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ASSESSMENT OF THE IMPEDIMENTS TO THE
PRIVATE PROVISION OF SHELTER
IN
ALGERIA

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EXECUTIVE SUMMARY

The pace of economic reform in Algeria is accelerating. In the process, the country is rapidly transforming from a centrally planned to a market driven economy. The private sector has emerged as a major participant in the production of housing, but the development process itself is in a state of transition governed primarily by ad hoc arrangements rather than clear procedures and regulations.

Several pieces of important legislation are presently being discussed in the National Assembly, or have recently been enacted. 1) The Land Act (Loi No. 90-25 of 18 Nov., 1990) establishes the principal of private land transactions breaking the previous monopoly held by local governments. 2) A new Town Planning Act which lays down the basic principles for further land use has been submitted to the National Assembly. It is largely a technical act and passage is expected quickly. 3) A new law on Real Estate Development is more problematic. The 1986 Act on Real Estate Development theoretically remains in force, but has proven unworkable and is not being enforced; while the debate continues on how a new law should be formulated or whether a specific law is required at all. 4) the Communal Act (Loi No. 90-08 of 7 April, 1990) not only defines the usual responsibilities of local authorities for urban planning, infrastructure development and enforcement of building codes, but also explicitly makes local governments responsible for creating favorable conditions for public and private housing development. 5) The Import Concessions Act (Article 41 of the 1990 Complementary Finance Law) breaks the state monopoly on certain imports and lays down conditions for private importation of equipment, vehicles, spare parts and a number of consumer goods. While timber and wood products are included in the list of approved imports, the act is primarily expected to increase building materials supplies by stimulating local production.

The cycle of real estate development in Algeria, as elsewhere, consists of two major phases, land development and housing development. The land development phase has three parts: preparation, sitework, and disposition. The preparatory part includes: land acquisition; definition of norms and standards; preparation of subdivision plans; and technical review of plans along with obtaining the permit to subdivide. The sitework part includes: staking out the site; grading the site; preparing and surfacing the road network, storm drainage, water and sewer system; and installing gas and electricity. The disposition part includes: transferring responsibility for the roads, drainage, water and sewer system; transferring the utility network, transferring the plots; and titling and registration. In the past the entire land development process was the responsibility of local government (APC); although they were seldom directly involved in executing the work. Technical offices at the Wilaya (State) level, generally performed the work on behalf of the APC. Under terms of the new Land Act, private developers and others may assume the development

initiative but the approval process and the agencies involved will remain unchanged.

The housing development phase can be divided according to pre-construction; construction; and post-construction work. The pre-construction part includes: preparation of the unit design; matching the design standards and affordability criteria used with the market segment targeted; review of plans for compliance with technical standards of local jurisdictions; and issuance of building permit and certification of material quantities. The construction part includes: obtaining building materials; arranging construction financing; administering the construction work itself; obtaining the required inspections and certifications of the public agencies; and supervision of the construction work on behalf of the owner or lender. The post-construction part includes: arranging for utility hook-ups; pricing, marketing, and selling the units; arranging for payment which may include housing credit for the buyer; and title transfer. Most of these tasks are the responsibility of the developer whether it be a public agency or a private company. Most developers use a variety of professionals contracted to undertake specific tasks.

Most constraints to private sector housing development are non-procedural although a few procedural constraints do exist. The most troublesome one was the monopoly position which APCs held (prior to the new land law) on creation of new subdivisions for housing. The 1986 Housing Development Act contained other constraints such as the limitation on the size of the project (200 units) a private developer could undertake. The restrictions contained in the 1986 law are presently being ignored and private housing developments are underway containing more than 15,000 units, evidence that the procedural constraints have had minimal impact.

The major non procedural constraints inhibiting broader private sector production of housing are related to housing finance, to the servicing of land, and to building material shortages. Access to credit has not been a problem for those private companies now active in housing production but expansion of the activity to include production of housing for sale to middle income households and changes currently underway in the economy at large will affect savings patterns and will require reform in the housing credit system, currently dominated by CNEP.

The lack of serviced plots is one of the major constraints to increased housing production. Local governments have not been able to keep up with the task of providing infrastructure to existing subdivisions. At the present time, subdivisions containing a six year supply of plots have been created but lack services necessary for housing to be built.

The other major constraint to increased housing production is an absolute shortage of critical building materials particularly cement and steel reinforcing rods. While increasing the supply

of other materials is also important, the current production and importation of cement and steel reinforcing rods limits construction to approximately the present level of production.

A number of other constraints are presently having relatively minor effects on the housing sector, but their importance would grow if significant expansion of housing production were attempted. These constraints include: 1) Land titling problems related to gaps in the cadastral system. This could create impediments to the development of mortgage credit; 2) High construction standards and the tendency to over-build compound building material shortages and raise the cost of housing, adversely affecting affordability; and 3) The shortage of experienced personnel limits the abilities of local authorities, public and private developers, contractors and designers to greatly expand their respective contributions within an expanded housing sector.

A three pronged strategy is recommended for A.I.D. assistance. The housing sector policy reforms underway in Algeria today are leading toward a market oriented real estate industry in which the private sector will play a substantial role. As the first element of a strategy, it is recommended that A.I.D. establish a schedule of regular consultation visits to Algeria in order to be a part of this policy reform dialogue. The second element of the strategy is to provide technical assistance funds to support specific issue oriented tasks such as :

- 1) mobilizing a cadre of professionals who understand market oriented housing sector operations; and
- 2) competing the process of divestitures of the public rental housing stock.

The third element of the recommended strategy is to define and provide financial assistance to a series of pilot projects and studies aimed at promoting institutional change.

One set of projects or studies might be directed towards mobilizing the latent housing stock, e.g. completing the units which are currently underway, and bringing the unoccupied units onto the market. The former may require a study to assess the overall situation and to design an action plan for completing the unfinished subdivisions and housing units, as well as technical and financial support for particular pilot projects. The latter may require a detailed study of the private rental housing market to assess the effects of current rental laws and to propose modifications likely to stimulate an increase in the private supply of rental housing.

A second set of projects or studies might be directed toward increasing infrastructure development for housing. A.I.D. assistance could be in the form of a study of infrastructure financing mechanisms at the national level and pilot projects in selected municipalities designed to demonstrate appropriate financing and cost recovery methods applied to servicing

existing neighbourhoods or new housing developments.

A third set of pilot projects might be aimed at addressing the housing needs of the middle and lower income groups. At present, public sector and private sector developers are building for the upper income segment of the market. In order to affect a change A.I.D. might support projects aimed specifically at:

- 1) creation of minimally served subdivisions with financing for owner built housing construction;
- 2) demonstrating ways to lower housing costs;
- 3) providing training and technical support for small contractors who do the actual construction in owner built housing.

INTRODUCTION

The fieldwork for this report consisted of meetings and informal discussions which took place in Algeria between September 29 and October 9, 1990. As a result of the rapid pace of economic reforms, the status reported is as of mid-October and the recommendations contained herein should be considered time sensitive.

The Terms of Reference called for a detailed review of the regulations and practices governing real estate development and for preparing a description of the various administrative procedures to be followed in the project development cycle. With regard to this task, it should be noted that commercial private development did not exist. In the centrally planned system which has predominated until quite recently in Algeria. During the last three decades, there simply was no place for private development (See note (1)). Since private real estate development did not exist, there was no need to regulate it; therefore there were few specific regulations and procedures in place prior to the real estate development act of 1986. This act, however, imposes so many restrictions that if applied to the letter, no private activity would take place at all. The authorities quickly realized it was unworkable and now acknowledge it is obsolete. Yet, private real estate development is emerging in spite of this legal obstacle, largely through "ad hoc" arrangements between developers and local authorities that knowingly by-pass the 1986 act. The present situation is therefore a transitory one; whatever regulations and procedures existed previously, have become obsolete and are being by-passed while the legislative and regulatory framework that is in the making has not been completed. Thus, for all practical purposes, one can say that at this point, there is no explicit set of regulations and procedures governing private real estate development. Yet, as far as the institutional set-up is concerned, nothing prevents private developers from functioning. Some private developers do indeed complain about the lack of clarity and information in the present transitional system. But this may be related to their own lack of experience as others have found their way in the system and say there are no major hurdles.

Whether a comprehensive regulatory framework is desirable at all, is an important question that the Algerians are now starting to ask themselves, especially after the 1986 real estate development act has proven to be impracticable. In most countries, there is no specific real estate development code. Practices are regulated by land management and urban planning laws, by codes of practice laid down by professional associations or by the commercial code.

(1) Although an estimated 60 percent of all new housing was and is being supplied by the private sector, this was achieved essentially by owner-builders constructing for their own use.

Apart from a few essential controls, what is most needed now in Algeria is encouragement of the early efforts by private developers to make up for the effect of the 30-year moratorium on private real estate development. First, this requires formal government recognition of the private developer's role in shelter production; and recent public initiatives show that the thrust definitely goes in this direction. The private real estate sector will include the newly emerging private developers as well as the present public developers who are to be privatized at a later stage; and who have already been given a degree of autonomy. Second, private developers must be given access to essential inputs like land, materials and credit. It is the state monopoly on these inputs, rather than specific laws and regulations, that has prevented private developers from functioning during the last decades. This monopoly is now being broken, although, for some time to come, the public developers may enjoy comparative advantages. The 30-year moratorium on private development has two other repercussions that can only gradually be overcome. For one, the profession itself has disappeared together with the specific skills and professional networks. The result is that the few private developers now in business are new to the field and are operating alone with limited expertise and experience (See note (2)).

Estrangement, or even antagonism between public agencies and private operators is another consequence of the dominant ideology of the time. Replacing this with more cooperative modes of formal and informal interaction is essential, and although there are encouraging signs, it will take time. On the whole, the transition from a state-controlled to a market-oriented real estate sector, is a profound structural change and adaptation of the regulatory environment is only one among its many ramifications.

(2) Most of the emerging, strictly private real estate developers are architects, contractors or businessmen; their total number is estimated at 15 to 20. Some of the public developers (EPLF and OPGI) have considerable experience within the limitations of the protected environment in which they operate.

A. STATUS OF LEGISLATIVE REFORMS

The political movement, which launched the housing development reform act of 1986, has gained considerable momentum in the past twelve months. This is evidenced by several major pieces of legislation recently enacted or presently being debated in Parliament. Actual copies of those acts which have not yet been approved were not available for perusal. In these cases, the following reviews are based on discussions with knowledgeable government officials (See note (1)).

1. The Draft Land Act (Loi Fonciere)

The new Land Act that has been in preparation for some time was recently approved by the Government and is now under discussion in the National Assembly. Because circulation of the draft law is restricted it could not be consulted. It seems however that the new Law has largely been agreed upon and is now in the final drafting stage. Once approved, it is expected to bring about radical changes in land administration. Among others, the local authorities' present monopoly on land administration, sales and development would be abolished, and the scope for a legal private land market considerably enlarged, which should eliminate most of the current illegal practices. Separate local land administration agencies would be created to reduce the local authorities' direct involvement in land administration. These agencies, however, would retain a right of preemption on all private land offered for sale. The main purpose of this measure apparently is to prevent the current practice of under-declaring sales prices in order to reduce the amount of transfer taxes paid on the transaction.

In parallel with these drastic changes in land legislation, other liberalizing measures have already been taken or are being prepared. The function of notary was privatized as of the first of January and a new Town Planning Act (see below) is to be submitted soon to the National Assembly. Reorganization of the cadastre is underway and may be supported by a World Bank project scheduled for appraisal in 1991. The cadastre has not been kept up to date for several decades and in its present state is a major constraint on a free land market. Land and property taxes are also being revised. The management capacity of the local authorities, among others in land administration, is being upgraded with the support of an on-going World Bank project.

(1) The Land Act was approved after the consultants left Algeria as the "Loi No. 90-25 du 18 Novembre 1990 portant orientation fonciere".

