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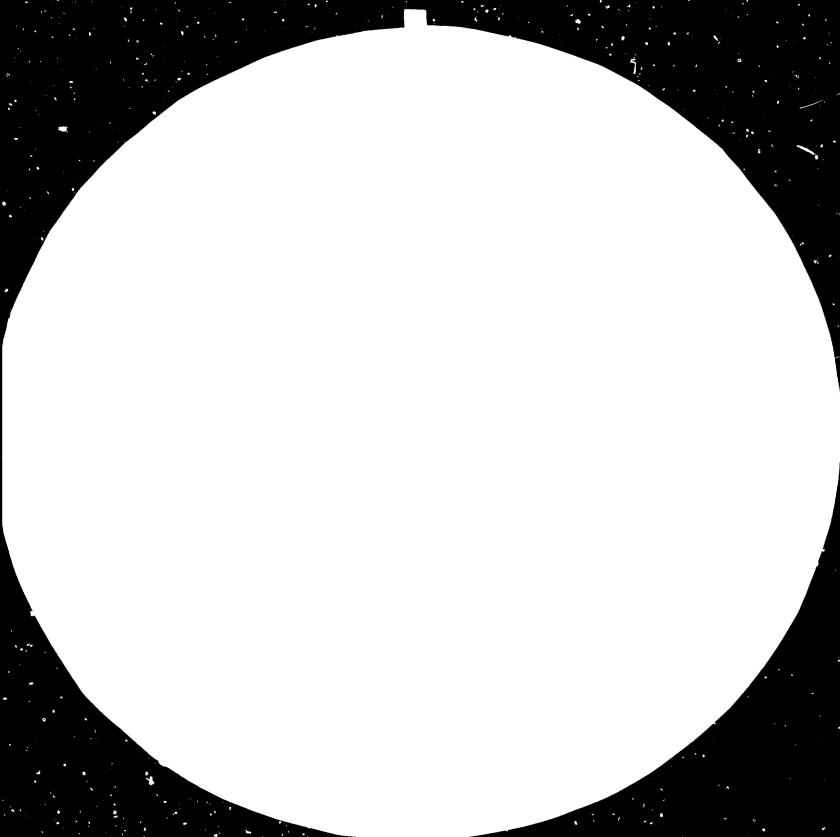
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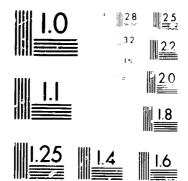
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ASSISTANCE TO THE BUILDING MATERIALS INDUSTRY

UC/TUR/83/057

TURKEY .

The export market for the construction and building materials industries

Prepared for the Government of Turkey by the United Nations Industrial Development Organization

> Based on the work of Jürgen Riedel, expert in industrial economy

> > 1311

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Vxplanatory notes

Reference to dollars (\$) are to United States dollars, unless otherwise stated.

The monetary unit in Turkey is the Turkish lira $(L_{...}^{T})$ During the period covered by this report, the value of the Turkish lira in relation to the dollar was \$US 1 = LT 202.

A slash between dates (e.g., 1970/71) indicates a crop year, financial year or academic year.

Use of a hyphen between dates (e.g., 1960-1965) indicates the full period involved, including the beginning and end years.

The following abbreviations have been used in this report:

- IGEME Turkish Centre for Export Promotion
- INTES Türkiye Insaat ve Tesisat Müteahitleri Isveren Sendikasi (Employers Federation of Construction Contractors of Turkey)
- OPEC Organization of Petroleum Exporting Countries
- TSI Turkish Standards Institute

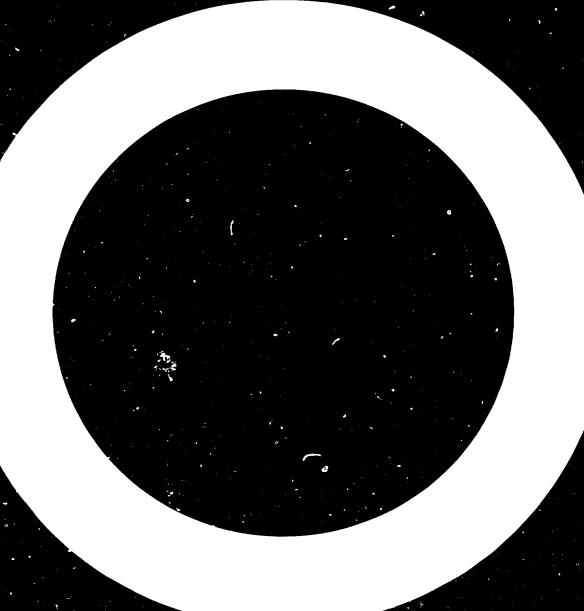
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ABSTRACT

As part of the project "Assistance to the building materials industry" (UC/TUR/83/057), an expert was sent by the United Nations Industrial Development Organization (UNIDO) to Turkey from 8 to 27 May 1983. According to the project document, emphasis was placed on Turkish construction operations abroad and on exports of building materials, and discussions with officials and the business community focused on these areas. However, domestic factors were also taken into consideration, in as much as they affect performance abroad, and a stable and sound domestic market is an important prerequisite for exporting.

