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## An Empirical Study on Problems Faced by Gems and Jewellery Industry in Special Economic Zones

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#### ABSTRACT

Gems and jewellery sector is an integral part of Indian economy. India is one of the world's most reasonable and rapidly growing gems and jewellery market. The Gems and Jewellery industry also contributes around 17% of India's exports. Economic and highly skilled manpower, along with strong government support in the form of incentives and establishment of Special Economic zones (SEZs), has been driving market growth for the past few years. SEZs offer a wide variety of benefits to the exporters. About 87% of Rajasthan's export of gems and jewellery are from Jaipur. The objectives of developing these zones are to promote the gems and jewellery industry and to build proficiency among the resident players. Employment, industrial sector, infrastructure are growing because of special economic zones. This paper highlighted various problems faced by special economic zones and provide some suggestion for overcoming these obstacles.

Keywords: Gems and jewellery, exports, special economic zones, problems.

## **1. INTRODUCTION**

Special Economic Zones are specifically described duty-free enclaves treated as a foreign territory for the purpose of service, industrial, and trade operations, with exception from customs duties and a more liberal regime in respect of foreign investment, duties, and other transactions. Special economic zoneshave been established in many countries, counting China, India, Kazakhstan, Poland, Jordan, Philippines, and Russia. The concept of having export oriented zones, free trade zones, and special economic zones dates back to 1970 (Ranjan, 2006). Restrictions, domestic regulations, and infrastructure inadequacies are sought to be removed in the special economic zones for creating a healthy environment. The SEZ Scheme seeks

to create a crystal clear system by introducing simplified processes for enhancing efficiency and making it easier to do trade. (Goswami and Baruah, 2008).

The Special Economic Zones Act, 2005, was passed by Parliament in May, 2005 which received Presidential assent on the 23rd of June, 2005. The special economic zones Act, 2005, supported by SEZ Rules, came into effect on 10th February, 2006, providing for extreme simplification of processes and for single window clearance on matters relating to both state and central governments.

The main objectives of the SEZ Act are:

- (a) Promotion of exports of goods and services;
- (b) Generation of additional economic activity;
- (c) Creation of employment opportunities;
- (d) Promotion of investment from domestic and foreign sources;
- (e) Development of infrastructure facilities.

It is estimated that this will generate a large flow of domestic and foreign investment in SEZs, in productive capacity and infrastructure, leading to additional economic activity and creation of employment opportunities (Dave, 2012). Steady and hassle-free environment is needed to carry out exports and this in turn would require reduction in taxes and duties, raising the level of production and other forms of financial support (Rastogi et. al., 2015).

Under SEZs Act, 2005 all SEZs are being provided various facilities and incentivise in order to make simpler regional development. State and Centre governments are trying to appeal Indian and foreign players for investing in various SEZs by giving following set of facilities and incentives: (Kumar, 2010)

- 100% exemption on stamp duty to developers and also to units in RIICO SEZs.
- Land conversion @ Rs100 to developers in rural areas
- 100% exemption from work contract tax to units and developers for 7 years
- 50% exemption to units from electricity duty for 7 years
- 100% exemption from entry tax to units on capital goods brought into local areas by the unit required for use as capital goods for setting up industry in SEZ.
- 100% exemption from VAT to units on sale or purchase by a registered dealer being an industrial unit established in SEZ of goods specified in certificate of registration, for the purpose of exclusive use in manufacturing of goods for sale in the course of export out of the country.
- 50% exemption from entertainment tax for 7 years.
- 100% exemption from luxury tax for 7 years.
- SEZ Act is also under consideration and after enactment of the new SEZ Act, some additional incentives would also be available to SEZs (Bureau of investment promotion, http://www.investrajasthan.com).

SEZs have lost their shine and lure after an 18.5 % Minimum Alternate Tax (MAT) added with a cess was imposed on special economic zone creators and Units along with a 15 % dividend distribution tax added

with a cess on creators in Union Budget 2011-12. Fiscal revenue loss, Tax related legal controversy, Land Use & Industry emphasis, Dilution in land acquisition rules are various problems faced by special economic zones (Balasubramaniam, 2013). Issues with respect to India's SEZ's like-land acquisition and rehabilitation, investor-government relation and the single window clearance for investor are highlighted (Mukherji, 2008). Curbs on gold imports, imposition of MAT on special economic zones, the drop in manufacturing output and problems related to labour laws and land acquisition discussed by (Sitharaman, 2014).