Effects and implementation:

The new act is expected to resolve many of the pending land tenure conflicts, and eliminate most of the illegal practices that are currently widespread. It would also considerably enlarge the scope for a legal private land market, though the public authorities are likely to retain some measure of control through the local land agencies to be established. As its designation indicates, the new land act merely gives the basic orientation of future land management. Before it can become effective, new regulations, institutions and procedures must be developed, while the act refers to these it does not itself set them in place. A definitive assessment of its effectiveness must therefore wait until they are established.

2. The Draft Town Planning Act (Projet de Loi sur l'Aménagement et l'Urbanisme)

The draft for this act was prepared earlier this year and is scheduled for submission to the National Assembly after approval of the new Land Act. The Town Planning Act will lay down the basic principles for future land use. As a technical act, politically less sensitive than the Land Act, the proposed Town Planning Act is not expected to meet with great opposition in the Assembly. The act significantly modifies the existing legislation, making it generally more operational.

Among others, the rigid distinction between urban, i.e. buildable, land situated within the legally defined urban perimeter, and agricultural or non-buildable land outside these perimeters would become more flexible. At the same time, future plans would cover the entire territory of a commune, and not just the area within the urban perimeter. In addition to the existing urban plans ("schema directeur d'aménagement urbain" or SDAU and "plan d'urbanisme directeur" or PUD), the act introduces detailed land use plans ("plan d'occupation du sol" or POS).

Effects and Implementation:

Although earlier drafts (March 1990) of the act put the emphasis on controls rather than on incentives where private sector involvement was concerned, the general approach is more realistic than before. Documents accompanying the draft dealt with a number of key issues to be tackled, such as servicing of existing subdivisions, regularization of illegal constructions, urban rehabilitation, and definition of appropriate standards. With land management, land ownership and land development being the basic problems, the effectiveness of the town planning act will depend much on that of the land act. As with the land act, the proposed town planning act merely sets up a framework, leaving implementing measures to be settled through by-laws and regulations that remain to be approved.

3. The Draft Real Estate Development Act
(Projet de Loi sur la Promotion Immobiliere)

The 1986 Act on Real Estate Development, which theoretically remains in force, has proven to be unworkable and is not being respected either by the public authorities and developers or by the private sector. It did not even recognize the profession of real estate developer and imposed a number of stringent conditions that actually prevented private real estate developers from operating. When this became obvious in subsequent years, a new and much more liberal act was drafted in 1989, which is still under discussion today.

At this point, however, the authorities are realizing that even this new draft law may still be too restrictive to free up private real estate development to the degree required for meeting the country's huge demand for housing. The on-going debate now centers on the question whether a specific real estate development law is required at all; some argue that merely repealing the 1986 Act would suffice, in which case real estate development would be regulated by the various existing laws and regulations, like any other commercial activity.

Effects and Implementation:

The debate continues, and no new draft law has yet been proposed to replace the 1989 law. At the time of the mission, the public developers were setting up an association (See note (1)). The very issues under discussion (building market rate vs. housing for lower income groups) demonstrate that considerable progress is being made towards removing obstacles to a free-market housing and real estate sector. Meanwhile, there is nothing in practice that prevents private developers from entering the market, and whatever new legislation may come up in the future is likely to further facilitate this policy.

4. The Communal Act
(Loi No. 90-08 du 7 Avril 1990 relative a la Commune)

This recent Communal Act, apart from defining the usual communal responsibilities with regard to urban planning, infrastructure development and enforcement of building codes, explicitly makes the commune responsible for creating favorable conditions for public and private housing development. Participation in real estate ventures, encouragement of housing cooperatives and residents' associations, assistance to developers and undertaking housing development programs or participating in

(1) Also, we subsequently learned that in January 1991, the Ministry of Commerce organized a fair for foreign and Algerian private developers

them are listed as the means to achieve this (Art.106). Private developers, although not expressly mentioned, do not seem to be excluded from this list of possible actors in the real estate sector.

Effects and Implementation:

This act has already come into effect, but its practical consequences for private sector real estate activity can only be assessed once other related acts and regulations have become effective.

5. The Import Concessions Act (Loi sur les Concessionnaires)

The new regulations governing import concessions that will go into effect on the first of January 1991 breaks the state monopoly on certain imports and lays down the conditions under which private foreign or local import and trade companies will be allowed to function. The goods that private companies will be allowed to import include, among others, a number of consumer items as well as industrial plants and equipment.

With the exception of timber and some wood products, however, building materials are not on the list, and will continue to be imported by the designated state distribution companies alone, as before. Thus, by controlling building materials imports, while liberating the importation of industrial plants and equipment, the Government obviously is supporting its policy of promoting the development of a private local building materials industry, which is already starting to bear fruit.

Effects and Implementation:

In the short term, this new law will certainly help the many small private factories that are ailing or producing at only a fraction of their capacity, because of the lack of spare parts and modern machinery, and in the longer term it will certainly encourage new private enterprises. But it will not immediately alleviate the acute shortage of cement and steel, which puts an absolute limit on the number of housing units that can be produced.

B. THE REAL ESTATE DEVELOPMENT CYCLE

This section describes the full cycle of real estate development as it is currently working in the housing sector in Algeria. There are two, often separate, parts of the cycle - Land Development and Housing Development. Each of these parts has a number of specific steps or actions which are discussed below. Figure 1 outlines these actions and indicates the party responsible. The process described is applicable for both private sector and public sector developers. When the responsible party is different both are shown in the matrix.

The private sector includes both organized developers who build housing units for sale and individuals who build their own houses. This distinction is also drawn in the matrix where appropriate. The procedures described are not codified in any single place, rather, they are the steps which actually occur in practice. The basic structure is derived from the consultants own knowledge of the development process, with the specifics of each step drawn from interviews and discussions (See Annex 5). Time factors and issues related to coordination are discussed only when they are identified as excessive, or perceived as a constraint on private sector activity.

Certain steps are included in the development cycle which, at the present time, are being undertaken on a more or less tentative basis following common practice rather than any conscious examination of alternatives. They are included in the matrix primarily to illustrate this point. As the market matures these steps will become increasingly important requiring conscious actions to enable developers to respond in a competitive environment.

I. Land Development Phase

Land development or subdivision process can be divided into three phases: a) Preparation; b) Site work; and c) Construction.

Preparation

Preparatory phase includes: land acquisition; definition of standards appropriate to the target market; preparation of subdivision plans; and review and approval of the subdivision plans. These are discussed below.

Land Acquisition:

Under the present system, land acquisition for housing subdivision is exclusively the prerogative of local government authorities (APC). Under the proposed new laws private land owners will be allowed to purchase land for housing development. In practice however private developers have entered into partnerships with private land owners rather than

Figure 1 -- Matrix of Actions/Agents in the Real Estate Development Process

		ACTIONS	AGENTS
LAND DEVELOPMENT PHASE	PREPARATION	Land Acquisition	APC
		Definition of Norms and Standards	APC/Developer
		Preparation of Sub-Division Plans	Bureau de Etude (Pvt)
		Technical Review of Plans/Permit to Subdivide	Direction de Urbanism (DUCH)/APC
	SITWORK	Staking out the Site	Surveyor (Pub./Pvt.)
		Grading the Site	Contractor
		Preparing and Surfacing the Road Network, Storm Drainage, Water and Sewer System	APC/ Developer
		Installing Gas and Electricity	SONELGAZ
	DISPOSITION	Transferring the Roads, Drainage, Water and Sewer Systems	APC
		Tranfering the Utility Network	Regional water/sewer Co., SONELGAZ
		Transferring the Plots	APC to Individual Land Dev. to Builder
		Titling and Registration	DIE for APC
HOUSING DEVELOPMENT PHASE	PRE-CONSTR.	Design	Bureau de Etude (Pvt)
		Standards and Affordability	Developer/APC
		Technical Standards	Control Technique de la Construction (CTC)
		Certification and building permits	APC
	CONSTRUCTION	Building Materials Supply	Owner or Contractor
		Construction Finance	Self or pre-sales CPA, CNEP, other ban
		Construction Work	Laborers/Contractors
		Inspection and Certification	CTC (major work)
		Construction Supervision	Owner/Bureau de Etud
	POST-CONSTR.	Utility Hook-ups	Regional water/sewer Co., SONELGAZ
		Pricing, Marketing and Sales	Developers
		Housing Credit	Buyer(self)/CNEP/Bar
		Title Transfer	Notary (Pvt)

purchasing their land. The partnership then builds units for sale. The original land owner is paid for his land from the proceeds of the sale of the completed units in accordance with terms established in the partnership agreement. Thus in practice private development is already occurring on private land. As this approach could be interpreted as a means to circumvent the law prohibiting the private sale of land other than to the APC, it involves a certain degree of risk on the part of private developer as any prior agreements concerning the value of the land which is to be paid from the sale of units can not be enforced under the law. This is an unnecessary risk which should be eliminated by the proposed new law, although the partnership approach to land acquisition is likely to remain as an alternative to land purchase.

The price of land which local governments are prepared to pay is the major reason private owners do not wish to sell their land to the APC. The market price seems to be about 10 times the official price although market prices for land vary considerably from city to city and within a city based on accessibility of services and general desirability of the site. The proposed new land law envisions allowing the APC to match the terms of any private offer to purchase land thus providing local government a way of acquiring land at market value for public purposes and a means of discouraging the current practice of reporting a low price on land sales in order to minimize the 12% tax paid on such transactions.

The present restrictions on land transactions preclude private developers from financing the purchase of land although it is not at all clear that lenders would be prepared to provide such financing if the restrictions did not exist. It is quite common in other countries for lenders to require that land developers own the land and use it as collateral when borrowing for the land development costs.

2) Definition of Norms and Standards:

The purpose of this step is to be certain that the proposed sub-division is planned and developed at standards appropriate to the intended use. At the present time only APCs can create subdivisions thus the normal standards are largely fixed. But in the future it will be the responsibility of the developer whether public or private, although it must occur with at least tacit approval of the local authority. The decisions made at this stage such as plot size, road reserves and the level of infrastructure to be installed dramatically affect the end cost of the units and therefore affordability. At the present time, the private sector is only building for the upper income market and the public sector developers are not fully reflecting project costs in the price of the units sold, thus this step is not being directly addressed by any formal sector developers. But it is the major factor limiting the ability of APCs to produce lots at a rate sufficient to meet the demand of individuals wishing to build their own houses. As a result

every large city in Algeria is experiencing the rapid growth of unplanned, unserviced, unauthorized sub-divisions.

3) Preparation of Sub-Division Plans:

Subdivision plans are prepared by individual professionals employed directly by the technical office of the province or by private sector professional offices under contract. Payment is usually on a fixed fee basis which is set according to the size (land area) of the project. The cost of preparing the plans is paid by the APC, but eventually will be paid by the developer seeking permission to subdivide. These costs can generally be financed by the developer as part of the land development costs.

4) Technical Review of the Plan/Permit to Subdivide:

Under the proposed new system the local government has determined that the plan complies with the urban development plan of the city and meets the approval of the utility companies. Compliance with the urban plan is verified by the office of urbanization (DUCH). This process requires only a few weeks. The review process of the utility companies with regards to the implications of the subdivision on their infrastructure investment program is more problematic. Under the proposed law permission to subdivide land for housing will not obligate the APC nor the utility companies to provide trunk infrastructure to the site, but permission will generally be withheld until those services are at least programmed into the budgets of the various agencies. A private developer may offer to pay the cost in order to speed up the process. Receiving permission to sub-divide land for housing will carry with it the obligation on the part of the developer to provide the on site infrastructure prior to selling individual plots. Theoretically, the local government and the utility companies will install the secondary infrastructure and the developer will install the tertiary systems himself. Due to the limitations on infrastructure financing, approval of new subdivisions can take as long as three years. While this situation will not be affected by the proposed new law there is no shortage of approved subdivisions at the present time. Between 1975 and the end of 1988, 4142 subdivisions of less than 25 hectares (Lotissement) and 257 special planning districts of more than 25 hectares (ZHUN) had been created in urban areas all over Algeria. The Lotissement contain 467,619 plots of which 318,381 had been sold and 57,060 provided with infrastructure. Houses had been completed on 63,000 plots and construction was underway on an additional 95,405 houses. In the ZHUN, there are 660,142 plots on which 179,523 houses had been completed and 107,337 on which construction had begun. Thus, at the end of 1988 there were more than 650,000 legally registered plots on which no construction had yet begun (See Annex 4). This is approximately a six year supply at the current rate of housing construction including public and private sector developers as well as individuals building their own houses in legal or illegal subdivisions.

b. Sitework

The sitework process includes: staking out the site; grading the site; preparing and surfacing the road network, storm drainage, water and sewer system; and installing the utilities, gas and electricity.

