



ANALYSIS OF THE TURKISH NATURAL STONE SECTOR

Turkey has a significant place in terms of world natural stone reserves and is increasing its share in the international markets every year with a variety of products in different colors and texture quality. Turkey ranks 5th among the natural stone exporting countries. The Turkish natural stone sector takes up around 8% of the world natural stone export pie and aims at bringing exports to \$ 2.5 billion by 2010.

Export and production of natural stone products have an important share in the mining sector which has gained importance in parallel to the improvement of the industrial products exports in Turkey. In recent years, the growth rate reached in terms of investment, production and exports in the natural Stone sector is quite above the world average. The fact that the \$4 million of export of natural stones in the beginning of the 80s has reached \$1.4 billion as of 2008, clearly presents the development potential of the sector.

PRODUCTION AND RESERVES

Turkey has 33% of world's reserves with its natural stone reserve of a total of 13.9 billion tons (5.2 billion m³) in the form of 'visible, probable and possible', is one of the oldest natural stone producers with its 4000 years of production history starting from the Marmara island.

Table 1
Turkey's Natural Stone Reserves

Reserves	Reserve Quantity (m³)	Reserve Quantity (Ton)
Known Reserves	589.000.000	1.590.000.000
Probable Reserves	1.545.000.000	4.171.000.000
Possible Reserves	3.027.000.000	8.172.000.000
Total Potential	5.161.000.000	13.934.000.000

Turkey has ongoing production activities in almost all of the reserves in a large area along the Anatolia and Trace regions and is producing various kinds of stones like granite, onyx, limestone, basalt, andesite, slate stone and diabase with a special emphasis on marble and travertine.

It's known that there are over 250 kinds of stones with different colors, textures and designs in Turkey. The sector today, with its high production and export potential, domestic market consumption, natural stone machinery manufacturing and export, makes an important contribution to the Turkish economy. Around a thousand marble quarries, small and medium sized 1,500 factories and 7,500 workshops functioning in the sector contribute seriously to employment. 90% of the quarries are situated in the Aegean and Marmara region to the west of Anatolia. 27% of the quarries are situated in the city of Balıkesir, 24% in Afyon, 12% in Bilecik, 8% in Denizli, 6% in Mugla and 4% in Eskişehir. The production in these regions makes up 65% of the overall production. Around 75-80% of the produced natural stones are processed into products with added value. The cities with intensive natural stone mining are; Afyon, Denizli, Mugla, Bilecik, Marmara Island, Bursa, Elazığ, Diyarbakır, Amasya, Burdur, Antalya, Istanbul, Ankara, Izmir, Kayseri and Sivas.

CURRENT STATUS OF NATURAL STONE MINING

In line with all these developments, our country's natural stone production increased from 600 thousand tons in 1986 to 2.5 million tons in 2000 to 9.5 million tons as of 2007. The sector's rapid development in the last few years can be attributed to the 'Investment Prioritized Sector' definition after 1985 and the subsidies. The occupation which could be considered as stone cutting up until then, later entered an industrialization process.

Today, almost 50% of the production is composed of marble, 45% travertine and the remaining 5% is other natural stones. Especially in the recent period with the stepping in of integrated production establishments with the investments of large companies, there is a notable increase in processed product manufacturing. With the application of modern quarry production methods and the latest techniques, Turkey has become one of the six largest natural Stone producers in the world.

Today, Turkey has managed to become one of the world's most important natural stone producer with its color, texture and design variety and quality and has reached the level to compete with the world's leading natural stone exporting countries. While the level of production and related export reached in a short time by the sector is simultaneously providing investment, employment and increase in quality, Turkey gains immense importance with its 9% share in the world natural stone production.

DEVELOPMENT OF EXPORTS IN THE SECTOR

The Economic Program which came into force in 1980 has initiated grassroots changes in all sectors with its greater interest in exports with the ‘Export Driven Industrialization Strategy’ in place of the ‘Import Substitution Industrialization Strategy’. So, especially between 1980 and 1985 imports expanded by an average of 185% and exports by 43%. Foreign trade volume grew at a rate of 80%. The usage of the idle capacity resulting from the industrialization policy implemented until 1980, exporting of the stock products, encouraging of exports as a new kind of understanding and the support of different policies are among the reasons sited for this rapid increase in exports. Nevertheless, in the first half of the 1980s with the increase in export related investments and the encouragement of foreign investments, a permanent upward trend was maintained.

Table 2
Turkey’s Natural Stone Export

Year	Amount (Thousand Tons)	Value (\$ Million)	Amount Change (%)	Value Change (%)
1996	345,7	93,5	-	-
1997	484,1	116,1	40,03	24,17
1998	535,6	128,5	10,64	10,68
1999	571,4	150,6	6,68	17,20
2000	731,4	188,7	28,00	25,30
2001	1.094,3	223,5	49,62	18,44
2002	1.561,3	302,6	42,68	35,39
2003	2.191,90	431	40,39	42,43
2004	2.707,70	626,1	23,53	45,27
2005	3.226,30	805,6	19,15	28,67
2006	3.758,70	1.027,4	16,50	27,53
2007	4.736,83	1.242,5	26,02	20,96
2008	5.125,69	1.402,1	8,17	12,8

While this structural transformation of the Turkish economy has positively affected our overall exports, it had a parallel effect on our natural stone exports. Our total natural stone export climbed from \$1.7 million in 1979 to \$7.3 million in 1981. After 1985, our natural stone exports registered leaps at significant rates. The lack of infrastructure and technology, mining engineer deficiency and the lack of educated intermediate workers are the most significant factors we came across that keep the sector from developing. Our natural stone export which was around \$40 million in the beginning of the 1990s reached \$188.7 million in 2000, \$805.6 million in 2005, \$1 billion in 2006 and \$1.4 billion in 2008.