Annual Employment Generation by Special Economic Zones in India and various issues like- Land Acquisition and Corruption, Direct Tax Code (DTC) Impact, Goods and Services Tax, Issue of power generation and distribution, Coordination issues, and disinvestment are described. (Singala et.al.,2011). The spatial distribution of SEZs in Rajasthan is not at par but most of SEZs are focused in few districts, leaving wide uncovered area (kumar, 2010).

The Sitapura Industrial Area near Jaipur was developed in seven different phases, to cover a total area of 1,646.71 acres of land. The developer of special economic zone is the State government's Rajasthan Industrial Investment Corporation (RIICO) (Goswami, 2008). In Special Economic Zones I and II of Jaipur approximately 8000 to 10,000 workers are employed and 150 Units are working. Current status of Indian Gems and Jewellery industry in Jaipur and impact of Special Economic Zone in Gems and Jewellery industries on employment generation and other human resource perspectives in Jaipur region are highlighted. (Sharma, 2014).

Special Economic Zone policy does not seem to be successful in diversifying exports basket, which in turn has affected the direction of exports by Special Economic Zones. Moreover, these zones were found to be highly susceptible to external shocks (Tantri, 2010).

In this paper, problems which are being faced by the SEZ I and II have been identified and highlighted. Problems like dependence on imports of raw material, competition, time lag, labour problems, procedural hardships, unorganised sector, problem to find new market, insufficient funds etc. After taking interview and collecting data through structured questionnaire researcher found that among these problems some are causing more concern to SEZ I and II and thus included in this paper.

#### 2. RESEARCH METHODOLOGY

This study is done to understand the problems faced by the exporters of gems and jewellery in SEZ I and II, Jaipur. A sample survey method has been employed to collect primary data. A descriptive research design is planned for this study to obtain the answers to research questions and achieve the objectives. The scope of this study is limited to the SEZ I and II, Jaipur. Survey was conducted using structured questionnaire and interviews were conducted using face to face method.

#### 2.1. Target Group

The interview were conducted with a member of senior management having the knowledge of exports.

#### 2.2. Sampling

At first stratified sampling was done. Sample was allocated to each SEZ I and II in proportion to the number of units. SEZ I has 50 units and SEZ II has 100 units. The total sample size of 50 was distributed

among them as 17 and 33. For sampling each zone was divided into four parts. In each part a random starting address was chosen in each area. Interviews were conducted using right hand rule from the starting address. Sub cluster size used was 4 in SEZ I and 8 in SEZ II.

## 2.3. Questionnaire Design

A structured questionnaire was designed. Respondents were asked to express their agreement/disagreement with the statements on 5 point Likert scale as given below:

- 1. Strongly disagree
- 2. Disagree
- 3. Neutral
- 4. Strongly agree
- 5. Agree

In order to avoid the fatigue by the respondents while answering the questions, number of questions were taken judiciously in such a manner that, the interview will last for a maximum time of 20 minutes.

## 2.4. Data Collection

The interviewers were selected on the basis of their experience in exports. The interviewers were briefed by this researcher about the subject background. They were explained each statement included in the questionnaire. Face to face method was used while taking personal interview. The respondents were selected from SEZ I and II, Jaipur. Data collection was spread over 6 days. Three interviewers were selected to carry out the data collection. Approximately 3 interviews were conducted per day.

Secondary Data Sources

- Books
- Websites
- Reference articles published in journals
- Periodicals of the Central and the State Government

## 3. DATA ANALYSIS

## 3.1. Distribution of Different Variables

		Table Number of Male and Fer	le 1 male exporters in	SEZ's	
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	47	94.0	94.0	94.0
	Female	3	6.0	6.0	100.0
	Total	50	100.0	100.0	

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0-5	22	44.0	44.0	44.0
	6-10	24	48.0	48.0	92.0
	10 Above	4	8.0	8.0	100.0
	Total	50	100.0	100.0	

Table 2Number of Years of establishment of Unit in SEZ's

Table 3Number of employees in Units

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	10-50	7	14.0	14.0	14.0
	51-100	9	18.0	18.0	32.0
	101-150	15	30.0	30.0	62.0
	Above 150	19	38.0	38.0	100.0
	Total	50	100.0	100.0	

Table 4
Gems and Jewellery sector is unorganised

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	36	72.0	72.0	72.0
	No	14	28.0	28.0	100.0
	Total	50	100.0	100.0	