1) Staking out the Site:

This phase of the work involves surveying the site in order to layout road and utility rights-of-way and staking out the individual plots. The work is done by professional surveyors under contract with the technical office of the province or by the staff surveyors. The surveyors stake out the plots on the site and prepare the individual plans for each plot when it is registered. Staking out a subdivision requires several weeks of work by an experienced survey crew but the provincial technical offices are allowed to contract with private firms to do the work when they can not do it themselves in a timely manner. Private developers may contract with private surveyors who are approved by the provincial technical office and thus further speed-up the process. In practice the APCs themselves have created all of the ZHUN and all of the Lotissement which exist today. The new land law will allow public and private sector developers to buy land and to create subdivisions but the approval process will remain the same.

2) Grading the Site:

The extent of the site grading required varies considerably from site to site. Low lying areas subject to periodic flooding and abandoned quarry sites may require extensive fill material be transported from other locations before they are suitable for housing construction while steeply sloped sites may require extensive cutting and filling to create road access and buildable plots. This work is generally done by a contractor hired by the developer or by the developer/builder's own forces. The work is generally financed as part of the land development costs and can drastically alter the final cost of the serviced land. There is no apparent shortage of equipment or of contractors qualified to do this type of work.

3) Preparing and Surfacing the Road Network, Storm Drainage, Water and Sewer System:

The management of water supply and sewage treatment is the responsibility of 13 regional utility companies but installation of the distribution systems is financed and carried out by the local communities. In theory this work as well as the grading and paving of roads is done by the technical office of the province on behalf of the APC using public sector or private sector contractors. If the developer of the subdivision is a private company or individual they are expected to pay the APC for this work. In practice private developers do pay the APC but may choose to proceed with the work themselves rather than

wait for the lengthy public contracting process. In such cases the developer is paying twice for the same work, which naturally increases the project costs. In subdivisions where the APC or public agencies are acting as developer the wait for financing for this work can be quite long (four to five years). As of the end of 1988 the APCs had been able to provide infrastructure to only about 12% of the plots in approved Lotissement and about 10% of the plots in ZHUN despite the fact that approvals are theoretically withheld until the infrastructure extensions have been incorporated in the local government development program (P.C.D.). The source of financing for infrastructure work is the money collected by the APC from the sale of unserved plots. Sixty six percent of these funds accrue to a special fund for financing infrastructure. As the APCs sell land at about 1/10 of market value, the funds collected in this manner are not sufficient to pay for the land itself, much less for the infrastructure.

4) Installing Gas and Electricity:

Installation of gas and electricity is the responsibility of SONEGAS, the government owned utility responsible for producing and distributing electricity and for distributing gas. SONEGAS has its own budget and schedule of work. Upon receipt of a proposed Lotissement or ZHUN the utility authority is supposed to incorporate the service required into its program of future work and notify the APC of the anticipated schedule. Often the anticipated date for extending the service to a particular site is several years in the future and even these dates are seldom met. Thus subdivision plans may be approved on the basis of a projected date when utilities will reach the site, but actual extension of the service lines may be far behind the projections. A private developer may speed up the process by agreeing to pay for the extension of utilities to his site but this is feasible only when the trunk lines are near the site. The installation of secondary distribution systems are usually done at the expense of the developer but by contractors hired and supervised by the utility authorities. Capital expenditures are financed by hook-up fees and rates paid to the utility company.

c. Disposition

The disposition phase of the land development process includes turning over the roads and utilities to the responsible public agencies and the lots to the housing developer or the individual who will build the units. These steps are discussed below.

1) Transferring the Roads, Drainage, Water and Sewer Systems:

Most subdivisions are developed by the local authority (APC) or by a public sector developer on behalf of the APC. In this case the road reserves are not transferred to the developer but are retained by the APC, Private Sector land developers (when this becomes possible) will transfer these rights-of-way to the APC after completion of the work.

2) Transferring the Utility Network:

As the utility lines are generally installed by the utility companies or by their contractor, transfer of the necessary rights-of-way occur prior to construction and the utility assumes full responsibility for maintenance.

3) Transferring the Plots:

At the present all subdivisions are created by APCs. APCs may sell plots to individuals as soon as the land is subdivided. Alternatively the APC may sell or transfer a group of plots to a housing developer (public or private) who will construct units for sale. When an APC transfers land to a developer before infrastructure is installed (virtually always the case), the same developer will most likely be the land developer and the housing developer thus no further transfer occurs until the units are completed. Under the new land law these two functions could be undertaken by two separate entities which would require a second land transaction. When APCs turn over land to public or private developers they usually impose conditions such as the maximum sales price of the finished units and standards of construction as well as types of units to be built - in the most extreme cases the "developer" is really nothing more than a turn key builder for the APC. Private sector companies have been reluctant to accept APC land due to the many conditions which some APCs impose but the obvious advantage of APC land is its price and the fact that the project can proceed immediately without waiting for the long process of land planning and approval required to create a new subdivision.

4) Titling and Registration:

Land assembly, subdivision and titling are handled on behalf of the local authorities, by the DIE (Directorat de l'Infrastructure et de l'Equipement) at Wilaya level, usually with the help of private surveyors. Land titling constitutes a major obstacle, because the cadastre has not been maintained for several decades, and the precise status of many tracts of land is unclear. The problem is compounded by the large-scale expropriations and the ownership shifts that took place at the time of Algeria's independence. Thus, in order to provide the plots with a clear title, complex and time consuming procedures are required, that cause considerable delays in the project cycle.

This ownership problem is frequently circumvented by conferring plot ownership through a so-called administrative act ("acte administratif") established and guaranteed by the local authority. These acts, however, do not constitute a full and clear title, since they do not lift the encumbrances, or resolve the ownership issues that may be pending. Private developers building on private land encounter similar problems.

These issues are being addressed in several ways. A major reorganization of the cadastre is underway since 1982 and will be aided by the World Bank project that is expected to be appraised in mid-1991. Also, the function of "notaire" was privatized as of January 1, 1990. Finally, the new Land Act that was already approved by the Government, and is now under discussion in the National Assembly, is likely to contribute towards solving some of these problems.

2. Housing Development Phase

a. Design

Although some public and private developers have limited in-house design capacity, to expedite the process they generally rely on private design offices, a fair number of which are available. Design fees are between one and two percent of the total project cost in the case of public projects, and between 10 and 12 percent for private projects, which are usually much smaller in size.

The quality of designs is variable. They are generally sound in technical terms, but from what could be seen, they are frequently inefficient and wasteful of space and materials. Little is done to develop housing types, lay-outs and construction details that reduce the use of scarce materials and that are more affordable.

The use of typical unit plans, that are adapted again and again to different sites, in varying configurations, is common practice. Apartment blocks and single family houses are the most common housing types and few attempts are being made to develop alternative housing types such as clustered single-family houses or row housing.

b. Standards and Affordability

Private developers at present are aiming for the upper end of the market and public developers for the upper-middle income groups, still well above the median income level. Effective demand in this section of the market far exceeds supply and even expensive houses built on speculation are easily sold. Therefore standards, in terms of type, size and finish of the units to be produced are determined pragmatically by the developers themselves to roughly match the expectations of his client group. Given the unmet demand in the upper end of the market, there is little incentive to produce cheaper housing affordable for households in the middle and lower income groups.

The private developer's clients typically have monthly incomes of DA 12,000 or more, and represent less than 5 percent of the population. Although the public developers have recently gained

more autonomy, they are still operating under the authority of the Ministry of Equipment and Housing, and have to follow certain guidelines with regard to standards, prices and client groups to be addressed. Thus the lower income limit of the households served by these public developers is around DA 4,500 per month, which still excludes some 70 or 75 percent of the households. There appears to be no upper limit to the segment of the market the public developers are allowed to build for and some of them have successfully engaged in top of the market operations where, in a more equilibrated market, they would be competing with the private developers.

In theory, the residential densities prescribed in urban master plans could provide the local authorities with some leverage in determining the client group of particular housing projects, the more so because these authorities so far have controlled the supply of land for public projects and or the larger private ones. However, this leverage does not seem to be used much and has not led to the production of developer housing affordable for middle and lower income groups.

c. Technical Standards

The technical standards as laid down in the building codes, are generally well-respected, through a relatively efficient system of building permits and controls, aided by a widespread tendency to over-build. This tendency stems from a number of factors, such as insistence on traditional building materials and techniques, the importance attached in Algerian society to the durability of housing as a family asset for several generations, lack of experience among designers and builders, as well as inefficiencies in owner-controlled construction. In addition, anti-seismic standards, although recently modified to take into account regional variations of seismic risk, remain very strict and require large quantities of cement and steel. Since the technical standards voluntarily adopted by owners, builders or designers are frequently in excess of what is legally required, legal standards are not perceived as a constraint. But the resulting waste of materials, given the shortages, does actually reduce the number of units that can be built with the materials available.

d. Certification and Building Permits

Building permits are delivered by the communes. The communes, however, have little or no technical staff of their own and submit the building permit applications to higher-level authorities such as the DUCH (Direction de l'Urbanisme, de la Construction et de l'Habitat) and the CTC (Contrôle Technique des Constructions). The procedure is relatively quick and efficient, and building permits are usually delivered within two or three months. In any case, applications are tacitly approved

if no objections or comments are raised within a three-months period. None of the developers interviewed, saw the procedure for obtaining a building permit as an impediment to their activity; and some even praised the efficient way applications are processed by the authorities. It is worth noting that the building permit alone gives access to the state-supplied building materials at controlled prices; without it no such materials can be obtained and one has to resort to the black market, at much higher prices.

Nevertheless, a large number of mostly owner-built houses are completed without a building permit. This is related less to bottlenecks in the building permit delivery process or to non-compliance with the building codes, than to serious structural shortcomings in the system of provision of buildable land and infrastructures, which has given rise to two types of illegal construction. First, a number of illegal subdivisions have appeared outside the urban perimeters defined in the urban master plans, and constructions in these subdivisions are per definition illegal. The second and most frequent case is that of the many subdivisions and ZHUN ("zone d'habitat urbain nouveau") that, although legal, have remained without infrastructure, for reasons explained elsewhere in this report. Construction in these subdivisions often goes ahead regardless of this, but without a building permit, because its delivery is conditional upon the availability of services. This often happens with tacit approval of the local authorities, who are unable to ensure servicing ahead of construction, but sometimes assist the owner-builders through post facto legalization and servicing. During the period from 1979 to 1988, out of some 500,000 applications for building permits, 352,000 were approved. In the same period, the Ministry of Equipment counted about 307,000 illegal constructions, 273,000 of which were inhabited. Regularization programs are now underway; in 1988, about 114,000 illegal constructions had been legalized. The on-going revision of land and town planning legislation is expected to address these difficulties.

e. Building Materials Supply

Production, importation and distribution of building materials remains largely in the hands of state-controlled companies. But because the quantities produced locally or imported remain far below what is needed, a rationing system at controlled prices is in effect. For a given construction project, the quantity of building materials to be supplied and the timing of their delivery are determined in accordance with the quantity survey and construction schedule attached to the building permit. Given the shortages, however the quantity required is usually not made available, or supplied over a much longer time period than the schedule indicates. This causes considerable delays and periodic stoppages in all construction projects and makes price control quasi-impossible. Shortages of cement and steel are the main constraint while finishing materials are available

in reasonable quantities. To some extent, these constraints can be circumvented by stockpiling and recourse to the black market or to illegal imports.

