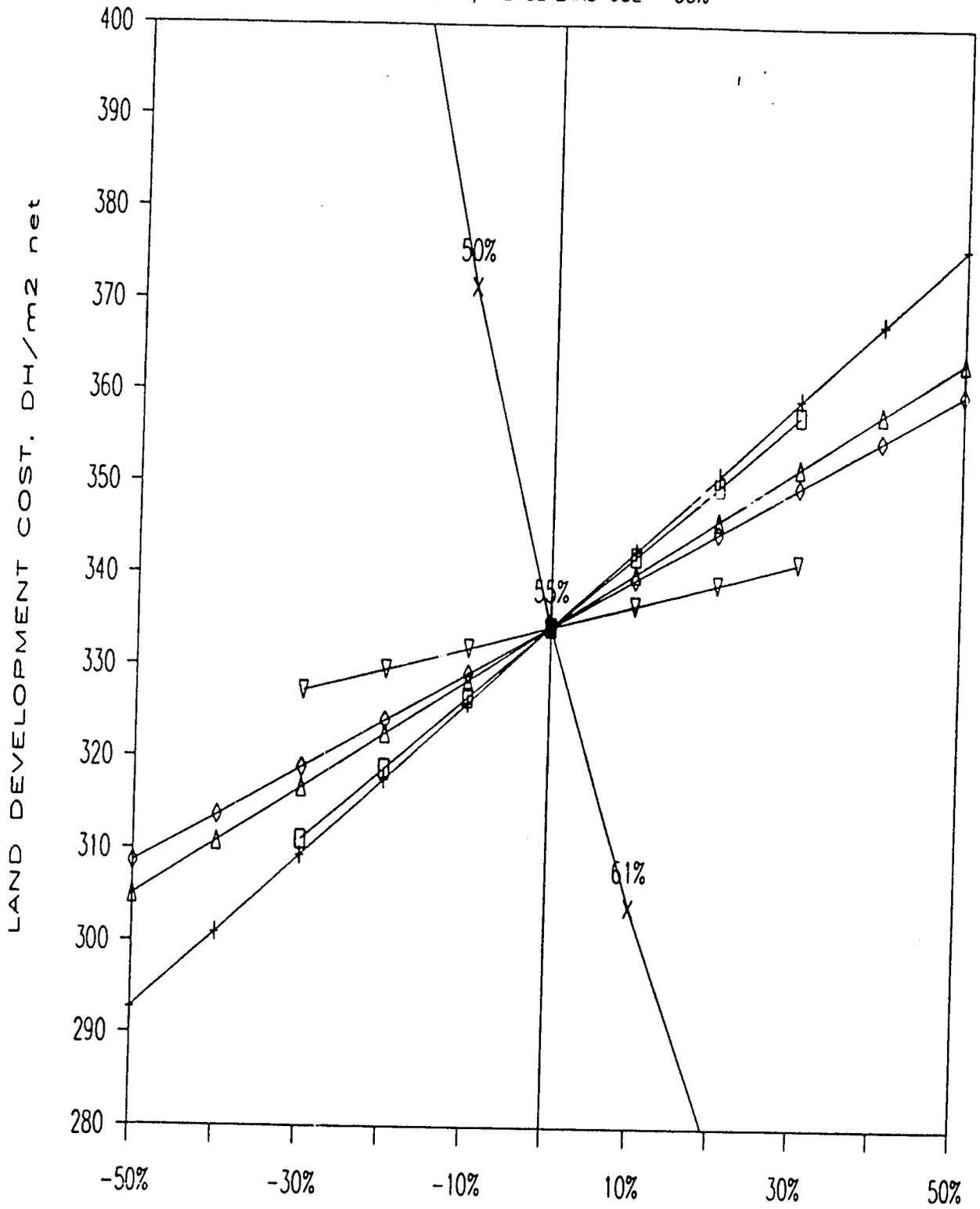
2.3 Estimation of breakeven sale prices

The above analysis outlined the average cost of developed land. The next step is to estimate the breakeven sale price.

An obvious approach would be to sell all the plots at the average cost per square meter, but this would be hard on the intended target population, and would result in lots for commercial purposes being sold well below market prices. ANHI's approach in the past has been to apply a cross-subsidy, reducing the price of plots for the target group and increasing the price for higher income groups and commercial uses. This approach will continue to be used under the USAID program.

SENSITIVITY OF ANHI COSTS TO INPUTS

1989 COSTS, BASE LAND USE = 55%



□ LAND + ROAD ◇ WAT Δ ELEC X L USE ▽ INT

Table 3 shows a sample calculation of sale prices, applying this cross subsidy approach. Approximate figures for the breakdown of different types of land use were obtained from ANHI records (See Annex VI.F.7). Sale prices were selected for the target group and for commercial and other uses, to achieve overall cost recovery. For example, assuming 55% land use factor, if the target group plots can be priced at 265 DH/m², and the commercial and other plots are sold at 700 DH/m² the total revenue to cover the average cost of 334 DH/m² will be collected.

Note that the plots for public services such as schools, mosques, clinics, etc, is price at zero, in keeping with past ANHI experience. The relevant Ministries which construct schools, clinics, etc. generally do not have the funds for these serviced lands. In essence the cost of land for services is borne by those buying into the developments.

Next the total price for different size lots for different buyers, and the breakdown of required beneficiary payments can be found.

CALCULATION OF PAYMENTS (BASED ON 55% LAND USE FACTOR)

BENEFICIARIES

	TOTAL COST PER HECTARE	LOT-60m ²	LOT-100m ²	LOT-140m ²
FIRST (40%)	443080	6360	10600	14840
SECOND (30%)	332310	4770	7950	11130
THIRD (30%)	332310	4770	7950	11130
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TOTAL	1107700	15900	26500	37100

COMMERCIAL

	TOTAL COST PER HECTARE	LOT-300m ²	LOT-500m ²
TOTAL	731500	210000	350000

It should be stressed that these figures are approximate. Different projects may be priced differently, as long as the overall financial balance is reached. For instance if the going rate for commercial plots is 1500 DH/m², ANHI could select a sale price of 1000 DH/m², quickly sell all these plots, and be able to mark down the plots for the target population even more. Also different types of lots within the category of economical housing could be priced differently, depending on local revenue distribution, market prices, etc.

TABLE 3

CALCULATION OF TARGET PRICES

60 HA/YEAR

<u>TYPE OF HOUSING</u>	<u>% OF AREA</u>	<u>PRICE</u>	<u>WEIGHTED AREA*PRICE</u>
ECONOM. HOUSING	70.0%	285	200
VILLAS	6.0%	285	17
APARTMENT BLOCKS	9.0%	800	72
COMMERCIAL	10.0%	800	80
SERVICES	5.0%	0	0
TOTAL	100.0%		369
WEIGHTED PRICE -			369
COST TO RECOVER @ 50% -			368

<u>TYPE OF HOUSING</u>	<u>% OF AREA</u>	<u>PRICE</u>	<u>WEIGHTED AREA*PRICE</u>
ECONOM. HOUSING	70.0%	265	186
VILLAS	6.0%	265	16
APARTMENT BLOCKS	9.0%	700	63
COMMERCIAL	10.0%	700	70
SERVICES	5.0%	0	0
TOTAL	100.0%		334
WEIGHTED PRICE -			334
COST TO RECOVER @ 55% -			334

<u>TYPE OF HOUSING</u>	<u>% OF AREA</u>	<u>PRICE</u>	<u>WEIGHTED AREA*PRICE</u>
ECONOM. HOUSING	70.0%	240	168
VILLAS	6.0%	240	14
APARTMENT BLOCKS	9.0%	650	59
COMMERCIAL	10.0%	650	65
SERVICES	5.0%	0	0
TOTAL	100.0%		306
WEIGHTED PRICE -			306
COST TO RECOVER @ 60% -			306

3.0 NORMS AND STANDARDS IN THE ANHI LAND DEVELOPMENT PROCESS

3.1 Introduction

Norms and standards are important aspect of the ANHI land development process. It is assumed that if norms and standards are reduced, then considerable cost savings can be made, reducing the cost of plots to the target population. However, standards cannot be reduced to the point where the quality of the development declines, or the marketability of the plots suffers. An additional aspect is that ANHI does not currently have control of a number of norms and standards, particularly those relating to infrastructure. To examine this issue a number of questions must first be answered:

1. What are the norms, design specifications and standards currently in use by ANHI, engineering design firms, local utilities, and other parties involved in the land development process?
2. Which norms are dictated by municipalities, Regies or other parties, that ANHI must follow. Which are design selections made by ANHI ? To what extent can ANHI negotiate relaxation of norms for cost reduction. ?
3. What aspects of the norms and standards could be modified to produce substantial cost savings, without seriously impacting the quality of the plots, the housing to be built on them, and the surrounding environment.

Any discussion of norms in the ANHI land development process must point out that ANHI has Project Officers with years of experience, who work with experienced engineering firms, and contract to experienced contractors. They recognize the importance of producing designs which strike a good balance between considerations of low initial cost, long life, and low maintenance requirements. ANHI staff are continuously learning as they carry out project after project. As will be seen, there are some aspects which are currently out of ANHI's control, which impact them greatly. Efforts relating to norms must begin to address these issues.

3.2 Current norms and standards

The paragraphs below outline the current norms used by ANHI, as stipulated by urban Master Plans, Land use plans, Municipalities and local utilities. In addition typical practice is described, and cost consideration discussed.

3.2.1 Spatial Planning

ANHI conducts preliminary topographic, architectural and urban planning studies to verify suitability of the land and to define the major project elements. These preliminary project designs are made in accordance with the Urban Master Plan and Land-Use Plan processes. Under the Master Plans ("Schema Directeurs d'Amenagement Urbains" or SDAUs), which have been elaborated for most major cities and towns in Morocco, peripheral areas for future residential development are delineated. These planning instruments are implemented by the

Ministry of Housing in direct collaboration with Municipalities, which adopt them once they are enacted into law. In a few areas, more precise Land Use Plans ("Plan d'aménagements") define more precise land use in selected areas usually closer to city centers.

The plans require developers to make proper consideration of access to green spaces, provision of services such as schools, clinics, mosques, and suitable housing densities. If public services are not located near a new development, then ANHI, the Municipalities, the local utilities, and local offices of relevant ministries will jointly program these to ensure their implementation.

The key issue is ANHI's spatial planning is the land use factor, that is the percentage of the land devoted to housing, commercial, and public services. The rest of the land will be occupied by vehicular roads (and sidewalks) and pedestrian roads, and green spaces.

During the initial design phase the architect will determine the basic site design, and define the land use pattern. The width of vehicular roads are computed by the architect as a function of traffic projections, which in turn depend on population densities. Municipal regulations do define minimum widths but usually the above considerations increase road widths beyond Municipal minimums. As outlined in examples presented in Section VI.F.7 Detailed Technical Background Details, the amount of land to vehicular roads ranges from 14 to 26%, and the amount for pedestrian varies from 20 to 32%. On the whole both tend to consume 40 to 45% of the total land. The balance is available for housing, commerce, services and green spaces.

The master plans usually define a minimum amount of green space per inhabitant. For instance one Master Plan for Oued Zem called for 10m² of green space per person. At a density of 500 persons per hectare, half the land would have to be in green space. By negotiating with the Municipalities, more realistic designs are established. In practice the architects allocate about 2 to 5% of the land area for green space. There are also national norms in terms of schools, clinics, mosques, etc, which are established by the associated Ministries. The architect must include correctly sized lots for these public services.

In the end ANHI can easily achieve 50% land use (housing, commercial & services) and with careful planning 55%. Their ability to do so is of course directly linked to the inclinations of the local Municipality. Some are quite open to negotiations, in order to ensure the viability of the projects, while other may be more restrictive. It must be emphasized that ANHI's ability to discuss and negotiate these issues does not carry across to private developers, who are regulated much more tightly.

During the design phase the architect will define the lot sizes and shapes, and the spatial arrangement of plots into blocks. Lot sizes are basically determined by market considerations. That is, ANHI and the architect will decide on a range of lot sizes to suit buyers interested in low-income housing, or villas, or lots for commercial use or apartment blocks. There is a national decree ("Dahir") concerning low-cost housing, which establishes minimum lot sizes of 45 to 60 m², depending on precise layout. The minimum lot size in ANHI

projects is, in fact 60m². However, over the last few years ANHI has found that the smallest lots are harder and harder to sell. The lower income buyers would rather purchase a larger lot, and rent or sell the upper floor with another family.

Lot shapes are selected by ANHI and the architects based on a number of considerations. First of all there are municipal regulations about house frontage, which usually specify a minimum of at least 6m. Lot/block design studies such as the Bertaud model have shown that deep lots with narrow frontage maximize land use and minimize necessary infrastructure per lot. However this efficiency consideration has limits. If the lot shape is chosen very long and narrow the quality of the housing environment produced will suffer. In addition a long narrow lot leads to undesirable interior room layouts. Currently ANHI tends to design its smaller lots at 7m by 10 or 11m, or 8m by 12m. Larger lots might be 10 by 15m, and villas even larger. This ratio of depth to frontage about 1.5 leads to good interior layout and acceptable lengths of infrastructure per lot.

Lots are grouped into small blocks, with pedestrian streets in between, with vehicular streets around groups of blocks and access ways. The width of pedestrian roads are stipulated by Municipal regulations, usually at twice the height of the housing to be built. The majority of ANHI house plans call for 2 story dwellings, with a height of 6m. Thus the pedestrian roadways would have to be 12m, which is quite large. This would lead to a rather poor use of soil. ANHI has found that it can negotiate these factor, and by keeping the blocks small it can retain most pedestrian access ways at 6 to 8 m width. Note that this is a significant improvement over the informal housing areas where such lanes are typically 3 to 4 m.

The resulting density of lots depends on their size. Recent ANHI projects average about 50 lots per hectare, but this figure can increase to 70 in projects (or parts of projects) emphasizing the lowest income market, and fall to 20 in those areas designed to serve a somewhat higher income.

Overall ANHI has a tricky and difficult design job. On the one hand they wish to maximize the percentage of built up land, and increasing the density within these build areas, so as to minimize the net cost per m² and per lot. On the other hand ANHI does not want to push these issues to far so as to create overcrowding, and sub-standard conditions which would decrease the market appeal of the projects, and be against their objectives. These issues were discussed in great detail with both technical and management staff of ANHI. The conclusion is that overall ANHI is finding a good compromise or balance between these two issues. Its most recent projects have reached land use factors of 55%, with the actual saleable area at 50%. The difference is due to a small portion of the serviced land being allocated to public services sold at a price off zero), as outlined in Section 2.3. This ratio should be used as a general target for future efforts. Trying to push the land use factor, despite the large cost reduction, would go too far. It would be better to purchase more land, or try to reduce other costs, rather than pushing the land use to 60%.

3.2.2 Road Design

Detailed engineering design works of vehicular roads are performed by licensed Moroccan engineering firms. Based on the results of topographic and soils studies, standard engineering formulas are applied. In general primary vehicular roads have 2 layers of asphalt, with 2 underlayers of sand and stone. Secondary vehicular roads often only have one layer of asphalt. Concrete road surfacing is not practiced. Roads are designed with the proper profile for surface run-off. No official norms exist. However, the execution of the roads are carefully monitored ANHI, the road designers, and the Laboratoire d'Etudes et d'Essais, as mentioned in Section 1.3.

ANNEX VI.F.7, gives sample cost breakdowns, with results showing 17% for leveling and grading, 43% for bed preparation and underlayments, 19% for paving, 19% for curbs and 2% for other costs. Two project bids were examined closely showing cost of 77,400 DH / hectare raw (La Butte II Rabat 1985), and 74703 DH / hectare raw (Oued Fes 4th phase 1987).

3.2.3 Sewer and Drainage

The designs for sewer and storm drainage systems are made by licensed Moroccan engineering firms. In larger cities, these studies designs closely follow the design procedures and results of existing urban sewerage master plans. In a number of cities the Master plans are out-of-date. Recently the Ministry of Interior has started an program to conduct new Master plans for seven major cities (Rabat, Sale, Casablanca, Tanger, Fes, Meknes, and Marrakech). USAID is currently planning the support of a Master plan study for Tetouan. In areas where such plans do not exist the calculations are based on similar procedures as in the other cities.

The sewerage master plans define if sewerage and drainage networks are to be combined or separate. For the calculation of storm drains the plans define the run-off coefficients to be used, the flows (based on 10 year, or in smaller towns 5 year storms). For wastewater, the plans call for direct house connections, define the basis for the calculation of effluent flow (usually 80% of water consumption), required minimum velocities, etc. The plans often also specify the type of pipe or drain profiles to be used, and minimum cover. Based on topographic site details the systems are designed in conformance to these specifications. ANHI has on several occasions asked firms to investigate whether alternative, less expensive materials would be technically suitable. In all cases the guidance of the Master plans has been found to be correct.

Most sewerage designs make use of standardized plans and procedures outlined in the General Regulations of Sewerage Works ("Devis General - Travaux d'Assainissement" or D.G.T.A.). This document was prepared by the Ministry of Public Works many years ago. It gives precise engineering details of circular and oval concrete drains, manholes, etc. The texts specify the required quality of materials (sand, gravel, cement, reinforced concrete) and the required quality assurance tests. The texts also outline precise installation procedures which must be followed by the contractors. In fact, drawings in the back of the texts appear directly in tender documents.

Existence of the DGTAs has not hampered the use of more modern materials, such as asbestos cement pipe, where appropriate.

It should be added, that despite the appearance of rigid norms defined by urban master plans, ANHI has had the ability to negotiate many of these factors with the Municipalities. This has led to relaxation of some norms to achieve desired cost reductions. Given the social objective associated with ANHI's mission, the Municipalities are more flexible with ANHI designs than with those of a private developer.

Precise unit costs for a full range of sewer network materials and components are given in Section VI.F.7 Detailed Technical Background Details. In addition that annex gives exemplary data on the breakdown of costs. On average the excavation represents 22% of the costs, piping 40% and connections and manholes 38%.

In order to understand the current designs and the cost structure better, three construction bids were examined carefully. The projects examined included La Butte II in Rabat (combined), the 4th phase at Oued Fes (separate) and the 1st phase at Al Ouafa in Larache. In practice most systems use ordinary concrete pipe for the combined systems the use mostly pre-cast unreinforced concrete pipe, but reinforced concrete pipe where the cover depths exceed about 4m. Generally the reinforced is used in the larger diameter sections, closer to the outfall. The separate system in Fes used unreinforced concrete pipe for wastewater and rectangular storm drains cast in-situ.

The examination of these bids allowed evaluation of the efficiency of the sewer network design. The length of drains per hectare (raw) of the networks was calculated. The range of ratio values was from 0.021 to 0.047 with an average of 0.035. The Bertaud Model for infrastructure planning specifies that a well planned network should reach 0.03 to 0.04, depending on lot shape, and site plan. Thus these networks appear to be well laid-out.

The total price per hectare ranged from 93500 DH/hectare (Larache 1988) to 96260 DH / hectare (Rabat 1985), for the combined systems and 131,650 DH / hectare (Fes 1987) for the total of the separate systems. Price per linear meter ranged from 275 (Rabat 1985) to 455 (Larache 1988) for combined systems. For the separate system (Fes 1987) the wastewater network cost 129 DH per linear meter, and the storm drains 176 DH/meter. (Recall that the average figure used in the cost estimates in Section 2.0 was about 350,000 DH/hectare before contingencies, in 1989, which included drains, sewer and roads as well as a provision for off-site sewage and drainage connection).

Given the above findings it is difficult to pinpoint areas for cost reduction. The networks appear well laid out, and are based on reasonable norms, which in practice allow some flexibility. One possible area for improvement could come from the utilization of new optimization software which has recently been issued by the World Bank. One available program calculates an optimum sewer network design, minimizing required excavation and cover depths. ANHI may find that the use of these programs could lead to moderate cost reductions, in both excavation and piping costs.

3.2.4 Water supply networks

In most cases, the water supply networks are designed by the Regies. In smaller cities local networks may be run by the Municipalities or by ONEP, the national water production board. The design process reportedly follows national norms. ANHI has no role in the design process. The Regies establish contracts for water network construction, which are executed independent of ANHI. It must be remembered that the Regies have a full legal monopoly over the design and execution of urban water supply networks.

It has been difficult to obtain precise information on the design procedures or norms used by the Regies. As will be discussed below, the bid documents do not elaborate the network layouts, the material quantities or unit prices. Studies carried out by Moroccan licensed engineering firms for USAID and ANHI for the Tetouan project (HG-001), use the following guidelines:

Service type	Metered house connection
Service period	24 hrs/day
Design flow	100 - 150 l/person/day
Peak factor	3
Design house tap pressure	10 m, minimum
Design period	15 yrs
Design consumption increase	4%-5%, annually

Interviews with engineering firms who have worked with Regies indicate that the design process is rudimentary and does not take into account computer modeling capability which exists in Moroccan engineering firms.

In one case in Taza, the local Regie prepared a dossier for an ANHI project there (Massira II). The total amount of the bid was close to 7 million DH (310,000 DH per hectare raw). Surprised by the total, ANHI commissioned an engineering design and cost estimate whose total was 3.5 million (165,000 DH per ha raw), about half the Regie figure.

The cost structure for water supply networks done by the Regies has no apparent relation to engineering design. The cost structure is usually composed of two parts - initial hookup costs ("taxe de premier etablissement") and participation in the urban network ("participation au reseau"). The first of these charges is based on a formula which includes the area of the lot and various undefined coefficients. The formula for the second is based on the result of the first formula, again using mysterious coefficients and algebra. In Section VI.F.7 Detailed Technical Background Details, the formulas are displayed.

Depending on the way costs are presented, Regies will sometimes add an oversight fee known as "peines et soins", to cover their costs to monitor construction, and as a hedge against faulty workmanship. It is calculated on the basis of 20% of the materials and labor. In essence it is insurance against future troubles. Regies can collect this for all water supply and electricity works. In addition TVA tax is also added into the amounts that ANHI pays, and must recover from the beneficiaries.

Thus large sums of money are demanded, with a very unclear basis. In one case in Larache, the total cost of water supply for a development, was fixed at 12 million DH by the Regie. By appealing to the Governor (who oversees the Regie), ANHI asked for a re-evaluation of the cost estimate. A revised estimate came in at 8 million, with no obvious change in engineering parameters.

Clearly ANHI has a big problem with the Regies and the water supply networks. There are many levels of concern. First is the need for proper design of the systems to appropriate norms, the second is the bizarre cost structures imposed, and third the full monopoly the Regies enjoy. Lastly, as outlined in Section 1.4 above, the Regies are slow in their implementation process which can greatly delay full project implementation.

The first concern can be addressed easily. Private firms can design water systems correctly. New micro-computer programs recently issued by the World Bank are available to perform cost optimization of these networks. These programs are in regular use in Asia. Experience has shown that trained users can cut the cost of traditionally designed systems in half. A training seminar for the Regies, ANHI and private firms could be easily arranged under this project.

Unfortunately, the other issues are much harder to resolve. It will take a high level inter-ministerial dialogue to make changes to address these administrative, and legal problems. A formula that ANHI would certainly like would be the ability to contract out design work, submit the designs for approval by the Regies, and contract-out for construction. ANHI would happily pay the oversight fee ("peines et soins"), to get proper control over the water network design and construction process. Of course the Regies will object to such a formula. Overall the Moroccan government must weigh its priorities and take a decision.

3.2.5 Electricity and Street Lighting

In most cases, the electricity and street lighting networks are designed by the Regies. The design process generally follows national norms established by O.N.E., the national electric power authority. In smaller cities, where there is no Regie which distributes electric power, local distribution is accomplished by ONE directly. In practice, the technical details of the network constructed will depend on the local Regie or ONE office.

The typical ANHI project involves a connection to a main or other high voltage power line (22kv), a feeder line to the site, and distribution to several step-down transformers (150-400 kVA) located in several small shelters spread around the site. From there the power is distributed via low voltage (LV) distribution networks. ONE norms define the type of poles, the allowable conductors (aluminum or copper, bare or insulated multi-conductor), the poles separation, and other technical details. Networks are designed on the basis of residential power connection around 0.5 kw, which is ample for lighting and small appliances, but not over-designed. Larger power connections are used for residential/ commercial and commercial lots.

On most ANHI projects low voltage (220-380 V) networks consist of overhead lines mounted on reinforced concrete poles 10 to 12 m high. On other occasions underground distribution has been selected by ANHI, raising costs considerably. In the Oued Fes and Al Kora I projects, which are designed to appeal to moderate income level clientele, underground distribution was selected by ANHI.

Street lighting is accomplished by 125w-400w fluorescent or sodium vapor lamps, usually mounted on the LV distribution poles. For the case of underground LV distribution, the street lights are mounted on their own poles, adding an additional indirect cost to underground distribution. Designs are based on providing light to each vehicular and pedestrian street.

In order to understand the current designs and the cost structure better, three construction bids were examined carefully. Two involved power distribution by the RED, the Regie in Rabat (La Butte II and Al Kora I), and the other a submission to ONE for a project in Taza (Massira II).

The examination of these bids allowed evaluation of the efficiency of the distribution network design. The length of the LV lines per hectare (raw) of the networks was calculated. The range of ratio values was from 0.026 to 0.046 with an average of 0.036. The Bertaud Model for infrastructure planning specifies that a well planned network should reach 0.03 to 0.04, depending on lot shape, and site plan. Thus these networks appear to be well layed-out. The site with the largest value would be a candidate for cost reduction studies.

The costs of networks was also examined. The total cost in the two cases with overhead distribution was 140,000 DH / hectare (Massira II Taza 1987) and 190,000 DH per hectare (La Butte II Rabat 1985), while the one case with underground distribution cost 370,000 DH per hectare (Al Kora I Rabat 1987). (Recall that the average figure used in the cost estimates in Section 2.0 was 244,000 DH/hectare before contingencies, for 1989, which is close to the average of the above numbers.) The cost of just low voltage distribution was 153 to 182 DH per linear meter for the overhead cases, and 258 DH per linear meter for the underground (all without taxes and fees).

The design of street lighting systems was also examined. The number of lamps ranged from 8.8 to 12.2 lamps per hectare, with lamp power ranging from 150 to 250 w. For the overhead LV distribution cases the net lighting power was close to 1300 watts/hectare, but in the other case this ratio reached 2300. Average pole spacing ranged from 33 to 45 m.

Precise unit costs for two of these projects and others are given Section VI.F.7 Detailed Technical Background Details. That discussion shows a steep increase in unit prices of electricity distribution hardware over the past 2 years.

The Regies contract for outside contractors to conduct the network construction. These costs will be borne by ANHI. But the Regies can also charge ANHI for "participation" in a main power line, to which the ANHI project will connect. For the case of Rabat, such calculation were based on the kw drawn by the developments. In other cases the basis of the calculation is unclear.

In charging their costs to ANHI, the Regies will add a oversight fee known as "peines et soins", to cover their costs to monitor construction, and as a hedge against faulty workmanship. It is calculated on the basis of 20% of the materials and labor. In essence it is insurance against future troubles. Regies can collect this for all water supply and electricity works. In addition TVA tax is also added into the amounts that ANHI pays, and must recover from the beneficiaries.

In conclusion it seems fairly clear that the electricity networks are well layed out and reasonably well designed. Overhead LV systems are far less expensive than underground, and still conform to national norms.

3.3 Cost reduction potential

From the review above it is clear that there are some areas where cost could be reduced by modifying norms and some where there is really nothing to be gained. It seems that nothing much will be gained in the spatial planning area, without significantly impacting the quality of the resulting housing environment. However the costs of the infrastructure networks could be greatly improved, especially in the water supply area.

If we postulate a variety of plausible changes, we can estimate a reduced cost of land development. First we will assume that the water system costs can be reduced 50%, through proper design and more rational pricing. Next if we assume that ANHI can obtain better control over the installation of the water networks, this will allow more efficient installation of the road and sewer networks. This savings combined with careful sewer design (length per hectare, careful study of combined vs separate) could lead to a 15% reduction in road, sewer and drainage costs. Lastly through use of strictly overhead lines and careful design of network lengths, we can estimate a reduction of electricity / street lighting networks at 15%.

These assumed changes can be entered into the 1989 costs in the cost Table in Section 2.0, and a new cost of land development found. The result is 1,580,000 DH per hectare raw, a reduction of 14%. This would translate into a cost per m² (@land use of 55%) of 287 DH instead of 334. Taking a more conservative estimation of simply reducing the water supply cost 40%, the net improvement in land development costs of 6%. These reductions are not very stunning, but given ANHI's experience to date, we could not have expected an enormous cost reduction potential.

Section VI.F.7 Detailed Technical Background Details discusses some other potential areas of cost reduction. For instance it suggests the possibility of increasing the land use factor, but as has been discussed above, ANHI is probably already at the desirable limit. This Annex suggests that cost reduction could possibly be achieved via careful selection of land, with good soil conditions, with favorable topographic profiles, minimizing grading and leveling costs, and lastly land close to existing infrastructure networks which will reduce off site connection costs.

One possibility which offers interesting potential, but requires more study would be the sale of partially serviced lots to private developers, for the completion of the lots and houses for direct sale to beneficiaries. A firm could buy the land and the right to develop a block or group of lots, under conditions and monitoring imposed by ANHI. By constructing houses and all secondary infrastructure at the same time, considerable savings to the consumer could result. This plan would lighten the project burden on ANHI, allowing them to develop more projects. The potential cost savings to the target population will have to be balanced against the extra monitoring requirements, and potential problems with private contractors.

Another possibility for cost reduction would be careful study of lot shape, block design, and development layout to minimize the length of infrastructure and perhaps increase land use slightly without impacting the quality of the developments. To date, ANHI and its architects and engineers do not employ the Bertaud Model techniques which have potential for cost reduction along these lines. At this time it is impossible to predict resulting costs savings, but there surely would be some possibilities here.