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Among the recommendations made by the expert to improve the building naterials and construction industries were the establishment of an information system on business conditions abroad and measures to ensure that Turkish building materials met international standards.



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INTRODUCT ION

As part of the project "Assistance to the building materials industry" (UC/TUR/83/057), an expert was sent by the United Nations Industrial Development Organization (UNIDO) to Turkey from 8 to 27 May 1983. According to the project document, emphasis was placed on Turkish construction operations abroad and on exports of building materials, and discussions with officials and the business community focused on these areas (see the annex). However, domestic factors were also taken into consideration, in as much as they affect performance abroad, and a stable and sound domestic market is an important prerequisite for exporting.

Among the recommendations made by the expert to improve the building materials and construction industries were the establishment of an information system on business conditions abroad and measures to ensure that Turkish building materials met international standards.

CONCLUSIONS AND RECOMMENDATIONS

A. The domestic market

1. The exploitation and better utilization of resources for construction materials and the upgrading of traditional technologies in eastern Turkey in the context of the development disparities between the eastern and western provinces may be an appropriate target for government action. The eastern provinces could become more independent of material transport from the western provinces, thereby freeing capacities there for export. Efforts should be combined with a thorough analysis of the building materials market at national and regional levels, taking into account technical features, appropriateness and structures of production costs and market distortions - in particular the effects of the cement-pricing system.

2. The supply of construction and building materials should be in line with demand in different areas. Emphasis should be placed on reinforcing sophisticated engineering, on the one hand, and on low-cost building materials and construction technologies, on the other, thus utilizing the market at all income levels in both the public and the private sector. Attempts should be made to establish co-ordination and co-operation between construction and building materials research institutes, with a view to improving their capacity utilization and orienting them towards empirical and more practical approaches. There is also a need to co-ordinate building materials and construction standards.

3. Maintenance and repair of existing structures should be improved. Old but stable buildings should be renovated, also for historical reasons, which would improve and revive traditional construction and building materials production skills. Such traditional activities are the most labour-intensive and could ease unemployment in the urban areas. This would also open new markets for small and medium-sized enterprises, which are usually labour-intensive as well.

B. The export market

In line with the new outward looking strategies of Turkish economic policy, various efforts could be undertaken in order to encourage further exploitation of the export potential in the area of construction and building materials industries.

4. Efforts should be made to provide access for entrepreneurs to information sources about export markets. Information should be collected from major client countries on legislation, pre-qualification, tender and bidding practices, contractual procedures, standards, specifications and quality requirements, the general business environment, financial institutions and facilities, individual product markets, foreign competitors, sponsors, conditions for Turkish labour, technical and social infrastructure networks, customs procedures etc. Such an information system should be centralized for economic reasons. It could be attached to the Union of Chambers directly or to the Turkish Centre for Export Promotion (IGEME), but there is good reason to place it closer to those involved, i.e. within the Association of Construction Contractors of Turkey, which is already supposed to assume this function, or the Employers Federation of Construction and Installation Contractors of Turkey (Türkiye Insaat ve Tebisat Müteahitleri 'sueren Sendikasi (INTES). A commercial bank that specialized in this field could be considered, too. A fee should be charged for information provided, and the business community should contribute financially to the operation.

5. In addition to encouraging the export of construction and building materials, Turkish engineering consultancy firms should be encouraged to bid for contracts abroad. Efforts are being made to merge the interests of two consultant firms (TUMAS and TUSTAS) for this purpose. Moreover, some contractors have set up their own affiliates, and others may form common consultancies. Finally, joint ventures could be set up with foreign companies already well established internationally, which might accelerate foreign market penetration.

6. The prospects for the construction machinery industry in Turkey on the domestic and export markets should be examined. This could be done by attracting foreign investors that are already involved in this sector world-wide to Turkey.

7. With respect to financing constraints, the Government has undertaken various measures to promote exports, and the results have been quite promising in various fields. Fiscal incentives and export credit schemes have apparently stimulated exports, and Turkish banks have gained international acceptance within certain limits.

8. After two years' experience, the measures suggested in 4-7 above should be reviewed. There is some evidence that the incentive system is rather complicated. This is confirmed by sometimes contradicting statements by contractors and building materials manufacturers. Bottle-necks exist within the system:

(a) Inadequate prefinancing facilities in foreign currency owing to increased bond and reduced advancement payments rates fixed by the overseas clients. The Turkish system does not respond with enough flexibility;

(b) Insufficient working capital financing in general and in foreign currency in particular;

(c) Complicated, lengthy and costly banking services;

(d) Unsatisfactory backing of commercial banks by the Central Bank in international business;

(e) Lack of an appropriate insurance system and guarantee fund.

It seems that larger and experienced contractors are more priviledged than smaller contractors and new-comers.