Stockpiling occurs mainly in the public contracting companies. While not exempted from the rationing system, these public contractors, with their large volume of works and influence as big enterprises, often gain priority access to available materials. In addition, they enjoy a margin of manoeuvre in moving materials between construction sites, or in playing on time schedules and on the difference between quantity surveys and amounts of materials actually used. This usually enables them to stockpile the materials for a given construction job before starting the works. This advantage, which large public contractors enjoy, can only be overcome by the parallel development of large private developers and/or the elimination of price differentials between the official suppliers, and the open market or black market sources.

Private contracting firms, that are much smaller, do not have the same facilities. Especially when working for a public client or developer, they encounter great difficulties, because prices are fixed in advance and based on official material prices. Purchasing black market materials at much higher prices makes no sense in this case. When working on speculation or for private clients, less difficulties are encountered in supplying materials. Private housing construction of this type is aimed at the high end of the market, where higher material costs do not appear to be a constraint. Given the unpredictable situation with regard to availability and prices of materials, many private developers and contractors refuse to commit themselves to a final price before the construction is completed. Even so, the larger part (90 percent) of the basic materials (cement, steel) is usually purchased from the state controlled suppliers; the black market and parallel imports are resorted to mainly for finishing materials.

Given these constraints, it can be expected that owner-builders, who do not have the material stockpiles, or other projects from which to borrow materials, and whose use of black market materials is limited by price considerations, suffer most from the building materials shortages. The large number of unfinished owner-built houses all over Algeria demonstrates this.

The informal or black market in building materials is supplied mainly through leakages from the official distribution system as well as from a small volume of illegal imports. Black market prices have risen sharply in recent months and currently (September 1990) are about three times as high as the official prices, as the examples below show.

Examples of building material prices (in DA)

	Official	Black market
Cement (50 kg bag)	32	95 - 110
Reinforcing bar (100 kg)	430 - 600	1400 - 2000
Hollow brick (unit)	2.10	5.40 - 8.00

The shortages of cement and reinforcing steel are the most critical. Figures computed by the Ministry of Equipment indicate that the 600,000 tons of steel imported annually, after deduction of non-residential construction requirements, allow for the production of no more than 100,000 to 120,000 housing units, while currently some 500,000 to 550,000 units are scheduled for construction, or awaiting completion. The need for new housing is in the order of 200,000 to 250,000 units yearly. A similar situation prevails with regard to cement supplies.

These shortages obviously are putting an absolute limit on overall housing production, whether public or private, because the bulk of materials available, even on the black market, come from local production and official imports and not from parallel imports whose importance appears to be no more than marginal.

All steel is currently imported, while cement is supplied partly from local production and partly from imports. A number of private steel and cement factories are being planned with Government support, but have not started production. To reduce the use of cement, local private production of hollow bricks, as a substitute for cement blocks in non-load bearing walls, is being promoted and a number of brick factories are starting up. Nevertheless, the limited overall availability of steel and cement is likely to remain a critical constraint for some time to come.

With regard to other materials (doors, windows, tiles, hardware, plumbing and electrical equipment, paint), the situation is less critical, although greater production is also needed. Most of these products are suitable for small scale private industries, which are favored by the new governmental initiatives (See Annex 3). Fair quantities of these materials are already being produced locally by public and new private enterprises. Importation is also less risky than with cement or steel and therefore relatively common.

It is noteworthy that the new law on trade concessions, that will come into effect on January 1st 1991, while not providing for private importation of building materials (with the exception of timber), does liberalize the importation of industrial plants, equipment and spare parts, which is expected to favor increased private initiative in the building materials industry.

In early November, after returning to the U.S., we learned that the Government of Algeria had doubled the official prices of building materials. In the absence of more detailed information, the effects of this measure on private housing productions are difficult to judge. It will certainly decrease the difference between official prices and those of the black market but if official import quotas are not increased at the same time its beneficial effects may remain limited.

Taken together, these actions constitute a macro-economic policy. By not providing for import concessions for building materials, by recently doubling the official prices of key materials, and by initiating an incentive program (See Annex 2) through the Chamber of Commerce, the Government of Algeria wants to encourage the development of local building materials production through private investment. This may be a wise policy given their resources of energy and raw materials.

f. Construction Finance

Securing construction loans does not appear to be a problem for public sector contractors, although this may change as they gain greater autonomy and enjoy less public support.

Reports vary as to private contractors' access to construction finance from the commercial banks, that have recently become more autonomous. Some private developers and contractors report there are no problems, and especially the CPA ("Caisse Populaire d'Algerie") seems to be interested in developing this kind of business. Others apparently have had difficulties in obtaining construction finance, but this may be related as much to their own inability to prove their credit worthiness, as to the banks' conservatism in assessing it. In any case it remains common practice for developers-contractors either to finance construction with downpayments from prospective buyers or, in cases where they have access to bank loans or private sources of finance, to simply build on speculation. It should be remembered that all private developers are addressing the upper end of the market, where the demand for housing seems well in excess of the present level of production. An earlier study of Housing Finance commissioned by A.I.D. recommended the creation of a private real estate development guarantee fund. Such a fund could be valuable if banks were short of funds and reluctant to lend to real estate developers for housing but this does not appear to be the case at the present time.

g. Construction Works

Apart from the delays and periodic stoppages due to the building material shortages, the actual construction works present few major problems. Both public and private contractors usually subcontract the finishing works among the many specialized small private contracting firms that are operating. Subcontracting

for excavations or machinery rental is not well developed and is expensive, therefore it seldom occurs.

Labor skill and productivity are a problem, however. The large state contractors tend to use highly industrialized building techniques, thus reducing the need for specialized skilled labor. Private contractors, on the other hand, do not have the means to invest in the required technology and equipment and, since the size of their projects is much smaller, by and large continue to use traditional and artisanal construction methods. For them, it is increasingly difficult to recruit and hold on to skilled and responsible construction labor, and intensive supervision is required to achieve acceptable standards of quality. Both public and private contractors usually try to keep a core team of skilled workers in permanent employment and recruit additional temporary workers as the need arises.

The number of private general contracting firms with significant experience and time in business is relatively small, because many of the older family-owned enterprises have been forced out of business in recent years by the multiple constraints on the private construction sector. Most of the private contractors now in the market are relatively new, and have often evolved from specialized subcontracting enterprises. Quality standards have suffered from this evolution.

In owner-built housing ("autoconstruction"), where the owner simply hires laborers and himself takes charge of supervision, coordination and supply of materials, construction is generally inefficient, wasteful of materials and of a lower quality.

h. Inspection and Certification

The safety and soundness of structural works, as well as the observance of legal anti-seismic standards, are checked for all public and private construction projects by the CTC (Contrôle Technique des Constructions), an efficient and well-respected public agency represented in each Wilaya. No problems or significant delays are reported.

i. Construction Supervision

As was mentioned earlier, in order to achieve an acceptable standard of quality, strict supervision of works is generally necessary because contractors are often inexperienced and there is an increasing shortage of skilled construction workers. Some of the public developers report difficulties in maintaining quality standards, both because their contractors (who are often private) are working under tight price constraints, and because of a general shortage of experienced construction managers and site supervision personnel.

Another fairly frequent problem for the public developers is that the contractors do not complete the works after final inspection, and simply forego the last ten percent of their payments that are withheld.

The shortage of experienced construction management and supervision staff also affects the private sector. The CTC can be called in to be in charge of construction supervision for both public and private clients, but because it charges a five percent fee, this only occurs in larger projects.

j. Utility Hook-ups

Where main and distribution networks for sewerage, water, electricity and gas are available, the installation of house connections by the utility companies usually does not raise problems or involve significant delays. Hook-up charges do not seem to form an obstacle. A national company, SONEGAS, is responsible for both power and gas supply, and regional companies for water and sewerage.

However, because of the infrastructure financing difficulties discussed elsewhere in this report, many new subdivisions remain unserved or only partly served for long periods of time, while house construction by owner-builders is going ahead. In these cases, services are being made available gradually or through makeshift arrangements by the owners themselves. This is less of a problem for public and private housing developers, who are usually able to install utility networks and hook-ups prior to occupation, or for owner-builders on private in-fill plots generally located within easy reach of existing networks.

k. Pricing, Marketing, and Sales

Both public and private developers are aiming at the higher end of the market (i.e. the upper 25 percent of the income scale), where a strong demand is supported by substantial cash reserves. They are therefore operating in a "seller's market" where pricing and marketing are not critical, at least at this stage. Some developers identify their clients beforehand, establish sales contracts and ask for downpayments to finance construction, but others simply build on speculation, confident that their houses will be sold. Although the public developers come lower down on the income scale than the private developers, they are barely addressing the middle-income group. When the high-income market reaches saturation at some future time, increased competition between public and private developers can be anticipated. Then a risk will exist that the public developers will inhibit private initiative, if they still enjoy the competitive advantages they have now.

1. Housing Credit

Much of the developer housing now coming on the market is purchased with cash from savings that have remained outside the banking system. The CNEP, which has accumulated most of the formal private savings in the country, remains the only major source of buyer financing. Although the new commercial banks are starting to get interested in the residential mortgage market. Given the present market conditions, developers are not involved in securing mortgage financing for their clients.

(For further discussion of Housing Credit Issues see section B.2.b. Housing Development Phase - Standards and Affordability; and Section C.2.a. Major Non-procedural Constraints - Housing Finance Reforms.)

C. THE MAIN CONSTRAINTS IN PRIVATE SECTOR HOUSING DEVELOPMENT

The Terms of Reference for this consultant mission, were developed around the premise that private companies are not contributing significantly to housing in Algeria; and that they would be able to do so if procedural constraints were identified and ways found to circumvent them. The fact is, however, that private companies are active in housing production, and that, the lack of clear procedures isn't in practice a major constraint to private initiative. None the less, constraints do exist, some indeed procedural, although most of the important constraints are non-procedural.

1. Major Procedural Constraints

The major procedural constraint to private sector real estate development is the monopoly position which APCs have in the creation of new subdivisions for housing. While this is not an absolute constraint as private developers may acquire land from APCs or develop land they already own (if it is already designated for development in the urban plan), it does discourage private sector development, particularly in those towns where an active public developer (EPLF) is located. There are 23 EPLFs and they are presently restricted to working in the community where they are established. Generally an APC places a number of restrictions on the developer when they sell public land. These may include specifying the number and type of units to be built and fixing the sale price although in some cases private developers have been given greater latitude to develop market oriented projects on public land. Private developers have also entered into partnerships with private land owners to develop their property and sell housing units as a way around the APC monopoly on selling land. The proposed land law would relax the APC monopoly on land transactions allowing the sale of privately owned land to other private parties but the APC would retain the right to match the terms of any proposed land transactions and acquire the land for public purposes. If this public "option" to intervene in any private land transaction is restricted to matching all the terms of the proposed private transaction including the time frame it may not be a major constraint although the potential for abuses is troublesome. The 1986 housing development law also contains other constraints such as limits on the size of project a private developer may undertake (200 units) but these will all be removed by the anticipated modifications to the 1986 law which is intended to leave housing development to function like any other economic activity. Meanwhile the government is taking a pragmatic approach by not strictly enforcing the regulations contained in the 1986 law. As a result of this attitude a number of private sector housing projects are underway. At the present, private sector housing projects in progress contain more than 15,000 units and more are anticipated.