Table 5	
Gems and Jewellery sector is leading foreign exchange earne	r

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	45	90.0	90.0	90.0
	No	5	10.0	10.0	100.0
	Total	50	100.0	100.0	

## Table 6 Significant gap in the technology adopted globally & technology Adopted by SEZ's exporters

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	15	30.0	30.0	30.0
	No	35	70.0	70.0	100.0
	Total	50	100.0	100.0	

Table 1 shows that Gems and jewellery exporters are mostly male. The percentage of Women is very less. Only 6% of exporters in SEZ's are female. On the basis of the tenure of business it is found that where the tenure of the business is 0-5 years they are facing the problems more, as they are new in the market Table 2. This sector being unorganised hampers the ability of Jaipur gems and jewellery industry to emerge as a world class supplier. 72% of exporters believe that this sector is unorganised as shown in Table 4.

Table 7
Gems and Jewellery Export Promotion Council (GJEPC) promotional policies
are helping in increase of export

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	38	76.0	76.0	76.0
	No	12	24.0	24.0	100.0
	Total	50	100.0	100.0	

#### Table 8

### Export potential of Jaipur gems and jewellery products, when compared with other cities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Competitive	19	38.0	38.0	38.0
	Competitive	25	50.0	50.0	88.0
	Not at all Competitive	3	6.0	6.0	94.0
	Can't Say	3	6.0	6.0	100.0
	Total	50	100.0	100.0	

# Table 9 Future of Gems and jewellery industry in Jaipur

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Good	17	34.0	34.0	34.0
	Good	31	62.0	62.0	96.0
	Don't Know	2	4.0	4.0	100.0
	Total	50	100.0	100.0	

## Table 10Tough competition with other countries

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Highly Disagree	3	6.0	6.0	6.0
	Disagree	6	12.0	12.0	18.0
	Neutral	3	6.0	6.0	24.0
	Agree	27	54.0	54.0	78.0
	Highly Agree	11	22.0	22.0	100.0
	Total	50	100.0	100.0	

## Table 11 Problem in finding new markets for exports

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Highly Disagree	6	12.0	12.0	12.0
	Disagree	7	14.0	14.0	26.0
	Neutral	11	22.0	22.0	48.0
	Agree	17	34.0	34.0	82.0
	Highly Agree	9	18.0	18.0	100.0
	Total	50	100.0	100.0	

		Table Inadequate I	12 Demand		
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Highly Disagree	9	18.0	18.0	18.0
	Disagree	6	12.0	12.0	30.0
	Neutral	7	14.0	14.0	44.0
	Agree	14	28.0	28.0	72.0
	Highly Agree	14	28.0	28.0	100.0
	Total	50	100.0	100.0	
		Table Time l	13 ag		
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	13	26.0	26.0	26.0
	Neutral	4	8.0	8.0	34.0
	Agree	25	50.0	50.0	84.0
	Highly Agree	8	16.0	16.0	100.0
	Total	50	100.0	100.0	
		Table Deficient kn	14 owledge		
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Highly Disagree	20	40.0	40.0	40.0
	Disagree	7	14.0	14.0	54.0
	Neutral	2	4.0	4.0	58.0
	Agree	14	28.0	28.0	86.0
	Highly Agree	7	14.0	14.0	100.0
	Total	50	100.0	100.0	

Table 15 Insufficient funds for sales promotion

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Highly Disagree	9	18.0	18.0	18.0
	Disagree	2	4.0	4.0	22.0
	Neutral	10	20.0	20.0	42.0
	Agree	22	44.0	44.0	86.0
	Highly Agree	7	14.0	14.0	100.0
	Total	50	100.0	100.0	

Utilization of hi-technology, efficient machinery and software has led to the gradual replacement of traditional/manual methods of polishing, manufacturing and designing of gems and jewellery in the global arena. 70% of exporters said that there is no technological gap in technology used by SEZ's exporters and by others Table 6. Table 16 shows that, availability of raw material is one of the major issues of the business, as a matter of fact, 90% of the raw material for making the gems and jewellery is being imported

Table 16Dependence on raw material

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Highly Disagree	3	6.0	6.0	6.0
	Disagree	4	8.0	8.0	14.0
	Neutral	5	10.0	10.0	24.0
	Agree	17	34.0	34.0	58.0
	Highly Agree	21	42.0	42.0	100.0
	Total	50	100.0	100.0	