3.4 Conclusions on Norms, Standards and Cost Reduction

The overall conclusion of this discussion must be there exists modest possibilities for cost reduction through modification of the standard ANHI land development process. The direct cost reduction potential is on the order of 15%, which should not be surprising given the experience ANHI has had to date. In fact most of the cost reduction potential relates to aspects of the land development process which are currently out of ANHI's control. The main area of concern stems from the irrational design and pricing policies of the Regies, especially regarding water supply.

Specific recommendations regarding these issues include:

1) A high level policy dialogue should take place under the project involving ANHI, the Ministry of Interior, the Ministry of Housing, and the Regies, regarding their network pricing policies, and monopoly control over all water and electricity works. A potentially workable formula would be ANHI being given the ability to contract out design work, submit the designs for approval by the Regies, and contract-out for construction. ANHI would probably have to pay the oversight fee ("peines et soins"), but would get proper control over the water network design and construction process.

2) Technical assistance, training and study activities including:

- * A training seminar for engineers from ANHI, private engineering firms and the Regies, on a new series of computer programs recently issued by the World Bank on optimum water and sewer system design.
- * Training for ANHI engineers and private architects on the use of the Bertaud model for development design. It is possible that use of these

types of models could lead to improvements in such areas as lot, block and site design, infrastructure lay-out, etc.

- * Other detailed studies on technical aspects of ANHI infrastructure. International experts with experience in a number of countries may have design improvements or other expertise to lend. Such efforts could take the form of detailed studies in Morocco, or study visits to other institutions in other countries.
- * Examination of the possibilities of sale of partially serviced lots for completion by private developers.

ANNEX VII E2B

UNITED STATES OF AMERICA
AGENCY FOR INTERNATIONAL DEVELOPMENT
REGIONAL HOUSING AND URBAN DEVELOPMENT OFFICE
RABAT, MOROCCO

608-HG 003-USAID/ANHI
608-0200

SPECIAL TOPICS AND ANALYSIS
OF THE PROGRAM

October 1988

By: Driss BENJELLOUN
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ACRONYMES

ANHI	Agence National de lutte contre l'Habitat Insalubre National Agency to Combat Substandard Housing
BCP	Bank Centrale Populaire Central Popular Bank
CF	Conservation Fonciere Land Registry Office
CGI	Companie Generale Immobilière General Real Estate Company
CIH	Crédit Immobilier et Hôtelier Housing and Hotel Loan Bank
CUS	Coefficient d'Utilisation du Sol Coefficient of Ground Use (CGU)
ERAC	Etablissement Regional d'Aménagement et de Construction Regional Land Development and Construction Agency
FNAET	Fonds National d'Achat et d'Equipement de Terrain National fund for Land Development
GB	Budget Général de l'Etat General Budget of the State
GF	Rez-de-chaussées Ground Floor
HBM	Habitat Bon Marché Middle Income Housing
MDH	Million Dirhams
MOD	Maitrise d'Ouvrage Delegué Delegated Owner's Representative
ONE	Office National de l'Electricité National Electricity Agency
ONEP	Office National de l'Eau Potable National Potable Water Agency
PDU	Projet du Developement Urbain Urban Development Project
TME	Travailleur Marocain à l'Etranger Expatriate Moroccan Worker
VRD	Voirie et Reseaux Divers Access Roads and Other Utility Grids

HG 003-- SPECIAL TOPICS AND ANALYSIS
FOR DEVELOPMENT OF THE PROGRAM

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1. ANHI ACCOMPLISHMENTS AND PROSPECTS:

The ANHI project "pipeline" has been evaluated at 47 operations which were identified as of the end of 1987.

Since its formation in 1984, ANHI has been assigned approximately 30 operations that have been approved by its administrative board. Of these projects, 5 will be carried out in 2 or more phases which brings the actual total to 37 projects involving the introduction of services to 1446 hectares* and the commercialization of 53,850 plots* equipped for an estimated population of 700,000 people. The average project surface area is 40 hectares with a median of 20 ha.

All these projects are in either design phase (19 operations) or in construction phase (18 operations) as of 1985.

As of the end of 1987, the majority of ANHI's projects (33) were managed by delegated owners representatives (MOD) through the Provincial Housing Delegations, particularly for the implementation of all the infrastructure equipment (access roads, sewer/storm water, drinking water, electrification and cadastral survey).

Only one operation (that of Oued Fes) was managed directly by the owner (land acquisition, laying on of services and commercialization). Throughout the next 3 years, ANHI intends to increase this number to around 10 projects, some of which are presently at the stage of land acquisition negotiations (Beni-Mellal, Larache, and Kenitra).

The PDU of Dersa-Samsa (HG 001) is a special case because ANHI is only supplying technical assistance to the Municipality of Tetouan, and it concerns an integrated operation (Upgrading, Prevention and Development together).

Furthermore, the 37 approved operations can be divided as follows:

-13 Very Low Income Housing operations: the average project surface area is 13.45 ha; the average size per plot is generally less than 80 m²; these projects are primarily reserved for the rehousing of "bidonville" or shanty-town dwellers.

-9 Middle Income Housing operations-H.B.M.: the average project surface is 36.83 ha; the average size per plot varies between 100 and 120 m² and includes a small number of lots allocated to villas or apartment buildings. These projects are publicly advertized on the real estate market.

-13 Integrated operations: the average project surface area is 69.00 ha comprising plots for Very Low Income Housing or for rehousing from "bidonvilles", for upgrading, for Middle Income Housing as well as other types.

-2 Upgrading operations: mainly involving the implementation of additional infrastructure equipment at presently lived in areas.

*including 340 hectares and an estimated 10,000 plots of the P.D.U. in Tetouan in which ANHI is only contributing technical assistance to the Municipality.

CHART No. 1 : ANHI ACCOMPLISHMENTS AND PROSPECTS (1984-1990)

Number of operations (including phases) identified from 1984 to 1987: 47 operations

APPROVED OPERATIONS		1984	1985	%	1987	FIN 1987	1988	1989	1990
- Number of operations approved by Board	Total	3	10	6	10	29	///////	///////	///////
	By phase	3	14	10	10	37	10	10	10
- Project Ownership (By phase)	Housing Delegations	3	10	10	10	33	///////	///////	///////
	Local Governments	-	2	-	-	2	///////	///////	///////
	ANHI	-	1	-	-	1	(1)	(4)	(5)
	Technical Assistance	-	1	-	-	1	///////	///////	///////
- OPERATIONS BY DESIGN PHASE		4	9	13*	11	37			
- Corresponding total surface area		78,20	135,57	565,25	666,9*	1 445,97	///////	///////	///////
- Number of plots involved		4 713	6 749	20 224	22 165	53 651	///////	///////	///////
OPERATIONS UNDER CONSTRUCTION									
- Number of operations under construction		-	4	6	8	18	11 (a)	13 (a)	10
- Type of operation	Rehousing	-	1	2	3	6	3	1	///////
	HBM	-	1	2	2	5	2	2	///////
	Integrated	-	2	-	3	5	6	9	///////
	Upgrading	-	-	2	-	2	-	1	///////
- Corresponding gross surface area		-	78,19	156,56	145,73	380,48			
- Marketable surface area		-	35,01	72,85	72,75	180,61	123,24	582,7	///////
							?	?	///////
- Number of plots under construction		-	4 713	4 704	7 819	17 236	4 402	12 032 (b)	4 000
- Number of plots allotted		-	4 142	4 186	4 804	13 132	?	?	?
- Number of plots delivered		-	-	1 321	4 754	6 275	5 300	5 500	6 000
MANAGING PERSONNEL (Accum. number)	Management	4	7	9	12	12	18	20	22
	Other	6	11	14	18	18	22	25	28
	Total	10	18	23	30	30	40	45	50

(*) Including an estimated 10.000 plots of the PDU in Tetouan (Technical assistance)

(**) Opérations which include plots for rehousing/Upgrading as well as standard

(a) Including operations that are identified by the Board but not yet approved

(b) Including the major Kenitra projects that will most likely be carried out in several phases (Areas greater than 100 ha)

(4) Relative to operations approved before 1988

Taken from ANHI 1987 Annual report

ANHI's ability to intervene in diverse ways gives it a greater flexibility in sales/production through cross-subsidizing within a given project or city; it therefore has positive effects on the length of construction time needed to fully service a project, thereby facilitating the "bidonville" dwellers' accession to proprietorship, these being in majority low income families.

After 3 years of activity ANHI has not yet been able to develop an annual rhythm of getting projects underway, especially since this depends on the size of the operation and the number of construction phases involved; the smallest area observed was 2.25 ha at Oued Zem and the largest was 101 ha at Oued Fes; the average being 21 ha per year*;

However, the average number of plots that annually went under construction since 1985 is 5700 units. It is more than likely that this average will be maintained throughout the next 3 years with the exception of the P.D.U. in Tetouan for which a special organizational structure was implemented.

An equivalent average number of plots delivered annually by ANHI to its clients is anticipated; around 5,500 plots per year through 1990. During 1986 and 1987, 6,275 fully serviced plots were delivered. ANHI expects an annual rhythm of production that will service and deliver approximately 8,000 to 10,000 plots on a mid-term basis. Appendix 7.1 gives a chart outlining the estimated delivery of plots for 1986 through 1993 on all approved projects. These estimations were taken either from ANHI's figures or from P.E.R.T charts.

It should be noted that as a result of being a young establishment, and in view of the extent of its involvement (mainly in projects managed by owner's representatives which focus on the need for low income plots, rehousing plots and H.B.M.), the programming of ANHI activities remains empirical and does not extend beyond 2 years, and that, with much uncertainty and subjectivity. Technical assistance could be provided by USAID to this end, or at least to projects directly managed by ANHI.

Concerning the financial picture of ANHI production, chart No. 2 furnishes the basic data according to category of operation (owner's representative, integrated or partial projects, those proper to ANHI, and the Tetouan case). In Appendix 7.2, a similar chart provides data on a yearly basis from 1984 to 1987.

The overall estimated cost for carrying out the 37 approved projects is 1,712 MDH of which 168 MDH are land costs and 1,164 MDH are ANHI appropriations. Here following, the unit costs for different project components will be examined as well as ANHI's cost price and sale price per fully serviced plot.

The commitment fee was approximately 20% of ANHI appropriations as of Dec. 31, 1987, but it exceeds 60% for the projects that have been under construction since 1985 (see chart No. 2).

The payment rate on all commitment fees is around 53%, and it is 55% for projects under construction.

The bulk of acquired receipts is essentially derived from beneficiary advances (85%) followed by appropriations from the state's general budget (14%).

*Average value adopted for P.E.R.T. chart (see chapter 2)

CHART No.2 : FINANCIAL SITUATION BY PROJECT OWNERSHIP (In thousand DHS)

		Int. MOD (1)	Part. MOD (2)	Op. Prop. (3)	Tech. ass. (4)	Total
A/ CHARACTERISTICS						
A1- NUMBER OF OPERATIONS		29	6	1	1	37
A2- TYPE OF OPERATION	Rehousing	10	3	-	-	13
	Development	5	3	1	-	9
	Integrated	13	-	-	1	14
	Upgrading	1	-	-	-	1
A3- GROSS SURFACE AREA		933,25	71,72	101,00	340,00	1 445,97
A4- NUMBER OF PLOTS PROJECTED		37 334	4 455	2 062	10 000	53 851
A5- OP. IN DESIGN PHASE	Number	18	0	0	1	19
	Area	725,49	0,00	0,00	340,00	1 065,49
A6- OP. UNDER CONSTRUC.	Number	11	6	1	0	18
	Area	207,76	71,72	101,00	0,00	380,48

B/ FINANCIAL SITUATION

B1- TOTAL EST. COST	Total	1 131 616	75 597	114 459	390 000	1 711 672
	of which Land cost	118 810	21 210	14 041	14 500	168 561
	of which ANHI Approp.	1 010 178	40 613	100 044	13 374	1 164 209

B2- CONTRACTED COMMITMENT	Design	5 694	1 881	0	4 448	12 023
	Works	114 998	26 062	45 611	0	186 671
	Others*	9 505	2 201	20 227	6 533	38 466
	Total	130 197	30 143	65 838	10 981	237 159
Commitment rate (B2/ANHI Approp.)		12,89%	74,22%	65,81%	82,11%	20,37%

B3- PAYMENTS MADE	Design	5 962	1	0	1	5 964
	Works	99 356	11	15	0	99 382
	Others*	20 262	1	14	0	20 277
	Total	125 579	13	29	1	125 622
Payment rate (B3/B2)		96,45%	0,04%	0,04%	0,01%	52,97%

B4- RECEIPTS ACQUIRED	Ben. Advances	128 655	19	40	0	128 714
	G.P. Approp.	21 804	2	0	0	21 810
	Other**	1 040	0	0	0	1 040
	Total	151 499	20	40	0	151 564
Cost Recovery rate (B4/B2)		116,36%	0,07%	0,06%	0,04%	63,91%

B5- Total projected pre-financing resources:	1 182 430
broken down as follows: Beneficiary advances	1 136 467
G.P. Appropriations	35 969
Other**	9 994

(*) Commercial costs, programming, cross-subsidy fund, ANHI Intervention, V.A.T.,....

(**) Cross-subsidy benefits, local government subsidies and other

(1) Integrated operations in MOD - All works supported by ANHI

(2) Partial operations in MOD - Certain works initiated by project owner

(3) Operation proper to ANHI

(4) Technical assistance to Tetouan Municipality

Pre-financing of the servicing of a project by its beneficiaries has become, especially since 1986, the principal rule before any construction can be initiated at the site. In addition, the difficulties encountered in the collection of receipts by project owners, the lack of direct control by ANHI on the procedure of recovering these receipts, and the absence of a revolving fund from which ANHI can carry out or complete various works breaks the rhythm of delivering serviced plots.

These are some of the common bottlenecks in ANHI's production cycle for servicing plots that were identified in most of its projects. To these can be added the difficulties encountered by project owners during land acquisition proceedings.

2. PRODUCTION CYCLE AND P.E.R.T. CHART:

The production cycle in direct project ownership (as recommended in the scope of HG 003 loan) can be defined by 5 components (project identification, land acquisition, design, construction works, and commercialization). These components can then be further subdivided into 2 or more steps which are either sequential or floating (see chart No. 3).

The theoretical production cycle that was studied begins with project identification and ends with the establishment of individual plot titles; 2 subsequent steps to this last one are considered to be of uncontrollably long duration or very long duration (5 years) and are: individual plot development and furbishing of accesses and surroundings.

On the basis of these components and steps as defined, a study was conducted on 4 ANHI operations * that are either completed or approaching completion (ranging in size from 10 to 25 ha). The object of this study was to determine the completion time of the major steps involved as well as the bottlenecks that may have been the cause for exceeding their projected time limits.

However, seeing that the majority of ANHI's projects are carried out by delegated owner's representatives, only 3 components directly concerned them (project identification, design, and construction). The other 2 steps, land acquisition and commercialization, fall under the responsibility of the project owner with limited assistance from ANHI, namely in the managing of pre-financing funds (beneficiary advances) that ultimately bear on the completion of design and construction.

In order to establish a theoretical housing development cycle that is complete, all the various components were used from 2 operations managed directly by ANHI (Oued Fes in Fes and Massira in Beni Mellal) as well as from similar projects carried out by other specialized organizations (Provincial Housing Delegations, E.R.A.C.,...).

2.1 Theoretical housing development cycle:

The P.E.R.T. chart as proposed, was applied to an integrated project under direct management by an organization comparable to ANHI and having an average superficial area of 20 ha (all components and steps included). A similar approach was reworked for a 100 ha project to be carried out in multiple phases (5 phases at 20 ha). The method used enabled a quantitative evaluation of the project completion time and defined the "critical path" leading to it (completion being the establishment of a plot title by the beneficiary-step C6). It resulted in an optimisation of the production sequence while taking into account various bottlenecks that commonly occur.

*Al Guds, Taza 1st phase (23.59 ha). Butte II, Rabat (15.76 ha).
Massira, Machraa Belksiri (10.00 ha). Massira, Taza (22.59 ha).

CHART No.3 : SEQUENCE OF START UP AND COMPLETION OF STEPS (20 ha Project)

COMPONENTS AND STEPS	No	Time (mos)	Prev Step		Start up		Completion		Mar- gin	Respon- sibility
			1st	2nd	Early	Late	Early	Late		
PROJECT IDENTIFICATION*	1	12	-	-	-	-	-	-	-	ANHI
LAND ACQUISITION										
- "Provisional autorization" (a)	F1	2	1	-	0	0	2	4	2	AUTOR.
- Negotiation and purchase	F2	4	1	-	0	0	4	10	6	PROP.
- Property registration (b)	F3	1	F2	T8	28	40	29	42	1	L.O.
DESIGN										
- Survey/Award of contract	E1	1	F1	F2	2	4	3	5,5	0,5	ANHI
- Survey/Field works	E2	3	E1	-	3	5,5	6	9,5	1	ENG. 1
- City planning/Award of cont.	E3	1	E2	-	5	8,5	6	10	0,5	ANHI
- City planning/Design	E4	3	E3	-	6	10	9	15	2	ARC.1
- City planning/Approval	E5	2	E4	-	9	15	11	18	1	CP Dep
- Roads & Sewer/Award of cont.	E6	1	E4	E5	10	17	11	18,5	0,5	ANHI
- Roads & Sewer/Design	E7	3	E6	-	11	18,5	14	23,5	2	ENG 2
- Arch. & Eng./Award of cont.	E8	1	T2	-	22	31,5	23	33	0,5	ANHI
- Arch. & Eng./Design	E9	5	E8	T8	23	33	28	40	2	ARC.2
- Other design	E10	-	E4	E5	11	21	-	28	10	ENG. 3
OFF SITE WORKS										
- Roads & Sewer/Works	H1	3	T1	E7	15	25	18	29	1	CON.1
IN SITE WORKS										
- Roads & Sewer/Award of cont.	T1	1	E7	-	14	23,5	15	25	0,5	ANHI
- Roads & Sewer/Works	T2	11	T1	E7	15	25	26	38	2	CON.1
- Water/Estimate	T3	4	E6	E4	14	22	18	28	2	UTIL.1
- Water/Works	T4	5	T3	T2	18	28	24	36	2	UTIL.1
- Electrification/Estimate	T5	4	F6	E4	14	22	18	28	2	UTIL.2
- Electrification/Works	T6	6	T5	T2	18	28	24	36	2	UTIL.2
- Boundary/Award of cont.	T7	1	T2	T6	24	34,5	25	36	0,5	ANHI
- Boundary/Works	T8	3	T7	-	25	36	28	40	1	ENG. 4
- Furbishing of surroundings (c)	T9	5	T9	C8	28	40	33	92	65	CON.2
COMMERCIALIZATION										
- Identif. of beneficiaries	C1	8	1	-	1	5	9	15	2	ANHI
- 1st payment by beneficiaries	C2	6	E4	-	9	15	15	33	12	BENE.
- 2nd payment by beneficiaries	C3	6	T4	T6	18	28	24	46	12	BENE.
- Final payment	C4	6	T8	-	28	40	34	87	41	BENE.
- Delivery of plots	C5	6	C4	-	28	40	34	87	41	ANHI
- Individual plot deeds (d)	C6	1	C5	T8	28	40	29	87	46	L.O.
- Plot development	C7	15	C5	T6	29	42	44	104	45	BENE.

(*) Includes identification of site and financing sources

(a) Yielding of land to project owner in order to engage the operation; process begun during identification

(b) Establishing a master property title in the name of the owner

(c) The furbishing of accesses can be started before reception of the housing project by the local government and at the latest when 70% of the plots are developed

(d) Established by "Conservation Foncière" or Land Office (L.O.) at the beneficiaries request

The proceedings and results are as follows:

1. The identification of all components and steps that are inter-related for the carrying out of a given project. These steps bear as much on the actual design and construction phases as on decisions relative to contracts, their approval and their awarding.

The "project identification" component which generally includes site reconnaissance, defining the program, identifying financing, and obtaining ANHI board approval of the project, is considered, for our purposes, a completed step before implementing the P.E.R.T. chart.

The steps that most easily affect the "normal" (i.e. according to the pre-determined time limits) execution cycle often involve activities in which outside administrations must intervene (approval of city planning design by the appropriate administration, the establishing of estimates by the water and electricity companies) or the project beneficiaries (the different payments through to the final one which then gives access to delivery of the plot). Concerning multiple phase projects, it should be noted that land acquisition and design are carried out for the entire project contrary to construction and commercialization which are completed by phase. The steps implemented in this case are the land development phases.

2. The identification of the relationship between each step. This clearly defines, for each step, those preceding it, that is to say those that must be initiated before the completion of the previous ones. This is particularly true in the awarding of design and construction contracts.

Other steps can be initiated on the basis of preliminary information which at the time can be considered incomplete. This is the case of obtaining estimates and design for water and electrical services on the basis of the unapproved city planning design alone, and before completion of the roadway and waste water design.

Ultimately, in the scope of ANHI's activities, the roadway works and other services will always depend heavily on the commercialization steps, namely concerning the final payment before the plot can be turned over to the beneficiary.

Graph A (appendix 7.3) illustrates the different relationships between the execution steps of a 20 ha project and shows the "critical path" of the cycle.

In a multi phase project, all design (except possibly architectural design) is completed before proceeding to construction. The "critical path" of the construction phase remains dependant on the drinking water and electrification works (monopolized concession of phases 2,3, and 4 (see graph B, appendix 7.3)).

3. The estimation of the completion time for each step, expressed in months, was based on accomplished works by ANHI, on discussions with ANHI project managers, on similar operations by others in Morocco, and lastly on the estimation of works to be executed. For each step or phase, a "normal" or "actual" (considered minimal) completion time was determined, as well as a corresponding time extension margin which thus gave the maximum completion time.

For 20 ha, the "critical path" analysis indicated that the total completion time (up to the complete development of plots) for a housing project with an average area of 20 ha can vary between 44 months (minimum) and 104 months (maximum).

The land acquisition phase can last from 5 to 12 months if the various properties making up the project are already registered (it becomes a question of simply updating the property title); In the face of the many real estate problems that can be encountered when working on state projects, this phase can lead to initiating the design work on the basis that ANHI, being an administration, can benefit from the "affectation de principe" while waiting for the land purchases to be legalized, and this through the support of the local authorities. Furthermore, ANHI can decide to buy land from private proprietors without the State Property Services (Services des Domaines) intervening, and at current market prices.

The design and construction phases (without taking into account matters of landed property and commercialization) can last 26 months minimum and 36 months maximum (with all margins accumulated). These figures were arrived at by applying the relationships and sequences previously defined.

The commercialization phase is very difficult to assess chronologically. Its duration, theoretically, extends far beyond the physical works of the project if one includes the element of outstanding unsold plots. It is currently accepted in Morocco that on the average, a housing project is not fully developed until after 4 or 5 years. It was on this basis that the payment times were estimated on which depend the delivery of plots and their registration by the project beneficiaries. In this case, it is important to develop a system that would penalize the attributors who have not completed their payments.

Concerning the development of individual plots, it is recommended that ANHI (in coordination with local authorities) retain the right to grant the "Administrative Certificate for obtaining a building permit" in case there are delays noted during the various steps of land acquisition.

Chart No. 3 furnishes for each step, the "normal" completion time, the number of prerequisite steps, the chronology of both the earliest and latest time for start up and completion, the time extension margin, as well as the organisation that is directly responsible to carry out any given step. A corresponding chart is given in Appendix 7.3 which defines the sequences being considered followed by an execution schedule outlining "normal" and "late" completion times.

For a multi phase project, chart No. 4 provides the same data. In this case the design component lasts between 19 and 27 months; the works component between 34 and 45 months with each phase being executed in an average time of 13 months.

CHART No.4 : SEQUENCE OF START UP AND COMPLETION OF STEPS (100 ha Project)

COMPONENTS AND STEPS	No	Time (mos)	Prev. Step		Start up		Completion		Mar- gin	Respon- sibility
			1st	2nd	Early	Late	Early	Late		
PROJECT IDENTIFICATION*	1	12	-	-	-	-	-	-	-	ANM
LAND ACQUISITION										
- "Provisional authorization" (a)	F1	2	1	-	0	0	2	4	2	AUTOR.
- Negotiation and purchase	F2	6	1	-	0	0	4	10	6	PROP.
- Property registration (b)	F3	2	F2	-	4	10	6	13	1	L.O.
DESIGN										
- Survey works	E1	5	F1	F2	2	4	7	11	2	ANM
- City planning/Design	E2	7	E1	-	6	10	13	20	3	ARC.
- City planning/Approval	E3	2	E2	-	13	20	15	23	1	CP Dep
- Roads & Sewer/Design	E4	7	E2	E3	14	22	21	31	2	ENG. 1
- Water & Electrification	E5	5	E2	E3	16	24	21	31	2	UTIL. 1
- Other design	E6	-	E2	E4	15	23	-	31	8	ENG. 2
OFF SITE WORKS										
- Roads & Sewer/Works	H1	4	E7	-	22	32	26	37	1	CONT. 1
ON SITE WORKS BY PHASE										
- 1st phase: VRD works/Sur.(c)	T10	14	E4	-	21	31	35	48	3	CONT. 2
Water & Electrif.	T11	6	E5	E6	25	35	31	43	2	UTIL.
Delivery	T12	6	T10	T11	35	48	41	94	40	ANM
- 2nd phase: VRD works/Survey	T20	13	T11	E4	27	39	40	55	3	CONT. 3
Water & Electrif.	T21	5	T11	-	31	43	36	50	2	UTIL.
Delivery	T22	6	T20	T21	40	55	46	101	40	ANM
- 3rd phase: VRD works/Survey	T30	13	T21	E4	32	46	45	62	3	CONT. 4
Water & Electrif.	T31	5	T21	-	36	50	41	57	2	UTIL.
Delivery	T32	6	T30	T31	45	62	51	108	40	ANM
- 4th phase: VRD works/Survey	T40	13	T31	E4	37	53	50	69	3	CONT. 5
Water & Electrif.	T41	5	T31	-	41	57	46	64	2	UTIL.
Delivery	T42	6	T40	T41	50	69	56	115	40	ANM
- 5th phase: VRD works/Survey	T50	13	T41	E4	42	60	55	76	3	CONT. 6
Water & Electrif.	T51	5	E5	E6	46	64	51	71	2	UTIL.
Delivery	T52	6	T50	T51	55	76	61	122	40	ANM

(*) Includes identification of site and financing sources

(a) Yielding of land to project owner in order to engage the operation; process begun during identification

(b) Establishing a master property title in the name of the owner

(c) VRD stands for Access roads and other utility grids

2.2 The state of ANHI projects:

Relative to ANHI's activities, chart No. 5 gives the design and construction steps in their order of execution for an operation under a delegated owner's representative. It also reveals the average estimated and actual completion times for each step and the main bottlenecks encountered.

Although it is difficult to make a synthesis on only 4 operations which have not yet been completed and which involve ANHI under particular conditions (ANHI start up program, operation initiated by project owner, influence of Local Authorities in shanty town reabsorption,...) one can however draw out the following observations:

- Average completion times: Except for architectural design and the electrification works for which the forecasted completion times were slightly overestimated, the remaining steps seem to correspond to "normal" or unobstructed execution.

CHART No. 5 : EXECUTION TIME OF DESIGN AND WORKS AWARDED BY ANHI

STEPS (In order of execution)	AVERAGE TIME		Margin	OBSERVATIONS
	Forecasted	Actual		
1- Surveying works	-	-	-	Initiated by the project owner
2- City planning design	-	-	-	
3- Roads, Sewer design / Aw.	-	3,5	-	
4- Roads, Sewer design	3	5	5	
5- Roads, Sewer works / Aw.	-	5	-	Approv. & Commer. Probs
6- Roads, Sewer / works	8	18	10	Contr., site, comm. probs
7- Water /estimate	-	10	-	Utility co. reply
8- Water /works	6	15	9	Off site probs. underes
9- Cadastral Survey/Aw.	-	5	-	
10- Cadastral Survey/Works	5	7	2	
11- Architecture/Award	-	2	-	
12- Architecture /design	6	4	-2	Deadline overestimat
13- Electricity /estimate	-	5	-	
14- Electricity/works	12	9	-3	Deadline overestimat

There are however, important deadline violations among these steps which vary from 2 months for design to approximately 10 months for construction. They are related, on the one hand, to technical difficulties encountered during construction (topography and off-site works in the case of Al Qods in Taza 1st phase, for example) as well as the monopoly held by the water company (Régie or ONEP) and electricity company (Régie or ONE) and on the other hand, to the policy of complete prefinancing of the various project works by the same beneficiaries.

At the moment, after the 3rd year of construction, no ANHI operation can be considered completely finished (total delivery of plots and their subsequent development) with the exception of Butte II in Rabat.

-Sequence of design steps and construction: As was specified above, in establishing the production cycle for a housing project, the sequence of steps plays an important role in its completion time.

Chart No. 5 gives the order in which steps were executed for the ANHI projects studied. The existence of much down time between steps was noted. In the case of ANHI projects, the sequence of steps remains very closely related to the commercialization component because start up of design and construction are generally dependant on beneficiary prefinancing.

3. TECHNICAL PROJECT RATIOS

3.1 Average consistency:

It should be restated that the average size of the 18 ANHI operations under construction since 1985 is in the order of 20 ha. The minimum size is 2.25 ha (at Oued Zem) and the maximum is 101 ha (at Oued Fes).

The average coefficient of ground use (CGU) on the 18 operations studied is 47.8% and is quite close to the proportion of marketable land (47.5%). The CGU fluctuates considerably according to the nature of the project (rehousing, HBM and integrated operations) and according to the volume of public equipment. The minimum CGU encountered was 38.8% at Butte II in Rabat and the maximum was 57.4% on the Oued Eddahab project in Oued Zem.