Within this term, value added processed marble and travertine exports became more important in the country instead of the export of block marble and travertine with lower added value. Turkey had mostly exported raw materials in the past, now actualizes its natural stone export in the form of around 67,1% processed, 22% raw block and 11% semi-processed.

Processed marble with 37.4% has the largest share among the natural stone exports which has materialized at \$1.4 billion in 2008 with a 12.8% value-wise increase with comparison to the previous year. The export of the mentioned product within this period has increased by 26,3%, materializing at \$524 million. With, subsequently, \$117.1 million and \$39.6 million, the US and the Suudi Arabia are on top of the list of countries that export processed marble. In the US natural stone market, our country's advantage in the export of travertine products does not apply to the export of marble products.

The export of the processed travertine which is the second largest group within the sector export with a 25.4% share has value-wise decreased 17,6% reaching \$356.9 million. While the US again takes first place with \$185.9 million in the export of this group, UK follows with \$33.1 million and the Canada with \$26.9 million. The Turkish travertines which have a considerable advantage over the other exporting countries with 63% market share especially in the US travertine export, are considered the world's favorite travertine in terms of variety and design and is highly applauded.

In the mentioned period, marble raw block export has continued its rise alongside processed products. In this term, \$221.8 million export of the product makes up 15.8% of the overall natural stone export. While the Republic of China becomes the country that exports the most in this product group with \$149.2 million, she was followed by Syria with \$18.2 million. India, Greece and Taiwan are the other key countries that the product is exported to.

The other products in the natural stone export can be listed as marble raw plate at \$70.7 million, granite raw block at \$51.8 million, travertine raw block at \$30.7 million and processed granite at \$25.7 million. While the Brezilya ranked first in travertine raw plate export, China's dominance can be felt in the raw stones suitable for construction and travertine raw block export. The export done to the Russian Federation which ranks first in the export of processed granite has risen in this period by 245.2%, materializing at \$8.3 million.

Table 3
Important Product Groups

Product Group	2007 Value (\$ Million)	2008 Value (\$ Million)	% Exchange
Marble (Block&Plate)	226,0	292,5	29,4
Processed Marble	414,8	524,0	26,3
Travertine (Block&Plate)	36,2	41,2	13,8
Processed Travertine	432,9	356,9	- 17,6
Granite (Block&Plate)	12,3	13,8	12,2
Processed Granite	12,5	25,7	105,6
Other Natural Stones	107,8	148,0	37,3
Total	1242,5	1402,1	12,8

TURKISH NATURAL STONES ARE ALL AROUND THE WORLD...

Here are the some projects in different countries and different cities by which Turkish natural stones has used.

- The President of USA, George Bush has been making press statements in front of a rostrum at White House which is made of Elazığ Cherry Marble.
- The house of Michael Dell, the chairman of Dell Company, is covered with Turkish travertine.
- The house of Jennifer Lopez and Eddie Murphy are decorated by a fireplace which is made of Nevşehir stone.
- The floor tiles, the heads of pillars and stairs of the castle in San Francisco which belongs to shareholders of Google, has covered with Turkish natural stones.
- Elazığ Cherry Marble has also been used in France Parliament, US House of Representatives and Disneyland.
- The Olympic Village in China is covered with Diyarbakır marbles.
- Also, Turkish marble embellish the luxury hotels, airports, schooll, hospitals, cultural and business centers, houses and public buildings.
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CONCLUSION

Turkey has a significant place in terms of the world natural Stone reserves and is a country with very high market potential with its various products in different colors and texture quality. The rapidly developing natural stone sector has not only surfaced as an important sub-sector of mining but has also become a candidate for becoming one of the most important building blocks for the sustainability of the Turkish economy.

The natural stone sector is a strategic industry branch that will leverage our country's competitive power in the world markets and will allow it to gain a higher share from international trade. The level of production and related export reached in a short time by the sector simultaneously provides investment, employment and an enhancement in quality. The growing trend towards processed product export in the sector and higher added value brought in compared to block export is seen as a positive and happy development for the future.

Today, while exports of Turkish natural stones are to over 160 countries, this is testimony of the Turkish stone awareness in the world markets and the increase in its consumption, in terms of maintaining sustainable export growth, developing and diversification of the current demand structure in the markets, formulation of promotion strategies for countries perceived as the target market, improving of the efficiency of the sector in general, close follow-up on new Technologies and the prioritization of R&D studies for their production, are all pertinent issues.