	Table 17 Procedural hardship						
		Frequency	Percent	Valid Percent	Cumulative Percent		
Valid	Highly Disagree	2	4.0	4.0	4.0		
	Disagree	6	12.0	12.0	16.0		
	Neutral	15	30.0	30.0	46.0		
	Agree	15	30.0	30.0	76.0		
	Highly Agree	12	24.0	24.0	100.0		
	Total	50	100.0	100.0			

## Table 18Non-availability of skilled workers

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Highly Disagree	2	4.0	4.0	4.0
	Disagree	9	18.0	18.0	22.0
	Neutral	5	10.0	10.0	32.0
	Agree	28	56.0	56.0	88.0
	Highly Agree	6	12.0	12.0	100.0
	Total	50	100.0	100.0	

and at times it is in scarcity moreover the competition is also one of the major constraint in the growth of business, in the same market the fluctuation in the selling prices pressurizes the sellers to offer new varieties every time, which is again is the problem of scarce raw material and skilled labour. Non-availability of skilled workers is often cited as one of the major reasons for the inability of the players in this industry to scale up their operations. Supply of craftsmen/artisans that come through generations need to be complemented by fresh talents, trained in a professional manner, to have access to wider talent pool Table 18.

## 3.2. One Way ANOVA

The one-way analysis of variance (**ANOVA**) is used to determine whether there are any significant differences between the means of two or more independent (unrelated) groups (although you tend to only see it used when there are a minimum of three, rather than two groups). The one-way ANOVA compares the means between the groups you are interested in and determines whether any of those means are significantly different from each other. In this research paper Size of Organization consider as Independent Variable and various problems consider as Dependent Variable.

## 4. INTERPRETATION

				Descripti	ve (Stat	ics)			
		NT	M	Std.	Std.	95% Confidence	Interval for Mean	M:	M
		IN	Mean	Deviation	Error	Lower Bound	Upper Bound	- IVIIIIIIIIIIIIII	1v1aximum
Tough	10-50	7	3.29	1.254	.474	2.13	4.45	1	4
Competition	51-100	9	4.22	1.302	.434	3.22	5.22	1	5
with other	101-150	15	3.40	1.056	.273	2.82	3.98	1	4
countries	Above 150	19	3.95	.970	.223	3.48	4.42	2	5
	Total	50	3.74	1.121	.159	3.42	4.06	1	5
Facing	10-50	7	2.29	.756	.286	1.59	2.98	1	3
problems to	51-100	9	3.11	1.269	.423	2.14	4.09	1	4
find New markets for	101-150	15	3.87	1.407	.363	3.09	4.65	1	5
exports	Above 150	19	3.37	1.116	.256	2.83	3.91	1	5
	Total	50	3.32	1.269	.179	2.96	3.68	1	5
Inadequate Demand	10-50	7	3.71	1.604	.606	2.23	5.20	2	5
	51-100	9	4.67	.500	.167	4.28	5.05	4	5
	101-150	15	4.20	.561	.145	3.89	4.51	3	5
	Above 150	19	1.95	1.026	.235	1.45	2.44	1	4
	Total	50	3.36	1.467	.208	2.94	3.78	1	5
Time Lag	10-50	7	2.00	0.000	0.000	2.00	2.00	2	2
	51-100	9	3.44	1.130	.377	2.58	4.31	2	5
	101-150	15	3.73	.704	.182	3.34	4.12	2	4
	Above 150	19	4.05	.911	.209	3.61	4.49	2	5
	Total	50	3.56	1.053	.149	3.26	3.86	2	5
Deficient	10-50	7	1.29	.488	.184	.83	1.74	1	2
Knowledge	51-100	9	2.00	1.323	.441	.98	3.02	1	5
	101-150	15	2.67	1.676	.433	1.74	3.59	1	5
	Above 150	19	3.37	1.499	.344	2.65	4.09	1	5
	Total	50	2.62	1.576	.223	2.17	3.07	1	5
Insufficient	10-50	7	2.71	1.604	.606	1.23	4.20	1	4
funds	51-100	9	4.22	.972	.324	3.48	4.97	2	5
for sales	101-150	15	4.00	.655	.169	3.64	4.36	3	5
promotion	Above 150	19	2.58	1.216	.279	1.99	3.17	1	4
	Total	50	3.32	1.301	.184	2.95	3.69	1	5
Dependence	10-50	7	4.71	.488	.184	4.26	5.17	4	5
on raw	51-100	9	4.22	.667	.222	3.71	4.73	3	5
material	101-150	15	3.60	1.298	.335	2.88	4.32	1	5
	Above 150	19	3.89	1.370	.314	3.23	4.56	1	5
	Total	50	3.98	1.186	.168	3.64	4.32	1	5