Low income housing plots (rehousing plots and HBM) represent about 90% of the plots delivered by ANHI. The average distribution of the "useable surface area" for the principle types of plots throughout the 18 operations is as follows (see charts No. 6, 8, and 9):

-Rehousing plots represent 40% of the "useable surface area" for about 56% of the plots; the average plot size is 74 m² (varying between 55 m² and 100 m²).

-HBM plots make up 30% of the "useable surface area" for 34% of the total number of plots; the average plot size is 105 m² (varying between 60 m² and 180 m²).

-Plots reserved for commercial equipment with 13% of the "useable surface area" and 3.7% of the plots; the average plot size is 65 m².

CHART No.6 : AVERAGE GROUND USE

CATEGORY OF GROUND OR PLOT USE	%	%	Plot Sizes (m ²)		
			Nb Plots	CGU	Average
Rehousing / Very Low Inc.	56,0%	39,7%	74	55	100
Middle Inc. housing HGM	33,6%	29,7%	105	60	180
Villas	4,6%	4,3%	292	180	1000
Apartment buildings	1,6%	8,8%	314	150	500
Commercial equipment	3,7%	12,8%	65	20	5000
Socio-collective equipment	0,5%	4,7%	1720	30	5000
Total	100,0%	100,0%	-	-	-

3.2 Housing density:

For housing plots the gross average density is 43 plots per hectare. The net density (comprising only surfaces for housing plots) is 100 plots per ha. It does vary according to the design and nature of the project. The minimum

value encountered was 19 plots/ha (gross) and 60 plots/ha net (the case of Oued Fes, 101 ha). The maximums were 65 plots/ha (gross) and 125 plots/ha net (the case of Massira in Machraa Bel Ksiri, 10 ha).

According to the nature of the projects studied, roadways occupied anywhere from 15 to 25% of the total project surface area and pedestrian accesses between 20 and 30%. Chart No. 7 illustrates the case of 3 ANHI operations.

Considering the requirements which are in effect, an optimal use of ground surface can be recommended according to the different categories of usage (roads, pedestrian accesses, etc.), and the nature of the project:

NATURE	HOUSING	ROADWAYS	PED. ACCESSES
100% HBM	45-55 %	15-20 %	20-30 %
Mixed (HBM, villas...)	60-65 %	20-25 %	15-25 %

CHART No. 7 : EXAMPLES OF GROUND USE CATEGORIES (in %)

	AMAL (Bouznika)	MASSIRA (M. Belksiri)	AL OODS I (Taza)
Type of roadway	8 to 12 m	8 to 25 m	12,14 to 20
HOUSING	14 190 49%	51 360 51%	114 200 48%
EQUIPMENT Marketable	450 5%	1 990 2%	7 800 9%
Non marketable	1 020	0	12 600
ROADWAYS	4 380 14%	26 410 26%	49 100 21%
PEDESTRIAN ACCESSES	10 130 32%	20 220 20%	55 660 23%
TOTAL	30 170 100%	100 000 100%	239 360 100%

CHART No.8 : A FEW EXAMPLES OF PROJECT CONSISTENCY

PROJECT	Total area (ha)	Number of plots	% Marketable area acc. plot type				C.G.U. (%)	Plot/ha
			Rehous.	H.B.M.	Other hous.	Equip.		
MASSIRA (M.B. Ksiri)	10,00	708	84,6	11,7	-	3,7	55%	70,80
AL OODS 1e tr. (Kour.)	28,70	1763	55,4	39,1	-	5,5	46%	61,40
AMAL (Bouznika)	3,05	206	96,6	-	-	3,4	46%	67,70
AL KORA 1e tr. (Rabat)	5,78	275	57,7	6,7	32,4	3,2	49%	47,60
AL KORA 2e tr. (Rabat)	7,70	506	67,2	15,4	10,5	6,9	48%	65,70
DHAR LAKHMIS (Fès)	10,15	499	-	80,3	-	19,7	42%	49,40
BUTTE II (Rabat)	15,76	795	88,5	8,3	-	3,2	36%	50,40
MASSIRA II (Taza)	22,59	634	-	47,6	44,4	8,0	52%	28,00
OUED FES (Fès)	101,00	2062	-	34,7	34,2	31,1	45%	20,40

CHART No.9 : A FEW EXAMPLES OF LOW INCOME PLOT SIZES

OPERATIONS	% Marketable area/Plot size					Frontage
	<70	71-80	81-90	91-100	>100	
MASSIRA (M.B. Ksiri)	67,8	3,9	15,8	-	12,5	11,60
AL OODS 1e tr. (Khouribga)	42,0	33,2	17,9	-	6,9	12,10
AMAL (Bouznika)	78,4	-	12,4	9,2	-	9,26
AL KORA 1e tr. (Rabat)	57,7	-	-	-	39,1	
AL KORA 2e tr. (Rabat)	-	82,6	-	-	10,5	
BUTTE II (Rabat)	96,8	-	-	-	-	10,60
MASSIRA II (Taza)	-	-	-	-	92	

CHART No.10 : UNIT EQUIPMENT COSTS

COMPONENTS	DH/ha gross		DH/m ² marketable		R (1988)
	1987	1988	1987	1988	
DESIGN & PILOTING:	53 100	56 817	10,62	11,36	6,2R
- Surveying	2 600	2 782	0,52	0,56	0,3R
- City planning	800	856	0,16	0,17	0,1R
- V.R.D	9 900	10 593	1,98	2,12	1,2R
- Architecture	27 300	29 211	5,46	5,84	3,2R
- Other	12 500	13 375	2,50	2,68	1,5R
WORKS:	798 000	853 860	159,60	170,77	93,8R
- Off site roads & sewer	50 000	53 500	10,00	10,70	5,9R
- On site roads	117 000	125 190	23,40	25,04	13,7R
- On site sewer	136 000	145 520	27,20	29,10	16,0R
- Water	187 000	200 090	37,40	40,02	22,0R
- Electricity/Lighting	213 000	227 910	42,60	45,58	25,0R
- Cadastral survey	15 000	16 050	3,00	3,21	1,8R
- Furbishing of accesses	80 000	85 600	16,00	17,12	9,4R
TOTAL	851 100	910 677	170,22	182,14	100,0R

CHART No.11 : MEAN COST PRICE BY PROJECT CATEGORY (1988)

COMPONENTS	PER HECTARE (Gross)			COST PER M ² MARKETABLE	R	V.A.T. Rate
	Unit cost	% Conting.	Total			
LAND CHARGES	190 000	20R	228 000	45,60	16,5R	?
DESIGN & PILOTING:	56 900	10R	62 590	12,52	4,5R	12R
- Surveying	2 800	10R	3 080	0,62		
- City planning	900	10R	990	0,20		
- V.R.D	10 600	10R	11 660	2,33		
- Architecture	29 200	10R	32 120	6,42		
- Other	13 400	10R	14 740	2,95		
WORKS:	853 800	15R	1 003 260	200,65	72,7R	14R
- Off site roads & sewer	53 500	15R	61 520	12,30		
- On site roads	125 200	15R	143 980	28,80		
- On site sewer	145 500	15R	167 320	33,46		
- Water	200 000	20R	240 000	48,00		
- Electricity/Lighting	228 000	20R	273 600	54,72		
- Cadastral survey	16 000	15R	18 400	3,68		
- Furbishing of accesses	85 600	15R	98 440	19,69		
SUPPLEMENT EXP (1R D/W)	9 100	10R	10 010	2,00	0,7R	19R
ANNI INTERV FEES (8R)	65 700		76 800	15,36	5,6R	19R
COST PRICE	1 175 500		1 380 660	276,13	100,0R	

4. PROJECT COST ANALYSIS

This chapter deals on the one hand, with the average cost prices and sale prices per square meter (m²) according to project category, and on the other hand, with the unit cost of infrastructure equipment.

4.1 Cost prices and sale prices:

The information gathered from terminated design and construction contracts of 8 completed or partially completed* projects enabled the calculation of average cost prices (per hectare and per marketable m²) for each component according to the disbursements made. The prices were corrected for 1987 and then updated for 1988 using an annual inflation rate of 7% (chart No. 10).

In summary, it is recommended that the following unit costs (1988 valued) be referred to in the financial planning of integrated housing projects under direct ownership. These costs were obtained by calculating the average land charges and supplemental expenses on all ANHI projects using a marketable land coefficient of 50 % and assuming that contingencies vary between 10 and 20%

The mean cost price is estimated at around 1,380,000DH per hectare or 276 DH per square meter (including contingencies and V.A.T.) of which approximately 17% goes to land charges, 77% to equipping costs and 6% to ANHI financial charges (see chart No. 11).

Within this cost price, the disbursements for design and works calculated per square meter come out to around 200 DH/m², and can be considered as non-fluctuating. This is not the case for the land charges and supplemental expenses.

ANHI intervention fees are calculated on the basis of design and works disbursements and supplemental expenses at a rate of 6%, increased by a V.A.T. of approximately 15 DH/m².

Thus an 80m² plot (average for rehousing) amounts to about 22,000 DH and a 100m² plot (average for HEM) to 27,600 DH.

It was relatively difficult to find any cases for comparison with the mean cost achieved by other developers apart from ANHI. This is largely due to the amount of provisions having to be made in the project and the variation in land charges and commercial expenses. However, two actual cases can be cited as examples:

-A private housing development in Settat (approx. 34 ha, 1985) with 600,000-DH per hectare (gross) for land charges, and 880,000 DH per hectare (gross) for development costs. 1,480,000 DH/ha or 296 DH per marketable square meter.

*Dhar Lakhmis in Fes, Butte II in Rabat, Massira in M.Belksiri, Massira II in Taza, Amal in Bouznika, Al Qods I & II in Taza.

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- A C.G.I. housing development in Fes (approx. 47 ha, expected 1988) with 450,000 DH/ha for land charges and 1,415,000 DH/ha for development costs. 370 DH per marketable square meter.

The possibilities of reducing the cost price of an operation in the scope of ANHI's activities are several:

1. At the design level of the project's general site plan where, according to the regulations in effect, the coefficient of ground use (CGU) can be increased to 55% or even 60% in the case of low income housing operations. This would represent approximately 70 plots per hectare (gross) using an average plot of 80 m².
2. During the project identification where special attention must be given to the location of the project relative to the main access roads and other utility grids (reduction of off site structures) and to the general topography of the terrain (reduction of earthwork). Preliminary studies must be conducted before ANHI can assume direct project ownership of an operation.
3. Concerning the technical provisions of a project, namely, of very low income housing projects (mean plot size less than 80 m²) reserved for families with the lowest income. It is recommended, especially where ANHI has the prerogative, that reflection be given to the design of plot configuration (reducing frontage), to specifications for minimum equipment, and to the level of technical provisions according to the nature of ANHI operations.
4. In the area of supplemental expenses: for operations under a delegated owner's representative, these disbursements not only include the commercial expenses of a project, but also a portion of the direct fees of the project owner as stated in the contract established with the delegated owner's representative. These latter fees (which can amount to as much as 1% of the total project cost) will not be required in the case of operations under direct project ownership.
5. At the level of recovering the V.A.T. which is imposed (directly or indirectly) at up to 7.56% of the cost price, land charges included. Under delegated owner's representative, ANHI is viewed by the fiscal services as an intermediary developer and not as a design office. There is a tacite agreement that ANHI management fees are taxed at a rate of 19%, but the V.A.T. is not recoverable. It is the same in the case of design services (12% non deductible) and construction works (14% non deductible) for operations under delegated owner's representative (D.O.R.). In addition, the sale of land plots under D.O.R. is non taxable (V.A.T.), contrary to operations under direct project ownership.

Under direct project ownership, ANHI is considered a simple developer. The recovery of the V.A.T., which was paid on construction works (14%) and on other disbursements for project related services (19%), occurs at the sale of the plots. In this case, the cost price per m² could go from 276 DH down to approximately 249 DH. The V.A.T. would therefore be included in the sale price at a rate of 14%.

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The mean sale price applied to the 18 projects that were initiated since 1985 is in the order of 270 DH/m² for a corresponding ANHI estimated cost price of 230 DH/m². In reality, these figures do not serve much use in and of themselves because ANHI's procedure for establishing sale prices is not systematic from one project to the next, but rather empirical. In fact, several parameters intervene in the fixing of sale prices by ANHI: price adjustment according to the different types of plots being sold and any expected cost increases; allowing prices to approach those in effect on the real estate market without exceeding them; cross-subsidizing within a project or between projects, particularly to the advantage of rehousing plots; the intervention of local authorities in the rehousing process; budget or project owner subsidies, especially relative to landed property matters.

In general, plots which are reserved for rehousing "bidonville" dwellers are delivered at a price varying between 100 DH/m² (in the case of Al Qods-1st phase-in Khouribga for an average plot of 67 m²) and 200 DH/m² (in the case of Al Kora-1st phase-in Rabat for a 70 m² plot).

For 2 story H.B.M. plots, prices vary between 250 DH/m² (in the case of Al Qods-1st phase-in Taza for an average plot of 65 m²) and 400 DH/m² (in the case of Hay Hassani in Ben Slimane for an average plot of 80 m²). For other types of housing plots, the prices increase according to the number of stories authorized, and the commercial function for which the ground floor will be used.

One is reminded that in the scope of direct project ownership the V.A.T. is calculated into the plot sale price at a rate of 14%; a deduction resulting from land charges and V.A.T. amounts paid on works (14%) and various other services (19%).

Concerning the cases examined for comparison with other developers, the sale prices of constructible land vary according to the project ownership (public, semi-public, as well as small or large private developers), according to the town or district involved, and according to the degree of equipment servicing the development (complete equipping, partial, or absence of equipping in the framework of "clandestine" developments).

For the 2 examples previously cited, the private development in Settat is selling at an average price of 430 DH/m², and that of the C.G.I. in Fes is estimated at 594 DH/m². Other examples of sale prices (1988 figures) can be quoted from recent studies carried out in Tetouan in the scope of US AID's HG 001 loan:

- public development, fully equipped: 300 DH/m²
- private development, fully equipped: 500 to 200 DH/m²
- private development (clandestine) non equipped: 50 to 200 DH/m²

Subsequently, the social and economic profiles of the various beneficiaries of projects completed by ANHI will be presented in chapter 5.

It is worth noting that in operations carried out by the state or its organisations, a common phenomenon that occurs is the resale of allocated plots. The legislation presently in effect fixes the time limit in which a

beneficiary can sell the plot that was purchased from the state--a minimum of 5 years after residency begins on the constructed plot. In practice, plots can be resold considerably before this time limit and that, at prices much higher than the purchase price (doubling the price is not uncommon!)

In fact, this phenomenon remains poorly controlled by the state. A few of its organisations are attempting to correct the situation by finding solutions that profit the administration. A single attempt is recorded in the case of the Ryad project in Rabat. At the ANHI level, it is thought that property resale would have involved 10 to 15% of the allocated plots. To eliminate this ambiguous situation, ANHI intends to follow the example of the "société d'Aménagement de Ryad" by authorizing resale on its projects against payment of a fee. Receipts thus acquired could be used towards preservation projects of certain historical facilities which are falling into disrepair (Medinas)

4.2 Analysis of unit equipment costs:

The sum total of operations studied spans the period from 1985-88. The unit prices of interest to us in this paragraph, concern the roadway works, the sewerage system, the drinking water network, and the electrification grid which includes public lighting of primary and secondary accesses.

Selecting the various components and sub-components within each price was dictated by the concern to isolate the elements with the greatest influence on the total cost of each required service. This approach was implemented so as to evaluate the portion of a given service (or provision) that is most relative within the total construction cost, according to the constraints and characteristics of each project. The objective is to define a set of reliable indicators that will direct decision making towards the optimum choices in future operations based on a certain amount of data obtained from the field: nature of soil, topography, location, etc.

Concerning the types of provisions, it should be noted that there is a certain limitation in the choice of basic materials; for instance, "bi-couche" paving on practically all roadways, type T-3 sidewalk curb, a combined sewerage/storage water system, etc.

4.2.1 DEVELOPMENT OF PRICES:

The unit price of basic materials and provisions are defined in chart No. 12. In considering the cost of roadway and sewer works, it immediately becomes apparent that there exists a relative stability in these prices that goes back 4 years (1985-88) even though the cost of living index has increased steadily.

With this in mind, three plausible reasons are presented:

A. The entire building industry has experienced a 5 year long recession typified by a reduction in supply and a demand that remained more or less stable. This situation brought about a price stability, and even in certain cases, a relatively important reduction during the 5 year period while material and labor costs steadily increased.

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B. This crisis period occasioned a stronger competition among contractors which resulted in a noticeable reduction of the profit margin in an attempt, by any means, to maintain a minimum amount of work for their survival.

C. ANHI, with its regularity and solvency at the level of payments and the efficiency of its interventions, has tapped into most of the contractors desirous of working at lower rates, but has respected payment deadlines and maintained a rigorous management.

These remarks obviously concern those services which are subject to price competition; the supply of water and electricity being under the monopoly of the utility companies (Régies, ONEP, ONE).

4.2.2 FUTURE PRICE DEVELOPMENT:

In view of the present increase (still slight) of activity in the building industry, it will be necessary in the years to come to make provision for a steady increase in construction costs in the financial planning of future operations. It remains, however, difficult to quantify this supposed price development in the absence of reliable data relative to price increase and against the background of a period of relative price stability.

We propose using the approach that is based on analysing the global increases of all price revisions divided by the corresponding number of years. The amount by which prices are increased can be calculated from the price index published monthly by the services of the "Ministère de l'Équipement". This analysis, carried out on a number of projects in the period 1979-1987, yielded an average yearly increase of 7% on the overall project cost.

As a first approach, this rate will be used while keeping in mind the likelihood of subsequent corrections.

4.2.3 SUMMARY OF AVERAGE UNIT PRICES:

A. Roads and sewer/storm water:

The calculation of average unit prices (chart No. 12) was done in such a way as to systematically eliminate prices that exceeded the general average by more than 30%, these being considered non representative. Thus were eliminated prices that reflected unique aspects of each project, or strategies to raise or lower certain prices, and in a general way, prices that corresponded to approaches other than those that quantify services according to actual disbursements.

It should be noted that these prices constitute a general average that does not take into account the project site, or any specific constraints, or any future price increases. This price average concerns the period from 1985-1988 which, as was already stated, experienced a certain price stability.

For additional information, charts No. 13 and 14 provide a percentage breakdown of road and sewer works of several ANHI projects according to sub-components. These can be used to identify a certain number of ratios for technically evaluating projects, with a view to considering different options that may serve to reduce the costs at the level of the initial choice of an operation.

CHART No.12 - UNIT PRICES FOR ROADWAY AND SEWER WORKS

A- ROADWAY

ITEM DESCRIPTION	UNITS	AVR. UNIT PRICE (DH)	% OF TOTAL CONTRACT
1- EARTHWORK			16,35%
a- All terrain	M3	8,70	
b- Rock	M3	60,00	
2- ROAD CONSTITUANTS			42,63%
a- Substructure	M2	43,70	
b- Surfacing			21,04%
- Monocouche	M2	10,50*	
- Bicouche	M2	15,90	
- Enrobé	M2	54,00*	
3- SIDEWALK CURB	LM	15,90	18,50%

(*) Rarely used by A.N.H.I

B- SEWER/STORM WATER

ITEM DESCRIPTION	UNITS	AVR. UNIT PRICE (DH)	% OF TOTAL CONTRACT
1- EARTHWORK			55 à 75%
a- All terrain	M3	11,90	
b- Rock	M3	56,90	
2- PIPING			
a- Vibrated concrete			
- Diam. 200	LM	22,00	
- Diam. 300	LM	29,75	
- Diam. 400	LM	60,27	
- Diam. 500	LM	85,43	
- Diam. 600	LM	126,72	
- Diam. 800	LM	155,63	
b- C.A.O.			
- Diam. 400	LM	207,69	
- Diam. 500	LM	324,90	
- Diam. 800	LM	403,80	
c- Asbestos cement			
- Diam. 200	LM	89,47	
- Diam. 250	LM	137,70	
- Diam. 300	LM	211,10	
- Diam. 400	LM	318,50	
3- COMPONENTS			45 à 25%
a- Road manhole	U	2968,00	
b- Sidewalk manhole	U	1176,00	
c- Junction box	U	294,60	
d- Single receptacle	U	487,60	
e- Double receptacle	U	526,50	
f- Curb drain	U	656,70	
g- Cast Iron cover	Kg	7,40	
h- Step iron	U	31,52	

CHART No.13 : ROADS - PERCENTAGE OF COST PER SUB-COMPONENT

DESCRIPTION	DHAR KHMIS (Fès)	KORA I (Rabat)	MASSIRA (B. Ksiri)	MASSIRA II (Taza)	AMAL (Bouznika)	AL QODS I (Taza)	AL QODS I (Khouri.)	BUTTE II (Rabat)
EARTHWORK	16%	21%	6%	23%	7%	16%	17%	17%
SUBSTRUCTURE	35%	40%	56%	36%	40%	36%	46%	54%
SURFACING	21%	24%	14%	23%	24%	23%	18%	11%
CURBING	22%	15%	25%	18%	13%	18%	19%	19%
OTHER	6%	0%	0%	0%	17%	8%	0%	0%
TOTAL	100%	100%	101%	100%	101%	101%	100%	101%

CHART No.14 : SEWER - PERCENTAGE OF COST PER SUB-COMPONENT

DESCRIPTION	DHAR KHMIS (Fès)	KORA I (Rabat)	MASSIRA (B. Ksiri)	MASSIRA II (Taza)	AMAL (Bouznika)	AL QODS I (Taza)	AL QODS I (Khouri.)	BUTTE II (Rabat)
EARTHWORK	20%	37%	8%	5%	15%	16%	62%	8%
PIPING	37%	33%	49%	71%	28%	28%	14%	49%
ASSEMBLY	43%	31%	43%	24%	58%	56%	25%	43%
TOTAL	100%	101%	100%	100%	101%	100%	101%	100%

B. Water supply:

The price schedules from the water utility (Régie, ONEP) contracts are extremely concise. Two somewhat detailed estimates were consulted that provided a number of significant unit prices. In all the other contracts, only 3 major lump sum prices were condensed under the following headings:

- Initial installation fee
- Network participation fee
- Fire water network

The initial installation fee is calculated as follows for the Rabat utility company (with possible general application):

$$T_i = K \text{ square root of } (R+nr) \times T_o \times \frac{I}{I_o}$$

T_i: initial installation fee in dirhams

K: a coefficient whose value depends on the zone within which the project is located

R: the area of land in m² on which the project is located

n: the number of stories (ground floor (GF) not included) authorized of given building on a single plot reduced by 2 units per plot (n=0 for GF, GF+1, GF+2; n=1 for GF+3; n=2 for GF+4; etc.)

r: total floor surface in m² of a typical floor

T_o: base charge in DH/th.l. th.l.=thousand liters

I and I_o: price adjustment indices according to salaries and materials

The initial installation fee is therefore calculated for each individual plot and then totaled together for the entire project.

The network participation fee is calculated on the basis of the following formula:

$$P = (25.5T + 1500) (Q - 2.51) \times 1.14$$

P: required fee in dirhams

T: initial installation fee in DH/th.1.

Q: the flow in l/s through the appropriate water meter

However, in most cases the water company simply calculates the participation fee of each housing development in proportion to the amount of equipped surface.

For informational purposes, chart No. 15 gives unit prices for some of the basic materials that were listed in recent contracts. It should be noted that prices vary from one utility company to the next and that the annual cost increase was found to approach 20%.

C. Electricity and public lighting:

For electricity and lighting, however, the schedule of prices tends to be very detailed (from a simple bolt to a transformer). Unit prices vary from region to region and from one company to the next.

In an effort to benefit from a large scale, the choice was made to analyze the unit prices from the electricity company having contracted the most ANHI projects (the Rabat company with 4 operations).

Chart No. 16 presents the unit prices for basic materials according to date and project. It should be noted that for the 4 projects examined, the average annual unit price increase was 29.4%. This excessive rate of increase is hard to justify when compared to the actual increases in the cost of materials and salaries.

CHART No.15 : UNIT PRICES FOR DRINKING WATER (Dirhams)

DESCRIPTION	UNIT	BOUZHNIKA ONEP / Oct.86	OUED ZEM ONEP / Sept.87
Asbestos cement piping			
Diam.150	LM	190,00	-
Diam.100	LM	140,00	141,00
Diam. 80	LM	110,00	120,00
Valves			
Diam. RV 150	U	3 000,00	-
Diam. RV 100	U	2 000,00	1 800,00
Diam. RV 80	U	1 500,00	1 500,00
Fire hydrants			
Diam. BI 100	U	8 000,00	-
Decontamination of water main	U	1,00	1,00

CHART No.16 : UNIT PRICES FOR ELECTRICITY (Dirhams)

DESCRIPTION	UNIT	AMAL Mar-88	BUTTE II Sept. 86	AL KORA I Oct. 86	AL KORA II Oct. 87
Cable unipolaire 1x95 mm ² Alu	LM	56,35	36,33	35,55	48,49
Branded copper 25 mm ²	K6	25,14	18,00	18,38	25,07
Civil Eng. 400 KVA transformer	U	-	22 782,61	-	28 254,00
Civil Eng. 250 KVA transformer	U	28 336,75	-	22 782,61	-
400 KVA transformer	U	-	31 615,50	-	61 871,04
250 KVA transformer	U	49 412,16	-	35 805,00	-
Cable insulated 1000 V- 25 mm ²	LM	8,25	6,03	6,03	8,22
Cable insulated 500 V- 1,6 mm ²	LM	-	1,34	1,34	1,82
Cable vinyisol 4 x100 mm ²	LM	146,51	101,01	101,01	133,63
Cable vinyisol 4 x 50 mm ²	LM	-	-	73,56	79,05
Cable vinyisol 4 x 25 mm ²	LM	-	-	34,86	47,98
Cable vinyisol 4 x16 mm ²	LM	33,32	23,31	23,31	32,14
Cable vinyisol 4 x10 mm ²	LM	-	-	16,70	22,34
Cable vinyisol 4 x 6 mm ²	LM	-	-	14,28	19,47
Cable torsadé (3x7)+(2x16)+54,6 Alu	LM	-	34,02	-	-
Concrete pole 10.50 F500	U	1 924,78	1 247,40	-	-
Concrete pole 10.50 F300	U	1 630,31	845,25	-	-
Street lamp 9m single arm	U	-	-	1 465,80	1 999,35
Light 125W-220V	U	890,57	-	564,90	770,52
Light 250W-220V	U	1 027,03	-	957,60	1 306,16
Fences and signs	M2	24,88	16,05	16,05	24,81

5. BENEFICIARY SOCIAL AND ECONOMIC PROFILE:

5.1 Conditions for the allotment of plots:

The allotment of housing plots produced within the framework of state housing projects is regulated by an Interministerial circular dated January 20, 1983 (see attached copy in Appendix 7.4) relative to plots that are equipped within the scope of the prefinancing plan.

The allotment procedure and requirements are as follows:

1. Publicity by means of posted notices at headquarters of local authorities.
2. Submission of the required application documents by the applicant within 2 months from the date the notice was posted; the date of submission is taken into consideration in the order of review and selection of applicants as well as during the allotment phase.
3. Preliminary review and selection of applicants by the project owner (ANHI, provincial housing delegation)
4. Conditions for eligibility:
 - must be 21 years of age or older.
 - must constitute a family (couple, widow or divorcee--of either sex) with at least one child under 21 years of age.
 - cannot be the proprietor of any residence or plot of land destined for residential construction.
 - must be residing on or near the project location.
5. Allotment committee meeting (chaired by the governor of the province or his representative) whose function is to review the applicant's file and to appoint by lot* the accepted candidates as well as those to be placed on the waiting list (used in the case of subsequent disqualification or withdrawal).

The allotment committee can only dispose of 80% of the residential plots; a percentage that can vary between 70 and 90% according to the decisions made by the governor of the province as to quotas that must be reserved for various particular beneficiary categories (moroccans working abroad, relatives of war victims, ...)

The above mentioned procedure is not implemented in 2 cases:

- Reabsorption of "bidonvilles": allotment is carried out on the basis of a census list of all the families present at the time the project is identified; this list is counter signed by the local authorities so as to assure the accuracy of the information gathered
- Semi-public project ownership (ANHI, ERAC,...): for the cases where the supply of plots exceeds the demand, the allotment committee does not have to be involved.

(*) A revision of the circular dated January 20, 1983 is in process; it is intended that selection by lot be abolished; a system that disadvantages candidates having been first to apply. The application date entered in a special registry held by the project owner will become the main criterion for allotment.

5.2 Financing methods for low income housing:

According to ANHI regulations, the projects that it carries out come under the scope of the prefinancing plan. In general, 3 separate payments disbursed by the beneficiaries are required (initial advance of 40% followed by 2 payments of 30% each). A plot can only be delivered after the final payment is made.

One should be reminded that in Morocco there is no availability of an institutionalized loan for the purchase of a plot of land for residential construction. In the face of the important financial investment required to obtain proprietorship of a plot, potential owners, particularly those with low income, rely on personal savings and other resources (family loans; tacite agreements with members of the extended family or friends*; the sale of personal belongings such as jewelry or farm land and equipment; etc.; these examples were drawn from investigations carried out by the P.D.U. in Tetouan and can often be seen in other low income housing projects)

Similar methods for financing the construction on acquired plots can also be encountered in spite of the existence, in this case, of available institutionalized loans (CIH and BCP).

Nevertheless, in view of the lack of accurate research, the amplitude and diversity of these prefinancing sources for acquiring low income housing remain unknown.

The approved organisations that provide loans for the acquisition of housing are the Housing and Hotel Bank (C.I.H.) and its representative in the case of the H.B.M. category, the Central Popular Bank (BCP). Other than the standards terms which normally pertains to the construction of individual residences,** that of the H.B.M. is of particular interest.