The major procedural constraint to individuals building their own houses is the restrictions on the subdivision and sale of unserviced plots by the private sector and the prohibition of occupying houses before all services are available in the APC subdivisions. While there has been some discussion of these issues there is no indication of imminent changes which would loosen these constraints. Unfortunately until they are removed the growth of unregistered (illegal) unserviced subdivisions will continue. At the end of 1988 Ministry of Equipment estimated that 700,000 to 800,000 families lived in these illegal settlements and that about 30,000 new units are added each year which is almost one third of the total annual production of new housing units. A few APCs have begun programs to regularize titles and provide services on an incremental basis to these settlements.

Thus the assumption, implicit in the terms of reference, that private sector housing development has to cope with major procedural constraints appears not to be valid any longer. The real constraints are elsewhere, and described below. The procedural constraints are in fact minor and likely to be considerably mitigated, if not eliminated altogether, by the new laws recently passed or currently being drafted. These include the Land Act, the Town Planning Act, and the expected revision or repeal of the 1986 Real Estate Development Act. In the meantime, the prevailing pragmatism is working to the advantage of the private sector, and no transitory measures appear necessary. The situation should be re-assessed once the new body of legislation is in place.

2. Major Non-procedural Constraints

a. Housing Finance Reforms

Access to credit is perceived to be a constraint to large scale private housing development but this may well be based on certain important misconceptions. It is common practice for large public contractors to stockpile enormous quantities of construction materials. This is essential to an orderly progression of construction as critical materials can not be bought from the official suppliers when they are needed due to an absolute deficit between supply and demand. Public contractors no longer have privileged access to materials. They receive monthly allocations based on building permits for work in progress just like private contractors. Using these vouchers they continually replace their large inventory. The critical difference is that this large stock-pile of materials allows the large public contractor to have materials available when they are needed and to replace them over a longer period of time thus maintaining the stockpile. It is mistakenly thought that access to credit would allow private contractors to do the same thing but the economics of stockpiling large quantities of materials with borrowed money would be a financial disaster for a private contractor. The public contractors did not build up these large

material inventories with borrowed money. The problem is not credit; the problem is materials. Until the problem of building material shortages is solved, and the price differential erased between official and unofficial sources of material, private contractors cannot compete on a cost basis with public contractors for large projects. But this is a macro-economic problem of an economy in transition from centrally planned to market driven. Algeria is well on its way toward the required reforms. Hard decisions must be made at this stage. Freeing up imports would reduce price differentials but would undermine local production, absorb critical foreign exchange, and possibly stimulate inflation. Compromises will be needed during this transitional period.

Demonstrated capacity and credit worthiness are the key factors involved when developers seek credit. Larger public construction companies have both, thus they easily find credit when they choose to undertake a project themselves serving as the developer as well as contractor. The public developers (OPGIs and EPLFs) may have some advantages in seeking credit but their experience is not universally impressive and banks are (and should be) reluctant to lend to an organization which has performed poorly in the past. Private contractors who have good reputations for producing quality work and who have well established businesses have not experienced difficulty in arranging financing for new ventures as housing developers when the projects they propose are in scale with the overall resource base of the company.

There are no large private sector contractors, if large private developers are to emerge in Algeria they will most likely come from other industries. There is already some indication that this may happen as companies whose primary business is manufacturing or trade launch "pilot" housing development ventures. Credit Populaire d'Algeria (CPA) is the commercial bank most contractors have used for their normal business credit needs. The CPA has been willing to extend construction period financing for private housing development.

A large public construction company has just launched its first venture as a developer of housing units for sale. The financing is being provided by BEA, another of the five commercial banks. BEA will serve as construction lender and joint venture partner in the project. BEA will also provide mortgage financing to buyers.

CNEP, which is Algeria's primary housing finance institution will also finance projects for private housing developers but construction loans are limited to 50% of the total project cost. While this is rather conservative, other lenders appear to be more flexible. For the present, there seems to be no shortage of money to finance private housing development and no shortage of companies interested in trying the new role of private developer but this is the easy period. There is a significant scarcity of housing units and apparently substantial

personal savings. In the near term most developers, public and private, will build for the upper end of the market. The real test will come when the demand for high cost housing has been satisfied. At that point developers will be forced to seek a broader market and the availability of affordable long-term mortgage financing will become critical to a strategy aimed at delivering houses to middle and lower income families. At the present time CNEP has adequate funds to meet the demand for mortgage loans, but it is highly unlikely that CNEP can retain its large share of savings as other alternatives emerge without revising its rates paid on savings which would require revisions to its lending rates as well. Thus changes in the availability of long-term mortgage funds seem inevitable and will require serious attention.

b. Servicing of Land

At the present time there is no shortage of land for housing in most urban areas of Algeria and no immediate shortage of land which has already been planned, subdivided and reserved for that purpose, nor is there any reluctance on the part of APCs to sell the land to private developers but the APCs do not have the resources to install the infrastructure. While private developers may pay the cost of servicing the land and include it in the price of their units this is only feasible for upper income projects and even then it puts private developers at a competitive disadvantage with public developers who only proceed on projects where the APC has arranged financing for the infrastructure. Most existing urban infrastructure was financed by central government grants. Recently a fund was established to finance municipal infrastructure by allocating a percentage of the revenue generated by the sale of unserviced APC land for this purpose but that approach is inadequate to the task. A totally new approach to the financing of municipal infrastructure cost on a sustainable cost recovery basis is required if an adequate supply of serviced land is to be available for housing. This may require setting up a revolving credit fund or a guarantee fund used to persuade commercial lenders to finance municipal infrastructure, but such a fund can work only if APCs can repay the loans which will require that APCs have a sound revenue base.

The World Bank and the Government of Algeria are currently preparing a project which will provide bank financing for a package of priority infrastructure projects which would be designed and implemented by public or private enterprises under contract with the three or four APCs involved in the pilot project. Other forms of technical assistance will be provided to these APCs with the objective of achieving full cost recovery on the infrastructure loans and a greater degree of managerial and financial autonomy for the APC. With the bank project serving as a guide to other APCs, it may be timely to consider appropriate approaches for implementing municipal infrastructure finance reforms on a national basis. Alternatively, it might be

useful to undertake a pilot effort aimed at illustrating a programmatic approach to providing services to all existing areas and approved subdivisions within a particular APC on an incremental basis where the costs recovered from the initial phase is used to further extend and upgrade the entire system.

c. Building Material Shortages

Perhaps the only absolute constraint to increasing housing production whether by the public sector or the private sector is the deficit of critical building materials. Some progress has been made toward increasing local production of cement and steel reinforcing rods which are essential for the structural frame of all buildings in Algeria (under present codes and accepted practice) other than in the south which is not subject to the threat of earthquakes. A new factory producing steel reinforcing rods will begin operation before the end of the year and construction has just begun on a steel mills (actual production is three or four years away) and permits have been issued to import equipment for four or five private sector cement production plants. There has also been considerable progress in the production of hollow clay wall tiles (brick), hordie (tiles used for structural floors) and unglazed floor tiles as well as ceramic tiles. Equipment for making stabilized earth bricks has also been imported for use in the south where reinforced concrete construction is not required. Increased production of kiln fired brick, hordie and stabilized earth brick is intended to reduce the use of cement but it is not likely to have any immediate effect. Until the artificial price of cement is removed, current wasteful practices are likely to continue.

Until local production increases substantially, interim measures are required to facilitate the importation of certain materials. One possibility being considered is to award construction contracts on a dual currency basis specifying that a certain percentage of the total contract price will be paid in foreign currency. Contractors could then be allowed to import materials for their own use, providing an interim measure to overcome building material shortages. It has the attractive advantage of allowing selective application for priority projects without opening the economy to the potentially damaging shock of unlimited importation of building materials which could trigger an inflationary building boom.

d. Other Constraints

A number of other constraints affect the housing sector. They will be mentioned only briefly because they are relatively minor compared to the constraints already discussed, and not specific to the private sector, or critical to its development.

1) Land Titling:

The land titling problems discussed earlier are not of immediate concern, because interim solutions have been found while an overhaul of the cadastral system is anticipated. In the long run, however, these problems could become an impediment to the development of mortgage credit.

2) Construction Standards:

High standards, a tendency to over-build, and inefficient building technologies, compound the building material shortages and raise the cost of housing. A review of building practices and standards would be in order, to make new housing more affordable for middle and lower income households.

3) Shortage of Experienced Staff:

A general lack of experienced and skilled personnel equally affects all parties involved in the building cycle:

- a) local authorities need staff trained in land management, urban planning, building controls, financial management;
- b) public and private developers need staff with skills in financial management, marketing, real estate specialties, financial analysis, construction management, and technical supervision;
- c) contractors (especially private) require construction managers, foremen, and skilled labor;
- d) designers need greater skills in cost analysis and cost-effective design, building technology, and the use of local materials.

D. PROPOSED STRATEGY FOR A.I.D. ASSISTANCE

The Terms of Reference only ask the consultants to identify potential pilot projects. Based upon the findings, a broader approach is recommended which includes: policy dialogue; analysis of issues; and pilot projects.

The housing sector policy reforms underway in Algeria today are leading toward a market oriented real estate industry in which the private sector will play a substantial role. The pace of these reforms has accelerated during the past few months and the GOA appears to be taking a pragmatic approach to policy reform unincumbered by excessive reliance on regulations or efforts to protect privileges of the past which characterized earlier reform efforts here and still plagues much of the reform movement in Eastern Europe.

During a period of rapid change such as is now occurring in Algeria it is difficult to chart a course of action which will remain relevant over an extended period of time. Thus objectives must be broadly stated and specific proposals for action must be limited in scope and aimed at addressing particular issues if they are not to be overtaken by events.

1. Objectives

a. Maintain a dialogue with senior managers and department heads in the Ministry of Equipment and Ministry of Interior as well as key policy makers at the Ministry of Planning and the Ministry of Finance.

b. Assist with specific tasks by providing technical assistance or studies aimed at addressing issues which are of concern to key GOA institutions during this period of transition.

c. Define pilot projects and studies aimed at facilitating institutional change in response to changing conditions.

2. Proposed Actions for FY '91

a. Policy Dialogue

Establish a schedule of regular consultation visits from the same person, whether a consultant or A.I.D. staff member. This person should make a trip to Algiers at least once every two months during FY '91 and should participate in the definition of each TA assignment and in the reporting of the results of any studies undertaken during this period. This action is essential if A.I.D. wishes to be a part of the policy reform dialogue which is currently underway. The selection of the proper person to fill this role will be critical to establishing that dialogue. It must be a person who can listen in order to identify areas of possible assistance as well as one who can provide advice on a range of topics when such advice is solicited by the Algerians.

b. Specific Issue Oriented Tasks

1) Mobilizing a Cadre of Professionals:

During the last decades, the dominant view of housing as a social good to be subsidized by the state and the consecutive ban on commercially oriented private housing development have led to a loss of specific skill and experience related to operating in a market oriented housing sector. This affects public agents as well as private operators. Especially marketing, financial and general real estate business skills are in short supply; and assisting Algerian professionals in rapidly acquiring these skills should be considered as a prime area of intervention by A.I.D..

An important question is which group of professionals to address. Future private developers will come from a variety of backgrounds. Most of the present private developers are architects or contractors operating at a small scale in the lucrative upper end of the market. They are likely to continue catering to this small segment of the market, and therefore will not necessarily be the main players in the future. Some of the present public developers (EPLFs and possibly OPGIs) are likely to play an important role in the future, because they seem willing to deal with middle-income housing, have experience in managing large operations, and will continue to enjoy, at least informally, a measure of public support. They have already become more autonomous, and further privatization is under discussion. An association of public developers was formed in October of 1990. New developers are also likely to emerge from other backgrounds; at least one of the large public contractors and a private Algerian owned trading company, that has long been active abroad, have already initiated housing developments. Finally, constructive interaction between private operators and public agencies is necessary and would be greatly helped if officials at APC, Wilayat and Central government levels gained at least a basic understanding of the principles and techniques of real estate development.

