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THE CONSTRUCTION INDUSTRY IN ALGERIA AND NEW FORMS OF
INTERNATIONAL CO-OPERATION: IMPACTS ON EMPLOYMENT AND MIGRATION

by

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The attached paper has been prepared by Mr. Mohamed Tayeb Kasmi, Consultant Economist, Algiers. This is one of the reference documents to be discussed in the second session, Item B. on "Internal development, regional integration: effects on employment and migration".

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SUMMARY

The significant place occupied by the building and construction sector in the Algerian economy constitutes a factor increasing the rate of job creation, due to the repercussions it has, in terms of its backward and forward linkages, on other sectors of activity. This sector also represents a favourable sphere for the development of international co-operation wherein the primary objective would be to create jobs, notably for young people who constitute the majority of the population.

The building and construction sector, which is presently undergoing a growth crisis resulting from a combination of endogenous and exogenous constraints, nevertheless conceals advantages of a kind that could once again set in motion a more balanced process of development. The obstacles to surmount concern the inefficiencies in economic structures, and an absence of organized, high performance networks capable of responding efficiently to market needs in the construction field. The production cycle as well, experiences frequent supply ruptures and equipment breakdowns, and suffers from insufficient knowledge of modern organisational methods and production management.

A critical assessment of co-operation programmes in the construction sector reveals a lack of continuity in projects initiated and their limitation to the public sector, institutional impediments linked to inflexibility in the legislation governing international capital movements in Algeria, and finally, an absence of appropriate incentive mechanisms to encourage international co-operation in construction despite the broad range of needs to be satisfied.

According to the author, international co-operation, in order to fulfill the objective of employment creation at the local level, and from there to reduce the incentive to emigrate, would benefit, on the one hand, from resolving the obstacles to development in the construction sector and on the other hand mobilising the often quite significant human and material energy available in the country. Co-operation policies to promote in this area take on manifold forms ranging from technical-financial support, to the encouragement of partnership relationships between Algerian enterprises and those in OECD countries. Technical assistance, technology transfer and training constitute further paths for international co-operation. The author also emphasizes that encouraging youth enterprise creation goes hand in hand with co-operation in the field of developing community facilities in rural areas. The existence of more attractive standards of life and conditions of employment constitute an important element in reducing the incentive to emigrate.

THE CONSTRUCTION INDUSTRY IN ALGERIA AND
NEW FORMS OF INTERNATIONAL CO-OPERATION:
IMPACTS ON EMPLOYMENT AND MIGRATION

Mohamed Tayeb KASMI

In a developing economy, construction activities are of great importance for employment. More co-operation in this industry would help increase the level of employment and, indirectly, reduce the incentive to emigrate. The case of Algeria appears significant in this respect, in view of the vital place occupied by the construction industry in the country's economy, the demographic structure of the population, mainly young, and the strong temptation to emigrate among certain categories of the population, notably to the western Mediterranean countries.

The first part of this document indicates the importance and weight of the building and public works sector in the Algerian economy, especially in terms of growth and employment. The second part is devoted to an analysis of prospects for the evolution of the construction market and the induced effects for employment and migration. Lastly, the third part presents certain proposals for international co-operation better adapted to the development of construction activities and likely to generate local jobs and thus, in the longer term, reduce the incentive to emigrate.

1. The importance of the construction industry in dynamic employment and economic growth in Algeria

The building and public works sector occupies a strategic place in the Algerian economy and plays a vital role in the process of development. Through its production and its consumption of intermediary goods, it exerts a stimulating influence on many activities, both upstream and downstream in the production cycle (1). Thus it contributes to the satisfaction of economic and social needs and is a vital vector for growth and job creation. The sector's activities cover housing, which has the biggest share of the market, non-residential buildings (education, health, tourism) and public works (roads, dams, etc.). Building, in the broad sense, which absorbs 75 per cent of the investment in the sector, is the branch which, because of the nature and technico-economic characteristics of its production process, is most labour-intensive. The relative weights of the factors labour and capital are respectively 73 and 27 per cent. It is therefore potentially a very important field for job creation (2).

