# Gems & Jewelry

# Sector Brief

The objective of this short write-up is to provide the reader with an overview of the sector. The information covers global trade of the product, status of Pakistan's exports and summary of industry structure. Trade information for global comparisons has been obtained from PC-TAS, International Trade Centre's Database. Latest available export data on Pakistan has been obtained from the Federal Bureau of Statistics, Pakistan.

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#### 1. Introduction

A natural gemstone is a mineral stone, or organic matter that can be cut and polished or otherwise treated for use as jewelry or other ornament. A precious gemstone has beauty, durability, and rarity, whereas a semiprecious gemstone has only one or two of these qualities. A gem is a gemstone that has been cut and polished. Diamond, corundum (ruby and sapphire), beryl (emerald and aquamarine), topaz, and opal are generally classed as precious stones. All other gemstones are usually classed as semiprecious.

## 2. Global Trade of Gems

Gems exports (SITC 667) have increased in last five years by 9% as a whole in previous five years, with a negative growth of 10% only in 1998.<sup>1</sup>

Value in \$ million									
World Exports									
	1995	1996	1997	1998	1999				
WORLD	34,389	36,090	36,630	32,842	37,462 <sup>2</sup>				
Growth % age		4.95%	1.50%	-10.34%	14.07%				

Global exports of gems can be subdivided into major categories such as pearls, diamonds, precious and synthetic stones. Diamonds hold the largest share in the international exports of gems i.e. above 90%, and by value its exports have increased by 11% in previous five years. Pearls registered highest growth i.e. by 47% while growth rate were -30% and 4.65% for precious and synthetic stones respectively during 1995-99.

			E	kport Value i	n \$ million
Pearls (Natural, Unworked & Worke	d)				
	1995	1996	1997	1998	1999
Value	691	866	934	872	1,016
Growth % age		25.23%	7.86%	-6.65%	16.52%
Share in Total Gem Exports	2.01%	2.40%	2.55%	2.65%	2.71%
Diamonds (rough & unsorted, sorted	d & unworke	ed and worke	ed & unmou	nted)	
	1995	1996	1997	1998	1999
Value	31,121	33,100	33,660	30,160	34,489
Growth % age		6.36%	1.69%	-10.40%	14.35%
Share in Total Gem Exports	90.50%	91.72%	91.89%	91.83%	92.06%
Precious & Semi-precious Stones (w	orked & un	worked)			
	1995	1996	1997	1998	1999
Value	2,139	1,703	1,583	1,379	1,500
Growth % age		-20.37%	-7.03%	-12.91%	8.76%
Share in Total Gem Exports	6.22%	4.72%	4.32%	4.20%	4.00%
Synthetic Stones (piezo electric qua	rtz, other sy	nthetic ston	e <mark>s unwork</mark> e	d and synthe	etic nes
	1995	1996	1997	1998	1999
Value	438	421	453	432	458
Growth % age		-3.75%	7.52%	-4.60%	6.01%
Share in Total Gem Exports	1.27%	1.17%	1.24%	1.32%	1.22%

<sup>&</sup>lt;sup>1</sup> World trade of Gems is reported under different SITC codes (6671, 6672, 6673 and 6674). For the purpose of analysis, all these codes have been summed up to get the overall picture of the world's trade of gems.

<sup>&</sup>lt;sup>2</sup> India's exports for the year 1999 are taken at the same level as were in 1998.

# 2.1. Major Players

Belgium has been the major exporter of gems for the last five years. Its exports have increased by 12% and it captured 32.14% of the gems trade in 1999. Israel, which had 20.77% of the export share and UK, capturing 15.14% of gems market in 1999, are two other major exporters.

						Value in \$ million
Major Exporters						
	1995	1996	1997	1998	1999	% Share in 99
BELGIUM	10735	11405	11336	10207	12041	32.14%
ISRAEL	5744	6284	6812	6366	7780	20.77%
UNTD KINGDOM	4585	5141	5294	4342	5673	15.14%
INDIA	4746	4176	4475	4954	4954	13.22%
SOUTH AFRICA	2327	2862	3311	1225	1576	4.21%
SWITZERLAND	1927	2022	1552	1172	1278	3.41%
THAILAND	1198	1228	824	465	518	1.38%
Other	3127	2971	3026	4111	3642	9.72%

Belgium has been the largest importer of gems for the last five years and accounted for 22.21% of total imports with a value of US\$ 11.12 billion in 1999. USA's imports of gems has increased by a high rate of 65% in these five years and was second with approximately 22.05% of world imports of gems in 1999.