Our recommendation is for A.I.D. assistance to focus initially on the preparation of a training and technical assistance program to help the public housing developers and public officials define their new roles and cope with the market driven conditions in which they must now operate. Defining a role for the public developers is essential to a healthy private sector real estate industry, as direct competition will be detrimental to both and will leave most of the population unserved. This initial effort can lead to a series of subsequent studies and pilot projects aimed at addressing the constraints which inhibit serving lower income households. But the first step should be to help the EPLFs and OPGIs define their future role and learn the techniques of market analysis, project management, cost control and marketing which are essential to

functioning in a market driven economy. This can be achieved through study tours abroad, seminars or specialized courses. The various institutions already active in the sector could be the vehicles for implementing this training and technical assistance program: the Ministry of Equipment, the association of public developers or the CNAT.

2) Advisor for Completing Divestiture Programs:

Divestiture of the public housing stock has taken place for the most part of the decade, and most of the better units have already been sold. But the program has now reached the stage where the government does not know what to do next. Initial efforts have led to a series of problems such as: uncertainty about maintenance responsibility in buildings which are now mostly owner occupied, but still have a few governmental owned rental units; unwillingness of tenants to buy older units in poor condition; anomalies in the tenant protection laws, which make owners of private housing unwilling to rent; and lack of targeting of housing assistance to lower income families.

Management and divestiture of the public housing stock are in the hands of the local OPGIs("Office Public de Gestion Immobiliere") who lack the funds, management tools, and staff to achieve this task. A.I.D. assistance could be in the form of an advisor to work with the housing department of the Ministry of Equipment, for a period of two or three months, helping to define a strategy for completing the rental housing divestiture program. The Ministry of Equipment indicated that it would welcome further discussion with USAID/RHUDO on possible assistance in this area.

c. Pilot Projects and Studies to Promote Institutional Change

1) Mobilization of Latent Housing Stock:

There are strong indications of the existence of a considerable latent housing stock that could number as many as one million units (See note (1)). This includes vacant plots in unfinished subdivisions, houses that remained unfinished because of building material shortages as well as completed houses that are withheld from the rental market because of rental controls. The related investments are presently unused; and could be mobilized relatively fast to increase housing supply by acting on the constraints that prevent it from being finished or used.

(1) See "Housing Finance and the Shelter Sector in Algeria", prepared for USAID by Abt Associates Inc., November 1990, pp.24-25. See also Annex 4 of this report which lists all official subdivisions with an indication of their status.

a) Completion of Unfinished Subdivisions and Housing Units:

Before a project can be identified, a more detailed assessment of the importance and nature of this problem, especially of its financial aspects, is needed. It is due mainly to two factors; on one hand, the financial inability of the local authorities to ensure servicing, and on the other, the shortage of materials that prevents individual plot owners from building or finishing their houses. But speculation and hoarding may also be a factor. Post facto servicing of the subdivisions is necessary and will be discussed below under "infrastructure development". As ownership of the plots has already been transferred, these developers would merely act as intermediaries and construction managers.

An issue to be clarified by a detailed survey is that many of the plots and houses in question are aimed at the higher end of the market, where oversupply is a risk and owners may not be in a hurry to compete. If this is so, a revision of the lay-outs, standards and plot sizes may be possible in some cases in order to make the units more affordable for middle-income families. Owners could be persuaded through incentives, to either sell the plots, or develop them for rental purposes (see also below: Development of a Private Rental market).

Subdivision servicing and conversion projects of this type may require public financial support. This should be subject to certain conditions, ensuring that it is targeted at specific income groups, and that the units will effectively be occupied. Similarly, they could be linked to a special commodities import program for critical building material needed to complete unfinished housing units of certain specified categories; or to a project supporting the government's efforts to expand the local production of building materials.

A.I.D. assistance could take the form of: (i) an overall assessment of the situation and design of an action plan; and (ii) technical and financial support for a particular pilot project.

b) Development of a Private Rental Market:

The private rental market is already underdeveloped, but is largely illegal, because of strict rental controls and extreme legal protection provided to tenants. This situation explains why an estimated 500,000 dwelling units are vacant. It is believed that a significant proportion of these units could come on the rental market if the proper protections incentives were provided for the owners. Understandably, the government is not keen on lifting rental controls altogether because of the social impact of such a measure. However, partial repeal of the rental controls may be possible for privately owned rental housing or other specific housing types, and/or income categories. In parallel with this, hoarding of vacant plots and dwellings should be discouraged by appropriate economic dis-incentives and tax measures.

A.I.D. assistance could be in the form of a detailed study of the private rental market, to assess the effects of the rental laws and to propose modifications likely to increase the private supply of rental housing.

2) Infrastructure Development:

As was discussed in detail earlier in this report, the lack of appropriate financial mechanisms for servicing urban land is a major constraint on housing development. As a result, there is a huge backlog in the servicing of existing housing developments, while the problem of servicing future ones has hardly started to be addressed. The existing unserviced subdivisions seem to fall into two categories:

a) the public subdivisions mentioned above that remain largely vacant because of the absence of infrastructures; this represents a potential housing stock that servicing could rapidly mobilize;

b) illegal private subdivisions as well as some public ones (or parts of them) that are already occupied but without proper infrastructure; regularization and/or servicing have apparently started in both cases.

In order to catch up with this backlog and to ensure adequate servicing of new urban areas, new financial mechanisms, based on cost recovery and cost sharing, will have to be developed that will allow the local authorities to establish ongoing programs for incremental extension of primary infrastructure. This may require setting up a revolving credit fund or a guarantee fund used to persuade commercial lenders to finance municipal infrastructure. But, because such a fund can only work if APCs can repay the loans, a thorough investigation of the local revenue base will also be necessary. Servicing existing subdivisions with secondary and tertiary infrastructure will require appropriate cost recovery mechanisms. To implement post facto servicing programs, the plot owners, together with the APC's responsible for these subdivisions, could delegate the task to a third party. The most likely candidates for this task are the (privatized) public developers, acting as financial intermediaries and construction managers. For future housing projects, cost sharing arrangements between APCs and developers similar to those in effect in Europe and the USA will have to be established.

A.I.D. assistance could be in the form of: (i) a study of infrastructure financing mechanisms at the national level; and (ii) pilot projects in selected municipalities to demonstrate appropriate financing and cost recovery methods in servicing existing subdivisions or new housing developments. Coordination of activities with the World Bank is advisable, since the Bank is already engaged in a project aimed at upgrading the local authorities' ability to function autonomously.

3) Addressing the Housing Needs of the Middle and Lower Income Groups:

The actions outlined above are dealing with general issues not specific to particular income groups. But it is clear that public and private developers alike, at present, are only addressing the upper end of the market, and even in the near future cannot be expected to make a significant impact on the middle and lower income market. These groups will have to rely largely on their own resources. Following a well established Algerian tradition, owner-builders have been contributing an estimated 60 percent of the yearly housing supply. Therefore, while increasing the production of private (and privatized public) developer housing, is a necessary goal, it is equally important to support owner-building.

Possible assistance by A.I.D. might include a series of studies and pilot projects aimed specifically at:

a) Large scale creation of subdivisions with minimally serviced plots together with appropriate financing facilities for housing construction;

b) Demonstrating ways of lowering housing costs, such as providing individual buyers with contractor-built structural frames (whether free standing houses, clustered or row houses or apartments) which they can finish to their own tastes and budgets; building standards and technology also require attention, as fear of earthquakes, combined with the lack of technical expertise and quality control cause over-building with considerable waste of materials and high costs;

c) Technical, management and credit support for the small-scale contractors who actually do the construction in the owner-built housing.

ANNEX 1

Summary of meeting with Mr. Vincent Lacour, The World Bank September 18, 1990

The World Bank is involved in four key aspects of Algeria's urban and housing sector:

1. The construction industry

A comprehensive study of the construction industry is currently being carried out by the CNAT (Centre National d'Animation des Entreprises et de Traitement des Informations du Secteur de la Construction) in Algeria, and will lead in the near future to a project supporting the development of this industry and addressing its main bottlenecks. This is the most advanced of the four projects that are being envisioned at this point.

2. Municipal development

A municipal development project aiming at improving the management capacity of the local authorities in four Wilayas (including Blida, Ghardaia and Tlemcen) is being prepared. It would include a number of components such as training of municipal staff, general municipal management and land management.

3. Cadastre

A study of the cadastral problems and related issues, such as collection of land taxes, has just started and is expected to lead to a cadastral project that would be appraised in mid-1991.

4. Housing sector

A study of the housing sector is to start later this year, and would focus on a number of critical aspects, such as housing finance, housing development and the provision of infrastructure.

The World Bank's main Algerian partners for the implementation of these projects and studies are the Ministries of Plan, Economy and Interior.

Referring to the successful cooperation between the Bank and USAID in the urban and housing sector in Tunisia, Mr. Lacour indicated that a similar arrangement could be envisioned in Algeria.

ANNEX 2

Summary of interview with Mr. Bettahar, Chamber of Commerce, Algiers, on the program for promotion of the private building materials industry, and additional comments.

This program was initiated in 1988 and aims at promoting the creation of private building materials industries by way of special foreign currency allocations channelled through the Chamber of Commerce. It has been relatively successful. A large number of applications were received especially for medium-sized brick and ceramics factories, and stone and marble processing plants. Some 250 projects have been approved to date and the first of these are now starting production. Some of the projects are joint ventures with foreign investors.

Because of difficulties in securing credits and access to raw materials, a start-up period of at least two years has to be assumed. The new commercial banks apparently remain reluctant to take risks and a lengthy procedure, involving the Ministry of Mining and the local authorities, is required to gain access to clay deposits and stone quarries. The present status of the program is summarized in the table below.

<u>Type of plant</u>	<u>Projects approved as of September 1990</u>	<u>Plants in production</u>
Brick making (average capacity approx. 50,000 tons per year)	150	10 or less
Ceramics (wall and floor tiles)	50	1
Stone quarrying & cutting	30	1
Stone crushing plants	n.a.	n.a.
marble cutting	10	3 or less

The shortages of steel and cement are critical elements in limiting housing production, but although private investment in these industries is also encouraged by the Government, it is proving more difficult to interest private investors, because of the much higher levels of investment required. Only one private plant for the production of reinforcing bars is being set up; it will have a capacity of 300,000 tons and is expected to start production this year. Discussions with other investors on the creation of half a dozen smaller cement plants of 250,000 to 300,000 tons yearly capacity each are only in the beginning stage.

Theoretically, the state-owned cement factories have a production capacity of 15 million tons per year, but at present they are turning out no more than 40 percent of that capacity. Lack of spare parts for machinery is mentioned as the main reason. In order to reduce the consumption of cement, especially in wall construction, attempts are being made to introduce substitutes for cement blocks, such as hollow ceramic bricks or even stabilized earth bricks, and the many brick factories now starting production would contribute towards this.

The supply of reinforcing steel is an even greater constraint, because in the absence of local production, all steel is imported. The annual need is estimated at about 1.5 million tons, but imports amount to no more than about 600,000 tons. Current thinking is in favor of setting up a number of private mini-steel plants in various locations around the country.

ANNEX 4

STATUS OF APPROVED SUBDIVISIONS / BUILDING PERMITS / ILLEGAL
CONSTRUCTION / HOUSING PRODUCTION (by Wilaya)

The tables on the following pages were reproduced from the document Projet de Loi sur l'Aménagement et l'Urbanisme, Annexes, Ministry of Equipment, March 1990.