9. The inadequacies of the Turkish technical standards system should be corrected. The following steps are recommended:

(a) The Turkish standards system should be strengthened and made compatible with international standards. Equivalence tables should be drawn up, the various testing facilities should be co-ordinated and the certificate issue and control system should be reinforced;

(b) In addition to research on appropriate and feasible standards for Turkey in both technical and economic terms, research work is required to find out what specific standards are acceptable at international levels. This should be done in the first instance for a selection of more important products and for major client countries only. Cases should be identified where Turkish products had been rejected for technical reasons by overseas clients;

(c) Once these cases have been identified, it should be detended to what extent and at what cost the quality of the products concerned could be raised to achieve international acceptance. This survey has to be undertaken in close collaboration with enterprises and should include considerations on government incentives to raise productivity and quality in general;

(d) If this approach proves to be insufficient to meet international requirements for products that are strategic, i.e. where Turkey possesses natural resources and has comparative production cost advantages, international co-operation should be sought to find international accreditation. Either Turkish testing laboratories must be internationally accredited so that the certificates issued are internationally accepted or Turkish products must be tested directly by overseas laboratories. This approach could be sustained in the long run by a government policy aiming at the reciprocal recognition of certificates between Turkey and major client countries.

10. Competition implies increased pressures to strengthen entrepreneurial performance, productivity and product quality. Hence, there is a need for productivity and quality improvements and related government efforts. The following measures might be envisaged:

(a) A foundation for productivity improvement and quality control which could be associated with the Union of Chambers could be established. Its functions would be to raise quality and productivity consciousness by advising and training entrepreneurs;

(b) A small and medium-sized enterprise advisory and extension service for construction and building materials industries, which could be incorporated in the Association of Construction Contractors of Turkey or the Employers Federation of Construction and Installation Contractors of Turkey could be established. It could be more practically oriented than the foundation suggested under (a) and promote exports of smaller and medium-sized industries;

(c) The existing National Quality Control System Project should be strengthened.

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I. BACKGROUND

A. Climatic and demographic conditions

Construction and building material technologies and skills have a long tradition in Turkey. Buildings reflect not only the country's rich and colourful culture but also the techniques that have evolved owing to the climatic conditions. The maritime climate of the south, west and north coasts contrasts with the continental-type climate of the east Anatolian plateaus, and there are extreme deviations from the average temperature and precipitation, as illustrated in table 1.

		High	Low		
Climatic variable	Value	Location	Value	Location	
Average temperature (°C)	19.6	Anamur (coast)	4.2	Kars (plateau)	
Highest temperature (°C)	46.5	Urfa (plateau)	38.0	Karaköse (piateau)	
Lowest temperature (°C)	-12.4	Urfa (plateau)	-43.2	Karaköse (plateau)	
Average relative humidity (%)	78	Rize (coas:)	48	Urfa (plateau)	
Average annual precipitation (mm)	2 357	Rize (coast)	324	Kony <i>a</i> (plateau)	
Average number of days with snow in a year	116	Karaköse (plateau)	None	Adana (coast)	
Average number of days with frost in a year	181	Kars (plateau)	None	Adamur (coast)	

Table 1. Climatic conditions in Turkey

Source: Statistical Yearbook of Turkey, 1981; and Turkey, Industrialization and Trade Strategy (World Bank, Washington, DC, 1982)

Another factor that has affected construction techniques in Turkey are the frequent earthquakes.

Turkey has a population of 46 million and an area of 314,578 square kilometres. There is a large market for civil engineering and building construction. The country is rich in mineral resources and forests, which can be exploited for building materials.

B. Economic conditions

Compared to other newly industrializing countries, Turkey had a good overall economic performance up to the mid-1970s, with average annual GNP growth rates of 6.6% (1963-1973) and 7.7% (1973-1976). Gross domestic investment ratios remained relatively low, leading to more effective investment productivity, i.e., low incremental capital output ratios (see table 2). Since then, however, GNP growth slowed down and fell behind population growth, resulting in a decline in real per capita income. At the same time, gross domestic investment in nominal terms increased faster than GDP, bringing up its share to 26% and the incremental capital output ratio to 13% (1979). In real terms (at 1968 prices), however, investment decreased from 1977 onwards, between 1978 and 1980 by nearly 15%. The private share dropped by more than 25%, reaching approximately the 1974 level.

Indicator	1963	-1973	1973	-1976	1976	-1979
Average annual growth rate of GNP	6.6	(7.1)	7.7	(5.1)	2.1	(5.8)
Gross domestic investment share of GDP	17.5	(21.7)	22.7	(25.0)	25.5	(25.0)
Incremental capital output ratios	2.9	(3.0)	2.8	(4.5)	12.6	(4.3)
Average annual growth rate of per capita GNP	4.1	(4.7)	5.2	(2.7)	-0.5	(3.4)

Table 2. Economic indicators

Source: Turkey, Industrialization and Trade Strategy (World Bank, Washington, DC, 1982), p. 45.

Note: Figures in brackets are averages for the newly industrializing countries.

The disparity between real and nominal values can be explained by two facts. First, the cost of construction, which counts for a large pertion of investment, was about 17 times higher in 1980 than in 1973; the cost of building materials was 15 times higher in 1980 than in 1973, whereas the wholesale price index increased by less than 11 times over the same period. Second, some indications suggest that the construction component in gross fixed investment declined up to 1977 and then rose again. In private investment the housing share increased from 37% in 1972 to 51% in 1980, while in the period 1978 to 1980 alone private manufacturing investment fell by 37%. On the other hand, real consumption stagnated between 1976 and 1980, whereby the public increased its share at the expense of private consumption.