Table 19Descriptive (Statics)

		NT	14	Maan Std.	Std.	95% Confidence Interval for Mean		Minimum	Maximum
		IN	Mean	Deviation	Error	Lower Bound	Upper Bound	<i>IVIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII</i>	1v1aximum
Procedural	10-50	7	3.29	.488	.184	2.83	3.74	3	4
hardships	51-100	9	4.22	.972	.324	3.48	4.97	2	5
	101-150	15	3.60	.828	.214	3.14	4.06	2	5
	Above 150	19	3.37	1.422	.326	2.68	4.05	1	5
	Total	50	3.58	1.108	.157	3.27	3.89	1	5
Skilled Labor	10-50	7	4.00	0.000	0.000	4.00	4.00	4	4
	51-100	9	3.78	.972	.324	3.03	4.52	2	5
	101-150	15	3.00	1.134	.293	2.37	3.63	2	5
	Above 150	19	3.68	1.108	.254	3.15	4.22	1	5
	Total	50	3.54	1.054	.149	3.24	3.84	1	5

## Table 20 One way ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Tough Competition	Between Groups	6.089	3	2.030	1.681	.184
with other countries	Within Groups	55.531	46	1.207		
	Total	61.620	49			
Facing problems to	Between Groups	12.408	3	4.136	2.862	.047
find New markets for	Within Groups	66.472	46	1.445		
exports	Total	78.880	49			
Inadequate Demand	Between Groups	64.744	3	21.581	24.346	.000
	Within Groups	40.776	46	.886		
	Total	105.520	49			
Time Lag	Between Groups	22.217	3	7.406	10.612	.000
	Within Groups	32.103	46	.698		
	Total	54.320	49			
Deficient Knowledge	Between Groups	26.597	3	8.866	4.285	.010
	Within Groups	95.183	46	2.069		
	Total	121.780	49			
Insufficient funds for	Between Groups	27.264	3	9.088	7.517	.000
sales promotion	Within Groups	55.616	46	1.209		
	Total	82.880	49			
Dependence on raw	Between Groups	6.606	3	2.202	1.624	.197
material	Within Groups	62.374	46	1.356		
	Total	68.980	49			
Procedural hardships	Between Groups	5.175	3	1.725	1.443	.243
	Within Groups	55.005	46	1.196		
	Total	60.180	49			
Skilled Labor	Between Groups	6.759	3	2.253	2.175	.104
	Within Groups	47.661	46	1.036		
	Total	54.420	49			

Table 21

Facing Problem to find new markets for Exports One way ANOVA								
Sum of Squares df Mean Square F Sig.								
Between Groups	12.408	3	4.136	2.862	.047			
Within Groups	66.472	46	1.445					
Total 78.880 49								

Table 22

#### **POST HOC Test:**

Multiple comparisons Tukey HSD									
(1) Num (Employed Mean Difference Stat Empres State 95% Confidence Interval									
(1) IN	lo. of Employees	(I-J)	Sta. Error	5 <i>1</i> g.	Lower Bound	Upper Bound			
10-50	51-100	825	.606	.529	-2.44	.79			
	101-150	-1.581*	.550	.030	-3.05	11			
	Above 150	-1.083	.531	.190	-2.50	.33			
51-100	10-50	.825	.606	.529	79	2.44			
	101-150	756	.507	.451	-2.11	.60			
	Above 150	257	.486	.952	-1.55	1.04			
101-150	10-50	1.581*	.550	.030	.11	3.05			
	51-100	.756	.507	.451	60	2.11			
	Above 150	.498	.415	.630	61	1.60			
Above 150	10-50	1.083	.531	.190	33	2.50			
	51-100	.257	.486	.952	-1.04	1.55			
	101-150	498	.415	.630	-1.60	.61			

\*The mean difference is significant at the 0.05 level.

Dependent variable: Problem to find new markets for Exports

## Table 23 Homogeneous Subsets Facing problems to find New markets for exports Tukey HSD<sup>a,b</sup>

NIe of East lance	NT	Subset for $alpha = 0.05$		
ino. of Employees	IN	1	2	
10-50	7	2.29		
51-100	9	3.11	3.11	
Above 150	19	3.37	3.37	
101-150	15		3.87	
Sig.		.173	.473	

Means for groups in homogeneous subsets are displayed.