ETAT DES LOTISSEMENTS PAR WILAYA: 1975 - 1980

WILAYAS	VALEURS ABSOLUES					RATIOS/1000 Hab.	
	NBRE. DE LOTIS.	SURFACE TOTALE (HA)	NBRE. DE LOTS	LOTS		L O T S	
				CEDES	VIABILIS	CEDES	VIABILIS
ADRAR	70	197,3	6 575	5 962	379	25,33	1,65
CHLEF	90	371	5 519	2 174	1 165	3,03	1,62
LAGHOUAT	43	415	7 824	4 826	0	21,29	0
OU M EL BOUAGHI	144	839	17 606	13 974	891	32,92	2,09
BATNA	61	605	11 485	14 214	2 669	17,76	3,33
BEJAIA	67	415	7 782	5 395	303	7,29	0,40
BISKRA	54	693	12 162	8 830	0	19,42	0
BECHAR	43	478	8 032	5 817	1 259	29,35	6,48
BLIDA	144	373	8 321	4 786	480	6,49	0,65
ROUIRA	71	371	5 949	4 253	942	5,63	1,24
TAMANRASSET	53	169	3 798	2 115	0	3,07	0
TEBESSA	55	403	3 042	7 119	6 500	16,41	15
TLEMSEN	147	580	17 035	12 435	1 069	16,70	1,42
TIARET	199	616	16 919	16 457	4 503	25,91	7,36
TIZI OUZOU	91	951	11 095	6 081	333	6,20	0,39
ALGER	179	399	7 443	6 993	3 593	4,09	2,05
DJELFA	66	629	12 115	7 408	137	13,31	0,25
JIJEL	61	281	5 226	2 571	0	5,11	0
SETIF	246	1 531	38 596	18 980	8 492	17,93	0,02
SAIDA	41	139	3 212	1 848	1 231	7,44	4,96
SIKIKDA	21	92	2 597	5 592	383	22,06	1,55
SIDI BEL ABBES	156	691	2 537	7 681	161	16,39	0,34
ANNABA	34	145	20 512	1 205	275	2,51	0,57
GUELMA	70	458	3 431	2 869	768	7,69	2,05
CONSTANTINE	205	1 711	31 799	13 501	1 051	19,55	1,52
MEDEA	183	456	7 558	4 473	1 578	6,48	2,23
MOSTAGANEM	63	156	4 642	2 759	216	5,15	0,40
M'SILA	117	903	19 512	12 113	1 054	18,96	1,66
MASCARA	179	772	16 848	14 495	2 290	24,35	3,84
OUARGLA	82	954	17 202	12 283	1 731	40,31	5,68
ORAN	75	348	11 426	8 283	16	8,66	0,01
EL BAYADH	49	392	7 230	4 380	109	26,60	0,66
ILLIZI	5	58	744	379	233	18,14	11,15
B.B.ARRERIDJ	66	448	11 998	7 440	5 916	16,37	13,01
BOUMERDES	76	491	7 759	4 462	0	6,44	0
EL TARF	122	498	10 211	3 930	483	13,48	1,65
TINDOUF	2	36	585	431	0	24,86	0
TISSEMSILT	15	62	1 288	566	0	2,35	0
EL OUED	43	513	10 461	3 894	575	9,57	1,41
KHENCHELA	35	422	6 975	8 032	4 162	31,22	16,19
SOUK AHRAS	53	445	7 168	4 933	375	15,62	1,21
TIPAZA	207	692	13 944	15 927	769	24,55	1,18
MILA	56	618	11 188	6 957	39	2,79	0,07
AIN DEFLA	46	138	2 905	1 132	262	1,93	0,46
NAAMA	18	168	2 692	1 661	0	13,35	0
AIN TEMOUCHEM	96	516	11 249	7 170	125	24,99	0,41
GHARDAIA	59	332	7 632	6 067	0	26,17	0
RELIZANE	32	378	6 887	5 269	553	9,29	0,38
ALGERIE	4 142	23 534	467 619	318 381	57 060	13,15	2,3

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ETAT DES ZHUN PAR WILAYA:

WILAYA	NOMBRE DE ZHUN	SURFACE EN HECTARE	CAPACITE EN LOGEMENTS			LOGEMENTS REALISES/ 1000 HAB.
			TOTALE	REALISES	EN COURS	
ADRAR	01	25	400	0	80	0
CHLEF	01	52	1 413	0	0	0
LAGHOUAT	03	188	4 043	3 319	724	14,46
O. E. BOUAGHI	03	955,6	34 935	7 419	2 973	17,47
BATNA	07	673,5	24 577	8 057	1 917	10,07
BEJAJA	07	448	13 790	4 632	2 605	6,26
BISKRA	09	548,4	19 994	3 062	3 104	6,73
BECHAR	02	139	3 757	191	1 287	0,92
BLIDA	05	514	16 171	5 970	5 237	3,10
BOUIRA	07	630,5	15 521	3 047	3 906	4,03
TAMANRASSET	04	243,5	2 895	1 229	456	20,20
TEBESSA	02	818,7	22 197	3 753	5 085	3,66
TLEMCEM	08	133,7	31 963	3 252	1 916	4,34
TIARET	03	559,7	17 084	5 318	6 928	8,69
TIZI-OUZOU	12	930	25 007	4 287	5 783	4,36
ALGER	06	323,2	22 566	7 371	9 325	4,32
DJELFA	09	1 097,6	24 643	5 372	1 644	10,01
JIJEL	13	992	24 634	2 693	3 249	5,36
SETIF	05	412,4	14 941	6 229	2 499	5,23
SAIDA	06	488,5	8 201	1 970	750	7,93
SKIKDA	03	729,9	21 708	12 897	3 072	50,39
S. B. ABBES	06	542,4	16 238	4 135	3 353	8,81
ANNABA	03	1 080,5	34 942	13 297	3 565	32,21
GUELMA	06	369,5	12 500	4 802	1 734	12,88
CONSTANTINE	08	916	28 419	9 014	4 899	13,05
MEDEA	07	795,7	21 132	7 537	3 030	10,92
MOSTAGANEM	03	227,9	6 149	2 825	1 388	5,27
M'SILA	05	583,6	16 276	2 351	2 985	4,46
MASCARA	08	601,9	15 217	4 710	2 153	7,91
OUARGLA	04	526,7	16 498	4 464	1 031	14,65
ORAN	12	1 068,5	29 369	15 261	4 788	15,97
EL-BAYADH	01	70	2 200	0	0	0
ILLIZI	02	70	1 652	108	574	5,17
B. B. ARRERIDJ	03	237	9 771	1 351	1 497	2,97
BOUMERDES	04	265	8 474	54	2 532	0,09
EL-TARF	05	252,6	9 114	1 032	588	3,71
TINDOUF	01	42,8	1 200	70	617	4,03
TISSEMSILT	02	148,5	2 446	0	400	0
EL-OUED	03	144	5 134	522	786	1,28
KHENCHELA	03	291	3 225	3 988	1 855	12
SOUK-AHRAS	05	362	7 040	2 534	1 218	15,64
TIPAZA	03	193,1	6 327	254	60	0,39
MILA	08	723	22 644	3 354	2 130	6,21
AIN-DEFLA	01	72	2 243	0	0	0
NAAMA	03	264	5 718	16	744	0,13
A. TEMOUCENT	04	252,2	10 171	2 207	1 716	7,69
GHARDAIA	03	127,9	2 800	184	238	0,79
BELIZANE	02	291,5	6 747	725	915	1,26
ALGERIE	257	21 835,7	660 142	179 523	107 337	7,41

ETAT EN MATIERE DE CONSTRUCTION : 31.12.1988

WILAYATE	PERMIS DE CONSTRUIRE (79-88)		CONSTRUCTIONS ILLICITES		
	DEMANDES	ACCORDES	RECENSEES	DONT HABIT.	REGULARISEES
ADRAR	3 598	2 264	979	970	928
CHLEF	6 260	4 533	9 309	9 095	1 531
LAGHOUAT	12 439	8 871	3 768	3 768	2 470
O. E. BOUAGHI	13 823	11 132	5 857	5 856	5 445
BATNA	17 095	13 524	15 313	13 990	1 947
BEJAIA	20 158	12 983	7 239	6 651	2 720
BISKRA	10 173	9 706	10 893	10 893	3 996
BECHAR	6 634	4 455	10 815	10 648	4 979
BLIDA	19 859	12 485	928	923	639
BOUIRA	9 296	6 021	3 227	3 064	3 021
TAMANSASSET	4 944	3 273	.	—	—
TEBESSA	7 216	5 030	17 404	—	—
TLEMCEM	26 767	17 435	20 723	20 000	6 373
TIARET	17 239	13 117	572	510	357
TIZI OUZOU	14 535	3 782	36 644	35 679	1 399
ALGER	22 002	12 667	10 815	10 648	4 979
DJELFA	13 307	9 328	4 977	4 869	3 914
JIJEL	4 937	2 708	11 717	11 082	2 035
SETIF	30 420	26 294	12 416	12 070	5 415
SAIDA	6 023	4 608	820	817	445
SEKIKDA	8 404	6 141	3 705	3 386	1 695
S. B. ABBES	16 768	14 021	37	20	36
ANNABA	5 481	4 623	493	354	179
GUELMA	3 909	3 124	10 467	9 662	9 314
CONSTANTINE	15 757	11 251	13 115	13 069	3 149
MEDEA	12 183	8 102	3 222	3 100	2 424
MOSTAGANEM	9 715	3 593	2 155	1 095	1 153
M'SILA	16 561	11 318	2 661	2 661	1 567
MASCARA	20 738	16 793	1 779	1 779	1 745
OUARGLA	10 286	3 846	6 985	6 785	1 399
ORAN	11 708	5 705	3 862	75	2 983
EL OUAJDJ	4 112	3 540	3 494	3 484	2 196
ILLIZI	1 166	511	—	—	—
S. B. ARRENDJ	13 681	6 709	3 353	3 353	2 581
BOUMERDES	8 607	4 464	9 983	7 940	3 111
EL TAREF	8 293	5 670	371	337	42
TINDOUF	831	437	281	273	72
TISSEMSILT	1 522	831	722	703	500
EL OUED	6 083	4 986	1 639	1 474	42
KEUCHELA	5 114	4 288	6 320	6 122	980
SOUK AHRAS	3 974	2 433	4 408	4 408	2 660
TIPAZA	8 947	6 817	5 025	4 820	3 334
MILA	4 438	2 760	16 174	15 646	3 110
AIN DEFLA	2 008	1 418	1 357	1 820	818
NAAMA	4 239	2 850	4 618	4 618	—
A. TEMOUCHENT	8 700	5 603	1 105	1 041	—
GHARDAIA	9 462	7 397	5 176	5 042	—
RELIZANE	6 875	5 912	5 501	5 420	4 124
ALGERIE	501 419	352 544	306 768	272 657	114 468