During the period 1972 to 1980, the total civilian labour force grew on an annual average of 1.8%, while employment achieved a rate of 1.1% resulting in a doubling of the number of unemployed. As a consequence, the total labour surplus ratio rose from 16.5 (1972) to 19.6 in 1980, although emigration, following a decline from 1973 to 1975, grew steadily and foreign countries absorbed about 10% of the increased labour force between 1972 and 1980. While total employment stagnated, it increased slightly in construction, mainly owing to foreign contracting, but declined in building materials.

Pursuing inward-oriented policies at considerable cost to the national economy, Turkey was not prepared for the external shocks during the 1970s. The export/import ratio fell from 64% (1973) to 38% (1980), and by 1980 Turkey had to spend 93% of its export receipts to cover the oil bill. This precarious evolution was mainly due to a dramatic deterioration of the terms of trade, the index of which dropped to 55 in 1981 (1973 = 100). $\frac{1}{*}$ Its balance-of-payments effects equalled 5.1% of GNP in the 1974-1978 period alone: a further 0.4% were attributed to export decline owing to world recession. In order to keep up economic growth, the Turkish Government relied on foreign borrowing; as a consequence, there was a steep increase in foreign debts from \$3.6 billion in 1970 to \$23 billion at the end of 1980, of which \$14.5 billion were disbursed. Between 1978 and 1980, inflation (wholesale price index) more than tripled, whereas average workers' salaries doubled; hence, real wages declined. At the same time, the lending rates of banks increased considerably. As a result, during the early 1980s the construction of private housing, which counts for 95% of the market, nearly ceased.

Constraints in government finance, in particular since January 1980, further reduced public spending facilities for social housing schemes. Also, the home savings and credit system of the Real Estate and Credit Bank (Emlak ve kredi Bankasi) suffered considerably from inflation. With prices ranging from LT 30,000 to LT 50,000 per m^2 , only middle and higher income groups can afford housing. For lower income groups (including the 20% unemployed), even modest housing is not feasible.

In 1980/81, the Government introduced policy reforms by adopting a new long-term strategy that had an outward orientation and increased reliance on market forces. One key element in this strategy was the promotion of exports in the construction and building materials industries, which may benefit from a new system of export incentives and subjidies. Furthermore, incentives were introduced to gear domestic and foreign investments.

*For the notes, see p. 22.

II. THE ROLE OF THE CONSTRUCTION AND BUILDING MATERIALS INDUSTRIES IN THE NATIONAL ECONOMY

The role of construction in the Turkish economy has grown during the 1970s. The sector's contribution to GDP increased, at 1968 prices, from 5.7% (1972) to 6.3% (1980) whereas its share in total civilian employment increased from 3.1% to 3.8% during the same period. On the other hand, the construction component in gross fixed capital formation decreased from a rather high level of 65% in 1970 to 61% by 1977 in real terms (at constant 1968 prices). This was mainly due to a significant relative decline of residential buildings from 20.1% to 12.1%, whereas other buildings and other construction improved their position from 21.4% to 23.0% and 25.3% to 26.0%, respectively. Other fixed investment statistics by economic sector providing data up to the year 1980 and quoted by the World Bank confirm a decline of the housing share from 20% (1972) to 16% (1977) but indicate a considerable growth to more than 23% by the year 1980 (at 1976 prices) The percentage of government capital expenditure in housing decreased slightly from more than 6% to 5%. Housing plays a minor role in the 3c vernment investment policy; only 2.1% of the was devoted to this sector in the year 1980 (2.4% in 1972). investment budg

There was little construction of roads, since the network increased by only 1,500 km, or 2.5%, over the period 1973-1980. (The state highway system declined by 8% and the provincial roads were extended by 4,300 km, or 18%.) Efforts were undertaken, however, to upgrade the quality of the network. Primitive and graded earth roads, the shares of which declined from 7.7% to 4.0% and 8.2% to 5% respectively, were partly replaced by surfaced roads, which by 1980 represented nearly 90% (84% in 1973) of the whole network. Within this group, stone block, crushed stone and stabilized-type surfaces were replaced with concrete and bituminous surfaces, which in 1980 accounted for 59% of the road network (37% in 1973). The length of bridges, overpasses, underpasses and tunnels grew by 16% between 1970 and 1980, whereby stone and wooden structures were replaced with steel and reinforced concrete. No major additions were made to the Turkish railway system: in fact, except on the main line, traffic activity went down in terms of both passenger and freight tonne kilometres.

In building construction, the number of authorized buildings and floor area completed (according to occupancy permits) rose by an annual average of 2.7% and 6.9%, respectively, during the period 1973-1980, whereby the public sector's share declined from 4% to less than i%. Housing has attracted considerable capital investment from the private sector during the 1970s. Its share in total private fixed investment rose from 37% in 1972 to 51% by the year 1980. The number of residential building units (houses) and the corresponding floor area increased on an annual average of 4.5% and 6.5% respectively. There are apparently no statistical data on the informal construction sector in Turkey. This sector, however, seems to play an important role in residential building in both the outskirts of urban areas and the rural areas.