<sup>a</sup>Uses Harmonic Mean Sample Size = 10.716.

<sup>b</sup>The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

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		Sum of Squares	df	Mean Square	F	Sig.
Inadequate	Between Groups	64.744	3	21.581	24.346	.000
Demand	Within Groups	40.776	46	.886		
	Total	105.520	49			
Time Lag	Between Groups	22.217	3	7.406	10.612	.000
	Within Groups	32.103	46	.698		
	Total	54.320	49			
Deficient	Between Groups	26.597	3	8.866	4.285	.010
Knowledge	Within Groups	95.183	46	2.069		
	Total	121.780	49			
Insufficient	Between Groups	27.264	3	9.088	7.517	.000
funds for sales	Within Groups	55.616	46	1.209		
promotion	Total	82.880	49			

Table 24 One Way ANOVA

# Table 25Multiple comparison (Post Hoc test)

Dependent Variable		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval		
					Lower Bound	Upper Bound	
Inadequate	10-50	51-100	952	.629	.683	-3.24	1.33
Demand		101-150	486	.623	.976	-2.78	1.81
		Above 150	1.767	.650	.150	50	4.03
	51-100	10-50	.952	.629	.683	-1.33	3.24
		101-150	.467	.221	.257	18	1.12
		Above 150	2.719*	.288	.000	1.90	3.54
	101-150	10-50	.486	.623	.976	-1.81	2.78
At		51-100	467	.221	.257	-1.12	.18
		Above 150	$2.253^{*}$	.276	.000	1.47	3.03
	Above 150	10-50	-1.767	.650	.150	-4.03	.50
		51-100	-2.719*	.288	.000	-3.54	-1.90
		101-150	-2.253*	.276	.000	-3.03	-1.47
Time Lag	10-50	51-100	-1.444*	.377	.030	-2.75	14
		101-150	-1.733*	.182	.000	-2.29	-1.18
		Above 150	-2.053*	.209	.000	-2.67	-1.44
	51-100	10-50	1.444*	.377	.030	.14	2.75
		101-150	289	.418	.985	-1.61	1.03
		Above 150	608	.431	.699	-1.94	.72
	101-150	10-50	1.733*	.182	.000	1.18	2.29
		51-100	.289	.418	.985	-1.03	1.61
		Above 150	319	.277	.833	-1.10	.46
	Above 150	10-50	2.053*	.209	.000	1.44	2.67
		51-100	.608	.431	.699	72	1.94
		101-150	.319	.277	.833	46	1.10

Dependent Variable		Mean Difference (1-J)	Std. Error	C:.	95% Confidence Interval		
				51g.	Lower Bound	Upper Bound	
Deficient	10-50	51-100	714	.478	.659	-2.25	.83
Knowledge		101-150	-1.381	.470	.052	-2.77	.01
		Above 150	-2.083*	.390	.000	-3.20	96
	51-100	10-50	.714	.478	.659	83	2.25
		101-150	667	.618	.875	-2.47	1.13
		Above 150	-1.368	.559	.141	-3.02	.29
	101-150	10-50	1.381	.470	.052	01	2.77
		51-100	.667	.618	.875	-1.13	2.47
		Above 150	702	.553	.765	-2.26	.86
	Above 150	10-50	2.083*	.390	.000	.96	3.20
		51-100	1.368	.559	.141	29	3.02
		101-150	.702	.553	.765	86	2.26
Insufficient	10-50	51-100	-1.508	.687	.287	-3.79	.77
funds		101-150	-1.286	.629	.396	-3.57	1.00
for sales promotion		Above 150	.135	.667	1.000	-2.12	2.39
	51-100	10-50	1.508	.687	.287	77	3.79
		101-150	.222	.365	.992	92	1.36
		Above 150	1.643*	.428	.006	.39	2.89
	101-150	10-50	1.286	.629	.396	-1.00	3.57
		51-100	222	.365	.992	-1.36	.92
		Above 150	1.421*	.326	.001	.50	2.34
	Above 150	10-50	135	.667	1.000	-2.39	2.12
		51-100	-1.643*	.428	.006	-2.89	39
		101-150	-1.421*	.326	.001	-2.34	50

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<sup>\*</sup>The mean difference is significant at the 0.05 level.