{Weight of the sector in the Algerian economy}

In 1990 the production of the building and public works sector amounted to some 88 billion Algerian dinars (DA), which represents almost 20 per cent of

gross domestic production (GDP), as compared with 12 per cent in 1978 and 8.5 per cent in 1970 (3). In 1990 the industry was also in first place in terms of non-agricultural employment, with a labour force of 682 000, or 30 per cent of the total population in employment (excluding agriculture and the administration) (4).

The importance assumed by the construction industry in the country's development dynamic has been a factor for the acceleration of job creation. During the past two decades, building and public works were responsible for almost 30 per cent of total job creation. In absolute terms, employment in the sector evolved as follows (thousands):

••• 1967•	1977•	1987	1990	
Number employed••	71•	364•	661	682
••• 1967/77	1977/87•	1987/90		
Jobs created per period		293	297•	21•

The bulk of the sector's employment is concentrated in building, which accounts for 70 per cent of the total labour force and of the value added.

{Evolution of the sector's structure and development dynamic}

The development of the construction industry may be characterised by four stages which have had a significant impact on employment and migrations.

{The period 1962-1969: a relatively unimportant sector}

This period was marked by a low level of investment in general, and construction investment in particular, due to the inadequacy of both demand and of market solvability. The productive apparatus, little developed, was composed essentially of small enterprises. This sector, still in the embryonic stage, employed 81 600 people in 1969, or 8.5 per cent of the total employed population (excluding agriculture) and accounted for almost 8 per cent of GDP. During this period, only the transport and communications sector ranked lower than the construction industry for job creation. Migratory movements were already to be seen in this period, essentially as a result of the pauperisation of the rural areas. The flows were still relatively modest however: an annual average of 11 500 people left the countryside between 1962 and 1969.

{The period 1970-1979: a burgeoning construction industry}

During the 70s, the building and public works sector grew rapidly thanks to the determination to develop the country, which resulted in an overall economic growth rate of almost 9 per cent a year. The big investment programmes, in particular in the industrial sector, meant major changes for the building and public works sector, leading to:

- The creation of a substantial network of public enterprises at national, regional and local level, designed to implement the construction side of the investment programmes and the development of a building materials industry;

- The introduction and regular revision of urban modernisation plans (P.M.U) for the biggest urban centres and communal development plans (P.C.D) which were subsequently to be generalised to all the municipalities of the country, including the rural areas.

Value added by the building and public works sector was multiplied by four over this period, and its share of GDP increased from 8.5 per cent in 1973 to 12 per cent in 1979. The sectoral labour force increased from 120 400 in 1970 to 437 000 in 1979. At the end of the period, the building and public works sector was in second position for the numbers employed outside agriculture. In terms of capital accumulation, the sector accounted for 52 per cent of gross fixed capital formation in 1979.

{The period 1980-1989: rapid expansion, then the appearance of signs of }
{slowing down as from 1986}

This period was characterised by the change in economic policy and the orientation of development objectives towards social investments, notably in housing. The period was marked by:

- The restructuring of big public enterprises, to provide a number of enterprises at regional and local levels;
- A measure of decentralisation, of development policy, leading to the generalisation of communal development plans (P.C.D) and the emergence of private sector activity in construction;
- The realisation of big construction projects in the fields of housing and economic and social infrastructures, notably between 1980 and 1985;
- The first impact of economic crisis on the sector's dynamic growth and development.

Between 1980 and 1989, sectoral value added was multiplied by three, despite a decline between 1986 and 1988 of over 4 per cent a year. The sectoral contribution to gross fixed capital formation (GFCF) increased from 55 per cent in 1980 to 75 per cent in 1987. The sectoral labour force was 665 000 in 1988, as against 468 000 in 1980 (5). As from 1982 the construction industry became the biggest non-agricultural employer, despite the stagnation, and even despite a slight fall in the sectoral labour force towards the end of the period. The decade of the 80s saw an acceleration in the rate of urbanisation, the urban population passing the 50 per cent level in 1988, and substantial migratory flows (almost 170 000 people a year) left the rural areas between 1975 and 1984 (6).