The share of residential units in total building decreased from 82% to 80%. At the same time there was a growing tendency towards multi-storey apartment buildings. The share of such buildings in terms of floor area rose from 74% to 79%. This applies, in fact, to all types of building and in particular to commercial and administrative buildings, which achieved the highest growth rates (12% and 9% per year in terms of floor area). Moreover, there was a shift of building construction from cities with more than 100,000 inhabitants to smaller cities, where the increase in apartment and commercial building was even more pronounced than on the national average.

During the past 30 years, important changes have taken place in the building materials used in Turkey. In the mid-1950s, bricks were by far the most popular material, accounting for 40% of the number of buildings completed (according to building permits). Stone ranked second (22%), followed by mud bricks (20%), wood (14%) and reinforced concrete (4%). Up to the mid-1960s, mud bricks and wood lost considerable importance, as did stone to a lesser extent; bricks were still the preferred material compared with cement. The latter, however, gained increasing significance and since the mid-1970s became the most important building material in Turkey. Nowadays, nearly 65% of the new buildings are made out of reinforced concrete, including steel frames and concrete blocks, and about 30% out of bricks. The other materials play only a minor role and are mainly used in residential building.

Mining and quarry products, forestry products, cement, glass and ceramics and iron and steel - most of which can be classified as building materials contributed largely to Turkey's export growth in the 1970s. The share of building materials increased from 11% in 1972 to 18% in 1980 and to more than 28% during the first 10 months of 1981. Even if iron and steel were not taken into account the growth would be significant (1972 - 9.7%, 1980 - 16.4%, 1981 - 24.0%). The excellent export performance in 1981 was probably due to the sensitivity of the producers of building materials to the market situation and the export-oriented policy of the Turkish Government, adopted in early 1980. On the other hand, the share of these products (excluding iron and steel) in total imports oscillated around 2.9%, which indicates a high degree of self-sufficiency in building materials.

III. MAJOR FEATURES OF THE DOMESTIC CONSTRUCTION MARKET

The high rate of population growth together with immigration from rural to urban areas increases the requirements for housing and infrastructure for which only restricted funds are available in the short and medium term. The segment of the housing construction market that catered to immigrants, low-income earners and the unemployed collapsed owing to enormous increases in construction cost compared to wages and salaries and the lack of efficient subsidy systems and social low-cost housing schemes. The areas around the cities where poer people live in unbearable conditions, with insufficient shelter, water supply, sewage and other social infrastructure facilities, are continuously growing. Forceful decentralization and resettlement policies are lacking.

Restrictive government spending policies in terms of both current and capital expenditure together with reduced private housing investment have led to a fall in domestic construction activity. Construction firms operating exclusively within the country report idle capacity of up to 35% of available equipment. Construction materials producers either manufacture and stockpile materials, waiting for better market conditions, or utilize less of the capacity of the plant.

In addition to general rural/urban growth disparities, there appears to be a growing gap between the western and eastern parts of the country in terms of both general economic and construction development. Despite extensive resource endowments for construction materials in the east, products have to be transported over long distances from the west. This leads to a high transport cost burden owing to the bulkiness and relative low unit price of the materials. Little care is taken to up-grade local resources for cheap traditional materials (perlite and adobe) as well as traditional construction technologies.

A. Materials used

The large-scale move from the use of traditional building materials such as bricks to cement, mentioned above, has been reinforced by the Turkish cement-pricing system. Ex-factory prices are uniform and subsidies are applied that take into account the difference in production costs between new and old plants, balance export and domestic prices and, in particular, compensate for transport and handling costs so that cement is sold more or less at the same price all over the country.

While this system may help to cut speculation, on the other hand it favours the use of cement over other building materials, thereby distorting the market competition, particularly in remote areas where other material resources are available. Although cement prices increased less than brick prices and the general building materials index during the early 1970s, this trend has reversed since the mid-1970s once this material had become very popular. This has made the sector more capital- than labour-intensive; for instance, the capital requirements per job is LT 16.1 million for cement and only LT 3.6 million for clay products, LT 1.6 million for stone and LT 1.5 million for other building materials (1980 data). There seems to be a widespread tendency towards higher and more expensive construction standards, restricting demand to higher income groups. High and sometimes luxurious standards are sometimes applied in industrial, commercial, banking and administrative building as well as in public civil engineering works where less attention is paid to cost accounting and value engineering. In areas of Ankara and Istanbul where housing needs are particularly critical, many sturdy buildings are unused, possibly owing to speculation. Existing buildings are deteriorating owing to deficiencies in maintenance and repair, or, possibly, to low-quality building materials and lack of construction skills. This may be because during the construction boom of the 1970s supply was unable to cope with demand and therefore quality was not an important factor for the producers of materials or the contractors themselves. At present some enterprises, including those that export, attempt to improve standards and quality. Others - mainly the small-sized firms continue to have lower and cheaper requirements.