						Value in \$ million
Major Importers						
	1995	1996	1997	1998	1999	% Share in 99
BELGIUM	10304	11385	10852	9618	11123	22.21%
USA	6687	7431	8583	9469	11045	22.05%
UNTD KINGDOM	4518	5170	5706	5329	6742	13.46%
ISRAEL	4695	5122	5102	4211	5821	11.62%
INDIA	2110	2924	3338	3764	3764	7.51%
HONG KONG	3624	3362	3283	2491	3457	6.90%

## 2.2. Pakistan:

In 1999 gems accounted for US\$ 2.4 million in foreign exchange earnings, which was approximately 0.0064% of international gem exports. The share reached a high of 0.014% in 1998 when Pakistan exports were US\$ 4.62 million, but the highest value was achieved in 1997 when Pakistan earned foreign exchange of US\$ 4.87 million.

Pakistan gems exports can be categorized into two categories i.e. precious stones worked and un-worked, in which un-worked shared 92% on average in last five years.

				Val	ue in \$ million
Pakistan Exports G	ems				
Years	1995	1996	1997	1998	1999
Value	2.01	4.08	4.87	4.62	2.40
Growth %		102%	20%	-5%	-48%
Share in Int Mkt.	0.01%	0.01%	0.01%	0.01%	0.01%
Pakistan Exports P	Precious Stones	unworked			
Value	1.86	3.44	4.76	4.40	2.29
Growth %		86%	38%	-8%	-48%
Share in Pak exp	92.20%	84.49%	97.62%	95.18%	95.41%
Pakistan Exports P	Precious Stones	worked			
Value	0.16	0.63	0.12	0.22	0.11
Growth %		303%	-82%	92%	-51%
Share in Pak exp	7.80%	15.51%	2.38%	4.82%	4.59%

Pakistan is also a regular importer of gems. Pakistan's import value remained below US\$ 36 thousand in the last five years except in 1996 and 1999 when imports were US\$ 76 and 69 thousand respectively.

	Value in \$ thousand										
Pakistan Imports Granite+Sandstone											
Years	1995	1996	1997	1998	1999						
Value	27	75	34	36	69						
Growth %		178%	-55%	6%	92%						

For international comparisons the data used is for the year 1999. However, data is also available for Pakistan for the year 2000-2001, which shows that there has been a decrease in exports from US\$ 2.4 million to nearly US\$ 2.09 million while imports were US\$ 52.18 thousand in 2000-01.

Some of the leading importers from Pakistan include Hong Kong, which imported 40% of Pakistan's gems in 1999 while USA is another major importer sharing 20.2% of Pakistan gems exports. UAE shared 29.37% of Pakistan exports in 1998 but its imports in 1999 were negligible.

			Valu	e in US\$ thousand
Pakistan Major Export Partner				
Country		1998		1999
	V	% Share	V	% Share
HONG KONG	1183	25.59%	966	40.30%
USA	641	13.87%	485	20.23%
GERMANY	373	8.07%	467	19.48%
INDIA	98	2.12%	116	4.84%
UAE	1358	29.37%	90	3.75%
THAILAND	64	1.38%	83	3.46%
FRANCE	85	1.84%	61	2.54%
UNTD KINGDOM	347	7.51%	31	1.29%

# 3. Global Trade of Jewelry

Jewelry exports have registered a sharp decline in 1999 i.e. by 11% but overall for the last five years a positive growth rate of 0.77% has been registered.<sup>3</sup>

				Value	in \$ million					
World Exports										
	1995	1996	1997	1998	1999					
WORLD	17,734	17,832	18,970	20,065	17,871					
Growth % age		0.55%	6.39%	5.77%	-10.93%					

Jewelry exports can be distinguished into three categories i.e. imitation jewelry, gold & silver jewelry and articles of other precious metals<sup>4</sup>. Gold & Silver jewelry has had the lion's share of about 88% throughout the previous five years while imitation and other articles of precious metal shared 8% and 4% of international exports in 1999. All have experienced negative growth but other articles of precious metals have increased their share in total jewelry exports from 2.22% to 4.2% in previous five years.