The Total Real Estate Value (VIT) includes the cost of the plot to be developed, the cost of the construction, and various financial charges (registration fees, service charges for hook-up to the VRD network,...). These latter charges are estimated at 25 to 30% of the VIT.

The conditions for a CIH or BCP low income housing loan (for purchasing or building) in the framework of the HBM category***, and the constraints that can be encountered by certain beneficiaries of a state project are the following:

(*)Certain H.B.M. beneficiaries lacking the funds to buy the allotted plot and build on it, seek out non-beneficiaries in order to set up a system of co-ownership (by legal or private agreement) of the plot to be developed in a duplex residence subject to the sharing of expenses (cases observed in Settat and Meknes)

(**)Main conditions: financing up to 75% of the project cost; interest rate varying between 10 and 13%; land charges cannot exceed 20,000 DH; with a maximum term of 15 years and up to 18 months grace period before payments begin.

(***)The World Bank opened a line of credit in 1983 for 51 million dollars through the CIH to promote low income housing (HBM).

- Construction: the surface area under roof cannot exceed 100 m². The VIT must be less than 150,000 DH and the building must be used as the personal residence of the loan beneficiary. In the case of a CIH, the land charges for an HBM cannot exceed 10,000 DH.

- Loans: the interest rate is 7% for a VIT less than 100,000 DH and reaches 9% for a VIT anywhere between 100,000 DH and 150,000 DH. The term of the loan is 25 years and the grace period can attain 6 months.

- Mortgaging (or requisitioning) the plot to be developed: one often notes a discordance between the dates of completion of works and plot delivery, and those recorded in the project subdivision registry.

- Family status: the borrower shall be between 21 and 63 years of age (the loan must be repaid before completing the 63rd year) and must have proof of a regular monthly income less than 2,600 DH. The monthly loan payments to the bank cannot exceed 40% of the monthly income. The amount loaned for construction can reach 90% depending on the number of children in the family.

In reality, these conditions, although advantageous, can prove to be constraining for certain families (namely for those in the first 3 income brackets--less than 1500 DH/month) in that the portion financed by the loan diminishes (consequently the personal investment increases) according to the criteria of age, income and the payoff rate of the loan.

Thus, the older a person is, the shorter the term of the loan is, and the higher becomes the payoff rate. Because the payoff rate cannot exceed 40% of the income, the portion financed by the loan must decrease (refer to the case of the Oued Fes project here following).

From another standpoint, on the basis of a survey carried out by the BCP*, the program of HBM loans granted by the BCP (as of the end of 1984) was found to reflect the following statistics:

-The areas of Casablanca and Rabat represented up to 60% of the loans granted.

-69% of the loans went to wage-earners in the public sector and 24% to those in the private sector.

-55% of the loans possess a term of between 20 and 25 years.

-54% of the loans were granted to people with an income between 1500 and 2250 DH and 30% between 1000 and 1500 DH.

5.3 Beneficiary social and economic profile: Oued Fes and Butte II cases

The primary objective of ANHI activities is the removal of substandard housing and, more specifically, "bidonvilles" occupied by families with very low income.

ANHI's approach to achieving this objective lies in providing small plots (less than 100 m²) whose sale price is approximately that of the cost price or in some cases less. In the latter case, the project is balanced by the

(*) "L'ENVIRONNEMENT FINANCIER" - A BCP report presented during the conference organized by the CIH October 14-15, 1985 in Casablanca on the subject of "the promotion of low income housing".

CHART No 17 · BENEFICIARY SOCIAL AND ECONOMIC PROFILE

Oued Fès (Fès)

		MEN	WOMEN	TOTAL
SPREAD (in %)		86,9%	13,1%	100,0%
AVERAGE AGE		44	40	44
PROFESSION:				
	- Civil servant	50,5%	52,4%	50,7%
	- Teacher	19,7%	21,4%	19,9%
	- Tradesman	2,1%	0,0%	1,8%
	- Craftsman	9,2%	13,6%	9,8%
	- Laborer	0,3%	0,0%	0,2%
	- T.M.E.	8,8%	0,0%	7,7%
	- Other profession	8,3%	4,9%	7,9%
	- Retired	1,0%	0,0%	0,8%
	- Unemployed	0,1%	7,8%	1,1%
Total		100,0%	100,0%	100,0%
AVERAGE INCOME	1985	2000 DH	1692 DH	1975 DH
	1988	2332 DH	1974 DH	2302 DH
MEDIAN INCOME	1985	1480 DH	1300 DH	1555 DH
	1988	1726 DH	1516 DH	1814 DH

Butte II (Rabat)

		MEN	WOMEN	TOTAL
SPREAD (in %)		85,5%	14,5%	100,0%
AVERAGE AGE		50 ans	55 ans	50 ans
PROFESSION:				
	- Civil servant	9,8%	0,0%	8,4%
	- Teacher	0,3%	0,0%	0,2%
	- Tradesman	6,0%	0,0%	5,1%
	- Craftsman	25,6%	3,2%	22,4%
	- Laborer	24,5%	8,1%	22,1%
	- T.M.E.	1,9%	0,0%	1,6%
	- Other profession	20,2%	19,4%	20,0%
	- Retired	6,5%	0,0%	5,6%
	- Unemployed	5,2%	69,4%	14,5%
Total		100,0%	100,0%	100,0%
AVERAGE INCOME	1985	569 DH	273 DH	527 DH
	1988	665 DH	319 DH	614 DH
MEDIAN INCOME	1985	550 DH	300 DH	500 DH
	1988	642 DH	350 DH	583 DH

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equipping and commercialization of various plots for middle income housing, apartment buildings, villas, and plots for commercial activities (integrated projects) with a positive balance, thus recovering the possible deficits incurred by the portion reserved for the rehousing of "bidonville" dwellers.

The social and economic profile of ANHI clients was defined on the basis of a study of the beneficiary files of two types of projects: the integrated operation of Oued Fes (2057 plots) and the rehousing operation of Butte II in Rabat (795 plots). These two projects can be considered representative of the general social and economic characteristics of beneficiaries of other similar projects carried out by the state.

Chart No. 17 provides the percentage breakdown of beneficiaries according to sex, profession, average age, and both the average and median incomes updated for 1988.

On both projects, approximately 14% of the beneficiaries are women--widowed or divorced heads of households; the average age is higher in Butte II. The average and median incomes of female beneficiaries are lower than for men (a large percentage of older women are inactive or work at home); this being the case mainly in Butte II.

At Oued Fes, the majority of women are civil servants, teachers or craftswomen which explains their average age of 40 years. This is also true for the men (50% being civil servants). As for Butte II, civil servants only represent about 10% as compared to the 26% who are craftsmen, 24% laborers, and 20% who have various other jobs (gardeners, watchmen, carriers, etc...). This profile clearly explains the reason for lower incomes in comparison with the case of Oued Fes which is more diversified.

CHART No 18. DISTRIBUTION ACCORDING TO INCOME BRACKETS AND CORRESPONDING PLOT AREA

Bracket No	Accumulated %	Income Bracket	Average Income	Average area acquired
1	10%	490 to 1030 DH	820	113
2	20%	1030 to 1200 DH	1 117	123
3	30%	1200 to 1420 DH	1 323	126
4	40%	1420 to 1550 DH	1 492	132
5	50%	1550 to 1800 DH	1 680	137
6	60%	1800 to 2330 DH	2 077	128
7	70%	2330 to 2680 DH	2 535	149
8	80%	2680 to 2950 DH	2 870	185
9	90%	2950 to 4420 DH	3 501	214
10	100%	4220 to 9000 DH	5 479	279

In 1988, the average income declared by Butte II beneficiaries is expected to be approximately 4 times lower than that of Oued Fes, and 3 times lower in the case of the median income.

The 1988 median income for Oued Fes is estimated at 1,814 DH and is 29% lower than the estimated national income (2,570 DH) which is only slightly below the upper limit fixed by the CIH in the framework of the HBM loan (2,600 DH).

Additional studies show that for the first 5 income brackets, a slight correlation exists between the average income and the size of the corresponding acquired plot. It is somewhat more noticeable in the last 5 income brackets as can be seen in Chart No. 18.

5.4 Income and financial accessibility of low income housing

The question to be resolved is whether the plots produced by ANHI are financially accessible (according to CIH and BCP criteria) by the families who have become beneficiaries.

The example of Oued Fes is presented having considered the requirements for CIH loans and the buying power in Morocco. The payoff rate of a household for the purchase of a plot of land and its construction can vary between 10% and 35% depending on the income bracket and the size of the household. The average observed is around 25% of the monthly income.

The maximal conditions of the various CIH loan plans were tested on the types of plots sold in the Oued Fes project using the average income corresponding to each plot bracket and the ANHI sale price (398 DH on the average for low income plots and 326 DH for villa plots). A mean construction cost of 900 DH/m² of flooring was adopted, and each parcel was assumed to comprise GF+1, being built according to the required codes and specifications (sizes of courtyards and set-backs). The portion financed by the CIH as well as the applied interest rate vary according to the loan plan and the VIT.

Chart No. 19 provides on the one hand, the effective cost of developing a plot acquired from ANHI, and on the other hand, various hypotheses as to the loan plan implemented (CIH and BCP). The actual cost of the plot purchased from ANHI is not taken into consideration in the calculations because land charges are treated as a lump sum in the CIH assessment.

By respecting the conditions set forth by the CIH for calculating the payoff rates, one notes that they are inaccessible for the average income of a household living in Oued Fes. By adopting the maximum payoff rate allowed by the CIH (40%), the personal investment of the beneficiary reaches 1 to 3 times the amount loaned by the CIH. Finally, by fixing a desirable payoff rate according to the actual income brackets of Oued Fes households, the majority of ANHI operation beneficiaries are eligible for an HBM loan with, however, a considerable reduction of the area of the building (Chart No. 19).

In practice, these extrem conditions are not practical and it should be noted that based on observations made in Morocco on the majority of low income housing projects, households are ready to make certain sacrifices in order to become homeowners and are even willing to rent out their home to generate additional income.

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Indeed, in the face of a growing need for urban housing (for young couples and others), ownership of a plot and its development in 2 or more apartments generates additional income for the household by renting out one apartment while keeping one for personal use. This supplementary income should be incorporated in the above mentioned reasoning about solvency; renting can cause the income brackets to vary from 20 to 40% (the minimum rent recorded in a low income neighborhood is 500 DH per month).

CHART No 19 · OUED FES - INCOME AND ACCESSIBILITY

	Less than 80 m ²	80 to 100 m ²	100 to 120 m ²	120 to 140 m ²	140 to 180 m ²	180 to 240 m ²	More than 240 m ²
Average plot area	67	96	111	132	157	207	341
Average income of owner	1 288	1 444	1 489	1 677	1 857	2 384	4 030

1- EFFECTIVE DEVELOPMENT COST

A1- Average cost per m ²	398	398	398	398	398	326	326
A2- Average cost of plot	26 500	38 200	44 300	52 700	62 600	67 400	111 300
A3- Floor surface	100	160	183	215	265	253	314
A4- Average const. cost*	91 200	144 000	164 300	193 200	238 300	228 100	283 000
A5- Financial charges (25%)	22 800	36 000	41 000	48 300	59 600	57 000	70 800
A6- Cost of developed plot	140 500	218 200	249 600	294 200	360 500	352 500	465 100

2- C.I.H FINANCING (Without implementing the 40% payoff rate limit)

B1- Land charges	10 000	20 000	20 000	20 000	20 000	20 000	20 000
B2- Construction cost	91 200	144 000	164 300	193 200	238 300	228 100	283 000
B3- Financial charges (25%)	22 800	36 000	41 000	48 300	59 600	57 000	70 800
B4- V.I.T (according to CIH)	124 000	200 000	225 300	261 500	317 900	305 100	373 800
B5- Portion financed by CIH/VIT	90%	75%	75%	75%	75%	75%	75%
B6- Applied interest rate	9%	10%	10%	13%	13%	13%	13%
B7- Monthly payments	930	1 595	1 797	2 450	2 978	2 858	3 502
B8- Payoff rate	72%	110%	121%	146%	160%	120%	87%

3- C.I.H FINANCING (With the 40% payoff rate limit)

C1- Maximum payoff rate	40%	40%	40%	40%	40%	40%	40%
C2- Monthly payments	515	577	595	671	743	954	1612
C3- Amount loaned by CIH	61 900	54 300	56 000	53 700	59 500	76 400	129 100
C4- Personal investment**	78 600	163 900	193 600	240 500	301 000	276 100	336 000

4- THEORETICAL ACCESSIBILITY VS ALLOWANCE COVERED SURFACE (in the framework of HBM loan)

D1- Desirable payoff rate	30%	30%	30%	35%	35%	40%	40%
D2- Monthly payments	387	433	447	587	650	954	1612
D3- Applied interest rate	7%	7%	7%	7%	9%	13%	13%
D4- Amount loaned by CIH	55 200	61 800	63 800	83 800	78 000	76 400	129 100
D5- Corresponding V.I.T	60 700	66 000	70 200	92 200	85 800	95 500	161 400
D6- Construction cost	40 600	46 400	48 200	65 800	60 600	60 400	113 100
D7- Allowable covered surface	45	52	54	73	67	67	126

(*) At a cost of 900 DH per m² of flooring

(**) Including the portion of land charges not covered by the CIH

6. PROPOSAL OF PROJECTS ELIGIBLE FOR THE HG 003 LOAN

Among the 10 operations that ANHI intends to carry out under direct ownership (see chapter 1), it is proposed that 8 projects be integrated in the HG 003 program. These 8 projects were discussed with the ANHI board of directors and were prioritized according to the various cadastral, technical and commercial constraints. Chart No. 20 gives an overview of the predominant physical characteristics of the selected projects as well as their financial status as of June 1988.

6.1 Technical facts and project advancement

A. LANDED PROPERTY:

Under direct project ownership, ANHI is required to first obtain proprietorship of the project sites. Except for those of Oued Fes (101 ha) and Massira in Beni-Mellal (32.66 ha, in the process of being purchased from private owners), the other operations have received preliminary approval from the former project owners (provincial housing delegations) for the transfer of land titles.

In light of the legal ownership of the land (in majority state land and assimilated land), few obstacles stand in the way of its acquisition by ANHI apart from the availability of funds and the delays due to the administrative process. Negotiations have begun.

B. CONSISTENCY:

The surface area of the selected operations varies between 23 ha (Qods II) and 140 ha (Ouled Oujih), the average being 75 ha. The physical development of projects of 100 ha and over, will be carried out in 20 to 25 hav phases.

The total number of plots to be delivered is 16,000 units of which 38% are plots for very low income housing (less than 80 m²) and 52% are plots for HBM's (between 80 and 140 m²). The coefficient of ground use (CGU) varies from 0.43 (in Sidi Kacem) to 0.55 (in Tangier).

Concerning the state of advancement of projects, construction has already started on 5 operations since November 1986 (see chart No. 20) and the delays encountered in the delivery of plots are mainly related to the prefinancing method currently in effect and the size of projects. Plot delivery on these 5 operations is scheduled for 1989 and following.

As for the 3 remaining operations (Souk Sebti, Ouled Oujih and Joutia), construction start-up is scheduled for January and March 1989. Design is at the stage of completing roadway and sewer calculations and drawings. The delivery of plots will not take place until 1990 and following. Appendix 7.1 gives a forecast of project delivery dates on the basis of P.E.R.T. charts.

(.2 Financial aspects

The total estimated cost for carrying out these 8 projects is 630 million dirhams; land charges representing approximately 10% based on an average cost of 10 DH/m² (gross).

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Indeed, in the face of a growing need for urban housing (for young couples and others), ownership of a plot and its development in 2 or more apartments generates additional income for the household by renting out one apartment while keeping one for personal use. This supplementary income should be incorporated in the above mentioned reasoning about solvency; renting can cause the income brackets to vary from 20 to 40% (the minimum rent recorded in a low income neighborhood is 500 DH per month).

CHART No.20 : SELECTED OPERATIONS

DESCRIPTION	PRIORITY 1			PRIORITY 2			PENDING	
	OULED FES	GODS II	NARJISS	MASSIRA	OJAJA 1 ^{er} tr	SOUK SEBT	OULED OUIJIM	JOUTIA
1- PHYSICAL CHARACTERISTICS								
City	Fès	Taza	Tanger	Béni Mellal	Larache	Kénitra	Kénitra	Sidi kacem
Gross area (ha)	101,00	23,41	35,55	32,66	34,53	100,00	140,00	55,00
Legal ownership*	A.N.H.I.	Recov. Land	Dom/Priv	Dom/Pr/Hab	Munic/ Dom.	Collectif	Collectif	Dom./Prive
Acquisition status	Acquired	Négociating	Négociating	Acqui 33%	Négociating	Négociating	Négociating	Négociating
Plots : - Very low income	-	600	-	1 254	1 158	(1 300)	1 200	830
- H.B.M.	1 380	290	841	175	224	(1 700)	3 056	1 043
- Apartment building	50	-	70	156	49	(0)	192	159
- Villa	415	-	-	-	231	(0)	0	-
- Commerce / Services	181	10	7	4	7	(5)	15	-
- Public equipment	31	8	9	4	6	(10)	24	175
Total	2 057	908	927	1 593	1 675	(3 015)	4 467	2 207
Size : - Very low income	-	96	-	80 à 90	70 à 120	80	80	80
(m2) - H.B.M.	66 à 160	96 à 130	110 à 300	96 à 120	70 à 120	100 à 120	100 à 140	100 à 145
- Apartment building	500	-	250 à 350	96 à 120	200 à 250	0	300 à 400	-
- Villa	200 à 1120	-	-	-	180 à 400	0	0	-
- Equipment	20 à 6000	350 à 750	2230	500 à 700	400 à 5000	460 à 1,4 ha	440 à 8 ha	131
Marketable area (m2)	451 064	107 523	194 793	143 580	185 121	Unidentified	Unidentified	236 440
Coefficient of ground use	0,45	0,46	0,55	0,44	0,54	Unidentified	Unidentified	0,43
Plots/ha (gross)	20,4	38,8	26,1	48,8	48,5	30,2	32,1	40,1
State of advancement								
- Const. start-up date	Nov-86	Nov-87	Jul-88	Déc-87	Avr-87	Mar-89	Mar-89	Jan-89
- Design	75%	90%	80%	100%	95%	50%	50%	65%
- Works	30%	40%	5%	35%	45%	0%	0%	0%
2- FINANCIAL ASPECTS (x1000 DH)								
Forecasted cost	114 459	25 090	45 753	34 468	40 910	125 420	174 724	70 000
Amount of funds committed	71 067	10 214	15 758	18 474	17 347	3	1 097	1 470
Disbursements	37 740	7 696	34	5 118	8 557	0	297	372
Financing sources:	114 459	25 090	45 753	34 468	40 910	Unidentified	Unidentified	Unidentified
- Beneficiary advances	104 372	25 090	45 753	34 668	37 976			
- Other (BGE, cross-subsidy...)	10 087	0	0	0	2 934			
Forecasted receipts	156 361	25 537	99 961	34 853	51 838	Unidentified	Unidentified	Unidentified
Acquired receipts	53 723	2 767	11 412	4 337	8 139	0	0	0
Scheduled for delivery in 1989	800	650	400	800	910	After 1989	After 1989	After 1989

(*) Recovered land; State; Municipal; Private; Collective, Habous..

6. PROPOSAL OF PROJECTS ELIGIBLE FOR THE HG 003 LOAN

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6.2 Financial aspects

The total estimated cost for carrying out these 8 projects is 630 million dirhams; land charges representing approximately 10% based on an average cost of 10 DH/m² (gross).

The sources for financing these operations are essentially derived from the advances paid by the beneficiaries. The acquired receipts appear to be significant only in the cases of Oued Fes and Narjiss. The amount of funds committed as of June 31, 1988 has reached 135 million DH with particularly important commitments made to Oued Fes and Messirat. This manifests itself in a further state of advancement on the projects which are under direct ownership as compared to the others.

APPENDIX 7.1 : FORECAST OF DELIVERY PLOTS (on approved projects)

PROJECT	INIT. CONST.	AREA (Ha)	FORECAST CONSISTENCY			DELIVERY								CALC METHOD & OBSERVATIONS	
			Total	Housing	Equip.	FIN 1987	1988	1989	1990	1991	1992	1993	TOTAL		
DHAR LAKHMIS (Fès)*	Jan-85	10,15	499	457	42	241	216	42	-	-	-	-	-	499	ANHI Forecast
AL OODS I (Khouribga)**	Jan-85	28,70	1 763	1 704	59	931	604	169	59	-	-	-	-	1 763	ANHI Forecast
AL OODS I (Taza)*	Mar-85	23,59	1 656	1 603	53	1 380	180	43	53	-	-	-	-	1 656	43 apt bldg plots
BUTTE II (Rabat)*	Déc-85	15,76	795	781	14	745	36	14	-	-	-	-	-	795	ANHI Forecast
MASSIRA II (Taza)*	Mar-86	22,59	634	621	13	25	425	154	30	-	-	-	-	634	17 apt bldg plots
HAY HASSANI (B. Slimane)**	Mai-86	14,14	819	787	32	753	0	34	-	-	-	-	-	787	ANHI Forecast
AMAL (Bouznika)**	Jul-86	3,04	206	204	2	204	2	-	-	-	-	-	-	206	
AL KORA I (Rabat)*	Nov-86	5,78	206	272	3	100	172	3	-	-	-	-	-	103	ANHI Forecast
MASSIRA (M. Belkiri)	Nov-86	10,00	708	654	54	0	150	504	54	-	-	-	-	708	ANHI / P E R T
OUED FES (Fès)	Nov-86	101,00	2 057	1 845	212	0	0	800	1 000	257	-	-	-	2 057	ANHI / P E R T / 50 apt
AL KORA II (Rabat)	Mar-87	7,70	506	442	64	0	349	80	77	-	-	-	-	506	13 apt bldg plots
AL WAFÆ I (Larache)	Mar-87	34,53	1 675	1 662	13	0	0	910	706	65	-	-	-	1 675	49 apt bldg plots
RGAI BENBIDANE I (Tanger)**	Mar-87	27,85	1 854	1 751	103	1 077	574	203	-	-	-	-	-	1 854	100 apt bldg plots
OUED EDDAHAB (Oued Zem)	Jui-87	5,76	404	377	27	0	100	277	27	-	-	-	-	404	ANHI Forecast
AL WAHDA EXT. (Oued Zem)	Jui-87	2,25	118	118	0	0	50	68	-	-	-	-	-	118	ANHI Forecast
AL OODS II (Taza)	Nov-87	23,41	908	890	18	0	0	650	240	18	-	-	-	908	ANHI / P E R T
MASSIRA (B. Mellal)	Déc-87	32,66	1 593	1 585	8	0	0	800	785	8	-	-	-	1 593	ANHI / P E R T
AL MOUKAOUAMA II	Mai-88	6,03	277	274	3	0	-	169	108	3	-	-	-	277	ANHI
R. BENBIDANE II (Tanger)**	Jui-88	3,76	251	249	2	84	-	165	2	-	-	-	-	251	ANHI
NARJISS (Tanger)	Jul-88	35,55	927	911	16	0	-	400	441	86	-	-	-	927	PERT / 70 apt bldg pl
ANDALOUS (Tanger)	Oct-88	9,20	375	368	7	0	-	270	56	49	-	-	-	375	42 apt bldg plots
AL MOUKAOUAMA I (O.Zem)	Oct-88	6,00	374	364	10	0	-	364	10	-	-	-	-	374	
SIDI KACEM	Jan-89	55,00	2 207	2 032	175	0	-	-	1 200	830	177	-	-	2 207	PERT
OULAD OUIH (Kénitra)	Mar-89	140,00	4 487	4 448	39	0	-	-	1 280	1 888	1 260	39	-	4 487	PERT
SOUK SEBT (Kénitra)	Mar-89	100,00	(3 015)	(3 000)	(15)	0	-	-	1 200	1 200	600	15	-	3 015	PERT
CHANTI (Sidi Yahia)	Mar-89	120,00	(3 620)	(3 600)	(20)	0	-	-	1 200	1 200	1 200	20	-	3 620	PERT
AL MOUKAOUAMA III	Mar-89	4,00	216	214	2	0	-	-	214	2	-	-	-	216	PERT
INZEGANE (Agadir)	Mar-89	25,00	(1 135)	(1 125)	(10)	0	-	-	1 125	20	-	-	-	1 145	PERT
AL KORA III (Rabat)	Jui-89	4,56	512	199	313	0	-	-	194	318	-	-	-	512	PERT
TADDART (Agadir)	Nov-89	120,00	(3 620)	(3 600)	(20)	0	-	-	600	1 200	1 200	600	-	3 620	PERT
GENERAL TOTAL		998,01	37 486	36 137	1 349	5 540	2 858	6 119	10 655	7 144	4 457	694	37 292		
PROJECTS WITH ONLY PUNCTUAL INTERVENING (Sites already occupied)															
AL KOUCHA/SAADA (Taza)	Avr-87	11,57	761	746	15	735	11	15	-	-	-	-	-	761	
BAB SIFFER	Mai-88	27,00	2 240	2 219	21	0	2 219	-	-	-	-	-	-	2 219	
ZOUAGHA (Fès)	Déc-88	20,60	1 336	1 296	40	0	1 296	40	-	-	-	-	-	1 336	

(*) Over 90% completion as of Dec. 31, 1987

(**) Plots delivered with only roadway and sewer works; the other services are in the process

APPENDIX 7.2 : FINANCIAL SITUATION OF PROJECTS 1984 -1987 (in thousand DHS)

YEAR OF APPROVAL		1984	1985	1986	1987	TOTAL
A/ CHARACTERISTICS						
A1- NUMBER OF OPERATIONS		3	14	10	10	37
A2- TYPE OF OPERATION	Rethousing	-	6	5	2	13
	Development	1	2	3	3	9
	Integrated	2	5	1	5	13
	Upgrading	-	1	1	-	2
A3- GROSS SURFACE AREA		62,44	639,93	80,41	663,19	1 445,97
A4- NUMBER OF PLOTS PROJECTED		3 918	23 182	4 837	21 914	53 851
A5- OP. IN DESIGN PHASE	Number	0	6	6	7	19
	Area	0,00	428,43	41,51	595,55	1 065,49
A6- OP. UNDER CONSTRUC.	Number	3	8	4	3	18
	Area	62,44	211,5	38,9	67,64	380,48

B/ FINANCIAL SITUATION

B1- TOTAL EST. COST	Total	79 251	700 480	102 841	829 099	1 711 672
	of which Land cost	12 021	56 841	24 933	74 766	168 560
	of which ANHI Approp.	65 717	277 244	68 571	752 676	1 164 209

B2- CONTRACTED COMMITMENT	Design	85	648	3 405	7 885	12 023
	Works	17 700	32 099	28 119	108 753	186 671
	Others*	1 283	2 357	17 422	17 403	38 465
	Total	19 068	35 104	48 946	134 041	237 159
	Accum. Total	19 068	54 172	103 118	237 159	

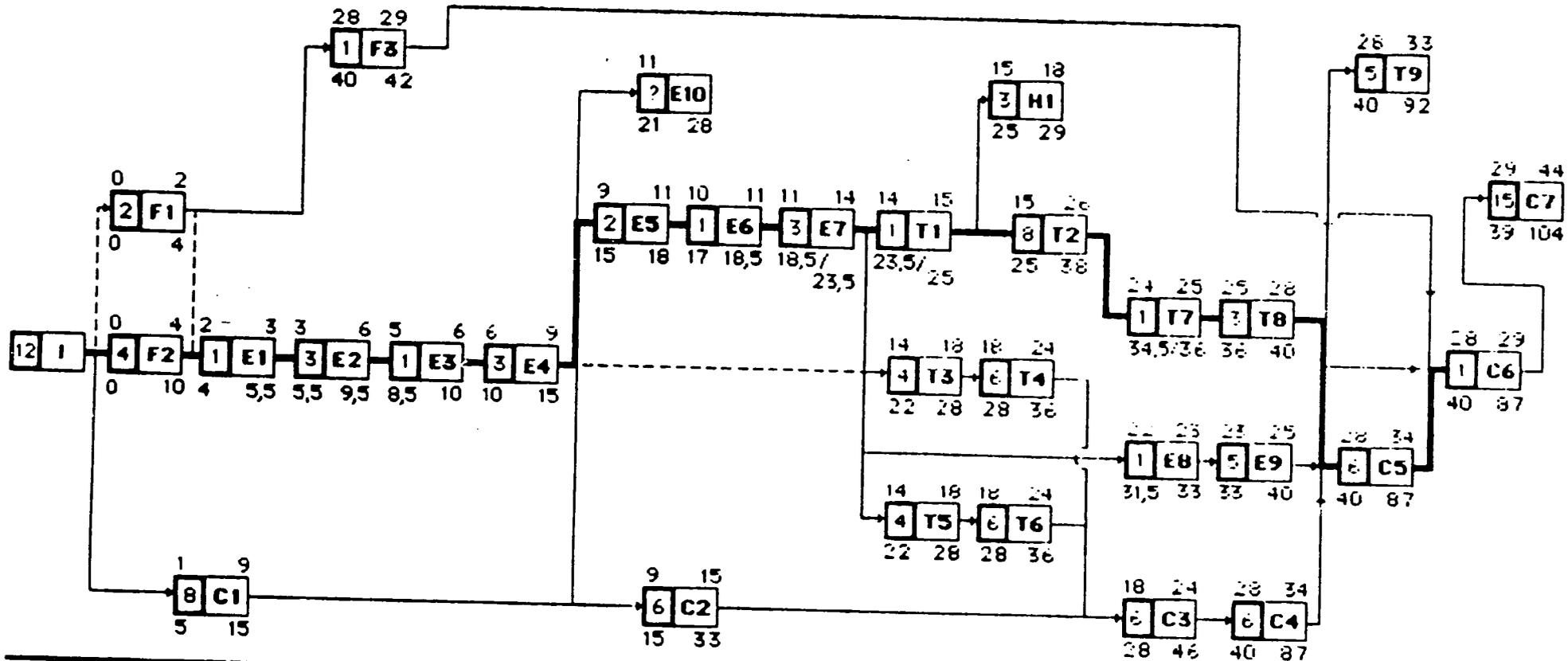
B3- PAYMENTS MADE	Design	0	370	1 842	3 752	5 964
	Works	81	14 241	31 424	53 635	99 382
	Others*	13	897	2 338	17 029	20 277
	Total	94	15 507	35 604	74 416	125 622
	Accum. Total	94	15 601	51 206	125 622	

B4- RECEIPTS ACQUIRED	Ben Advances	0	7 368	29 207	92 139	128 714
	E.P. Approp	10 850	3 000	3 960	4 000	21 810
	Other**	0	0	348	692	1 040
	Total	10 850	10 368	33 515	96 832	151 564
	Accum. Total	10 850	21 218	54 733	151 564	

B5- Total projected pre-financing resources	1 182 430
broken down as follows	
Beneficiary advances	1 136 467
G.P. Appropriations	35 969
Other**	9 994

- (a) Including an estimated 10.000 plots estimates of the PDU in Tetouan (350 ha) - Technical assistance
 (b) Does not include the expenses incurred during the general identification studies (115.000 DHS)
 (*) Commercial costs, programming, cross-subsidy fund, ANHI intervention, V.A.T....
 (***) Cross-subsidy benefits, local government subsidies and other

A.1 - EXECUTION CHART (20 Ha)



LAND ACQUISITION

- F1** "Provisional authorization"
- F2** Negotiation and purchase
- F3** Property registration

DESIGN

- E1** Survey/Award of contract
- E2** Survey/Field works
- E3** City planning/Award of cont.
- E4** City planning/Design
- E5** City planning/Approval
- E6** Roads & Sewer/Aw. of cont.
- E7** Roads & Sewer/Design

- E8** Arch. & Eng./Award of cont.
- E9** Arch. & Eng./Design
- E10** Other design

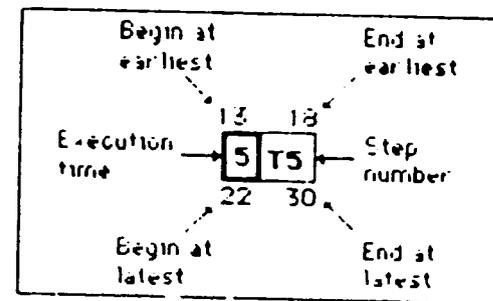
WORKS

- H1** Roads & Sewer / Off Site
- T1** Roads & Sewer /Aw of cont.
- T2** Roads & Sewer /Works
- T3** Water/Estimate
- T4** Water/Works
- T5** Electrification/Estimate
- T6** Electrification/Works
- T7** Boundary/Award of cont.