B Standards

Standards for the construction and building materials industries are set by the Turkish Standards Institute (TSI) in line with international specifications. Products are tested either by the Institute itself or by other laboratories. The Ministries of Industry and Technology and Public Works are responsible for the introduction and control of standards. There is some control with respect to state-financed projects, but in general the control was reported to be insufficient. Turkish manufacturers who apply for and obtain a TSI certificate cannot be sufficiently controlled or checked, and construction technology and building materials research in Turkey seems to be dispersed and there is little co-ordination. It is performed by various institutes and laboratories inside and outside the university system. Each institute tries to establish its own structure independently. Equipment is extremely expensive and the existing capacities are hardly used - sources indicate an average of not more than 20%.

Concerning the supply side, the country has at its disposal relatively advanced construction and building materials industries. Large firms with sophisticated technologies and standards and capable of facing international competition operate side by side with small and medium-sized enterprises as well as with various building handicrafts. This sector is largely independent of imported skills, except for some highly sophisticated technologies ar materials. The low construction standards that are sometimes evident be more a consequence of general economic factors such as excess der insufficient incentives than of lack of capability. Weaknesses were .ced mainly in management and logistics as well as in financial organizati, and investment planning - areas that are, however, particularly crucial in the construction industry because of such factors as production sites, large prefinancing requirements for both investment and working capital, individual product specifications and long production periods. Some entrepreneurs claimed that the emigration of skilled workers was a factor.

IV. THE EXPORT MARKET

While the exports of building materials have been a traditional foreign currency earner, construction abroad is a rather new activity for the Turkish construction industry, and its performance in recent years has been remarkable. The total value of contracting outside the country increased from \$1.5 billion in 1979 to \$2.5 billion in 1980 and to \$10 billion at the end of 1982. The estimate for the mid-1980s is \$15 billion. Contracts are concluded mostly with countries in North Africa and the Middle East (Iraq, the Libyan Arab Jamahiriya and Saudi Arabia), but efforts are being made to diversify and extend activities to other countries of the regions and to the Far East and tropical Africa. Turkish contractors are mainly involved in labour-intensive and usually less-sophisticated projects such as housing schemes and other buildings, roads, irrigation projects and industrial plants. Particularly in the latter, they are often subcontractors in joint ventures for con ractors from western industrialized countries that have concluded turnkey or product-in-hand contracts. According to World Bank estimates, the gross receipts of Turkish contractors abroad may reach \$5 billion a year by 1985, assuming an average three-year construction period. This amount would cover about one third of Turkey's imports of goods and non-factor services projected for the year 1985, notwithstanding the fact that part of this total would be spent in the host country and for imports. However, some 20-25% of the total would be for workers' wages, 10-15% for exported construction materials, 10% for profits and 5-10% for various services.

A. Construction

Two main factors were responsible for the rapid expansion of Turkish contractors' activities abroad. First, a huge market for construction arose in North Africa and the Near and the Middle East. Turkish contractors were able to renetrate the market because:

(a) Turkish contractors had acquired experience by working with construction companies of western industrialized countries on joint ventures in Turkey;

(b) Turkish engineers had personal contacts with enterprises in those countries from university studies or direct employment;

(c) Competitive advantages owing to relative low labour costs;

(d) Preference of Arab States to deal with Turkey because of Islamic relationships.

The second factor was the export-promotion policy set forth by the Turkish Government in 1980/81.

Although initially Turkish contractors were mostly sub contractors, the risks were considerable: lack of knowledge of strange environments and markets; problems of financing, logistics and organization of construction sites; management of labour and supplies of construction materials; and changes from an inward- to an outward-looking entrepreneurial attitude. With the assistance of the Turkish Government in bridging banking and financial obstacles and providing export subsidies (tax allowances and reduced interest rates), construction abroad became very profitab¹, and Turkish contractors proved extremely capable. However, to avoid excessive risks, the following points should be borne in mind: (a) During an economic boom, there is a tendency to assume that the market will remain at that level;

(b) The Organization of Petroleum Exporting Countries (OPEC) market has decreased owing to the glut of oil prices and increasing competition from countries in the Far East;

(c) Religious relations and friendships are vulnerable unless supported by valid economic factors;

(d) Unlike contractors from western industrialized countries, Turkish contractors have little experience abroad and less footing in their domestic construction market. The share of foreign turnover in many cases exceeds 50% of the total business. Furthermore, they cannot yet offer a package of construction, building materials' supplies, planning and design engineering from Turkey. Standards and quality levels do not 'always satisfy tender requirements. Financial backing is still insufficient and vulnerable and depends on the international financial standing of Turkey;

(e) So far a number of contracts have been awarded, but success can be measured only when a large number of projects have been completed to the satisfaction of the clients.

These points are not intended to discourage new ventures but to reduce risks and shortcomings. A number of problems can be solved by individual entrepreneurs within the process of strengthening their activities. Other solutions will require government assistance and other co-operation.