{The period 1990-1992: slow growth and relative stagnation of employment}

Because of the specific nature of its activities, the building and public works sector was the first to feel significant effects of the economic crisis, which resulted in a reduction of activity due to shortage of domestic financing and to cuts in investment. The sector was unable to maintain its dynamic growth, and recorded a fall in 1991 of 7 per cent as compared with the previous

year (as against a fall of 2.9 per cent in industry). During this period, a process of reorganisation and liberalisation of the economy was embarked upon to improve performance and profitability. The economic reforms thus initiated resulted in the progressive introduction of market economy mechanisms and autonomy for national and regional public enterprises in the construction industry. Construction activity is now carried out by an organised and structured sector and by what is known as an "informal" sector made up of independent builders and persons building their own homes.

Organised sector

The organised sector comprises some 9 000 public and private enterprises and design offices, of very different sizes, distributed over the whole of the territory.

The structure of the enterprises in 1989, was as follows (7):

- Over 7 600 small and medium private enterprises, accounting for 16 per cent of the total sectoral labour force and almost 20 per cent of production;
- 153 public enterprises of national and regional significance, generally of large size (with an average workforce of over 1 000), accounting for 55 per cent of production with 50 per cent of the sectoral labour force;
- 827 local public enterprises dependent on the local authorities, communes and departments, of medium size (workforce of about 300), accounting for 25 per cent of production with 34 per cent of the sectoral labour force.

The building branch remains dominant in the building and public works sector, with 80 per cent of enterprises, 65 per cent of production and almost 70 per cent of employment. The skill level of the labour force remains limited and labour productivity is low. The breakdown by socio-professional category is as follows: 4 per cent managers, 12 per cent supervisors and 84 per cent operatives. Permanent jobs predominate in this sector and the proportion of casual workers does not exceed 30 per cent. The building and public works sector generally employs younger workers. In fact in total national employment for all sectors by age group, (excluding agriculture), it accounts for 30 per cent of employed persons between 20 and 29, and 35 per cent of those between 20 and 59 (8).

Informal sector

This sector includes the building of homes by the owners themselves and maintenance work carried out by labour known as "informal" because it is not structured in legal entities. It is not possible to give any precise figure for total employment in the informal construction sector, but estimates put the workforce at between 100 000 and 150 000 persons. The physical production of this sector is in the order of 35 000 dwellings a year, for the most part individual houses, both urban and rural.

2. Development prospects for the construction market and impact on employment and migration

During the past decade, the average annual level of investment has been of the order of 113 billion DA. Between 1980 and 1988 the central government budget's contribution to finance construction averaged 35 per cent, of which 10 per cent for low-cost housing. The average annual investment for housing as a whole (including building own homes) was 64 billion DA. Private investment in new housing amounts to 39 billion DA, or 68 per cent of the total, of which 53 per cent by do-it-yourself builders. Average annual physical production during the same period was 127 000 dwellings of different types. Investment in non-residential building during the past decade averaged almost 26 billion DA a year, for the most part financed out of public funds (education, health, other social and administrative facilities).

Lastly, the annual average level of investment in public works during the period was 23.7 billion DA.

The present and future challenges for the construction industry in Algeria can be understood through three main indicators (9);

- The need for additional dwellings induced solely by demographic growth (3 per cent a year), will amount to an annual average of 114 500 until 1994, and 131 000 by the year 2000 (disregarding any improvement in housing conditions and assuming maintenance of the same rate of occupation per dwelling);
- An increase of almost 4 per cent a year in new cohorts entering primary and elementary education and 8 per cent a year entering secondary education;
- An increase of 4.5 per cent a year in the active population seeking work. The number of job-seekers will reach almost 8.3 million by horizon 2000.

{Evolution of the market in the short, medium and longer terms and impact on }
{employment and migrations}

The objective in terms of construction work for 1992 is to build 45 000 dwellings of the low-cost and for sale types and something of the order of 35 000 by do-it-yourself construction (10). Almost 10 billion DA will be invested in educational buildings, a similar amount on the communal development plans and over 16 billion on public works. On top of these investments we also need to add those made by enterprises, by other sectors (services, trade, tourism) and housing maintenance work carried out by individuals.

In terms of prospects, planned investment per period for the present decade is as shown in Table 1 below.