RATIOS SIGNIFICATIFS

WILAYATE	PERMIS DE CONSTRUIRE (79-80)			CONSTRUCTIONS ILLICITE	
	DEMANDES %	ACCORDES %	% ACCORDES	RECEPSES %	REGUL. %
ADRAR	15, 57	9, 36	63	4, 26	4, 04
CHLEF	3, 73	6, 32	72	12, 98	2, 13
LAGHOUAT	54, 21	38, 66	71	16, 42	10, 76
O.E. BOUAGHI	32, 57	26, 23	81	13, 70	12, 82
BATNA	21, 35	16, 90	79	19, 14	2, 43
REJAILA	27, 73	17, 55	64	9, 74	3, 67
BISKRA	35, 58	21, 35	60	23, 96	8, 74
BECHAR	34, 32	22, 36	61	55, 49	25, 60
BLIDA	26, 94	16, 94	63	1, 25	0, 86
ECUIRA	12, 19	7, 37	65	4, 27	4
TAMANRASSET	53, 33	35, 30	66	—	—
TEBESSA	15, 65	11, 60	70	39, 7	—
TLEMCEM	35, 80	23, 32	65	27, 7	8, 52
TIARET	28, 19	21, 45	76	0, 93	0, 53
TIZI OUZOU	14, 81	8, 95	60	37, 34	1, 45
ALGER	12, 90	7, 43	58	6, 34	2, 92
DJELFA	24, 81	17, 39	70	9, 28	7, 29
JIJEL	9, 32	5, 39	55	23, 32	4, 05
SETIF	28, 74	24, 84	86	11, 73	5, 11
SAIDA	24, 25	18, 56	76	3, 70	1, 73
SKIKDA	33, 16	24, 23	73	14, 62	6, 33
S.E.ABBES	35, 99	29, 91	83	0, 07	0, 07
ANNAVA	11, 44	2, 66	84	1, 02	0, 37
GUELMA	19, 48	8, 37	80	28, 07	24, 98
CONSTANTINE	22, 81	15, 29	71	18, 99	4, 56
MEDEA	17, 66	11, 74	66	4, 67	3, 51
MOSTAGANEM	13, 14	16, 04	88	4, 02	2, 15
M'SILA	25, 92	17, 71	69	4, 16	2, 49
MASCARA	34, 94	23, 23	81	2, 99	2, 91
OUARGAL	33, 75	25, 03	86	22, 92	4, 59
ORAN	12, 24	5, 97	48	4, 04	3, 11
EL BAYADH	24, 97	21, 59	86	21, 22	13, 36
ILLIZI	55, 83	28, 87	37	—	—
R.B.ARRERIDJ	29, 32	14, 76	49	7, 37	5, 6
BOUMERDES	6, 45	6, 45	52	14, 42	4, 4
EL TARF	23, 15	19, 45	69	1, 27	0, 1
TINDOUF	47, 94	25, 21	53	22, 26	4, 1
TISSEMSILT	6, 35	3, 45	54	3	2, 0
EL OUED	14, 96	12, 28	82	4, 93	0, 1
KHENCHELA	19, 88	16, 59	83	24, 57	3, 4
SOUK AHRAS	9, 73	7, 70	79	13, 95	8, 4
TIPASA	13, 70	9, 27	67	7, 74	5, 1
MILA	8, 22	5, 11	62	29, 97	5, 1
AIN DEFLA	3, 52	2, 49	71	3, 26	1, 1
NAAMA	35, 34	23, 76	67	38, 50	—
A.TENOUCHEM	30, 67	19, 52	64	3, 85	2, 1
GHARDALA	40, 82	31, 91	73	22, 33	—
RELIZANE	12	8, 75	73	9, 60	7, 1
ALGERIE	20, 71	14, 55	72	12, 67	4, 1

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1) URBANISME 1988:

WILAYA	ACTIVITES ETUDES PUD/PUP (communes+A.S)		LOTISSEMENTS		LOGTS EN ZHUN		I.T.U.E. ACHEVEMENT	
	ACHEVES	APPROUV	CEDES	VIABIL.	LANCES	REALISE	ETUDES	TRAVA
ADRAR	0	0	0	0	0	0	-	-
CHLEF	5	3	400	0	0	0	5	-
LACHOUAT	6	5	0	0	0	660	0	0
O.E.BOUAGHI	4	0	3835	0	407	353	0	0
BATNA	11	9	1699	232	0	182	0	0
BEJAIA	12	1	214	80	550	1771	0	0
BISKRA	2	6	518	0	15	414	1	0
BECHAR	4	4	1153	0	0	0	2	-
BLIDA	6	0	353	0	0	918	-	-
BOUIHA	15	5	1121	510	480	226	0	0
TAMANRASSET	2	0	0	0	-	-	-	-
TERESSA	5	0	914	500	540	411	0	0
TLEMCEN	4	20	1279	0	0	330	2	-
TIARET	6	7	643	0	100	435	-	-
TIZI OUZOU	7	6	29	15	1896	351	0	0
ALGER	0	0	1097	130	2232	1163	4	3
DJELFA	20	0	1320	1044	150	197	-	-
JIJEL	3	0	418	0	1120	0	1	0
SETIF	26	22	1047	572	2683	1307	0	0
SAIDA	0	0	409	246	0	1130	-	-
SKIKDA	6	2	501	0	343	618	0	0
S.B.ABBES	4	4	626	0	690	333	-	-
ANNABA	4	0	119	0	816	1032	0	0
GUELMA	4	0	0	0	15	126	0	0
CONSTANTINE	12	3	6502	0	1949	306	0	0
MEDEA	2	2	840	23	0	363	-	-
MOSLAGANEM	1	0	908	150	1000	195	-	-
M'SILA	17	7	1561	0	460	202	0	0
MASCARA	0	10	934	0	60	540	-	-
OUARGAL	4	11	3360	737	191	679	0	0
ORAN	4	0	6279	16	0	1912	-	-
EL BAYADH	0	15	929	109	0	0	-	-
ILLIZI	0	0	124	233	580	50	0	0
B.B.ARRERIDJ	10	11	1677	1064	750	1351	2	0
BOUMERDES	7	7	1066	0	883	48	1	0
EL TARF	3	3	900	0	0	126	0	0
TINDOUF	0	0	131	0	248	130	1	0
TISSEMSILT	1	0	12	0	100	0	-	-
EL OUED	7	1	0	575	374	76	0	0
KENCHELA	1	2	1911	732	414	273	0	0
SOUK AHRAS	1	0	360	0	300	1131	-	-
TIPASA	3	3	4118	138	353	0	-	-
NILA	6	5	1505	0	506	312	0	0
AIN DEFLA	1	2	50	0	0	0	-	-
MAAMA	0	0	0	0	-	-	-	-
A.TEMOUCENT	3	3	954	37	306	0	-	-
GHARDAIA	0	4	22	0	12	0	0	0
RELIZANE	0	7	1354	474	200	265	-	-
ALGERIE	272	202	54423	6712	21608	19487	19	-

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2) CONSTRUCTION 1983:

INDICATEURS	LIVRAISONS EN LOGEMENTS SECTEUR PUBLIC		PERMIS DE CONSTRUIRE SECTEUR PRIVE	
	URBAIN	RURAL	DEMANDES	ACCORDES
WILAYA				
ADRAR	379	125	1201	979
CHLEF	535	1238	1213	9308
LAGHOUAT	751	250	1800	1375
OU.M. EL. BOUAGHI	1063	1300	3812	2657
BATNA	481	1530	3640	3113
BEJAIA	2365	335	6557	4144
BISKRA	590	648	1748	1873
RECHAR	175	314	1746	1067
BLIDA	1373	800	3944	2354
BOUIRA	361	1105	3721	2523
TAMANRASSET	300	800	1070	731
TEBESSA	1724	471	729	481
TLEMCEM	371	513	4513	2661
TIARET	647	900	3068	2445
TIZI OUZOU	461	424	3436	2008
ALGER	2675	693	4012	3139
DJELFA	250	342	2783	2067
JIJEL	556	347	1154	615
SETIF	2110	911	7737	6420
SALDA	1204	700	1801	1446
SKIKDA	1400	1323	2391	1681
SIDI BEL ABDES	568	500	2117	1034
ANNABA	2320	800	930	635
GUELMA	200	304	1115	773
CONSTANTINE	1400	951	1994	1207
MEDEA	625	1147	3715	2770
MOSTAGANEM	592	470	3334	1828
M'SILA	300	537	5340	3610
MASCARA	791	1228	4630	3100
OUARGLA	911	758	2500	2263
OFAN	1420	307	2500	720
EL BAYED	118	100	1530	1312
ILLIZI	180	340	642	75
G B ARRERIDJ	691	442	4005	2501
BOUMERDES	869	1259	2435	1722
EL TARF	934	346	2205	1074
TINDOUF	71	100	372	170
TISSEMSILT	343	513	730	368
EL OUED	163	765	3253	2716
KHENCHELA	391	72	1660	1384
SOUK AFTAS	934	510	870	568
TIPAZA	1375	1285	3023	2120
MILA	532	304	1771	1163
AIN DEFLA	426	577	754	560
NAAMA	160	130	1108	706
AIN TEMOUCHENT	200	336	3094	2336
GHARDAIA	203	602	2585	2000
RELIZANE	744	1000	1732	1106
ALGERIE	37 805	31 004	124 478	84 636

3. RATIOS SIGNIFICATIFS : 1988

RATIOS % WILAYATE	LIVRAISON LOGTS SECTEUR PUBLIC		LOTISSEMENTS		PERMIS DE CONSTRUIRE		
	URBAIN + RURAL		CESSION	VIAB.	% ACCORD	DEMANDE	ACCORD.
ADRAK	2, 13		0	0	64	5, 23	3, 35
CHLEF	1, 72		0, 55	0	50	1, 69	0, 35
LAGHOAT	4, 4		0	0	77	7, 84	6
OUN EL BOUAGHI	3, 06		9, 03	0	70	8, 08	6, 25
BATNA	2, 5		2, 12	0, 29	86	4, 55	3, 49
BEJAJA	3, 6		0, 28	0, 10	63	2, 36	5, 6
BISKRA	2, 7		1, 13	0	61	3, 24	2, 36
BECHAR	2, 5		5, 32	0	61	8, 05	5, 45
BLIDA	2, 9		1, 15	0	60	5, 35	3, 10
BOUIRA	1, 2		1, 48	0, 67	68	4, 83	3, 34
TAMANRASSET	1, 3		0	0	68	11, 54	7, 80
TEBESSA	5, 06		2, 10	1, 15	68	1, 62	1, 13
TEMCEN	1, 2		1, 71	0	59	6, 03	3, 35
TIARET	2, 6		1, 05	0	60	5, 01	3, 09
TIZI OUZOU	0, 0		0, 02	0, 01	61	3, 50	2, 12
ALGER	1, 0		0, 64	0, 07	64	2, 38	1, 84
DJELFA	1, 1		2, 46	3, 43	74	5, 20	3, 05
JIJEL	2, 5		0, 83	0	53	2, 20	1, 22
SETIF	2, 3		0, 00	0, 54	73	7, 31	6, 06
SAIDA	3, 03		2, 01	0, 90	77	7, 55	5, 42
SKIKDA	11, 09		2, 21	0	79	2, 43	6, 63
SIDI BEL ABBES	2, 2		1, 33	0	87	4, 51	3, 01
ANNABA	6, 5		0, 24	0	68	1, 04	1, 32
GUELMA	1, 5		0	0	69	2, 98	2, 07
CONSTANTINE	3, 4		0, 41	0	65	2, 03	1, 06
MEDEA	2, 5		1, 21	0, 03	75	5, 30	4, 02
MOSTAGANEM	1, 0		1, 64	0, 23	55	6, 22	3, 41
M'SILA	1, 3		2, 44	0	60	8, 35	5, 65
MASCARA	3, 37		1, 57	0	60	7, 78	5, 36
OUANGLA	5, 47		11, 82	2, 41	63	8, 46	7, 42
ORAN	1, 39		6, 57	0, 01	29	2, 62	0, 76
EL BAYADH	1, 32		5, 64	0, 66	35	0, 34	7, 97
ILLIZI	25		5, 03	11, 15	12	30, 74	3, 59
R.B.ARRERIDJ	2, 49		3, 62	2, 34	53	10, 77	5, 67
BOUMERDES	3, 13		1, 45	0	61	4, 09	2, 48
EL TARF	6, 10		3, 00	0	49	7, 56	3, 63
TINDOUF	14, 5		7, 55	0	48	21, 46	10, 26
TISSEMSILT	3, 5		0, 84	0	50	3, 03	1, 53
EL OUED	2, 10		0	1, 41	63	0	6, 67
KHENCHELA	1, 30		7, 42	3, 04	74	7, 23	5, 38
SOUK AHRAS	4, 5		3, 06	0	55	2, 75	1, 80
TIPAZA	4, 10		6, 34	0, 21	70	4, 66	3, 28
MILA	2, 25		2, 00	0	66	3, 28	2, 15
AIN DEFLA	1, 76		0, 08	0	75	1, 32	0, 09
NAAMA	2, 5		0	0	67	0, 32	6, 63
AIN TEMOUCHENT	2, 15		3, 32	0, 12	75	10, 78	8, 14
CHARDALA	3, 5		3, 54	0	80	11, 15	8, 92
BELIZANE	3, 06		2, 36	0, 82	69	3, 02	2, 00
ALGERIE	2, 84		2, 24	0, 35	68 %	5, 11	3, 49