B. Information on foreign markets

When an entrepreneur decides to enter a foreign market, the first step is to gather information on the business environment (customs and tax systems), laws, government regulations, financial facilities, co-operation opportunities, living conditions etc. in other countries. No systematic and efficient information source is available in Turkey so far. Although IGEME has at its disposal a basic library and documentation and offers research facilities, its staff has little experience and no opportunity to travel to major trading-partner countries. The involvement of commercial attachés of Turkish embassies is not sufficient. The Contractors' Association, the Union of Chambers, the Union of Exporters and the Chambers of Industry are not adequately equipped and staffed to deal systematically with information gathering. Their efforts are sporadic and no common attempt has been undertaken to co-ordinate the individual activities in order to create a vigorous and up-to-date information and advisory system.

IGEME has to restrict its activities and operates in isolation; no co-operation exists with established information systems in the developed countries. The need for such co-operation 1s not seen to be urgent because Turkish business seldom uses IGEME - large contractors have established their own small information bases or have direct access to foreign sources through their branch offices in Wetlern Europe, the United States of America and client countries. Other contractors and building materials exporters rely on a few foreign clients only and are unable to undertake broad market research. Hence, gathering information on foreign markets and establishing a vigorous and co-ordinated information system is a prerequisite for continuing export success. A group to advise on contractual procedures, legislation systems, financial conditions, standards and quality control etc. and experienced and well-paid staff would be required.

C. Standards

Turkish contractors abroad actually operate under tender specifications set by well-known design engineering consultants from industrialized countries who prefer technologies and products they know and sometimes want to favour. This makes it difficult for Turkish contractors to qualify for more sophisticated work and to introduce the use of Turkish building materials. Since the certificates of TSI have no international reputation, large contractors who produce or export building materials must attempt to have their products assessed by international testing institutions, which is cumbersome and costly and is feasible only where large quantities are required for big contracts. Contractors have good reasons to accept products specified in the tender instead of increasing the risks with Turkish supplies. This attitude may be further supported by financial (exchange rate etc.) considerations and interests. There are small and medium-sized consultancy firms operating on the national market. In addition, some large contractors have set up their own affiliates to plan and design the contractors' own projects. However, they have not yet gained enough international experience and reputation to serve as consultants for foreign clients and to undertake the conception, tender preparation and surveillance of projects. An alternative to individual contractors trying to cope with the challenge of the international market would be for contractors to form a joint venture in which each held shares and with the financial backing of commercial banks. In order to achieve an international reputation fast, a well-known foreign consultancy firm might be invited to join.

Concerning standards and quality, there are a number of inadequacies. These inadequacies became particularly evident when in spite of outward-looking strategies, foreign clients would not accept Turkish standards. This applied in particular to technical specifications for building materials to be used in international tenders. Some observers maintain that the major problems in this area are not a result of weaknesses vithin the Turkish standard system (i.e., of compatibility with international standards, testing procedures of materials and the issue and control of certificates) but stem from the lack of willingness, diligence or capability on the part of entrepreneurs to produce according to the standards and in particular, to guarantee the continuous application of the standards. This point of view is supported by TSI. Other experts in this field claim that the Turkish standards system is not operating satisfactorily. In particular, TSI is capable within certain limits only to properly certify products and control them; hence under prevailing conditions its reputation cannot be built up, at least at international levels, to back Turkish products abroad. Since international acceptance is a prerequisite for any further success in exports, various efforts are required to improve this situation.

There is a need for assistance in developing the ability to know which quality is requested by the client and in promoting quality consciousness and improvements in the production process. For this purpose, however, entrepreneurs need travel possibilities abroad and access to foreign currency, particularly before they have earned their own foreign currency. Quality consciousness, on the other hand, is related to a willingness to make continuous efforts to raise productivity and to develop long-term strategies aimed at opening and defending new markets against competition. Contractors and especially building materials producers seem to need assistance.

V. GOVERNMENT POLICIES

Policies that directly or indirectly affect the construction and building materials industries have to be consistent with national objectives and priorities. At present, Turkey is in a period between the Fourth Five-Year Plan (1979-1983), which had to be largely modified under the pressure of internal developments and external shocks, and the Fifth Five-Year Plan (1984-1989), which is in preparation. After 12 September 1980, the Government reinforced measures, introduced in early 1980, towards more market and export orientation. In line with these measures it developed long-term policy guidelines at the Second Economic Congress of Turkey in November 1981. Of particular relevance to the construction and building materials industries were the following statements:

"[To foster] the growth of the national product and the equitable distribution of the national income it will be decessary to bring the economy up to a level of production capable of meeting, to the extent possible, the consumer requirements". $\frac{2}{2}$

"As the exodus to cities will go on during the forthcoming decade, we must rapidly take the measures destined to make up for the infrastructural shortages, and prevent the proliferation of shanty towns ... develop absolutely a system of producing rapidly housing plans ... lower to the minimum the difference of service standard between the village and the city, and absolutely remove the interregional imbalances ... continue to take urgent steps for bridging the dwelling gap ... place emphasis on setting up industries that make use of our natural means and resources and which have a competitive strength".3/