Export Value in \$ million									
Imitation Jewelry (base metal & non	precious ma	aterial)							
	1995	1996	1998	1999					
Value	1,488	1,453	1,498	1,398	1,422				
Growth % age		-2.35%	3.08%	-6.68%	1.72%				
Share in Total Gem Exports	8.39%	8.15%	7.90%	6.97%	7.96%				
Gold & Silver Jewelry (full metal, smi	ith wares, a	nd articles o	of precious s	tones)					
	1995	1996	1997	1998	1999				
Value	15,852	15,795	16,895	17,906	15,699				
Growth % age		-0.36%	6.96%	5.99%	-12.33%				
Share in Total Gem Exports	89.39%	88.58%	89.06%	89.24%	87.85%				
Other articles precious metals (plating	num catalys	ts, <mark>other pr</mark> e	ecious metal	ls)					
	1995	1996	1997	1998	1999				
Value	394	584	578	760	750				
Growth % age		48.00%	-0.95%	31.56%	-1.36%				
Share in Total Gem Exports	2.22%	3.27%	3.05%	3.79%	4.20%				

## 3.1. Major Trade Players

Italy is the major exporter of jewelry for the last five years and captured 27.54% of the jewelry trade in 1999. China had 11.16% of the export share and Switzerland, with a decrease of 32% in its exports, captured 7.18% of jewelry market in 1999.

<sup>&</sup>lt;sup>3</sup> World trade of jewelry is reported under different SITC codes (8972, 8973 and 8974). For the purpose of analysis, all these codes have been summed up to get the overall picture of the world's trade of jewelry.

<sup>&</sup>lt;sup>4</sup> These categories can be further divided into three or more types which are unnecessary to be explained in international perspective.

						Value in \$ million
Major Exporters						
	1995	1996	1997	1998	1999	% Share in 99
ITALY	4653	4856	4719	4650	4922	27.54%
CHINA	1208	1010	1399	1674	1994	11.16%
SWITZERLAND	1899	1589	1788	1463	1283	7.18%
UNTD KINGDOM	1444	1621	1970	1719	1260	7.05%
USA	584	618	730	761	1078	6.03%
THAILAND	910	920	987	835	901	5.04%
GERMANY	801	761	681	729	752	4.21%
Other	6234	6456	6696	8234	5681	31.79%

If exports are analyzed on the basis of separate categories, Korea, Italy and UK were the largest exporter of imitation, gold & silver and articles of other precious metals respectively.

USA has been the largest importer of jewelry for the last five years in each of the categories. Its imports have increased by 32% during 1995-99 and it shared 36% of total imports with a value of US\$ 5.7 billion in 1999. UK was second with approximately 10.67 % while Hong Kong had third largest share in 1999 imports of jewelry.

						Value in \$ million
Major Importers						
	1995	1996	1997	1998	1999	% Share in 99
USA	4363	4422	4650	5340	5772	35.94%
UNITED KINGDOM	1610	1872	2436	2149	1713	10.67%
HONG KONG	886	865	1070	961	1070	6.66%
SWITZERLAND	1342	1361	1616	1327	1054	6.56%
JAPAN	1361	1248	1002	910	1039	6.47%
GERMANY	915	862	748	833	844	5.26%

## 3.2. Pakistan:

In 1999 jewelry exports accounted for US\$12.24 million in foreign exchange earnings, which was approximately 0.07% of international jewelry exports. The share has increased from 0.03% (in 1995) while in value; the exports have increased by 99% from the last five years. Pakistan exports can be subdivided into imitation jewelry of base metal, Gold & Silver metal jewelry and gold & silversmith jewelry.<sup>5</sup> Among them gold & silver metal jewelry accounted for above 98% of Pakistani exports.

<sup>&</sup>lt;sup>5</sup> Sub-categories.

				Value ir	n \$ million					
Pakistan Exports Jewelry										
Years	1995	1996	1997	1998	1999					
Value	6.16	6.03	4.50	7.51	12.24					
Growth %		-2%	-25%	67%	63%					
Share in International exports	0.03%	0.03%	0.02%	0.04%	0.07%					
Pakistan Exports Imitation Jewelry of E	Base Metal									
Value	0.04	0.04	0.02	0.02	0.08					
Growth %		-5%	-46%	0%	276%					
Share in Pakistan exports	0.67%	0.65%	0.47%	0.28%	0.65%					
Pakistan Exports Gold & Silver metal Je	welry									
Value	6.09	5.99	4.43	7.49	11.34					
Growth %		-2%	-26%	69%	51%					
Share in Pakistan exports	98.93%	<b>99</b> .35%	98.49%	99.68%	92.62%					
Pakistan Exports Gold & Silversmithwa	res									
Value	0.00	0.00	0.04	0.00	0.83					
Share in Pakistan exports	0.00%	0.00%	0.98%	0.00%	6.74%					

Pakistan is also a regular importer of jewelry, and its imports were of US\$ 0.87 million in 1999 which have increased by 37% in the previous five years. If imports are analyzed yearwise, the import level has gone down after reaching a peak value of US\$ 1.7 million in 1998.