Table 1. Planned investment in building and public works, 1993-1999
(billion Algerian dinars, 1991 prices)

DESIGNATION	PERIOD 1993-1994			PERIOD 1995-1999		
	Annual Average	Annual increase (%)	Share of total inv. (%)	Annual Average	Annual increase (%)	Share of total inv. (%)
Housing	26	6.1	19	34	5.3	20.7
Education and training	9.4	5.2	6.9	11.4	4.1	7
Health and other social services	3.95	3.9	3	4.8	4.2	3
Collective facilities	9.5	2.6	7	10.8	2.9	6.6
Economic infrastructures	11.3	3.8	8.3	13.9	4.7	8.4
Hydraulics	10.7	-	7.9	12.8	-	7.8
Industrial civil eng.	7	2.9	5.2	8.4	4.1	5.1
Service facilities	7.7	2.9	5.67	8.75	2.4	5.3
TOTAL	85.55	-	-	105.05	-	-

{Source:}• "Esquisse technique de developement à moyen and long terme : travaux d'élaboration du plan 1990-1994 - C.N.P. April 1989.

On top of these investments, there are the do-it yourself construction operations, housing maintenance work and local authority works, which we estimate to be at present between 30 and 35 billion DA. In physical terms, the main new building objectives, until the end of the decade, for housing, education, health and other social services, consist of:

- Building each year 127 000 dwellings, 6 700 classrooms (1st and 2nd cycles) 206 primary schools, 42 secondary schools, 830 places for higher education and an equal number of hospital beds, 270 polyclinics and 76 health centres;

- Meeting the other social needs as follows: holiday and leisure centres for 14 800 young people, infrastructure for 24 800 young people, sports facilities for 16 200 young people, cultural infrastructure for 23 300 citizens, and several social protection facilities (youth, family, the handicapped).

We may also point to the positive impact for employment and migration of the construction of the East-West motorway (1 200 km) and the high plateau railway (over 1 000 km), the first sections of which are already under construction, and the Algeria-Morocco-Spain gas pipeline, which is soon to begin and will run through Algeria for several hundred kilometres.

The place reserved for rural areas and the small and medium towns is not defined in the objectives set. The demographic structure and the general regional distribution of the population are presented in Table 2.

Table 2. Total and active population, broken down by rural and urban areas 1993-1999

(million people)

DESIGNATION	U : Million			
	1 9 9 3		1 9 9 9	
	Rural Areas	Small and Medium Towns	Rural Areas	Small and Medium Towns
Total population	12.04	6.92	11.5	9.53
Active population	2.97	1.7	2.83	2.3
of which young adults 20 to 34	1.59	0.91	1.52	1.23

The period 1993-99 will be characterised by the stagnation, and even regression of the rural population and the very significant progression of that of the small and medium towns, judging from the urban growth trends observed over the past two decades.

The total number of unemployed in Algeria at the end of 1991 amounted to 1 266 000 people (of whom 74 000 with the baccalaureate or university qualifications), or 21 per cent of the active population. This was an increase of 105 000 over the 1990 figure. Although we have no more detailed or up-to-date figures, it is nevertheless clear that unemployment is most severe among the populations of the rural areas and the small and medium towns, and in particular the young people.

{Constraints and positive factors}

The building and public works sector is at present experiencing a growth crisis resulting from a number of endogenous and exogenous constraints, but

there are also positive factors which are likely to lead to a return to a process of better balanced development if it receives resources which are more appropriate and better adapted to its role as a motor for economic growth.

{Constraints}

The sector is very much marked by dysfunctioning and structural imbalances resulting from the high elasticity of demand and the rigidity of supply and the inadequate development of the branches supplying the necessary inputs.

More precisely, the construction industry suffers from:

- The lack of organisation of the actors in building and the absence of well-structured and efficient construction processes, capable of responding more effectively to market needs;
- Perturbations in the production cycle, resulting from frequent breakdowns in supply (inadequate supply of building materials) and non-availability of materials;
- The extremely poor state of plant and equipment, resulting from inadequate maintenance and the lack of spare parts;
- Continuing inconsistencies in the system for financing enterprise activities. The fact is that enterprises are subject to very rigid commercial transactions which lead to serious financial difficulties, given their very limited self-financing capacity;
- The stagnation and even decline in the order book, due to the recession in the national economy;
- Inadequate development of more economical construction processes and techniques and poor mastery of modern methods of production organisation and management.