"The interventionist role of the state must give way to a role that regulates and encourages... reconciles the diverging interests, and hence increases productivity. ... To depend on price controls... will generate black-marketing and double prices. ... Exports constitute the focal point... [and are] not solely the sale of our products at the foreign markets, but the giving up of our country from a closed economy and opening out to the whole foreign world".4/

"State support must be granted in every field to enable the Turkish contractors to be awarded larger contracts, and the problems presently arising should be promptly solved". $\frac{5}{}$

Within the preparation of the Fifth Five-Year Plan, sub-commissions, established for both the construction and the building materials sectors, have prepared draft reports. The report on construction deals mainly with training, technology and organizational problems, legal issues and financing constraints of private contractors. Some principal issues are:

(a) Increasing the number and skills of supervisors, basic training for unskilled seasonal workers, training courses at enterprise level in addition to on-the-job training and government incentives to promote the implementation of training programmes;

(b) Replacing unit-price systems by general performance specification systems, improving the public tender and bidding system through better project design and preparation including continuous planning and implementation of site preparation and strengthening standards to allow for economies of scale in the building materials industry; (c) Conferring public project design and engineering consultancy (including supervision and follow-up functions) to the private sector, improving the engineering certificate system and using previous quality performance and experience as criteria to award contracts instead of applying pure principles of lowest prices offered;

(d) Lowering guarantee bonds, improving and harmonizing price-adjustment procedures against inflation in order to avoid case-by-case treatment and strengthening payment procedures of public services including discipline with respect to agreed schedules.

The report on building materials stressed the effectiveness and co-ordination of research, the role of the Building Materials Department of the Ministry of Housing and Reconstruction as well as on the Turkish system of standards and particularly product quality and price control measures.

Overseas contracting and the export of building materials are dealt with in another commission report which was not yet available at the time of the consultant's mission.

There is no doubt that the future performance of the construction and building materials industries will depend largely on the evolution of the overall economic environment in Turkey and abroad. National and sectoral government policies such as monetary, external and fiscal (public investment) policies, regional policies (decentralization, urbanization and resettlement measures), on the one hand, and policies to promote agriculture and individual industrial sectors, on the other, will considerably affect the growth of these industries.

Footnotes

1/ Monthly Bulletin of Statistics (State Institute of Statistics) vol. XI-XII, 1982, p. 38.

2/ Opening-Closing Sessions and Committee Reports of the Second Economic Congress of Turkey, Izmir, 2-7 November 1981 (Ankara, State Planning Organization, 1983), p. 13.

3/ Ibid., p. 140-141.

- 4/ Ibid., p. 139.
- 5/ Ibid., p. 131.

<u>Annex</u>

DISCUSSIONS HELD DURING THE MISSION

Organization or institution ⁴	Persons contacted
State Planning Organization, Construction Sector	Yasar Bagli; Arif Özmen
Ministry of Industry and Technology	Yilmaz Koçak, General Director of Prices, Qualities and Standards Department
Association of Construction Contractors	Tekin Özme, General Secretary; Lütfi Solakoglu, Adviser (INTES); Nebil Ilseven, Assistant Co-ordinator for external affairs, ENKA Holding (Investment Co.)
Enka Holding A.S.	Sedat Ilhan - Co-ordinator for Ankara Office
Ministry of Housing and Ministry of Housing and Reconstruction	Oktay Ergunay, General Director of Construction Material Department
Turkish Cement Manufactures Association	Sükrü Yürür, General Secretary
Association of Construction Contractors	Basri Akçaru, Türk-Insa Genel Sokak; Leman Ardogan, Union of Chambers of Turkey; Salim Aktan, Union of Chambers of Turkey; Hüseyin Erdem, Ceceli Tel Sanayii A.S. (metal products); Bahattin Daloglu, Dalsan Alçi Sanayi A.S. (gypsum); Muharrem Daloglu, Dalsan Alçi Sanayi A.S. (gypsum); Lütfi Solakoglu, INTES A.S. (contractor holding); Nebil Ilseven, Enka Holding A.S.
Ministry of Public Works	Teoman Özalp, General Director of Construction Works; Yilmaz Topkara, Assistant General Director; Gülay Andaç Vedat Demirkol; M. Kocatayli; S. Usakli
TÜBITAK Building Research Institute	Mustafa Pultar, Director
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State Institute of Statistics	Melek Düzgünis

 \underline{a} / Listed in the order visited.

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INTES Construction Industry and Trade Co.S.A.

ENKA Holding Yatirim A.S.

TEKFEN Construction and Installation Co. Inc.

LIBAS Libya Construction and Investment Inc.

TOKAR A.S.

OTIM Middle East Trade and Export Center

Chamber of Industry

OT IM Middle East Trade and Export Center

Deniz Survey Bürosu, Superintendan e and Control

Industrial Development Bank of Turkey

GAMA A.S.

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Misbah Mertoglu, Director; Turgut Tezcanli

Ahmet Arzan, Director of Special Research; Ergin Tansug, Civil Engineer

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ÖZDEMIR Construction Co.	Atilla Özdikmen, Vice President; Levent Güray, Deputy General Director
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