- T8** Boundary/Works
- T9** Furbishing of surroundings

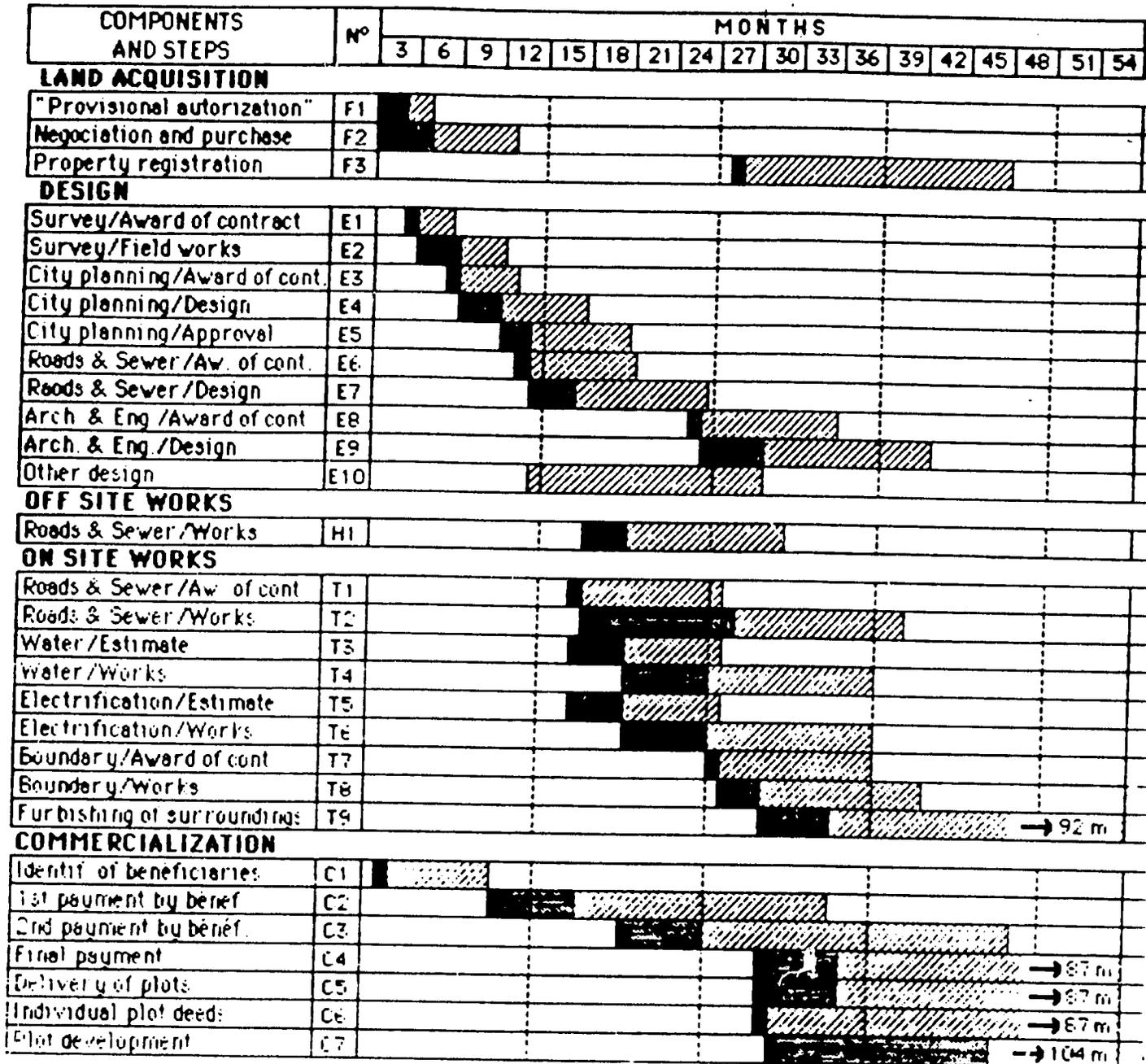
COMMERCIALIZATION

- C1** Identif. of beneficiaries
- C2** 1st payment by benef
- C3** 2nd payment by benef
- C4** Final payment
- C5** Delivery of plots
- C6** Individual plot deeds
- C7** Plot development



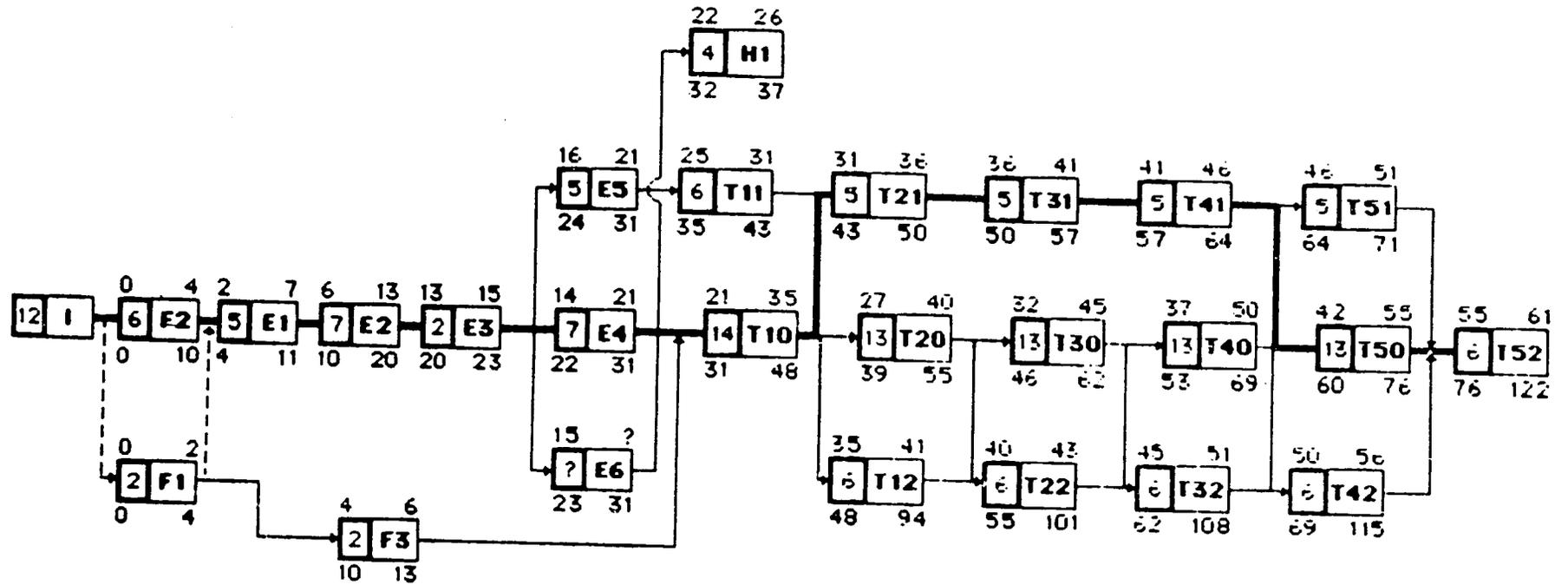
— Critical path
 - - - Optional path

A.2- EXECUTION SCHEDULE (20 ha)



 EARLIEST EXECUTION
 LATEST COMPLETION

B.1 - EXECUTION CHART BY PHASE (100 ha)



LAND ACQUISITION

- F1** "Provisional authorization"
- F2** Negotiation and purchase
- F3** Property registration

DESIGN

- E1** Survey works
- E2** City planning/Design
- E3** City planning/Approval
- E4** Roads & Sewer/Design
- E5** Water & Electrification
- E6** Other design

WORKS

- H1** Roads & Sewer / Off Site

1st phase:

- T10** VRD works/Survey
- T11** Water & Electrification
- T12** Delivery

2nd phase:

- T20** VRD works/Survey
- T21** Water & Electrification
- T22** Delivery

3rd phase

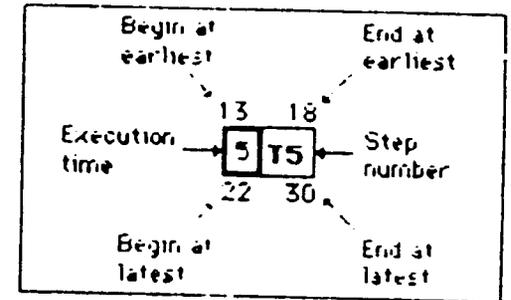
- T30** VRD works/Survey
- T31** Water & Electrification
- T32** Delivery

4th phase

- T40** VRD works/Survey
- T41** Water & Electrification
- T42** Delivery

5th phase

- T50** VRD works/Survey
- T51** Water & Electrification
- T52** Delivery



— Critical path
 - - - Optional path

UNOFFICIAL TRANSLATION

APPENDIX 7.4:

Kingdom of Morocco

MINISTRY OF HOUSING AND
LAND DEVELOPMENT

MINISTRY OF THE INTERIOR

January 20, 1983

20/DCL/D.PAT/2.

INTERMINISTERIAL CIRCULAR relative to the
ALLOTMENT PROCEDURE OF EQUIPPED PLOTS
In the Framework of the Prefinancing Plan

RABAT, January 20, 1983

KINGDOM OF MOROCCO

MINISTRY OF HOUSING AND
LAND DEVELOPMENT

MINISTRY OF THE INTERIOR
GENERAL SECRETARY

No. 20/DGL/DPAT/2

No. 183/5

INTERMINISTERIAL CIRCULAR

SUBJECT: Allotment procedure of equipped plots
in the framework of the prefinancing plan.

REFERENCE: Ministry of Housing and Land Development--Circular No
127/MHAT/I.G. (November 17, 1977)
relative to the allotment procedure of equipped plots and state
housing.

The object of the present circular, while revising the above referenced circular, is to define the various phases of the procedure, which henceforth must be observed, for allotting land plots whose development has been prefinanced in the framework of:

- either the F.N.A.E.T.
- or known services that are administered autonomously; services for developing land into low income housing.
- or "delegated owner's representative" contracts drawn between the Regional Housing Delegations or the Municipalities and public or semi-public developers (ERAC, CGI, OLM, CIFM, SOPHAL) for the development of housing projects.

The present circular does not concern housing plots which are equipped in the scope of programs for the removal of "bidonvilles". The procedure that is therefore to be implemented in the future is defined as follows:

PUBLICITY AND CANDIDATE APPLICATION

As soon as approval has been given for a land development project for housing within the framework of the prefinancing plan, the general public is informed by means of posted notices at the headquarters of local and communal authorities, of various public services, as well as of the Regional Housing Delegation.

These notices explain, among other things, that interested candidates can pick up the forms required for the application process, which are provided free of charge, at the headquarters of the local and communal authorities and at the Regional Housing Delegation offices.

After the necessary forms have been completed, candidates are required to submit their application file in exchange for a receipt, at the headquarters of the Regional Housing Delegation (no other offices can receive applications)

within 2 months from the date printed on the notice.

Application files that do not contain all of the required supporting documents will be rejected.

As the receipts are issued, the applications are inscribed in a registry whose pages shall be numbered and initialed beforehand by the Delegate of the Ministry of Housing and Land Development.

EXAMINATION OF APPLICATIONS SUBMITTED PRIOR TO THE PRESENT CIRCULAR

Applications submitted prior to the date of the present circular are to be re-examined by the Regional Housing Delegations in the following manner:

- a. applications that fill all the requirements and the deadline outlined in the present circular are considered acceptable and are entered in the above mentioned registry.
- b. applications that fill these same requirements but necessitate additional information must be completed by the interested applicants at the written request of the Regional Housing Delegations.
- c. applications that do not fill these requirements are rejected, and the files are returned to their holders.

EXAMINATION OF NEW APPLICATIONS AND CONDITIONS FOR ALLOTMENT

The delegation of the Ministry of Housing and Land Development:

-verifies whether the applicant meets the conditions for allotment as outlined below:

1. Age: 21 years or older on the date the application is submitted.
2. Family status: a household comprising at least one child who is less than 21 years of age.
3. Income: a maximum income of 2,250 DH/month* in the case of low income housing plots less than 110 m².
(* a candidate whose income is greater than 2,250 DH/month can apply for a conventional housing plot, unless he expressly requests on the application forms a low income housing plot. In this case, the applicant loses his right to a conventional housing plot.
4. Cannot be the proprietor of any residence or plot of land destined for residential construction, nor be the beneficiary of any other plot or house within the country granted through the different housing programs initiated by the state or private and semi-private developers (ERAC, CGI, OLM, CIFM...)
5. Cannot apply except within the area of residence which must be proven by producing an up to date national identification card.

-addresses a letter to all candidates whose application file is incomplete by requesting that the additional information be promptly submitted.

-submits all the applications to the allotment committee while distinguishing those that meet all the above mentioned conditions from those that remain incomplete.

THE ALLOTMENT COMMITTEE

The allotment committee is structured as follows:

* as permanent members

- the governor of the province or his representative
- the head of the state land district or his representative
- the delegate of the Ministry of Housing or his representative and the chairman of the committee.
- the president of the Municipal Council or his representative

* as observers, on occasion

- various representatives from the registry office for taxes and the land office.

Allotment Committee Meetings

The allotment committee meets in closed sessions as required, two months after the deadline established for the submission of applications.

Activities of the allotment committee

1. The examination of applications submitted by the Regional Housing Delegation in light of the conditions specified in the present circular, and the elimination of those that do not meet all the requirements.

2. The selection by lot of the beneficiaries and of the candidates who will be entered on the waiting list.

It is necessary to distinguish between:

- the selection by lot relative to allotment of low income housing plots (110 m² maximum), and which concerns candidates whose income is less than 2,250 DH/month who have specifically requested to be considered for a low income housing plot;
- and the selection by lot relative to allotment of conventional housing plots (greater than 110 m²) and which concerns candidates whose income exceeds 2,250 DH/month who have not specifically requested to be considered for a low income housing plot.

The selection by lot is carried out in the following way:

- photocopies of the candidate's identification cards duly inscribed with the corresponding application number are deposited in an urn having been thoroughly examined by each committee member beforehand.
- the photocopies are then drawn from the urn without interruption, and as each paper is drawn, the beneficiary is declared until the number of available plots has been exhausted.
- Afterwards, the remaining photocopied I.D's are drawn and a waiting list is composed whose number of candidates is not to exceed 15% of the number of available plots.

It should be noted that "available plots" is understood to refer to 80% of the plots separately contained in the two housing categories of a given project; low income housing and conventional housing. This percentage can vary between

70% and 90% according to the decisions made by the governor relative to the quotas reserved for beneficiaries in the special categories which are listed subsequently.

3. The assigning of plots: as each beneficiary is declared through selection by lot, a plot number is assigned by proceeding from the lowest plot number figuring on the general site plan to the highest within each housing category.

In the event that the allotment committee should decide, for whatever reason, to interrupt the selection process, the urn shall be given over to the Collector and put under official seal until the process is resumed.

4. Allotment report: at the end of the committee meeting, the minutes are recorded by the chairman and signed by each permanent committee member. To this is attached the list of selected beneficiaries and the waiting list, both also being signed by each committee member.

5. Allotment registry: these two lists are copied into a special registry held by the delegate and whose pages are numbered and initialed by the Minister of Housing and Land Development or his representative. Any interlining or crossing out of any nature in the registry involves the full responsibility of the regional delegate of the ministry of housing.

. Waiting list: it should be explained that the candidates whose names figure on the waiting list are given priority, according to their order on the list, in the allotment process when:

- one of the selected beneficiaries is disqualified
- one of the selected beneficiaries withdraws
- the allotment process is carried out on a future similar project.

VERIFICATION OF THE LISTS

The low income housing beneficiary list and the conventional housing beneficiary list as well as their respective waiting lists are displayed at the headquarters of the local and communal authorities, the state land office, and the Regional Housing Delegation.

All justifiable contestations supported by reliable evidence can be submitted, during one month following the display date on the lists, to the governor who will decide what steps should be taken.

UNSELECTED CANDIDATES

Two cases can occur:

1st case: candidates whose application file is disqualified by the allotment committee. These applications are returned one month after the display date of the beneficiary lists by the Delegate with a letter of explanation attached.

2nd case: candidates whose names remained in the urn after the allotment process. In this case, the urn for low income housing and the urn for conventional housing, which contain the remaining I.D. photocopies that were not selected as beneficiaries and did not make the waiting list, are given over to the Collector and put under official seal until a future allotment process in the scope of a similar project.

These candidates are given priority in a future similar project at the time of selecting beneficiaries by lot. However, any subsequent change in the status of these candidates, whose application is under seal, (income, household dependants, proprietorship in real estate etc.) must be made known to the Delegate who in turn will notify the allotment committee. In any event, any change having occurred in the status of a candidate and communicated to the committee will bring about a thorough review of the application file.

ALLOTMENT FOR SPECIAL CATEGORIES

A quota of 20% of the low income housing plots and the conventional housing plots is reserved for the special candidate categories listed below:

- Families of servicemen who died while reclaiming the Saharian provinces.
- Veteran members of the Resistance Movement and of the Liberation Army.
- Moroccans working abroad.

Satisfying the needs of the above mentioned categories in keeping with the aforementioned quota is the prerogative of the governor. This quota can be reduced to 10% or increased to 30% of the total number in each plot category as required by the demand. The governor is to communicate his decision to the allotment committee before it meets.

Applications from the above mentioned categories are submitted directly to the governor who will make the selection based on the accuracy of the provided information concerning both the candidates appurtenance to a special category and the question of proprietorship of other real estate.

The governor is kindly requested to recover all applications relative to these special categories which at the writing of this circular, are spread out among the various administrative bodies involved.

It is furthermore requested that each governor communicate the list of selected beneficiaries under these special categories to the Regional Housing Delegations, so that the procedure for the collection of prefinancing payments and for the delivery of equipped plots, can be initiated.

PREFINANCING PLAN

The prefinancing plan to be implemented is outlined in circular No. 1871/MHAT/IG, November 17, 1977.

APPENDICES

ANNEX VII. E3

VII. E3. SOCIAL SOUNDNESS AND WOMEN IN DEVELOPMENT

1. Social Soundness and Women in Development

a. The Socio-cultural Setting

In the last 15 years, Morocco has experienced rapid urbanization, with almost 43% (8.4 million persons) of the total population now living in urban areas. The delivery of authorized shelter has lagged far behind, resulting in the continued existence of areas called "bidonvilles," (shanty towns) and the more recent and rapid development informal housing settlements referred to as "zones d'habitat clandestin," or clandestine developments, implying development without municipal government permission. These types of development differ in important ways, as the shanty towns are dense, unserved neighborhoods of poor quality construction, while the clandestine neighborhoods have more conventional construction materials and techniques, and, therefore, higher quality and spacial standards. Both types of housing serve the needs of low income groups. A 1983 study by the World Bank identified five basic elements that typify most clandestine neighborhoods:

- absence of formal authorizations for land development and individual housing construction;
- inadequate provision of physical and social infrastructure;
- prevalence of owner-built construction, with housing development occurring in phases;
- lack of registered title to the land, though traditional contract forms establish ownership rights;
- median household income 40% lower than the urban median.

The main reason for the development of informal housing has been the size and speed of urbanization in Morocco. The specific form it has taken results from an inadequate supply of serviced land interacting with a dynamic response by land speculators and the informal sector to meet the demand for low-income housing.

The proposed project is specifically designed to support the GOM effort to increase the amount of serviced land offered to lower income families in a context of clear title and ease of access to public services, be they water and sewer or transportation and education.

Socio-economic analysis is based on data from the 1982 Census, plus an in depth analysis of two low income neighborhoods in Tetouan carried out by the Institut National de l'Amenagement Urbain (INAU) and USAID/Morocco in 1986. The socio-economic characteristics of the population described in the analysis is considered accurate for the lower income segment of this project's target population. The most important differences between the groups studied in the INAU analysis and the higher income segment will be income itself, and, therefore, the potential for access to higher levels of savings and credit.

(1) Land Tenure

The predominant forms of land ownership classification in informal neighborhoods (accounting for 82%) was found to be either public domain or private ownership in almost equal proportions. About one quarter of the inhabitants of the public domain lands claimed ownership by virtue of the "zina," a traditional form of recognition of the rights of those who develop public domain lands. When an owner who claims use rights via the "zina" sells these rights, the "mulkia" is used, a transfer mechanism supported by ten witnesses. About 20% of owners of land registered as public domain have acquired the right via the "mulkia." The "mulkia" process is formalized by an "acte adoulaire" and about 45% of the households inhabiting public domain land claim ownership through one of these two mechanisms. One third of the households, when asked about their confidence in their ownership rights, indicated no concern about their legality.

In a shanty town area, one proprietor accounted for the bulk of the land. This land had been acquired through registry under the "khalifa" process, a process employed during the period of the Spanish protectorate. This type of title mechanism can be found principally in the north or the far south of Morocco, and was ruled invalid in 1978. Transfer was required at that time, but due to the length and complexity of the process, few properties have been re-registered.

There is a clear difference in the quality of construction between those areas where households are confident of their ownership, whatever the mechanism applied, and those where it is clear that there is another owner.

(2) Land Purchase and Home Construction

Approximately one half of the households claiming ownership of a land parcel lived in the Tetouan area for more than 15 years before acquiring land. More than 60% indicated that price was the determining factor for choice of the parcel, with 17% indicating proximity to work.

Some two-thirds of those buying unbuilt land paid the full price once, while the remaining one third paid over time. Any financing was informally arranged among friends and connections. Forty-five percent of buyers used family savings as contrasted with 27% who used the sale of an asset to raise the funds. More than 55% of the households surveyed reported buying undeveloped land and then proceeding to construction. For 65%, construction began in less than one year following acquisition of the parcel, and just under 50% reported that construction took less than six months. Once again, in the majority of cases, construction was financed by savings.

Some 50% of the units were found to be served by potable water, 65% had electricity, and 11% were connected to the municipal sewer system. Almost 70%, however, were connected to community level sewer networks, which removed waste water from the site, often via open canal, but had no treatment capacity.

(3) Unit Occupancy and Household Data

The average household size in the study neighborhood compared closely with the 5.59 registered for the Tetouan area as a whole, with 18% of the households having nine or more members, and only 3% being single person households. About 23% of the households were renters, a lower figure than for Tetouan as a whole, and the renter group had slightly lower average income and fewer economically active members. Rental payments averaged 17.4% of income. As might be expected, the population is young, with 64% under the age of 25, though this number is not far different from the national urban situation.

The median urban area household income has been estimated to be 2,250 DH per month. While studies of household income and expenditure are invariably difficult, the Tetouan area work referenced above suggests that expenditures may run 57% for food, 16% for transportation, 2% for housing and 25% for health and clothing or other related expenditures. There are some data that suggest that poorer households within the target group may have to devote a higher percentage to food.

When asked to give priorities to community needs, roads were an overwhelming first choice. Public lighting was second. Clear title had an almost insignificant response, confirming other data that suggested that households would prefer to live with the current situation, rather than have to go through the bother and expense of a more regularized situation. This sentiment applies to those who do feel secure by having an "acte adoulaire" or other form of traditional contract to support their claim to ownership rights.

Those economically active among the target group tend to work in commerce (23.5%), traditional hand crafts (17.1%), public works (14.1%) and service positions (15.2%).

Seventy-one percent of heads of household had earned income, with 20% retired or disabled, 2% unemployed, and 6% housewives. Thirteen percent of households are headed by women. Only 9% of females in the Tetouan study area had earned income, versus 38% of males. One in eight women were economically active, as compared with one in two men. Twenty-seven percent of female heads of household who responded to questions on household income fell into the poorest category.

b. Link Between ANHI Projects and Target Families

Socio-economic analysis of two ANHI projects where allocation of lots has already taken place, Oued Fes, a project developed by ANHI itself, and Butte II in Rabat, a "bidonville" relocation project developed by ANHI on behalf of the municipality, show that the population served equates well with the AID target (urban median monthly income estimate: 2250 dirhams, US\$281. The following tables are illustrative.

TABLE VII. E3.1. - OUED FES: PROFILE OF BENEFICIARIES

HEADS OF HOUSEHOLD		MEN	WOMEN	BOTH
Percentage		86.9	13.1	100
Average Age (years)		44	40	
OCCUPATION:				
Civil Servant		50.5	52.4	50.7
Teacher		19.7	21.4	19.9
Commerce		2.1	0.0	1.8
Artisan		9.2	13.6	9.8
Laborer		0.3	0.0	0.2
Work Overseas		8.8	0.0	7.7
Other Occupation		8.3	4.9	7.9
Retired		1.0	0.0	0.8
Unemployed		0.1	7.8	1.1
Ensemble		100	100	100
AVERAGE INCOME 1985		2000	1692	1975
(Dirham) 1988		2332	1974	2302
MEDIA INCOME 1985		1480	1300	1555
(Dirham) 1988		1726	1516	1814

TABLE VII. E3.2

BUTTE II: PROFILE OF BENEFICIARIES

HEADS OF HOUSEHOLD		MEN	WOMEN	BOTH
Percentage		85.5	14.5	100
Average Age		50	55	
OCCUPATION:				
Civil Servant		9.8	0.0	8.4
Teacher		0.3	0.0	0.2
Commerce		6.0	0.0	5.1
Artisan		25.6	3.2	22.4
Laborer		24.5	8.1	22.1
Work Overseas		1.9	0.0	1.6
Other Occupation		20.2	19.4	20.0
Retired		6.5	0.0	5.6
Unemployed		5.2	69.4	14.5
Ensemble		100	100	100
AVERAGE INCOME 1985		569	273	527
(Dirham) 1988		665	319	614
MEDIAN INCOME 1985		550	300	500
(Dirham) 1988		642	350	583

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These two project examples maybe considered at the extremes of the income range served by the ANHI. If the Oued Fes example is taken as more representative of the future operations of the ANHI, it is still possible to see a range in which the median income falls below the urban median. The following table gives a distribution of incomes served by the Oued Fes project

TABLE VII. E3.3,

OUED FES - DISTRIBUTION OF MONTHLY BENEFICIARY INCOME

Decile	Percent (Cumulat.)	Income Strata (dirham)	Average Income	Avg. Size(M2) Plot Acquired
1	10	490 to 1030	820	113
2	20	1030 to 1200	1117	123
3	30	1200 to 1420	1323	126
4	40	1420 to 1550	1492	132
5	50	1550 to 1800	1680	137
6	60	1800 to 2330	2077	128
7	70	2330 to 2680	2535	149
8	80	2680 to 2950	2870	185
9	90	2950 to 4420	3501	214
10	100	4420 to 9000	5479	279

Experience to date suggests, therefore, that nearly 70% of the population served by the Oued Fes project, the project most likely to resemble future ANHI production, may be classified as the target for HG Program support.

c. Affordability of Project Output for Target Families

The affordability of project output has been considered from three points of view in an effort to reflect current experience, and to permit a review of the impact of use of formal sector home financing techniques.