## 4.1. Face Tough Competition with other Countries

Table XIX shows that companies in Jaipur SEZ I and SEZII tend to face tough competition from other countries since they agree with the statement (mean score greater than 3). From table XX we see that the differences in the means of groups are not significant, indicating that irrespective of the size of company, 10-50 employees or more than 150 employees in an organisation, face tough competition from other countries. Jaipur is facing Competition with other countries like China, Hong-Kong. China has strengths like cheap economic labour, infrastructure and a welcoming government. It also offers attractive labour union terms and export-friendly policies. They, at times, find it very difficult to cope with other countries in terms of cost, quality, standards, popularity, etc.

## 4.2. Facing Problems to Find New Markets

Table XX shows that there are significant difference across the group means. Since the group variances are equal, Post Hoc test using Tukey HSD table XXII shows that that organizations with the number of

employees 10-50 are not facing this problem of finding new markets only the units with 101-150 employees facing it. SEZ's bigger units find it difficult to sell their products at remunerative prices because of higher cost of production and non-standardised quality of products. Therefore they found it difficult to find new markets.

## 4.3. Inadequate Demand

Since there are significant differences table XX across organizations of different sizes, everybody is not facing this problem. Post hoc tests are done using Tamahne's T statistics table XXV since group variances are unequal. Where number of employees are less than 150 those units are facing the problem of demand. Exporters are not getting adequate demand of jewellery. Due to change in consumer's preference, very high prices of diamond, gold and silver, global economic recession, prevailing crisis in Europe, there is a significant difference across the group means. Bigger units are not facing problem of inadequate demand that much. As the sector is primarily dependent on exports to the US and European countries, the meltdown in these countries affected the gems and jewellery sector to a great extent.

## 4.4. Time lag

In this case also there are significant differences between the group means table XX. If a trader of Jaipur imports the raw material of gems and jewellery from any foreign country; then the parcel of imported raw material will come first to Mumbai or Delhi and then it will come to Jaipur. Since the frequency of international flights is less to Jaipur as compared to Mumbai/Delhi. Also Jaipur being land lock city does not have water way connectivity as in case of Mumbai. In this way parcel do not reach at the right time. The mean value of group 10-50 employees is less than 3 and the mean value of other groups are more than 3 it shows there is a significant difference across the group means. That smaller organizations don't face this problem.

## 4.5. Deficient Knowledge

Since the group means are significantly different table XX a post hoc test with Tamhane's T is done table XXV as group variances are unequal. This test shows that all the units with less than 150 employees facing the problem of deficient knowledge (mean scores less than 3). Exporters do not have good knowledge or experience of various marketing concepts and strategies. As a result, they are unable to understand quickly and accurately the prevailing as well as constantly changing market trends. In spite of having huge potentialities of extensive market for their products, they are mainly unwilling to opt for efficient marketing techniques.

## 4.6. Insufficient Funds for Sales Promotion

Exporter's also facing problem of lack of the resources and funds needed for effective sales promotion. There is a significant difference across the means of groups table XX. The mean value of 10-50 employees is 2.71 and 150 above employees is 2.58 table XIX. It shows that smaller and bigger units are not facing this problem but only mid-size organizations (51-150 employees) are facing this problem. Many of such exporters cannot afford to spend much on advertising, sales promotion, market research, etc.

### 4.7. Dependence on Raw Material

In Jaipur 90 per cent of raw material is imported and its supply is limited. The raw material is processed and manufactured to sale in international market. Rough diamonds as raw material account for more than 50 per cent of imports. These rough diamonds are cut, polished and exported. Jaipur imports rough diamonds mainly from Belgium, the UK, Israel and the UAE etc. The sector being dependent almost completely on imported raw material, it is natural that more export should lead to more import. But the fact which causes worry is that excess imported raw material, when exported gives fewer earnings in foreign exchange. All exporters of SEZ's I and II are facing this problem. Mean value of all groups are more than 3 table XIX.

#### 4.8. Procedural Hardships

There is no significant difference between the group means table XX which all are above 3. That means all organizations are facing this problem. Gems and jewellery trade have to import the raw material and export the manufactured commodity again, so it has to abide by the prevailing policies of the government which keep changing according to time. These changes put exporters and producers into a lot of troubles. Export and import involved a long procedure. For instance, all the exporters, who are the members of the GJEPC, are supposed to file all the information about the exports like the number of pieces exported, details of returned items, value of goods exported and purchased etc. Exporters in general are facing a number of troubles in bank transactions also. In dealing with a bank also they are supposed to submit lot of documents and fulfil many formalities. All exporters of SEZ's I and II are facing problem of logistics.