On top of these intrinsic difficulties, there are other more exogenous constraints weighing on the economic development of the building and public works sector. The most significant are:

- The impact of the reductions of all kinds induced by the weight of the external debt, which amounts to 26 billion dollars and on which interest payments at present absorb 75 per cent of the country's foreign exchange resources;
- The great need for financing all branches of economic activity;
- The progressive disengagement of the state from the financing of certain investments (notably in housing, industry and services), thus reducing public orders, which in the past had greatly favoured development of the sector;
- The limited development of the materials industry, which can no longer meet the needs of the construction industry;

- The lack of openness of the sector to external markets and the low level of international co-operation in the construction field.

{Positive factors}

The sector nevertheless has certain advantages which could, in a process of economic revival make it possible to exploit the enormous potential and productivity reserves at present untapped. Among these positive factors we may mention:

- The existence of a big market, in view of the needs to be satisfied (shortage of over 2 million dwellings, increasing school-age population, etc.);
- Certain sectoral activities do not require substantial amounts of foreign currency, while others do not require a very skilled labour force but are very labour-intensive;
- The sector has substantial locomotive effects, notably upstream on activities such as the materials industry, machine tools and services, etc.;
- Lastly, the sector still has a great production potential which could generate a higher level of activity, absorb labour and help reduce unemployment.

3. International co-operation in the construction industry: impacts on employment and reduction of the incentive to emigrate

Construction activities in Algeria constitute a priority field for the development of international co-operation which would reconcile the need for durable local jobs and in the longer term reduce the incentive to emigrate to the developed countries, notably for young people who now constitute the majority of the population.

{Critical evaluation of co-operation programmes in the construction field}

The most significant co-operation programmes in the construction field date from the first half of the 80s. In fact, between 1980 and 1986, about 178 000 dwellings and 5.2 million m² of education-training and health facilities in fifteen departments of the interior and the high plateaux and in certain intermediate zones between the North and South of the country (Tell Saharien), were to be built by 68 foreign enterprises, for the most part European (France, Italy, Spain, Belgium). 42 260 dwellings and 4.2 million m² of socio-educational facilities were built, at a cost of 46 billion DA.

There are scarcely any statistics available concerning the impact of these programmes on employment and migrations. However, if we take the average European productivity (65 m³ per worker per year), corrected downwards to take account of production constraints in Algeria, and apply it to the total area of the programmes implemented, the number of jobs can be estimated at almost 120 000.

At the time, this programme was highly motivating for the labour force concerned, because of the more advantageous pay and working conditions offered by the foreign enterprises. It also induced migrations which were considered more positive in the sense that they more dynamically followed the construction projects which, to a large extent, were located in the small and medium towns and even in certain rural areas.

A critical analysis of these co-operation operations reveals that:

- The process did not develop steadily because of the financial difficulties Algeria began to experience as from 1986;
- It was not equally extended to all the Algerian actors in the construction industry (prime contractors, promoters, enterprises, etc.), because it was limited to the initiative of the public authorities only (public programmes);
- The objective was not necessarily oriented towards job creation, but more to satisfy construction needs (dwellings, social facilities);
- The rigidities of the legislation and the regulations in force in Algeria, concerning foreign investments, the transfer of capital and profits and prior authorisation for intervention on the property market curbed private initiatives;
- The lack of appropriate incentive mechanisms to favour the development of international co-operation in the field of construction (facilities for access to land, liberalisation of contract-award procedures flexible taxation and transfer operations, etc.), despite the scale of the needs to be satisfied (housing, employment, local development etc.);
- The field of co-operation was too narrow, because the programmes implemented were in the context of governmental agreements;
- The foreign partners knew little about the Algerian construction market and the possibilities for co-operation;
- The horizontal and direct relations of the foreign partners with their Algerian counterparts and construction industry professionals were little developed;
- The co-operation projects were limited to housing and non-residential buildings, whereas the possibilities for co-operation are greater elsewhere (technical assistance, building materials, etc.);
- Co-operation was mainly on the basis of ad hoc actions rather than on longer-term prospects and programmes centred on the resolution of concrete problems as a function of the necessary complementarity between the contracting parties.

Since 1986, this process of international co-operation in construction has been considerably reduced, due to the country's financial constraints, of course, but also due to the failure to seek methods and means more adapted to the new economic situation.

It is only now that international co-operation in the construction industry is again becoming a major concern, notably among economic operators and actors in the construction industry, whose initiative has been liberated by the institutional and structural reforms of the economy.