USAID/Morocco housing sector strategy for the medium term includes analysis of the ways to improve access to traditional long term home purchase financing, and support of GOM programs designed to achieve such an objective. Improving access to such financing, however, will not only require program and attitude development among Morocco's banking institutions, but also a comparable development of interest on the part of low-income families. (See sections on Technical Assistance.)

Because ANHI has been launched in a financially conservative environment, and has, therefore, relied on beneficiary advances for the bulk of its working capital, the experience with lot allocation and sales to date offers an excellent insight into the purchasing and financing preferences of its clientele. This experience makes clear that the majority of families that are the target of ANHI projects have used informal financing techniques to support purchase of a lot and the resultant home construction. ANHI information also suggests that many of these beneficiary families would not use formal sector finance were it available.

In fact, this is not surprising information. Tables VII. E3.1 and 2 above show that many of the heads-of-household are likely to have irregular income flows. They are also not familiar with credit concepts that suggest that the monthly payment is a far more important component of the decision making process than the total to be paid over the lifetime of a loan. They do not see the purchase as that of an asset whose value will increase beyond the total amount invested, and on which a profit could be made at time of sale.

For this reason, the affordability analysis contained herein will review three different conditions: 1) recourse to traditional, formal home financing; 2) application of a discounted cash value analysis to relate incomes to potential investments using another type of credit arrangement; 3) a review of recent ANHI experience, applying the ANHI procedures now prevalent.

(1) Traditional, Formal Sector Financing

Tables VII E4.4 and 5 give the results of a series of calculations of affordable lot and housing unit costs based on the following assumptions:

- * beneficiaries will use savings, cash from the sale of family assets, informal credit, or other means to buy the lots with cash (in three payments over 2-3 years);
- * the lot title will be sufficient collateral to obtain formal financing (from C.I.H.);
- * two types of loans will be assessed - a CIH low cost housing loan 7% over 25 yrs (which is subsidized), and a normal house construction loan at 10% over 15 yrs;
- * the maximum affordable loan will be calculated based on borrowers spending 20% to 30% of their monthly income on the loan payments;
- * The ratio of down payment (plot) to loan (house) costs will be 1/3 to 2/3, respectively.

The results are summarized below, for a household at the median income (1989):

	Low Cost Housing Loan 7%, 25 yrs	Construction Loan 10%, 15 yrs
Max. Afford Lot Price (DH)	58231	38006

Max. Afford Lot Price per m2
based on a lot of:

@ 60m2	971	633
@ 80m2	728	475
@ 90m2	647	422
@ 100m2	582	380
@ 120m2	485	317

Households at the median income can afford to pay between 38000 DH and 58000 DH depending on the financing they obtain. If they were to purchase a lot of 90 m², they could afford to pay 422 DH to 647 DH per m².

The breakeven sale prices estimated in Annex VII. E2.A can now be compared to these figures. Those calculations led to an average price of 265 DH/m² for the target group. This amount should be easily affordable by households at the median income.

Tables VII E3.4 and 5 show similar calculations for household who earn less than the median. Household who earn only 60%-75% of the median income could still afford the lot price of 265 DH/m², assuming a lot size of 90 m². By selecting a lot of only 66m², even a family earning only 45% to 60% of the median could afford an ANHI lot.

Another factor in the affordability analysis is the fact that in many cases two families can combine resources to buy a plot and construct a house for both. Thus the affordability doubles. For the target price of 265 DH/m², two families earning 45% to 65% of the median can join forces, purchase a lot of 120m², build a dwelling and each occupy one floor. Alternatively two families earning 30% to 40% of the median income can buy a plot of 60m², and share the dwelling. Similarly a single family could purchase a lot and construct, and then sell off the upper floor, which would in essence amount to the same as the strategy mentioned immediately above.

TABLE VII. E.3.5

<u>AFFORDABLE LOT COSTS</u>	<u>C.I.H. CONSTRUCTION LOAN</u>					
		INTEREST: 10.0%				
		PERIOD: 15 yrs				
	100%	90%	80%	70%	60%	
% OF MEDIAN INCOME	100%	90%	80%	70%	60%	
MONTHLY INCOME (1989)	2776	2498	2221	1943	1666	
ANNUAL INCOME	33312	29981	26650	23319	19987	
% OF INCOME TO HOUSING	30.0%	30.0%	25.0%	25.0%	20.0%	
MONTHLY INCOME TO HOUSING	833	750	555	486	333	
MAXIMUM LOAN AMOUNT	76013	68412	50675	44341	30405	
MAXIMUM LOT PRICE	38006	34206	25338	22170	15203	
MAXIMUM HOUSE + LOT	114019	102618	76013	66511	45608	
YEARS OF INCOME IN LOT	1.14	1.14	0.95	0.95	0.76	
YEARS OF INCOME IN TOTAL	3.42	3.42	2.85	2.85	2.28	
AFFORDABLE LOT PRICE	38006	34206	25338	22170	15203	
LOT PRICE PER m2						
@ 60 m2	633	570	422	370	253	
@ 70 m2	543	489	362	317	217	
@ 80 m2	475	428	317	277	190	
@ 90 m2	422	380	282	246	169	
@ 100 m2	380	342	253	222	152	
@ 110 m2	346	311	230	202	138	
@ 120 m2	317	285	211	185	127	

(2) Discounted Cash Flow Basis

A second approach to evaluating the affordability was also taken, assuming:

- * beneficiaries take no formal financing;
- * the financial burden of purchasing a lot and constructing basic shelter (by whatever means) can be estimated by annualizing these costs at a 10% discount rate over 20 years. The annuity associated with these costs must not exceed 20% to 30% of the monthly revenue;
- * the analysis will assume lot prices at 265 DH/m2, and lot sizes of 60m2 and 90m2;
- * construction of a house will cost 700 DH/m2 of liveable space.

Thus from an estimate of income, the maximum affordable house size can be computed. If this surpasses a liveable minimum, the lot and house will be considered affordable.

Results are shown in Table VII E3.6, and summarized below. The household at the median income can afford an annuity of 830 DH/month (as in the previous analysis), which constrains them to spend 61231 DH on a house if they buy an ANHI plot of 90m2. At 700 DH/m2, they can build a house with 87m2 of liveable

space. By buying a plot of 60m², they can afford a house with 99m² of liveable space. Both of these house sizes are considered adequate. Obviously households with a smaller income will be able to afford a smaller living space. Households whose incomes fall as low as 60% of the median can still build the minimum basic shelter.

TABLE VII. E3.6

AFFORDABLE HOUSE SIZE

% OF MEDIAN INCOME	100.0%	90.0%	80.0%	70.0%	60.0%
MONTHLY INCOME (1989)	2776	2498	2221	1943	1666
% OF INCOME TO HOUSING	30.0%	30.0%	25.0%	25.0%	20.0%
MONTHLY HOUSING AMOUNT	833	750	555	486	333
AFFORDABLE LOT + HOUSE	85081	76573	56721	49631	34032
LOT SIZE	90	90	90	90	90
AFFORDABLE LOT COST	23850	23850	23850	23850	23850
MAXIMUM AFFORD. HOUSE COST	61231	52723	32871	25781	10182
CONSTRUCTION COST PER m ²	700	700	700	700	700
AFFORDABLE HOUSE SIZE	87	75	47	37	15
% OF MEDIAN INCOME	100.0%	90.0%	80.0%	70.0%	60.0%
MONTHLY INCOME (1989)	2776	2498	2221	1943	1666
% OF INCOME TO HOUSING	30.0%	30.0%	25.0%	25.0%	20.0%
MONTHLY HOUSING AMOUNT	833	750	555	486	333
AFFORDABLE LOT + HOUSE	85081	76573	56721	49631	34032
LOT SIZE	60	60	60	60	60
AFFORDABLE LOT COST	15900	15900	15900	15900	15900
MAXIMUM AFFORD. HOUSE COST	69181	60673	40821	33731	18132
CONSTRUCTION COST PER m ²	700	700	700	700	700
AFFORDABLE HOUSE SIZE	99	87	58	48	26

(3) Informal Financing Techniques

Though considerable thought has been given to this subject, with studies carried out for markets in other countries, there is no statistically conclusive information about how Moroccan low-income families amass the resources necessary for land and shelter acquisition, and, thereby, avoid the bureaucratic obstacles of formal financing institutions. What has been made very clear for some time is that access to serviced land at an affordable price provides the critical incentive to low-income families to concentrate resources for purchase, and subsequent construction of shelter over time, without recourse to formal sector financing programs. The ANHI experience is clearly proving the point.

ANHI lots have been purchased by families inhabiting shanty-towns whose reported monthly incomes are below the levels that would be necessary were they to use formal sector loan programs. These families have also opted for larger lot sizes than had been expected, often because they are able to combine, as has been noted above, so that one lot serves two families.

ANHI management have had to stagger project completion to respect the capacity of their clients to advance working capital over the lot preparation process, but the percentage of "clients" unable to maintain the pace of advances has been ten percent. The conclusion is that the ANHI product has been priced to be affordable to the target population.

ANNEX VII. E4

VII E4. INSTITUTIONAL ANALYSIS

I. ANHI ORGANIZATIONAL STRUCTURE AND FINANCIAL FLOW

1. Historical Background and Operating Characteristics

ANHI has been chartered in 1984 as a private law enterprise. (Societe Anonyme) owned by the state. As stated in its charter "The State sub standard housing assigns ANHI The task of eliminating this tasks covers but is not limited to:

- The purchase and servicing of land located outside or inside slum neighborhoods.
- The elaboration of studies concerning the servicing of slum neighborhoods and the construction of relocation housing and community faculties.
- The marketing of serviced plots; housing units and eventually any other residential or commercial buildings it may have built.
- The recovery of advances and other costs from beneficiaries of its programs.

ANHI's charter gives it the operational authority necessary to pursue these objectives including contracting loans from external sources with prior authorization of the Ministry of Finance.

ANHI became operational in 1985 and is currently the most important land developers in the Kingdom with a portfolio of 42 projects in various stages of implementation covering the production of 34000 serviced plots including the 10000 plots of the AID financed Tetouan project. Deliveries of finished plots reached 5500 plots in 1987 and are expected to level at 8 to 10000 plots per year in 1990 when ANHI reaches its full production capacity.

Currently, and in most of the ongoing projects, ANHI acts as a Project Manager on behalf of the Regional Directorates of the Ministry of Housing, and local Governments. A sizable proportion of its production, about 90%, is earmarked for relocation of "bidonville" dwellers at a heavily cross subsidized prices. Because of its very low capitalization (100 000 DH) and of the absence of an adequate financing mechanisms ANHI relies entirely on beneficiary advances to carry out its operations. Furthermore detailed studies or works on a particular site can only start when advances from its specific beneficiaries are collected. As a result, planning and coordination are extremely difficult and works follow closely the plan of advance collection leading to lengthy development periods and otherwise avoidable cost burdens.

The proposed program will address the above mentioned constraints by providing ANHI with a 10 Millions HG loan intended as a working capital to start and sustain a slum prevention activity covering the yearly production of 3000 serviced plots at prices affordable to populations below the Median income.

In this program which constitutes approximately 33% of ANHI projected production capacity, ANHI will act as a principal rather than as a project manager; opposed to project manager. However, it will continue to subcontract works, engineering studies and technical monitoring to private entrepreneurs, public utility agencies (Regies) and engineering companies and will limit its role to activities where it has a clear comparative advantage such as:

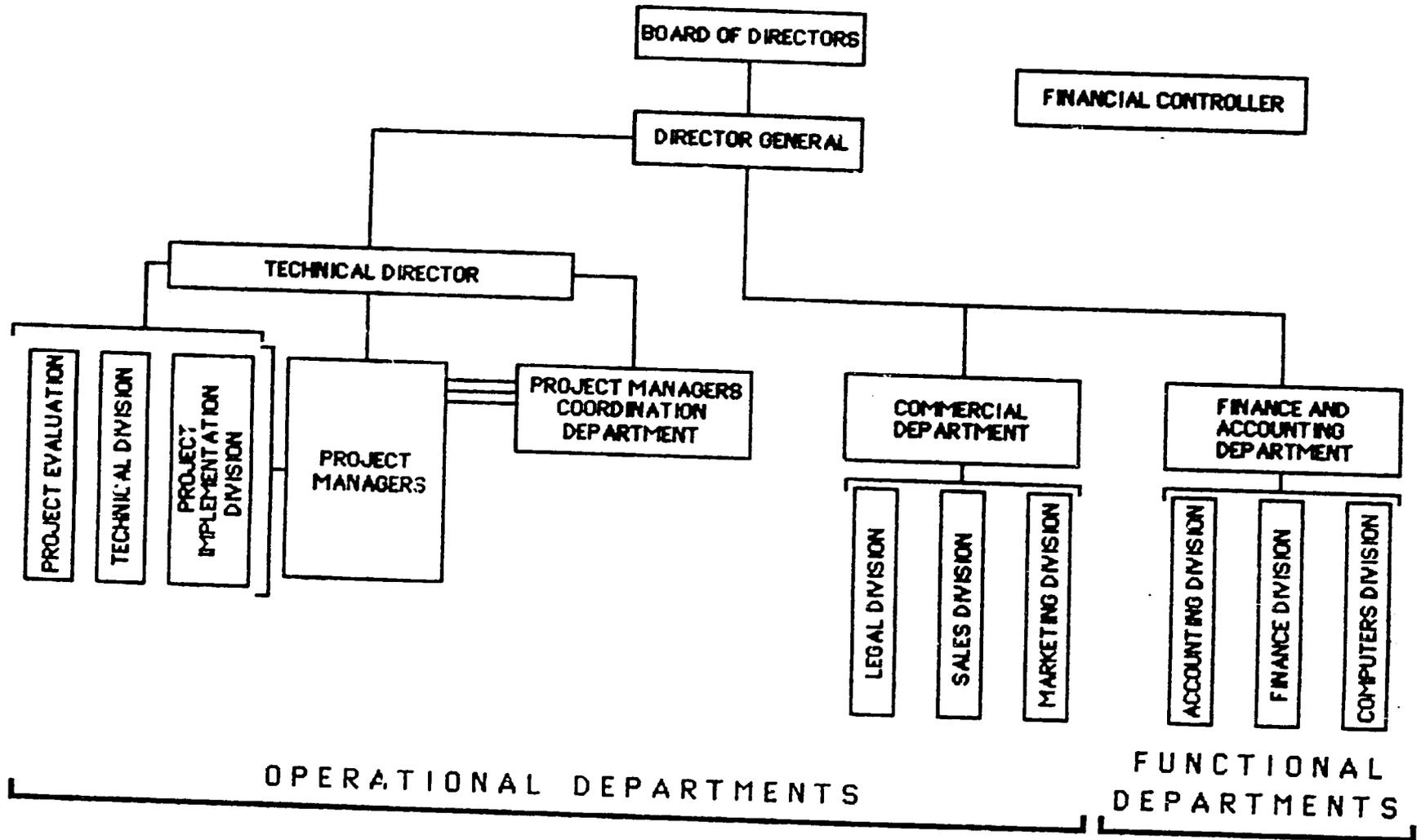
- Project identification
- Land assembly and regularization of land tenure
- Contracting, coordinating and supervising studies and construction
- Collection of beneficiary payments
- Defining marketing strategies
- Defining pricing strategies with a reasonable differentiation among various uses (residential, Commercial...)
- And a cross subsidy component benefiting the poor
- Providing technical assistance to beneficiaries for housing construction
- Promoting partnerships with private developers and small builders for the production of low income shelter.

2. Organization and Staffing

ANHIS Organization chart is shown in the figure below. This organization which heavily relies on project managers is very well suited for ANHIS geographically decentralized activities and allows high production levels with minimal overhead expenses. It is characterized by the existence of two separate groups of activities: A functional department centralizing all administrative personnel and financial activities and operational departments centralizing conceptual work, project evaluation commercial policies etc...; and a pool of project managers responsible for all aspects of project implementation and drawing on the competence of the other departments for the various tasks of project preparation and administration.

In the past, while acting as a project manager on behalf of the Ministry of Housing its regional directorates and local governments ANHI relied heavily on the regional housing directorates for cost recovery and on the public treasury network for handling its receipts. With the event of the proposed program strengthening of these capabilities is required. This same remark applies for land acquisition. Most of the land tracks being developed currently by ANHI are identified by the regional directorates of housing and generally belong to the state or to the local governments. In the future, however, ANHI will have to buy land from private owners and it should accordingly develop in house capabilities to carry this activity particularly for the identification of the tracks of land and the quick evaluation of their potential for development and successful marketing. The actual legal and administrative work pertaining to the purchase of land is carried out by private public notaries readily available in most parts of the Kingdom.

608 HG 003
ANHI HOUSING PROGRAM
ORGANIZATIONAL CHART OF ANHI



3. Controls authorizations and approvals

a. The board of Directors

ANHI has a board of directors chaired by the Minister of Housing. It includes representatives from the ministry of housing the Ministry of Interior, the Ministry of Finance, the Ministry of Economy and Plan, the state secretary for economic affairs assigned to the prime minister and the Fund for Communal Infrastructure FEC. The board defines ANHIS policies oversees its activities and approves its budget and its medium term plans. Extensive powers are delegated to the Director General for carrying out approved programs.

4. Financial Controls

As a private law enterprise wholly owned by the state, ANHI is subject to government financial control. This control is exercised by the financial controller, a senior official from the Ministry of Finance and the accountant who is seconded to ANHI by the Ministry of Finance. ANHI is further requested to have an annual budget approved by the Ministry of Finance which includes anticipated expenses and revenues for both operations and investments. The controls of the financial controller and the accountant, who jointly signs all the checks with the director general, are exercised with reference to these budgets and to relevant contracts and public finance regulations. These controls are generally timely. They are concerned strictly with the regularity of expenses and do not limit the powers of the Director General.

Like all state owned enterprises ANHI is required to give full accounting of its expenses and revenues to the Ministry of Finance. For accounting purposes ANHI is required to open individual Accounts for each project and funds collected from future beneficiaries of a given project can only be strictly and directly earmarked to pay for the specific expenses of that project.

To date ANHI is not authorized to open accounts in primary banks. It has a single checking account at the treasury which centralizes all its revenues. All payments are made by checks drawn on this account and jointly signed by the accountant and the Director General, these checks are negotiable in all banks. Revenues from sales are collected as follows: when a payment is due by a given beneficiary ANHI issues an authorization to pay. The concerned beneficiary deposits his or her payment at the local branch of the treasury upon presentation of the authorization to pay. Against his payment he receives a receipt to prove the transaction when required. The local public treasurer sends a copy of the authorization to pay to ANHI and transfer the fund to the central treasury in Rabat with a float averaging 15 to 20 days. The central public treasury in Rabat provides ANHI daily with a listing of all payments received including the names of beneficiaries and the amounts deposited by each beneficiary. Money deposited in the checking account do not bear any interest. ANHI has however the possibility to place its excess liquidities in time deposits (Three month certificate) at 8% interest rate.

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Contracting beneficiary selection and pricing are subject to external controls as follows:

5. Contracting procedures and control

Contracts are authorized by a joint commission whose members include; the director general of ANHI, the financial controller and a representative from the ministry of housing. The contracting procedures obey both the general laws concerning work, supplies and services contracts for public bodies and the specific regulations concerning the activity concerned. Contracts are awarded to the best qualified bidders.

The control of the execution of the contract is the joint responsibility of the engineering firm in charge of the technical monitoring of works, ANHIS Project manager, the local representative of the Ministry of Housing and eventually the public laboratories for analysis of material. Invoices for progress payments have to be signed by the above parties and approved by the financial controller, mentioned earlier, and the director general before payment.

The contracts allow for physical contingencies and price revisions within a specified ceiling. Past this ceiling revised work orders are made and have to be approved by the joint commission for contracting.

Both the contracting and revised work order procedures are standard procedures and don't raise any particular concern.

6. Beneficiary Selection

Beneficiary selection procedures are set in the interministerial circular; 20 DGL/DPAT/2 dated January 1983 and signed jointly by the Minister of Housing and the Minister of Interior. This circular is given in Annex VII E 2B.

Applications for a serviced plot are examined by the regional directorates of housing which assesses the acceptability of the applicant: Eligible beneficiaries are defined as follows:

- i/ Age: a minimum of 21 years at the time of application.
- ii/ Martial status: married with at least one child not exceeding 21 years of age at the time of the application.
- iii/ Revenu: 2250 DH/month maximum for applicants towards serviced plots smaller than 110 Square meter and earmarked for low income housing. Applicants housing higher revenues can be eligible for larger plots.
- iv/ Applicants should prove that they are not owners of urban land plots produced by public or semi-public developers in any part of the Kingdom.
- v/ Application can only be received for development in the locality of residence as evidenced by the national ID card the eligibility of the beneficiaries assessed by the selection commission. A selection by lot among eligible beneficiaries is made in the presence of this commission which includes the following members:
 - The Governor of the province or his representative - chairman.
 - The chief of the "Circumscription Domaniale" or his representative.
 - The local delegate for housing or his representative - secretary of the commission.
 - The chairman of the municipal council or his representative

When necessary the commission could invite local representatives of land registry, internal revenues or land titling as observers.

The commission selects a main list of beneficiaries and a waiting list equivalent to 15% of the main list. When a beneficiary from the first list loses his right to a plot; usually for failure to pay in time, he is automatically replaced by the first beneficiary on the waiting list.

10 to 30 percent of the lots in each development are earmarked for special beneficiaries such as workers abroad and widows of the war. The selection of beneficiaries for these plots is at the full discretion of the Governor.

The same selection procedure would be applied for the proposed program. Experience showed in Morocco and elsewhere that involving local authorities in the selection process insures their full cooperation for the various authorizations and approvals and insures also a better knowledge of the beneficiaries and of the demand for serviced plots in the various localities. One concern should however be raised for the 10 to 30% plots to beneficiaries selected at the full discretion of the Governor.

Lots for commercial Use and apartment building are sold by competitive bidding according to regular procedures.

In the proposed programs ANHI is encouraged to wholSELL to private developers and small builders, tracks of serviceable land for further servicing and/or low income housing construction. ANHI should develop selection procedures for these developers and small builders encouraging competition and providing reasonable incentives.

7. Land Pricing

Sales prices of residential plots are determined by ANHI on the basis of the projected costs of the development and prices are advertised at the announcement prices have to be approved by the local authorities and namely the Governor. Two principles are observed in determining the sale prices. The principle of total cost recovery for each site developed and the principle of cross subsidies between the different land uses within a given site. Basically in each development 10 to 20% of the land are earmarked for commercial use and apartment building and sold at marked price or approximately at twice their cost. the markup on the sale of this land is used to cross subsidize low income residential land as well as land earmarked for community facilities (5%) which is transferred fee of charge to local authorities. Further price differentiations exist to a lesser extent among lots, based on plot size and plot location within the site.

8. Land Acquisition

Land acquisition prices are determined by arm length negotiations between ANHI and the owners. These prices are influenced by the prices assessed by the land price assessment commissions (Commissions d'expertise) composed of whose members are the Governor and representative from the regional administrations in charge of the public estates and of land titling and registry as well as representatives from the local government. The prices determined by the above commission are usually the actual transaction prices in case of an acquisition of public or collective land. They greatly influence the actual transaction prices in case of land purchased from private owners.

II. UTHORIZATIONS AND APPROVALS REQUIRED FOR LAND DEVELOPMENT

Each land development operation requires a series of authorizations and approvals as outlined below:

- i/ Regularization of land titles.
- ii/ Agreement in principle.
- iii/ Authorization to develop.
- iv/ Interim Formal reception of the sites by the municipalities.
- v/ Individual land titles.
- vi/ Construction permits.
- vii/ Final formal reception of the sites by the municipalities.

1. Regularization of land titles

The regularization of land tenure and titles is normally required before starting any development. However, given that ANHI is wholly owned by the state, it is sometimes allowed to proceed to other steps of the procedures before regularization of land Tenure.

The regularization procedure varies depending on whether or not the various parcels of the land track to be developed are originally titled. In the first case ANHI presents to the administration in charge of land registry and titling an application for title containing; the technical drawings, the acquisition documents and the titles to the various parcels. A new single title is issued for the whole land track within a period not exceeding one month.

In the second case the procedure is very similar however an additional five to six months are usually required for publicity and legal inquiries.

Surveying, topographical work and legal works are carried out by private surveyors topographers and public notaries on behalf of ANHI. These are readily available in most parts of the Kingdom.

2. Agreement in principle (Accord de principe)

All land development projects exceeding a 100 plots are required to have prior approval of the local authorities at the provincial or prefectural level. This approval is based on the draft urbanistic studies. The delays required for this approval vary from 2 to 6 months depending on whether or not the location of the site is in an area covered by a duly approved and advertised urban plan and on whether or not ANHI requests exemptions from certain urban regulations.

3. The authorization to develop the site

Once the draft urbanistic plans are approved at the provincial or prefectural level ANHI proceeds to the detailed studies of the site. The final drawings are then presented to the municipality for approval. The municipality in turn forwards the drawings to the regional authorities and issues an authorization to develop within one to two months.

Both the delays involved in delivering the agreement in principle and the authorization to develop the land are reduced due to the existence of an ample amount of clear and well established codes and regulations and due to the high level of competence of both ANHI staff, the engineering consultants, and the staff of the regional directorates of Housing.

4. Delivery of individual land titles

At the final stages of site development ANHI undertakes plot staking work through private subcontractors and prepares all the topographic work necessary for the preparation of individual land titles. The various files are submitted to the public office of topography which formally approves the drawings and are then submitted to the administrations in charge of land registry and titling.

At site completion, upon presentation of the sales contract from ANHI and payment of the land registry taxes, each beneficiary is provided with a land title. The procedure is well established and takes 15 to 30 days.

5. Interim formal reception of the site by the municipality

Once the works are completed the municipality proceeds to the formal reception of the site. Municipal engineers are usually invited to participate in the various interim formal reception does not usually require long delays.

Once the interim formal reception is delivered, the water and electricity regies become responsible for the operation and maintenance of their respective networks in the site and the municipality becomes responsible for the operation and maintenance of the access roads and the sewer and storm water drainage networks.

6. Final reception

The municipality delivers to ANHI the final formal reception of the site one year after delivery of the interim reception.

7. Construction permits

Before construction starts, an individual construction permit should be issued by the municipality. This construction permit is also required for access to housing finance. ANHI usually provides beneficiaries with a choice of alternative drawings for a housing unit. These drawings are usually provided along with a prearranged construction permit.

Both individual land titles and construction permits are prerequisites for the obtention of a housing finance loan.

III. INSTITUTIONAL ENVIRONMENT

As mentioned earlier, ANHI is mostly involved in conceptual work, promotion, monitoring and coordination. The various tasks directly related to studies and site development operations are subcontracted to specialized public and private enterprises along the contracting procedures already described.

Several professional groups share the responsibility for assuming these tasks. These are:

- The private public works construction companies.
- The private engineering firms.
- The regies in charge of public utilities.
- Private topographers and surveyors and land registry and titling administrations.

A brief description of the main futures of each of the above groups will be given below as well as a brief description of the housing finance system.

1. Private public works construction companies

Public works construction companies sub-contract all ANHI's works related to access roads, side walks sewer and water drainage networks. These companies are registered at the commerce registries and are classified by categories according to their capital and the nature of their equipment. Enough capacity exists for carrying ANHI's work orders. Furthermore, because of ANHI's timely payments and because of the competence of its technical controllers, it enjoys a good reputation among these companies and receives very competitive bids from quality firms.

For large developments and in certain locations it is sometimes difficult to find a contractor sufficiently equipped to carry out all the works. In such cases, ANHI usually subdivides the development and contracts the works to several contractors.

So far ANHI did not undertake any housing construction programs. Under the proposed HG loan ANHI will wholesell small tracks of land to private entrepreneurs for further servicing and construction. For such partnerships it is recommended that ANHI develops special programs for small builders. These builders produce usually at lower price and are more interested in low income housing. A study should further assess the possibilities and the procedures for mobilizing small builders.

2. Engineering Firms

Private Engineering firms carry out two major functions for ANHI. The first function consists of all urbanistic architectural and engineering studies. The second is project monitoring and technical supervision function.

ANHI usually gives a preference to firms chartered in the location of the sites. These firms usually have a better knowledge of the specific regulations and urban codes of the locations where they are chartered and can carry out the subsequent supervision and monitoring functions at lower prices. Based on past records and the recognized high technical competence of moroccan engineers, urbanists and architects the cooperation with private engineering firms gave full satisfaction and does not warrant any particular concern.

Under the proposed HG loan ANHI is encouraged to provide technical assistance for housing construction after completion of the site. Such activity could advantageously be added to the tasks subcontracted to private firms.

3. Land registry and titling

Most of technical work involved in land registry and titling is performed by private topographers and surveyors. Regional administrations in charge of registry and titling perform the formal work of approval, tax collection and the delivery of official titles. The procedure is well established and beneficiaries receive an official title to their land plot in about a month from the date of the request.

Most of ANHIS beneficiaries sell the right to build a second floor on their plots. In such case ANHI writes the sales contract in both names and the title is issued directly to both beneficiaries avoiding double taxation and double title requests.

4. The Regies and the national offices in charge of public utilities

Responsibilities for water and electricity are shared as follows: The Office National de l'Electricite (ONE) and the Office National de l'Eau Potable (ONEP) are responsible respectively for electricity and water production nation wide. They are also responsible for the distribution of these two utilities in rural areas. Distribution of water and electricity in the urban areas is the responsibility of the "Regies", which are joint stock monopoly enterprises owned by the municipalities. 16 Regies cover the whole Kingdom. All work related to on site and off site electrical and water grids is subcontracted by ANHI to the Regies, the ONE or ONEP depending on site location. The later subcontract the works to specialized private companies. They charge all the direct materials and manpower costs and a 20% surcharge to cover their overhead.

The cooperation with the Regies and to a lesser extent the ONE and ONEP raises at least two issues, one concerns prices and the other concerns coordination.