Value in \$ million					
Pakistan Imports Jewelry					
	1995	1996	1997	1998	1999
Value	0.64	0.16	0.35	1.70	0.87
Growth %		-74%	113%	386%	-49%

For international comparisons the data used is for the year 1999. However, data is also available for Pakistan for the year 2000-2001, which shows that there has been an increase in exports from US\$ 12.24 million to nearly US\$ 24.24 million while imports have decreased to US\$ 0.84 in 2000-01 from US\$ 0.87 million in 1999.

Some of the leading importers from Pakistan include USA, which imported 43.78% by value of Pakistan's jewelry while UK and UAE are other major importer sharing 26.22% and 10% of Pakistani exports of jewelry in 1999.

			Valu	e in US\$ thousand		
Pakistan Major Export Partner						
Country	1998		1999			
	V	% Share	V	% Share		
USA	2416	32.17%	5360	43.78%		
UNITED KINGDOM	2397	31.91%	3210	26.22%		
UNITED ARAB EMIRATES	1944	25.88%	2448	20.00%		
SRI LANKA	272	3.62%	478	3.90%		
CANADA	123	1.64%	213	1.74%		
SINGAPORE	111	1.48%	65	0.53%		
MALAYSIA	18	0.24%	0	0.00%		

#### 4. Pakistan Gems & Jewelry Sector

Nature has gifted Pakistan with rich deposits of some of the finest and valuable gemstones in the world. Most of these deposits are concentrated in the Northern Areas, Malakand division, Bajaur agency etc. A variety of gemstones including Emerald, Ruby, Peridot,

Gemstones	Excellent Grade	Medium Grade	Low Grade
Emerald	US \$200-250 Per Carat	US \$25-50 Per Carat	US \$2-5 Per Carat
Ruby	US \$200-250 Per Carat	US \$25-50 Per Carat	US \$2-5 Per Carat
Topaz	US \$150-200 Per Kilo	US \$50-100 Per Kilo	US \$25-50 Per Kilo
Aquamarine	US \$500-1000 Per Kilo	US \$200-300 Per Kilo	US \$50-100 Per Kilo
Kunzite	US \$500-1000 Per Kilo	US \$200-300 Per Kilo	US \$50-100 Per Kilo
Peridot	US \$2000-3000 Per Kilo	US \$300-500 Per Kilo	US \$75-100 Per Kilo
Quartz	US \$75-100 Per Kilo	US \$30-50 Per Kilo	US \$10-20 Per Kilo
Tourmaline	US \$2000-3000 Per Kilo	US \$300-500 Per Kilo	US \$75-100 Per Kilo
Lapis Lazuli	US \$75-100 Per Kilo	US \$25-50 Per Kilo	US \$2-5 Per Kilo

Aquamarine, Topaz which have a worldwide demand are mined and traded for local and foreign markets.

Above are international prices of precious stones which are present in large quantities in Pakistan.

All Pakistan Commercial Exporters Association of Rough and Un-Polished Precious & Semi Precious Stones (APCEA) is working for the betterment of this sector. Other associations include All Pakistan Gem Merchant & Jewelers Association, and Gemstone promotion committee.

Gemstones	Occurances/Showings		
Emerald	Gujarkilli-Swat, Mingora - Swat, Shamozai - Swat, Charbagh - Swat, Khilatro-Gilgit, Bajour Agency, Mohmand Agency		
Ruby	Hunza Valley, Neelam Valley (Azad Kashmir), Upper Hazara		
Pink Topaz	Katlang - Mardan		
Light Pink Topaz	Shamozai - Mardan		
Peridot	Sput - Kohistan		
Spinel	Hunza Valley		
Aquamarine	Bulechi, Stak and Khaltaro in the Eastern Part of Gilgit District, Garm Chasma - Chitral		
Tourmaline	Neelum Valley - Azad Kashmir, Garm Chasma - Chitral, Bulechi, Shingus in Northern Areas.		
Feldspar	Skardu, Gilgit, Chitral		
Quartz	Dusso (Skardu), Lasbela, Nagarparkar (Sind), Azad Kashmir, Gilgit, Chitral		
Тораz	Shingus and Bulechi in Gilgit District and at Niyit Bruk and Gone, near Dusso in Skardu District		
Zircon	Chilas, Gilgit Agency		
Agate	Nagarparkar - Sind, Dir Kohistan		
Garnet	Jambil - Swat, Kot - Malakand Agency, Targhao - Bajaur Agency, Skardu		
Turquoise	Chagai Hills - Baluchistan		