In this context, operations are now maturing or being finalised in the building branch. Some major projects now being negotiated are:

- A project for 30 000 dwellings in Algeria, involving the public building promoters (E.P.L.F) and CYTREN Group CANADA IND, in accordance with the protocol of agreement signed in Montreal on 20 August 1992;
- A project to build wooden houses, involving Poomerleau of Canada and the Algerian enterprise E.C.T.A.;
- The European Community plan for financing the import of construction materials to complete the low-cost (public) housing programmes, amounting to 70 millions ecus. The fruits of this EC funding, in Algerian dinars, will be used entirely in Algeria to develop youth employment programmes;
- The project for co-operation with the World Bank, to finance the development of the construction industry in the fields of housing, building materials and technical assistance (US\$ 200 million loan for housing);
- Building partnership projects now reaching maturity for the construction of several thousand dwellings, involving Algerian
 - promoters and French and Canadian enterprises, and projects now under way in hotel building with a South Korean group;
- The setting up of a land and property monitoring system by the housing development agency, with the technical assistance of U.S. AID. This is aimed at the broader diffusion of information, clarifying housing policy choices and contributing to the better functioning of the property market;
- Small and medium industry projects with Italian partners in the field of construction materials (dressed stone, bricks) with the aim of promoting the development of rural construction and local employment.

Regarding economic infrastructures, financing operations have been concluded with the BIRD, the B.E.I and the African Development Bank for the construction of the East-West motorway and a number of dams, and for the maintenance of the national road network. All these co-operation programmes now being prepared or actually launched show that the construction industry in Algeria offers undoubted prospects for international co-operation, likely to

lead on the one hand to job creation in the country and on the other, in the longer term, reduction of the propensity to emigrate.

Regarding housing projects for emigrants (though without their being obliged to return to Algeria for good), there are no precise statistics at either national or local level on construction programmes. We may nevertheless note that in the department of Tizi-Ouzou, part of a programme for 5 000 dwellings now being implemented by the family housing promotion enterprise is devoted to emigrants. In the same region, (one with a high emigration rate) a programme of 2 000 dwellings for emigrants is at present being studied by the promoters and the departmental services, with European Community support. There is also a building partnership project involving French and Algerian enterprises in the West of the country; one-third of the housing programme is destined for emigrants. For some years now, emigrants have been using local building workers and young job-seekers to build individual houses for themselves. Lastly, as regards housing construction for emigrants, there is no longer any specific legislation. However, the Caisse Nationale d'Epargne and de Prévoyance (CNEP), a housing finance body, gives priority in its programmes to its emigrant clients if they pay part of the cost in foreign currency. Property promoters also operate similar schemes.

{Suggestions for the broad lines and forms of international co-operation adapted }
{to the construction industry}

In order to fully achieve its two main objectives of local job creation and reduction of the incentive to emigrate, international co-operation should be oriented on the one hand towards removing the obstacles which hamper the development of the construction industry and on the other towards the mobilising the human and material resources available in the country, which are often substantial. In Algeria, the biggest constraints are concerned with the volume of activities, especially in rural areas and the small and medium towns, the satisfaction of sectoral demand for the inputs necessary to the functioning of the industry and the management of human resources and employment.

The co-operation policies to be promoted could take the following forms:

- Technical and financial support for the development of the more labour-intensive construction activities:
- Encouragement and incentives for the development of partnership relations between Algerian enterprises and OECD country enterprises in the field of construction and associated activities;
- Participation in the design and financing of local development programmes, especially in rural areas;
- Technical assistance, technology transfer and training.

The main activities and potential fields for co-operation capable of leading to the achievement of the desired objectives are as follows:

- Promotion of small and medium enterprises in the production of building materials (dressed stone, bricks, aggregates and in particular sand);

- Promotion of housing and other building projects (for tourism, commerce, etc.), which can be implemented through partnership between operators;
- Establishment of housing programmes, in the home country, for emigrants at present living in OECD countries (generally from rural areas or small towns);
- Development of services connected with construction (concrete production, plant maintenance, supply of spare parts, etc.);
- Establishment of cooperatives of young people and small enterprises in building maintenance in the towns;
- Road maintenance work;
- Design and implementation of local development programmes based on substantial building and public works activities;
- Small and medium agricultural irrigation schemes, forestry work and land development, to maintain the link between the agricultural world and local employment;
- Support for restructuring the production apparatus (enterprises) to preserve employment and improve performance;
- Training activities in the building trades most adapted to the needs of the market and the desire to develop new, more economical, labour-intensive construction methods;

These co-operation operations could be based on:

- The mobilisation of credit, for the benefit of economic agents developing SMEs in building, building materials and associated services;
- Loans for the realisation of major projects, and local development programmes;
- The effective establishment of all forms of partnerships between different operators;
- Support and technical assistance for managing human resource.