In some locations under the jurisdiction of the ONE and ONEP, ANHI was authorized to subcontract water and electricity works directly to specialized private companies through competitive bidding procedures. Unmistakably the costs were sensibly lower and coordination was easier to perform. The ONE and ONEP performed the studies and supervised the work thus insuring conformity of the network to specifications.

Such an arrangement has not been allowed by the regies and ANHI had often to enlist support from local authorities in order to push the regies to lower their prices to reasonable levels.

Efforts should be made in order to improve coordination with the regies and to find solutions aiming at normalizing prices charged.

5. The Housing Finance System

The main institution in charge of housing finance is the CIH (Credit industriel et Hotelier) with several housing finance programs and loan schedules. CIH delegated the financing for the urban poor (Habitat Bon Marche) to the Banque Centrale Populaire (BCP) which has a branch net work covering most of the kingdom. The performance of the housing finance system is summarized in the table bellow.

PERFORMANCE OF THE HOUSING FINANCE SECTOR
1982-1986

	1982		1983		1984		1985		1986	
	Individual Mortgage loans									
	NL	A	NL	A	NL	A	NL	A	NL	A
Individual Mortgage loans to Beneficiaries	5762	444	8097	599	10488	718.7	18371	793	10522	865
	PREFINANCING HOUSING PROJECTS									
Prefinancing Housing Construction	NL	A	NL	A	NL	A	NL	A	NL	A
	49	125	45	207	73	228	106	452		
No. of housing units	1706		3741		3776		4963		NA	
	PREFINANCING LAND SERVICING									
Prefinancing Land Servicing	NL	A	NL	A	NL	A	NL	A	NL	A
	7	9.9	3	3.2	7	10.7	6	10	13	42.3
Number of Plots	9.6		286		251		652		3345	

Source CIH

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This performance is considered weak as the total number of housing units financed is about 15 to 20% of the total number of units built with a construction permit or 5 to 10% of the total housing units built.

In the past ANHI did not access the housing finance system for prefinancing its operations, nor did it assist its beneficiaries in getting mortgage loans for housing construction. Under the proposed program ANHI is expected to increase the access of its beneficiaries to the housing finance system in several ways. Along with the delivery of a serviced plot ANHI will provide the beneficiaries with all the administrative documents required for an application towards a mortgage loan. Early in the process of site development ANHI will inform the banks concerned about its programs and adapt its operation in order to channel housing finance resources to its beneficiaries.

INITIAL ENVIRONMENTAL EXAMINATION

Project Location: Morocco
Project Title: ANHI Low Cost-Housing Program
Project No.: 609-HG-003
IEE Prepared by: Alan Wyatt, Environmental Engineer, RTI *AW*
Harry Birnholz, Regional Officer, Rabat. *HB*

Recommended Environmental Threshold Decision: Negative Determination

It is considered that the proposed project will not have a significant effect on the environment and no further assessment is required.

Charles W. Johnson
Charles W. Johnson, Director

October 18, 1988

Clearance: Eric R. Loken, Mission Environmental Officer *ERL*

INITIAL ENVIRONMENTAL EXAMINATION

MOROCCO NATIONAL UPGRADING AGENCY LOW INCOME HOUSING PROGRAM

HG - 003

1. INTRODUCTION & SUMMARY

In accordance with AID Environmental Regulations, 22 CFR Part 216, this Initial Environmental Examination for the subject project has been prepared in support of the "PID-like cable" approved by the AID Mission Director and transmitted to AID/W on 8/12/88.

As is described in detail below, this IEE recommends a Negative Environmental Determination, on the basis that the proposed project will not have a significant effect on the environment. In this regard, I call to your attention the following points:

1. in fact, the project will have a significant beneficial environmental impact, improving the living conditions and public health situation of the target population - the urban poor;
2. the project implementing agency, L'Agence Nationale de Lutte contre l'Habitat Insalubre (ANHI), currently follows all statutory norms and standards for land development in Morocco, including land use (as outlined by urban Master Plans), site planning (street widths, lot sizes, housing densities, as outlined in Municipal regulations), and infrastructure norms (water supply, sewerage, electricity networks specified by local public utilities).
3. ANHI already expends considerable effort and resources to monitor all phases of project implementation to ensure rapid completion of all contracted works, good construction practice, and minimal environmental disruption;
4. ANHI works directly with municipalities and public utilities to ensure the provision of infrastructure maintenance on a continuing basis (garbage collection, street cleaning and maintenance, water, sewer and electric power distribution network maintenance).

This IEE was prepared during late-September and early-October, 1988. Appendix 1 shows a list of persons contacted, documents reviewed, and ANHI project sites visited. Extensive discussions were held with the Director, the Technical Director, and Project Managers at ANHI. Informal discussions were also held with private architecture and engineering (A&E) contractors who work with ANHI. Six projects sites were visited, representing projects in various stages of completion. Two of those visited, including Oued Fes, and Qods II (Taza) are among those considered as sample projects for the proposed HG-003 program with ANHI.

2. PROJECT DESCRIPTION

A major problem in meeting the housing needs of a rapidly growing urban population, particularly the lower income families, has been the inability of Moroccan municipalities and others to finance primary infrastructure, and to open up new areas for shelter development. As a result, nearly 40% of the shelter production is carried out by the informal sector, creating clandestine neighborhoods, which are below Moroccan housing norms (lack of basic infrastructure), and which when in place, require even larger investments by local governments to upgrade and service. The major bottleneck in the provision of low-income shelter continues to be a lack of affordable, serviced land.

In the short time since its creation (1985), ANHI has rapidly become the largest land developer and public sector producer of shelter for the poor in Morocco. As of the end of 1987, ANHI had identified 37 distinct projects, most in collaboration with local governments. ANHI's total delivery of serviced plots has risen from 1521 in 1986, to 4754 in 1987, and is expected to reach about 5300 in 1988. ANHI provides a serviced plot in a well-planned development, as well as a guaranteed title to the plot, a house plan, and follow-up technical assistance so that eligible beneficiaries can access the credit system and build suitable housing.

Under this project, USAID will provide \$US 10 million HG loan financing to carry out a program with ANHI. The goal of the project is to improve opportunities for urban families below the median income to acquire affordable shelter. The program purposes include:

- * to increase the production of serviced housing sites that are affordable to Moroccan urban households earning less than the median income;
- * to encourage the private sector to take a greater role in the production of shelter affordable to below median income beneficiaries;
- * to strengthen ANHI's capacity as the key public sector land development agency; and
- * to reduce costs by adopting more affordable norms and standards.

Under the USAID program, ANHI will carry out market studies, undertake planning and engineering analyses, acquire land, provide infrastructure and sell parcels to low-income beneficiaries. Plots for commercial development will be priced close to full market value to allow parcels for low-income beneficiaries to be sold at an affordable price. The program will support only development of ANHI's own portfolio of projects, and will not support operations where ANHI acts as project manager for other agencies. As a direct output of the HG resources, and beginning in the third year, ANHI will deliver approximately 3000 lots on 60 ha of land each year. ANHI will continually replenish its land reserves and continue production at a steady rate. Eight sample projects have already been identified, including 522 ha of land and approximately 15000 lots identified for the target population. Details of these projects are given in Appendix 2.

3. DESCRIPTION OF EXISTING SITUATION

3.1 Conditions in Existing Low-Income Housing Areas

The target population of the proposed project come from two existing types of low-income housing: squatter settlements ("bidonvilles"), and clandestine neighborhoods ("quartiers clandestins"). Both types of housing lack basic infrastructure (water supply and sewerage), and have only limited access to public services such as schools or health centers. The squatter settlements involve temporary shelters, while the clandestine areas have more conventional structures, built without legal authorization. Estimates indicate that as of 1983 about 7% of the urban population lived in the squatter areas, and 13% in the clandestine neighborhoods*. Land development and housing construction under ANHI projects make vast improvements over these existing conditions.

Squatter settlements are occupied by the poorest of the poor, many of whom have migrated from rural to urban areas. These settlements appear at the edge of urban areas, on un-used public lands, in ravines, or on steep hill-sides. The topographic conditions are generally unsuitable for residential use. Many are located close to industrial zones, and are susceptible to air or water pollution. These developments are created in a completely unplanned fashion, outside of the master plan/zoning process. The squatters typically have no title to the property, and are occupying the land illegally.

Conditions in the "bidonvilles" are very poor. Housing consists of poor quality wood, brick and sheet metal shacks, typically 25- 50 m². Dirt floors are common. The shelters are densely packed, with narrow, meandering dirt alleys. Water supply is obtained from public standpipe water (at a significant distance), or from vendors. Storm water runs off the unpaved surfaces, leading to significant erosion. There are no sewerage facilities. Solid waste is dumped indiscriminately. In general, very poor sanitary conditions exist. In addition, there is no electric power or street lighting service.

Conditions are better in the clandestine areas. Buildings consist of concrete/brick construction of generally acceptable quality. Plot sizes average about 100m². Nearly all buildings are two stories, but many have 3, 4, or 5 floors. Road and alley widths between buildings are small, around 4 to 6m. Such access ways are rarely paved, and storm water drains off without any control. Estimates show that about 35% of the houses have direct water connections from public utilities**. Those houses connect to rudimentary (often open) sewers which drain out to adjacent land. About 40% of the houses have electricity connections, and some areas have street lighting***. Due to the narrow meandering streets, solid waste collection is difficult and often ineffective. While conditions in the clandestine neighborhoods are better than in the "bidonvilles", they still lack basic infrastructure, and are developed outside of the GOM land-use and permit process.

* Informal Housing: Upgrading and Prevention Policies and Programs - Morocco, The World Bank, 1983

** Ibid

*** Ibid

Overall, it is clear that housing conditions in these low-income areas are sub-standard. In addition, the-existence of these conditions creates significant erosion and pollution of land and water, both on and off these sites, creating a public health and environmental hazard for the resident population and others nearby.

3.2 Current ANHI Land Development Process

The paragraphs below describe the steps in the current ANHI land development process which will continue to be followed during the AID financed program.

3.2.1 ANHI land selection & acquisition

The first step in project implementation is the selection and acquisition of land. As a standard practice, ANHI selects land at the perimeter of urban areas which has (in all cases) been previously disturbed. In almost all cases, the lands will have been used for agricultural purposes. ANHI does not select land which has been previously used for industrial, waste disposal or other purposes which would degrade it, as this will elevate costs which must ultimately be borne by the beneficiaries. In the past, the land had usually been previously under municipal, state, or other public ownership.

Land selection is also made in accordance with the Urban Master Plan and Land-Use Plan processes. Under the Master Plans, which have been elaborated for most major cities and towns in Morocco, peripheral areas for future residential development are delineated. Industrial zones are grouped and separated away from residential zones. Areas with physical constraints (excessive slope, susceptibility to seasonal flooding) are thus not included for residential development.

These planning instruments are implemented by the Ministry of Housing in direct collaboration with Municipalities, which adopt them once they are enacted into law. Since all ANHI projects are approved by the Municipalities, in the early stages, the ANHI developments are bound by these regulations.

In addition, due to the Plan/Municipal approval process, there will be proper consideration of access to green spaces, provision of services such as schools, clinics, mosques, proximity to water mains, transport routes, etc. If such services are not located near a new development, then ANHI, the Municipalities, the local utilities, and local offices of relevant ministries will jointly program these to ensure their implementation.

3.2.2 Site design

Once a site is selected and the main project elements defined, site planning & design is conducted by licensed architects, under contract to ANHI. The architects, under the guidance of ANHI project managers, will determine basic project layout, number and size of lots, roads (primary, secondary, pedestrian access), parking, green spaces and zones for public services. Typically, designers allocate 25-35% for roads, about 5-10% for green space, and 5-10% for service infrastructure (schools, clinics, mosques, etc.), leaving 45-50% as built-up land. Lot shapes and sizes, and grouping of lots into blocks follow concerns of market demand, infrastructure requirements, land use goals, and cost constraints. A mix of lots for different income-level groups and for commercial

establishments is made. Commercial activities are limited to shops (food and other essentials), offices, and service operations. No manufacturing or light industrial activities are allowed in ANHI projects. Some sample site plans are provided in Appendix 3.

The site plans must follow municipal regulations regarding lot frontage, road width, sidewalk widths, distance between secondary roads, etc.

Next, the on-site and off-site service infrastructure is designed by private A&E firms, under contract to ANHI, under the guidance of the ANHI Project Manager.

Roads designs are based on two types - vehicular and pedestrian. Vehicular streets vary from 20m for the largest site access roads, down to a minimum of 8m for secondary access roads. Sidewalks of 1.5 - 2m width are included. Vehicular roads have one or two layers of asphalt over compacted crushed stone. Pedestrian access paths are generally close to 6m in width, with a single asphalt or concrete layer.

Storm drainage and sewer systems are designed under standards outlined by the Ministry of Interior. Storm drain standards are based on a 10-year storm profile and on-site runoff coefficients. Sewer norms are based on uniform direct household connections and on the use of high quality materials for long life. Sometimes sewer and storm drains are combined and sometimes they are separate depending on flows, allowable slopes, cover requirements, costs, etc.

Regarding water supply and electricity for the lots, ANHI is compelled to work with local public utilities. In most major urban areas, water supply and electricity networks are designed, constructed, and maintained by these utilities (known as "Regies"). In smaller urban areas, the national water and electric utilities take over this function. These institutions have a complete legal authority over these operations.

Once an ANHI project has been identified and the site plan developed, the Regies assume responsibility for designing and implementing this infrastructure. The systems are designed "in-house" in keeping with the national norms followed by all utilities. Thus, the water and electricity supply in ANHI projects conforms completely to national standards. For water supply, the service level consists of a metered house connection. Network designs are based on daily consumption of about 150 liters/person/day, an ample supply of clean potable water. Electricity supply is based also on direct metered service, with residential service reaching about 0.5 kw per household, sufficient for basic lighting and small appliances.

Off-site infrastructure is designed to link the developments to the existing urban water supply, sewer, storm drainage and electricity networks. If a trunk main must be extended, then its costs are built into the project.

ANHI does not design for sewage treatment, as this is the responsibility of the Municipalities, as defined in their overall sewerage Master Plans. ANHI constructs a high quality sewage collection system, which connects to the existing sewage collection and disposal systems existing in the cities. This is a vast improvement over the existing conditions, where sewage is discharged on adjacent lands via haphazard, traditional disposal methods.

Overall, a very good infrastructure standard is achieved, greatly improving the housing conditions of the target population.

Once the site plan and infrastructure design is complete, house plans are developed, with architectural harmony between different plot types, plot sizes, and uses (residential and residential/commercial). They are approved by Municipal offices which administer local building codes. These plans are provided to beneficiaries free of charge. Some sample house plans are provided in Appendix 3.

3.2.3 Current ANHI implementation process

Once a full design is elaborated, works can begin. Tender documents are prepared, bids evaluated, contracts awarded and work begun. All civil works are conducted by registered private construction contractors with considerable experience. Due to a reputation for strict control and rapid payment, ANHI claims that bid prices are often under provisional estimates.

ANHI maintains three levels of control on all contractors to ensure good quality work completed on time. First, the private A&E firms which have prepared the designs are retained to maintain continual oversight of all works on a daily basis. If work has been done incorrectly, it must be redone at contractor's expense. Second, all major materials (concrete, pipe, asphalt, reinforcing steel, etc.) used at a project are sampled and tested to ensure proper conformity to material specifications (strength, pressure resistance, compactness, etc.). This work is carried out, under contract, by a private materials laboratory, known as the Laboratoire d'Essais. Third, ANHI project managers visit the work sites frequently, overseeing all operations and formally accepting work completion.

Specific contract clauses require contractors to maintain the work areas in good condition during the construction phase so as to avoid safety problems, erosion, or other environmental degradation. Contractors must completely clean a project site within 15 days of contract completion. Strict penalties for lateness are imposed.

As lots are completed and staked, they can be delivered when beneficiaries make the final installment payment. Payments are made in three lump sums over the construction process. Along with the lot, beneficiaries receive the land title, a construction permit, and a house plan which they must follow. ANHI does provide follow-up technical assistance to beneficiaries in house construction. House plans can be modified in individual cases, with payment of additional architectural fees, and permitting. Nonetheless, architectural harmony is achieved on the ANHI projects. With the construction permit, the owner can obtain a water system hook-up.

Beneficiaries can now access formal or informal credit to finance construction of their house. Actual construction may proceed in stages, with phases being accomplished as their means allow. In a typical ANHI project, different lot owners will proceed at different paces, but after a period of 5 years about 90% of the houses will be complete.

In order to get an electricity hook-up, the owner must present a "residence permit" ("permit d'habiter"), which can be obtained only at the completion of the house and full clean-up of the construction site, including removal of excess construction debris.

It should be added that, as an incentive for the beneficiaries to complete their houses, an extra municipal tax charge will be imposed on those lot owners who have not completed their houses within 5 years of receiving their lot.

Final site clean-up, sidewalk paving and landscaping (trees along streets and plantings in green spaces) is done by private contractors, paid by ANHI, once 80% of the dwellings are completed.

During the site visits, it was noted that many spots around the developments had significant piles of construction debris waiting to be cleaned up. Sand, gravel and other debris was collecting in the newly constructed storm drains, reducing their effectiveness. ANHI would be wise to encourage the households and construction workers to minimize their debris. This will save them money in the final site clean-up, and reduce the possibility of uncontrolled transport of debris off-site.

3.2.4 Conditions in completed ANHI projects

As the final lots are delivered to buyers and construction begins, the entire development is turned over to the Municipality and the local public utilities for the "operational" phase. The lot owners are now residents who pay taxes in accordance to their house size and location. As tax payers, they now have every right through their elected officials to demand all relevant municipal services, such as garbage collection, street maintenance, street cleaning and public lighting, etc.

It should be added that in approving the project in the early stages the Municipality testified to its eventual acceptance of the operation and maintenance of these developments. Once a project is complete, ANHI is still informally "on-site", providing technical assistance to lot owners, and can verify the Municipality's performance of these tasks.

The "Regies", by the very fact that they have installed the water and electricity network and collect monthly payments, must perform O&M on their networks.

Still, there is some evidence that Municipalities are not completely effective at handling the expanded garbage collection requirements. In the past, once cognizant of this situation ANHI has applied pressure, informally, for service improvement. One strategy that ANHI has taken, and that it will continue when necessary, is to provide garbage collection bins at strategic locations throughout their developments to facilitate Municipal garbage collection.

4. RECOMMENDATIONS FOR AID-ASSISTED PROGRAM OPERATIONS

In general, ANHI projects utilize good measures to ensure a low environmental impact during the land development process. No major environmental problems have been identified.

The concerns raised in Section 3.2 of this document include the presence of excessive debris and lot runoff during the house construction process, and the occasionally ineffective collection of solid waste by Municipalities during the operational phase. Recommendations to ANHI include:

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Documents Reviewed

GENERAL

1. Draft Environmental Report on Morocco, Prepared by Arid Lands Information Center, Tucson, Arizona, for US Man and the Biosphere Secretariat, US Dept. of State, Feb., 1980
2. Environmental Assessment & Impact Statement Handbook, Cheremisinoff, P., Morresi, A., Ann Arbor Science, 1977
3. Etudes en droit de l'environnement, Mekouar, M.A, Editions OKAD, Rabat, 1987
4. AID Environmental Procedures - 22 CFR Part 216 (4-1-88 Edition)
5. Informal Housing: Upgrading and Prevention Policies and Programs - Morocco, The World Bank, 1983, Report 4787-MOR.
6. Les services publics de l'electricite de l'eau, et de l'assainissement, IIIeme Colloque national sur les collectivites locales, Meknes, June 19-22, 1986

ANHI DOCUMENTS

1. Ville de Rabat - Lotissement "La Butte II" - Voirie & Assainissement, Etude Preliminaire, 1985
2. Ville de Rabat - Lotissement "La Butte II" - Voirie & Assainissement, Avant Projet, 1985
3. Ville de Rabat - Lotissement "La Butte II" - Voirie & Assainissement, Dossier d'appel d'offres, 1985
4. Ville de Rabat - Lotissement "La Butte II" - Voirie & Assainissement, March, 1985

6. APPENDICES

Appendix 1

Persons Contacted

N. Laraichi	Director, ANHI
A. Filali	Technical Director, ANHI
M. Halimi	Project Officer, ANHI
E. Loken	Mission Environmental Officer, USAID/Rabat
D. Benjelloun	Consultant to USAID/Rabat
M. Kharchafi	Architect/Consultant to USAID/Rabat
M. Zerhouani	Tajhiz, S.A., (A&E firm)

Existing Project Sites Visited

September, 1988

Oued Fes	Fes (Design complete, works begun)
Dhar Lakhmis	Fes (Design complete, works nearly complete)
Qods I	Taza (Works complete, houses under constr.)
Qods II	Taza (Design complete, works begun)
Massira II	Taza (Works complete, houses under constr.)
Butte II	Rabat (Works complete, houses under constr.)

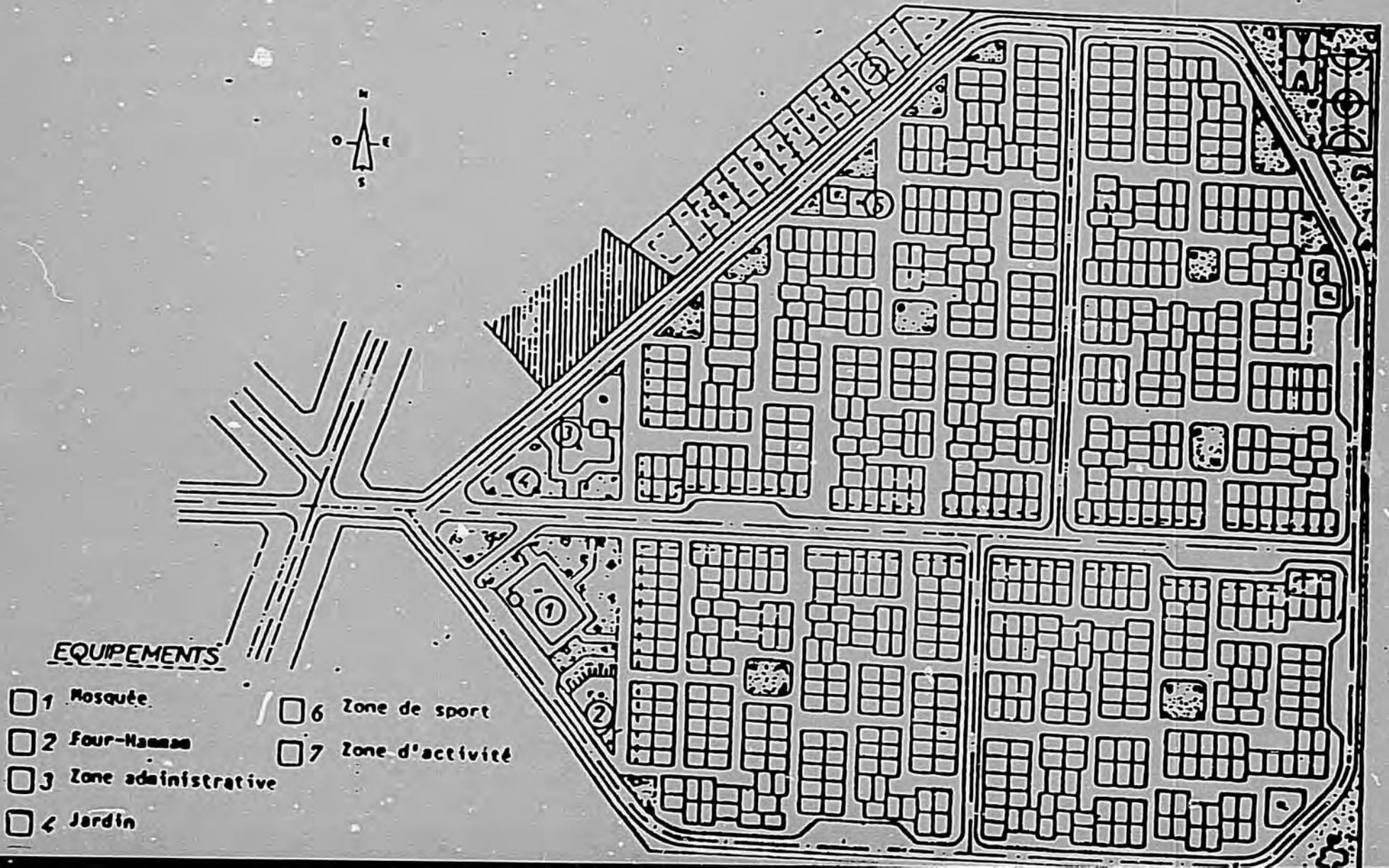
MREI CANDIDATE PROJECTS

SITE CITY	QUDS FES FES	QODS II TAJA	HAJALIS TANGER	MARSIHA BENTI MELLAL	ODAPA I LARACHEZ	SOUK SEBT KENTRA	OULED OUJH KENTRA	JOUTA BIDI KACEN	TOTAL	AVE
AREA - RAW	101.00	23.41	35.55	32.65	34.53	100	140	55.00	522	65
AREA - NET	45.11	10.75	19.48	14.36	18.51			23.64	131.85 **	21
TOTAL # OF LOTS	2057	908	927	1593	1675	3015	4487	2207	16869	2109
LOTS PER HECTARE	20.4	38.8	26.1	48.8	48.5			40.1	32.3 **	37
COEFF. OF LAND USE	45%	46%	55%	44%	54%			43%		
NUMBER OF LOTS										
ECONOM. HOUSING	1380	890	841	1585	1382	2900	4256	1873	15107	16
VILLAS	415				231				646	3
APARTMENT BLOCKS	50		70		49	100	192	159	620	1
COMMERCIAL	181	10	7	4	7	5	16	50	280	
PUBLIC SERVICES	51	8	9	4	6	10	23	125	216	
TOTAL	2057	906	927	1593	1675	3015	4487	2207	16869	
PERCENTAGE BREAKDOWN OF LOTS										
ECONOM. HOUSING	67.1%	98.0%	90.7%	99.5%	82.5%	96.2%	94.9%	84.9%	WEIGHTED AVG	89.6%
VILLAS	20.2%				13.8%					3.8%
APARTMENT BLOCKS	2.4%		7.6%		2.9%	3.3%	4.3%	7.2%		3.7%
COMMERCIAL	8.8%	1.1%	0.8%	0.3%	0.4%	0.2%	0.4%	2.3%		1.7%
PUBLIC SERVICES	1.5%	0.9%	1.0%	0.3%	0.4%	0.3%	0.5%	5.7%		1.3%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		100.0%
PERCENTAGE BREAKDOWN OF AREA										
ECONOM. HOUSING	34.7%	88.0%	71.4%	96.2%	53.0%				WEIGHTED AVG	57.9%***
VILLAS	28.6%				31.1%					17.2%***
APARTMENT BLOCKS	5.6%		10.3%		6.3%					5.3%***
COMMERCIAL	10.2%	2.7%	5.9%	1.9%	2.0%					6.2%***
PUBLIC SERVICES	20.9%	9.2%	12.5%	1.8%	7.5%					13.4%***
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%					100.0%***
AVERAGE LOT SIZE										
ECONOM. HOUSING	113	106	165	87	71				WEIGHTED AVG	103 ***
VILLAS	311				250					289 ***
APARTMENT BLOCKS	504		286		238					336 ***
COMMERCIAL	254	293	1629	698	535					320 ***
PUBLIC SERVICES	3045	1243	2700	655	2327					2504 ***
TOT ESTIMATED COST (000DH)	114459	25090	45753	34468	40910	125420	174724	70000	630624	78
LAND COST (000DH)	14041	1276	4142	5000	2490	5000	7000	16500	55449	6
LAND AS % OF TOTAL	12.3%	5.1%	9.1%	14.5%	6.1%	4.0%	4.0%	23.6%	8.8%	
LAND COST PER M2 RAW	13.9	5.5	11.7	15.3	7.2	5.0	5.0	30.0	10.6	
LAND COST PER M2 NET	31.1	11.9	21.3	34.8	13.5			69.8		
SITE DEVELOPMENT COSTS	100416	23614	41611	29468	38420	120420	167724	53500	575375	71
DEVEL. COST PER HA RAW	994	1017	1170	903	1113	1204	1198	973	1102	10
DEVEL. COST PER M2 NET	223	221	214	205	208			226		
ESTIM. COST / LOT (DH)	55644	27632	49356	21637	24424	41599	38940	31717	37395	36
ESTIM. COST/HA RAW (000DH)	1133	1072	1287	1056	1185	1254	1248	1273	1208	1
ESTIM. COST PER M2 NET	254	233	235	240	221			296		
DATE OF:										
AGREEMENT	1/85	11/37	11/87	11/87				11/87		
START STUDIES		8/87		3/87	6/85		6/88	12/87		
START WORKS	11/86	11/87	7/88	12/87	3/87	3/89	3/89	3/89		
START LOT DELIVERY	1989	1989	1989	1989	1989	1990	1990	1990		
STATE OF ADVANCEMENT										
- STUDIES	75%	90%	80%	100%	95%	0%	50%	65%		
- WORKS	30%	40%	5%	35%	45%	0%	0%	0%		
LOT DELIVERY:										
1989	800	650	400	800	910	0	0	0	3560	
1990	1000	240	441	785	700	1200	1270	1200	6836	
1991	257	18	86	8	65	1200	1908	830	4372	
1992	0	0	0	0	0	600	1270	177	2047	
1993	0	0	0	0	0	15	39	0	54	
SUM	2057	908	927	1593	1675	3015	4487	2207	16869	
TOTAL	2057	908	927	1593	1675	3015	4487	2207	16869	