#### 4.9. Skilled Labour

Here also one way ANOVA table XX shows that there is no significant difference between group means which are all above 3. That means irrespective of the size all organizations face this problem. Gems and jewellery sector is highly labour-intensive, its dependency on craftsmanship is very high. The cutting and polishing of diamonds and coloured gems, which are soft stones, requires immense care on the part of the labourer. Although some activities in the cutting and polishing of gems are mechanised, the sector still requires skilled craftsmen to achieve precision in diamond cutting. Results showing that this problem is also faced by all the exporters.

#### **5. RECOMMENDATION**

- 5.1. The exporters should give more offers and discounts at frequent periods/intervals to attract more buyers. It is recommended because of tough competition. Sometimes offers will enhance the sale of jewellery.
- 5.2. Russia, Middle East and China are few of the emerging destinations that are witnessing an increase in jewellery demand. Jaipur SEZ's exporters can tap these countries to diversify and increase their business. It will be beneficial to make relationship with foreign countries for more trade with them.
- 5.3. Exporters are facing problem of Demand. It has been observed that exports of gems and jewellery from SEZ's are mainly concentrated in few products like diamonds and gold jewellery. This has posed a serious handicap to SEZ's exporters because they could not encash the benefit from

the increasing demand of other gems and jewellery products. Thus, the study stresses that it is necessary to diversify the export product portfolio, and concentrate more on other products of gems and jewellery like pearls, synthetic stones, costume/fashion jewellery, non-gold jewellery, and coloured gemstones.

- 5.4. Jaipur manufactured goods were known in the world market for its cutting and polishing earlier. But now our labour and artisans are not skilled so much. There is a need to train them to compete in the international markets. This will improve the deficiency and will bring back historical fame.
- 5.5. The government need to increase tariff rates and reduce formalities involved in export procedures, which in turn will help to increase exports.
- 5.6. The Government should further develop the gems and jewellery sector in Jaipur through various policies. Various policy initiatives should have been taken from time to time to boost the gems and jewellery sector by government. While the focus is clearly on export promotion, the liberalised policy regime will help exporters perform better in the domestic as well as global market.
- 5.7. The advertisements for jewellery must be more effective, innovative and informative. Jewellery advertisements must cater to the need of all types of people in the society. It is necessary that Banks, financial institutions and government helps to provide funds or loan on easy conditions for promotion.
- 5.8. Government should come up with new incentives for women exporters to attract more and more woman joining the business. The woman jewellery market in all the categories/segments will grow rapidly throwing up huge opportunities in an area yet to be fully tapped by various players.
- 5.9. The government is considering the creation of training centres where the exporters can be imparted training and making efforts towards provision of new and advance technology and techniques to the jewellery industry so that it can become more competitive.
- 5.10. There are around 10,000 people employed by the Jaipur SEZ's, of which less than 5 percent are trained through diploma or vocational courses. In the coming five to seven years, there is potential for employment of 3,000-5,000 additional people. It is necessary to open more institutes and give chance to new generation. Also, the training of existing employees will need further improvement in infrastructure. Jaipur's skill development curriculum needs to be standardized and updated to reflect global standards. In the face of changing customer preferences, artisans should also be encouraged to upgrade their skills through formal training, using scholarships and fee subsidization. Skill development institutes should have strong collaboration with jewellers to ensure practical training.

## 6. CONCLUSION

Gems and jewellery has been an everlasting part of our life since a long time. They have an important impact on the tradition, culture and history of human civilization. The Jaipur gems and jewellery industry has a traditional as well as glamorous blend to it. With the evolution of human society various activities

aligned with the jewellery like mining, polishing, cutting retailing and fabrication need to be organised. SEZs played a vital role for boosting up the exports in Jaipur and state government proposed and initiated various projects regarding the growth of SEZs. But the performance of SEZ's in exports not up to the expectation. Over the years the Jaipur gems and jewellery sector has gone through a number of challenges like- trade barriers, growing competition, changing preferences of customers, dependence on raw material, inadequate demand etc. Economic and highly skilled manpower, along with strong government support in the form of incentives and various favourable policies is must for growth of SEZ's I and II and government should liberalize tax policies. Industry experts expect further growth in the sector, especially in coloured stones and diamonds, which has opened various newer opportunities for local jewellers.

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