4. Conclusion

The development of the construction industry, besides its direct effects on employment also has indirect effects through job creation in other sectors. The effectiveness of international co-operation depends to a large extent on the forms this co-operation takes new forms more closely associating construction professionals and actors are to be encouraged, for the traditional paths have all shown their limits. The coherence of co-operation operations, their duration and the rationality of their execution, associated with more

dynamic and more appropriate local development policies, could create an internal growth dynamic and hence in the longer term help reduce the incentive to emigrate.

In the particular case of young people, the determining factors which lead them to emigrate are unemployment, particularly in rural areas, the housing shortage, the lack of leisure infrastructures, notably in the small and medium towns, and lastly the lack of concrete possibilities to encourage young people to create enterprises. The new forms of co-operation to be promoted should take account of young people's aspirations.

Generally speaking, new forms of co-operation in the construction industry should help modify the economic behaviour of candidates for emigration. Among the proposals likely to work in this direction, we may mention:

- Establishment of technical assistance for the development of building trades and certain associated activities (production of granulates, dressed stone, etc.) through training and assistance programmes designed to satisfy the need for skilled manpower in rural areas and in the small and medium towns. The people thus trained could fully participate in local development and improve their social situation. In this way a professional and social environment more favourable to their remaining at home could gradually be created;
- The attribution of loans and credit lines for SMEs in construction and in building materials production, particularly located in small urban centres and in rural areas, would make it possible to favour the development of economic activity and job creation;
- Encouragement for the creation of enterprises by young people, through helping them to acquire certain items of equipment and benefit from the technical support of professionals and specialists in the design and realisation of their projects. Young people who own their own businesses will have every reason to remain at home;
- Participation in local development programmes (rural areas, small and medium towns), favouring the construction of collective facilities, notably leisure infrastructure and shops, as well as housing, in a context associating partnership actions with technical assistance and enterprises created by young people. The existence of more attractive working and living conditions is a factor likely to reduce the propensity to emigrate.

NOTES

1. These upstream effects were pointed out in the article by M. Guerboukha: "Le repérage des secteurs-clés de l'économie algérienne à l'aide de l'analyse input-output", in Revue statistiques no 8, Office national des statistiques, (ONS), July/September 1985 (and A. Anizon).
2. See: "Plan national 1991 : rapport de synthèse", Conseil National de la Planification (CNP), February 1991. The monetary values provided in this document are all expressed in constant dinars (1991 prices). The official exchange rate of the Algerian dinar in January 1991 was 14.3 dinars to the dollar and 2.8 dinars to the franc.
3. See Revue statistiques no24, "rétrospective 1962/1987", ONS, 1989 and no 15 of this same journal, ONS, 1987.
4. See: L'Algérie en quelques chiffres, année 1991, ONS, Edition 1991.
5. See: "Structure du secteur B.T.P en 1989", CNAT, November 1991 and "Etude sur l'évaluation des effets du développement du secteur sur l'emploi", a study carried out by us for the IBRD as part of the "l'étude des perspectives de développement du secteur de la construction en Algérie", Op. cit, September 1990.
6. See: "Rapport général du plan quinquennal" 1980-1984, Ministère du plan et de l'Aménagement du Territoire (M.P.A.T) (1986).
7. See: "Structure du secteur B.T.P en 1989", November 1991, Op. cit.
8. See: Revue statistique no5, ONS, October/December 1984 and collections statistiques no30 : "Analyse de la population active en Algérie, quelques résultats issus de l'enquête main-d'oeuvre", June 1989, ONS.
9. See: "Actualisation de l'esquisse technique du développement économique et social à l'horizon 2000", Conseil national de la planification, December 1989.

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END-OF-TEXT