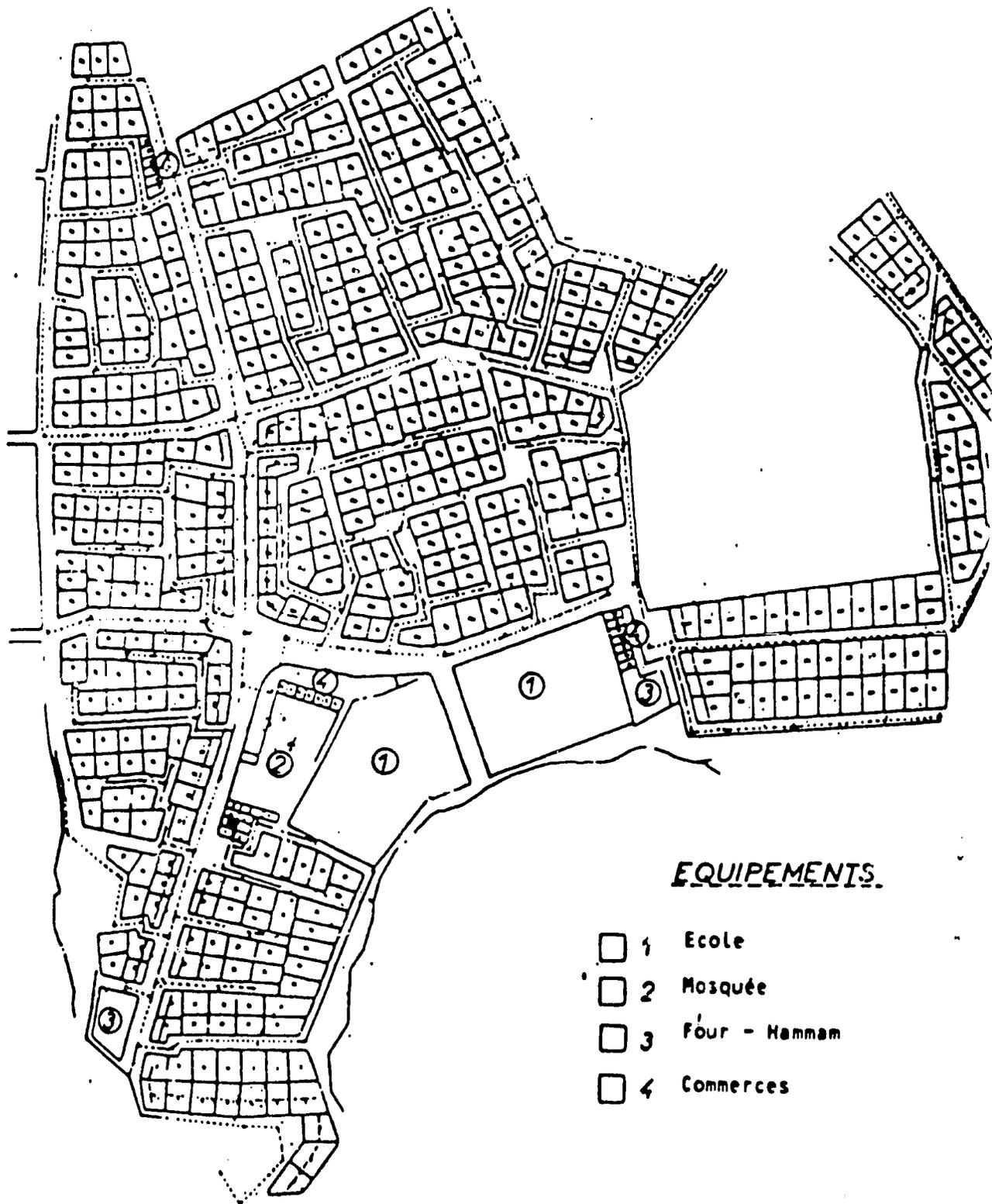
NOTES:

- ** NOT INCLUDING SOUK SEBT, OULED OUJH
- *** NOT INCLUDING SOUK SEBT, OULED OUJH, AND JOUTA

OPERATION BUTTE II
A RABAT
POUR LE RECASEMENT DES BIDONVILLES
DE CHELLAH

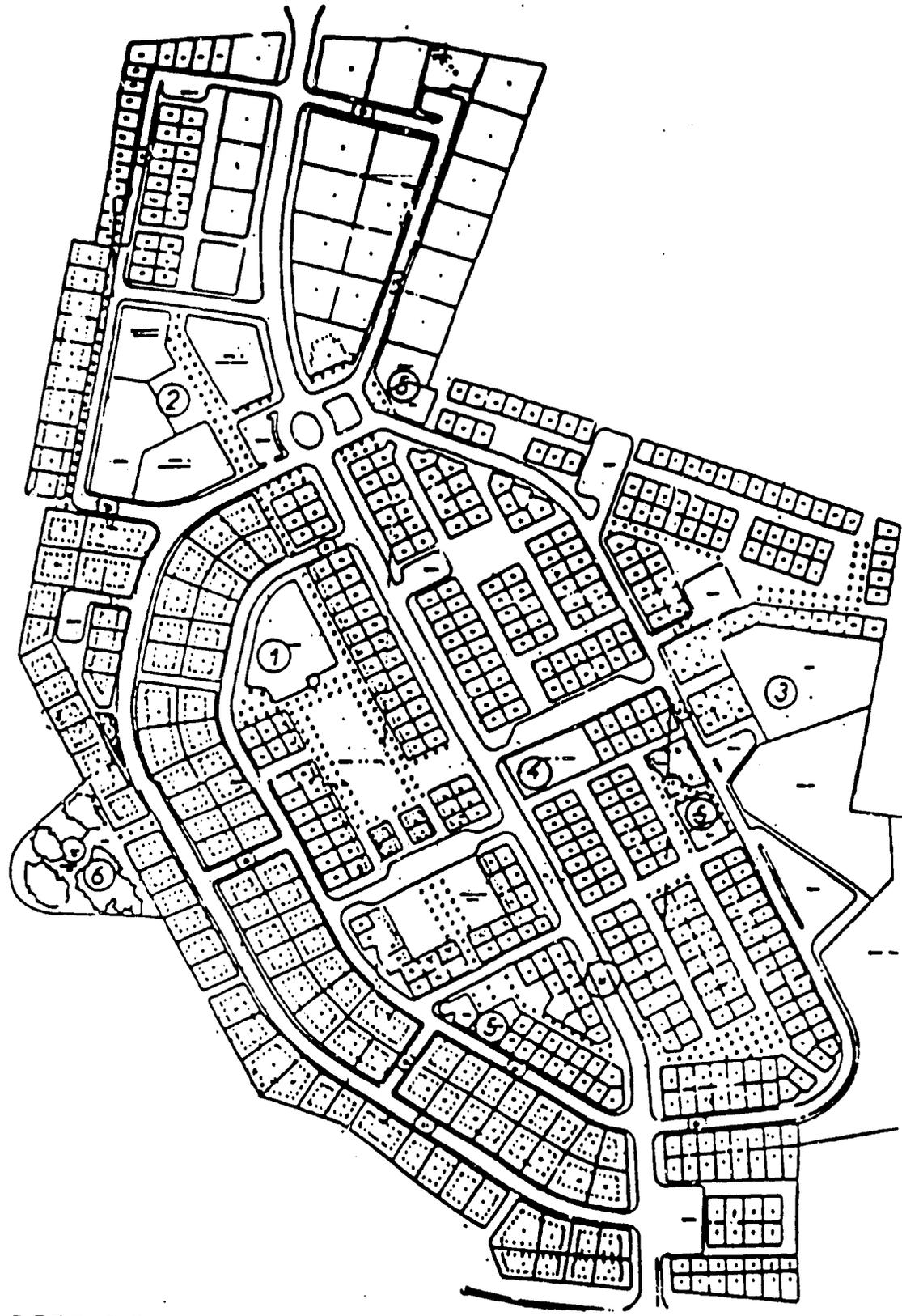


OPERATION DHAR LAKHMIS
A FES



EQUIPEMENTS.

- 1 Ecole
- 2 Mosquée
- 3 Four - Hammam
- 4 Commerces



OPERATION AL MASSIRA II
A TAZA

EQUIPEMENTS

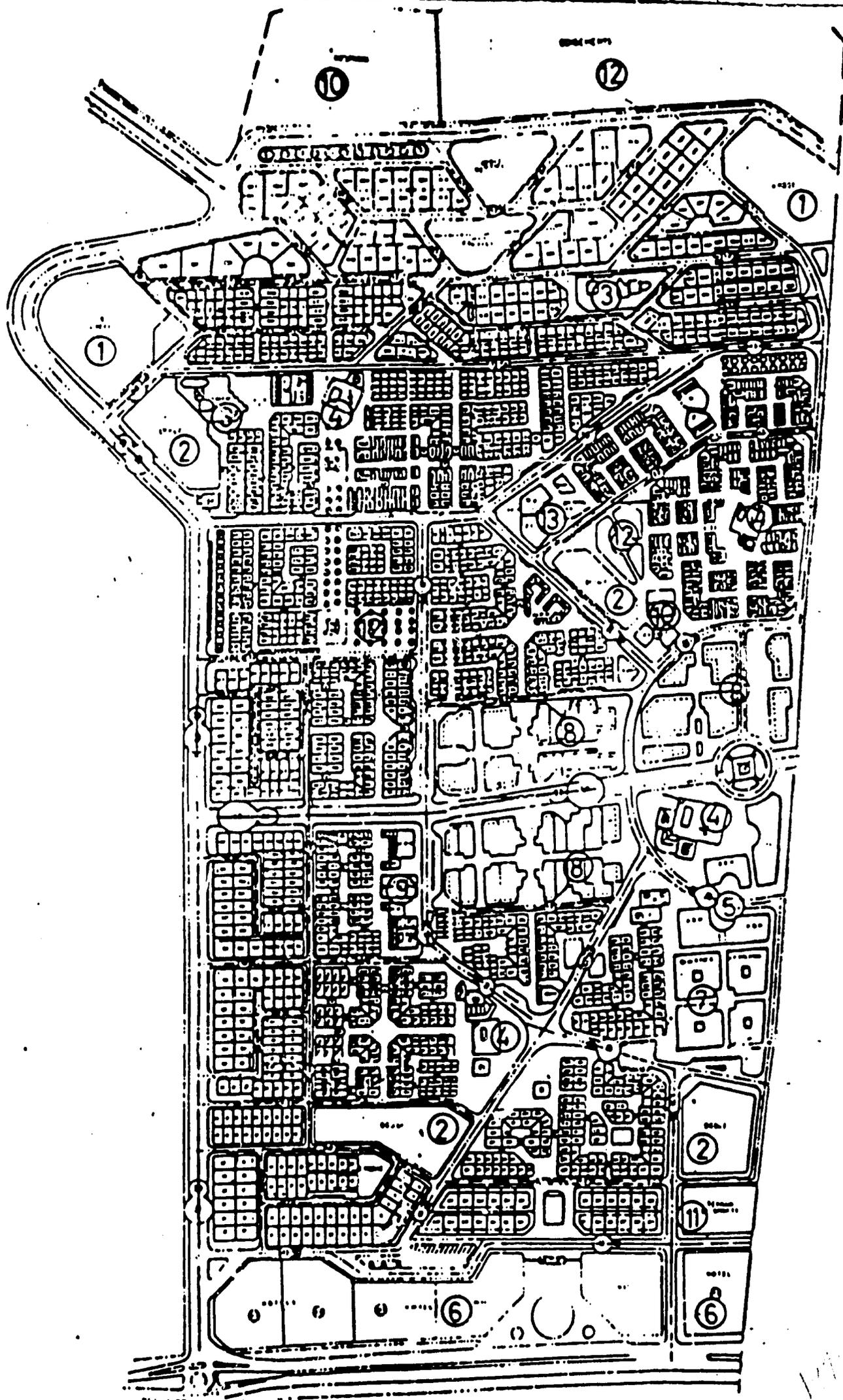
- 1 Mosquée
- 2 Centre administratif:
- 3 Zone de sport
- 4 Maison de jeune
- 5 Four - Hammam
- 6 Jardin

1195

OPERATION "Oued fes" A FES

Equipements

- 1 - Lycées
- 2 - Ecoles
- 3 - Crèches
- 4 - Mosquées
- 5 - Zone administrative
- 6 - Zone touristique
- 7 - Zone artisanale
- 8 - Zone centrale
- 9 - Centre commercial
- 10- Hopital
- 11- Terrain de sport
- 12- Espace vert
- 13- Equipements socio-éducatifs



10

12

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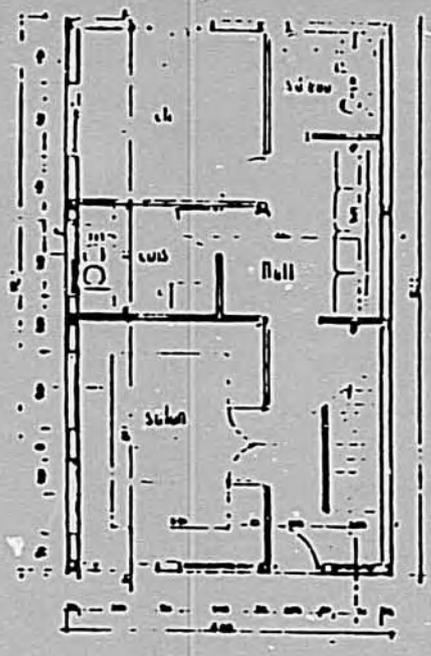
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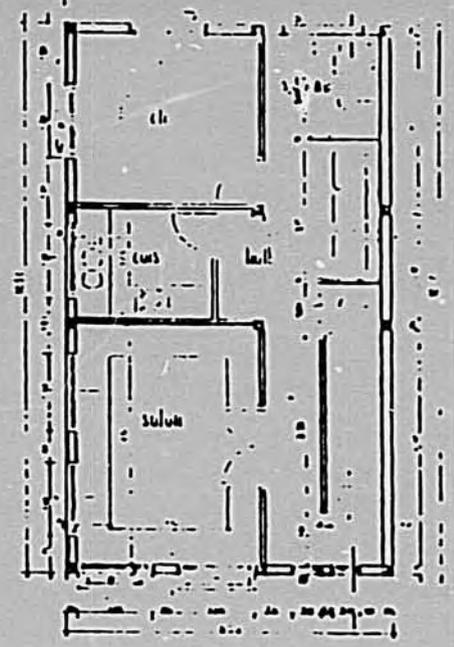
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6

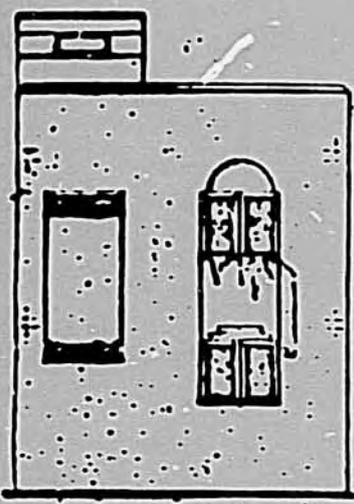
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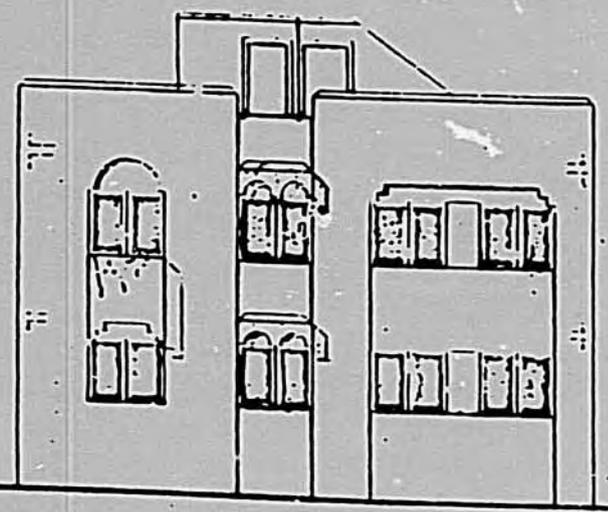
RDC



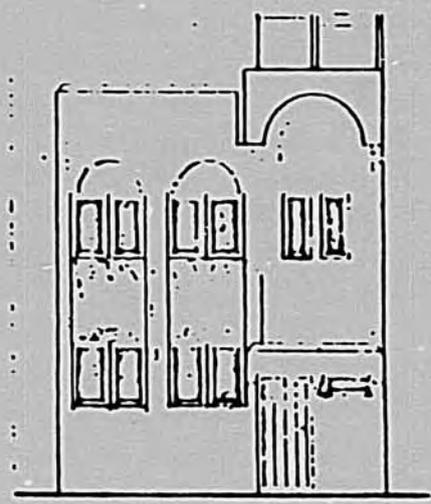
ETAGE



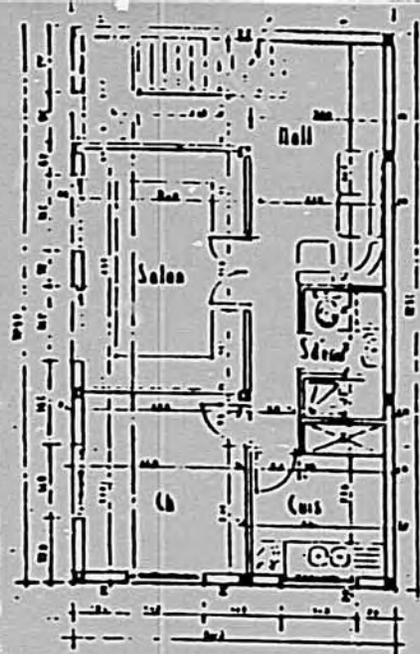
FACADE POSTERIEURE



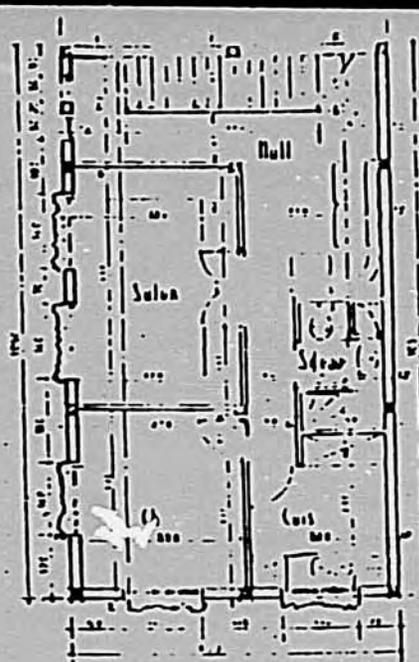
FACADE GAUCHE



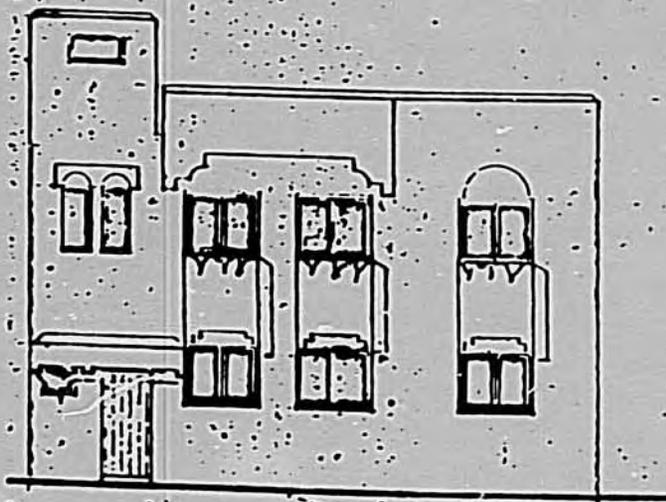
FACADE PRINCIPALE



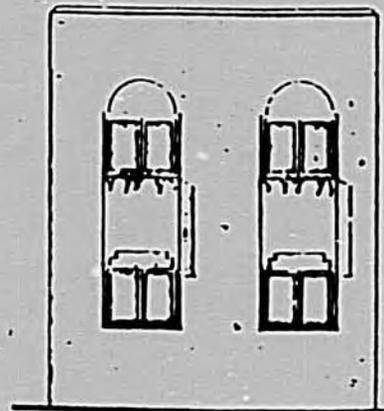
REZ DE CHAUSSEE



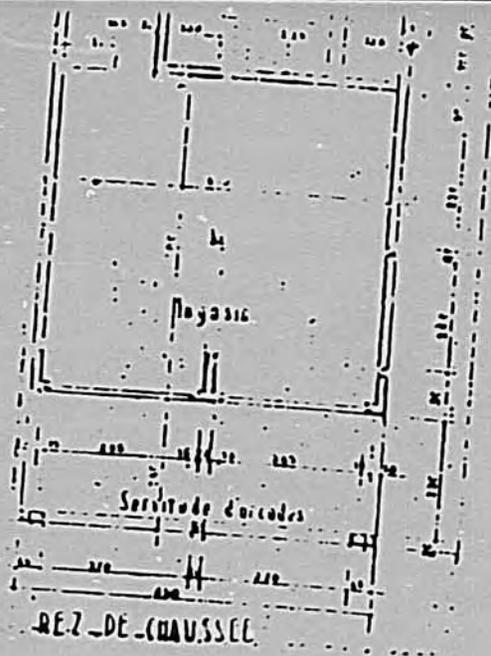
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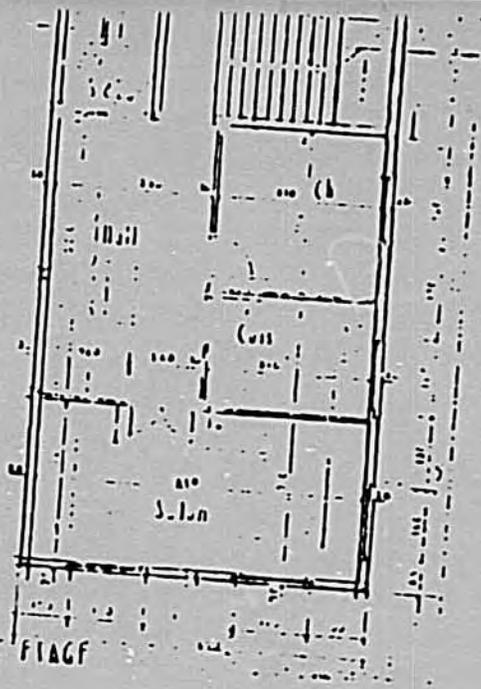
FACADE PRINCIPALE



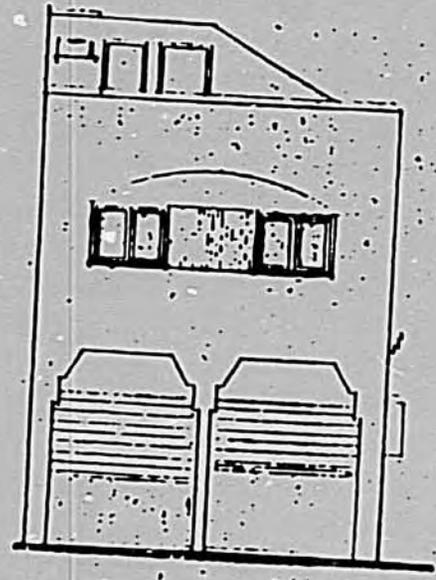
FACADE SECONDAIRE



REZ-DE-CHAUSSEE



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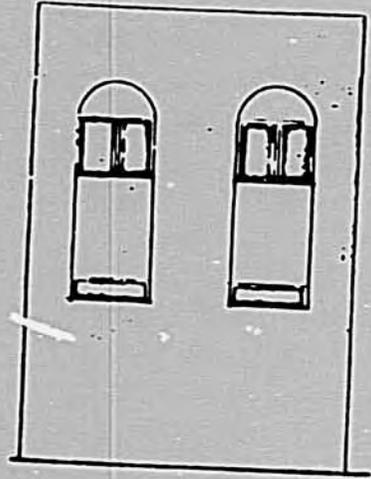
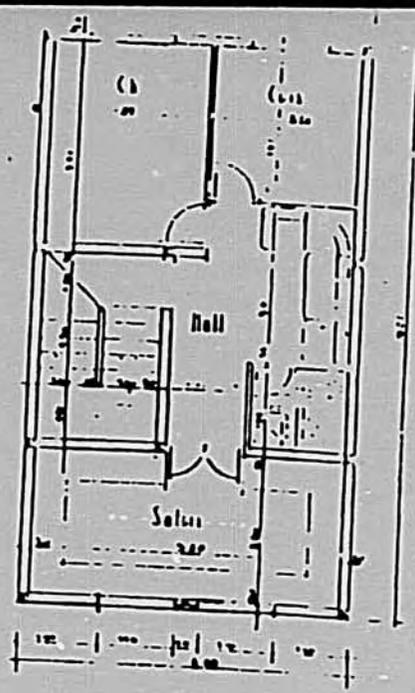
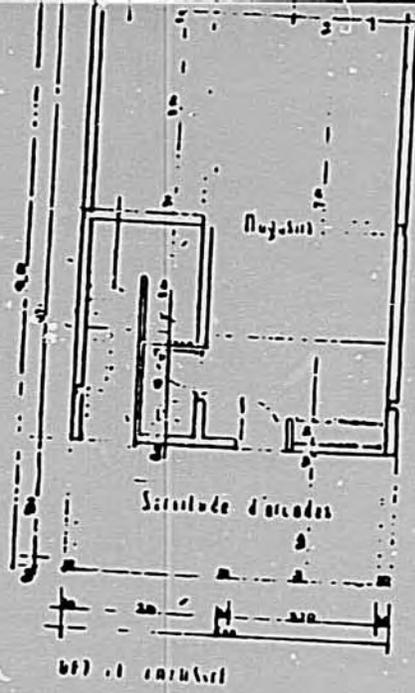


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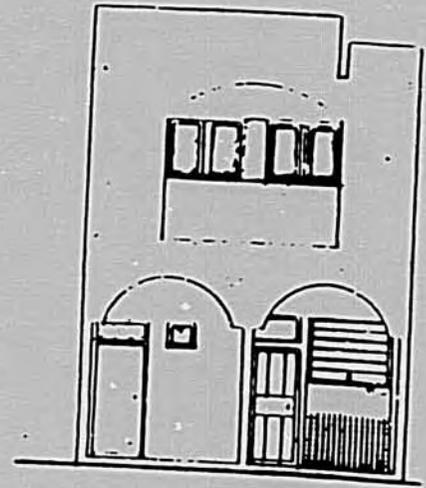


FACADE LATÉRALE DROITE

101



FACADA POSTERIOARA



FACADA PRINCIPALA



ACTION AIL3 INFC: DCM ECON/5

VZCZCRA0457EHV329

OO RUEFRA

DE RUEHC #6598 3512150

ZNR UDUU 223

O 162149Z IEC 89

FM SECSTATE WASHDC

TC AMEMFASSY RABAT IMMEDIATE 8357

BT

UNCLAS STATE 406598

INFO COPY

LCC: 422

729

19 IFC 88

0732

CN: 43235

CHRG: AID

DIST: AID

608-HF-003

AIDAC

E.C. 12356: N/A

TAGS:

SUBJECT: ANHI LOW COST HOUSING PROGRAM (608-EG-003) - APPROVAL OF INITIAL ENVIRONMENTAL EXAMINATION (IEE)

ACTION: RH400

DUE DATE: 12/10

INFO: Dir Dir, Prog...

REFERENCE: (A) RABAT 10406; (B) IEE DATED 10/18/89

ENR - CHRON. RE

1. FOR REGIONAL HOUSING OFFICER, HARRY BIRNHOLZ; INFO MIO, ERIC LOREN FROM ANE/PD/ENV, MOLLY AUL.

2. ANE/PD/ENV HAS REVIEWED THE SUBJECT IEE AND WISHES TO COMMENT THE MISSION FOR PREPARING A COMPREHENSIVE AND THOUGHTFULLY EXECUTED ANALYSIS. THIS CABLE CONSTITUTES AIL/WASHINGTON ENVIRONMENTAL CLEARANCE OF THE SUBJECT PROJECT, AS REQUIRED BY AIL'S ENVIRONMENTAL PROCEDURES (22 CFR 216).

3. PURSUANT TO 22 CFR 216.3(A)(2)(I), ANE/PD/ENV HEREBY CONCURS IN THE MISSION'S THRESHOLD DECISION THAT THE PROPOSED ACTION WILL NOT RESULT IN A SIGNIFICANT ADVERSE EFFECT ON THE ENVIRONMENT. IN ACCORDANCE WITH 22 CFR 216.3(A)(2)(III), THEREFORE, ANE/PD/ENV HAS RECORDED A NEGATIVE DETERMINATION WITH RESPECT TO THE SUBJECT PROJECT, AND PREPARATION OF AN ENVIRONMENTAL ASSESSMENT

WILL NOT BE REQUIRED.

4. ENVIRONMENTAL CLEARANCE IS PROVIDED SUBJECT TO THE UNDERSTANDING THAT NO AID FUNDS SHALL BE USED TO FINANCE ANY ASPECT OF THE DESIGN, CONSTRUCTION, COMMISSIONING, OPERATION, MAINTENANCE, AND/OR REPAIR OF SEWAGE TREATMENT FACILITIES UNDER THE SUBJECT PROJECT. SHOULD SUCH ASSISTANCE BE CONTEMPLATED, AN ENVIRONMENTAL ASSESSMENT MUST BE PREPARED BY THE MISSION AND APPROVED BY ANE/PD/ENV BEFORE A DECISION IS MADE TO PROCEED.

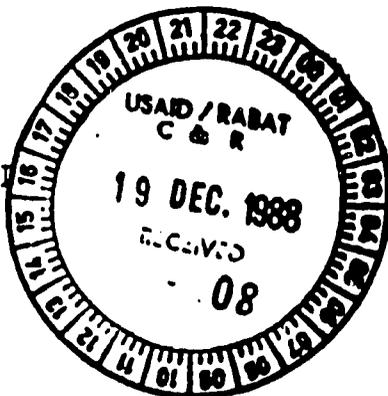
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