

## **DIVERSIFICATION OR EXPORT CONCENTRATION: A CASE OF INDIAN HIDE AND SKIN**

**\*Shally**

Research Scholar  
Department of Economics  
Kurukshetra University

**\*\*Dr. Kuldeep Singh Rana**

Professor, Department of Economics  
Kurukshetra University

### **Abstract**

Agriculture sector alone is not capable enough to provide employment opportunities. Therefore, there arose the need to explore new areas of employment generation. The solution to employment generation activity lies in leather industry development. India has the largest livestock population in the world. This livestock can be utilized as a development potential by India. After animal dies its skin can be stripped and is later converted into finished leather by tanning process. The exports of raw hides and skin will not only provide employment to both rural and urban youth but also help in earning huge foreign exchange. The present paper has tried to analyze the market power or share of various importing countries of raw hide and skin from India. The paper has further tried to study the Export Concentration Ratio of fifty five major countries of the world. If market power and export concentration are known then it will help in framing trade policies or Export import policies by government of India.

**Keywords: Export, Diversification, Export Concentration, Market Power, Employment.**

### **PROLOGUE**

Agriculture sector alone is incapable of creating employment opportunities for rural youth. Rural non-farm employment can play a pivotal role in curbing this menace of unemployment. One of the rural non-farm employment generating activity is engaging in leather industry. India has the largest livestock population in the world. These livestock often die naturally or are even slaughtered for their hide and skin. It is this raw hide which is later converted into finished leather by a process called tanning. This finished leather as well as raw hide and skin is later exported to various countries like European Union, Germany, Italy, USA etc. for earning forex thus accelerating the inclusive and faster growth path by employing rural and urban skilled labour force. Raw hide and skin is basically a by-product of meat and milk products. Flaying or stripping of animal hide and skin is thus a good non-farm activity with least

investment and skills. Leather sector not only provides employment to approximately 2.5 million people but also provides employment to roughly thirty per cent of the women workforce. The basic raw-material for leather and leather exports is hides and skins.

At primary stage or level, the production of hides and skins starts with a butcher or individual or small and marginal farmer in the community. In the past or ancient time the work of stripping of raw hide and skin was restricted to village with mostly 'chamars' often known as 'rangia' literally dyer associated with the profession. These workers stripped or flayed dead animals of their village and later made up shoes or drum heads for use for the people. The leather industry was based on Jajmani system where people associated with the stripping or flaying of raw-hide and skin used to sell manufactured/finished product used to sell finished product to the Jajmans or Brahmans. Slowly and gradually, when the supply exceeded than demand for hide and skin then urban based tanners or good manufacturers were contacted. It thus started meeting the demand of the city people, army and police requirements. It thus enter into value-addition chain.

In 1900, extraordinary rise in world prices of hide and skin which adversely affected village tanners as Jajmans started selling skins of their dead animals to chamars. Chamars being poor, were not able to purchase hide and skin and thus started shifting to modern tanneries in urban areas. They also now started getting engaged in full time agricultural activities due to their poor and downtrodden conditions.

In liberalized economies like India, there are almost nil or few restrictions in trade of hides and skins. Also the number of hide and skin players are large in number in present scenario. But at the same time it is seen that there is a decline in the number of persons engaged in the activity due to social stigma connected with the stripping of raw hide and skin. Rapid techno-economic situation also worsened the situation with respect to persons engaged in the activity of flaying of raw hide and skin.

In the beginning of the 21<sup>st</sup> century, the World economy has been facing economic slowdown. The globally advanced economies especially of the US and the European countries, *de facto*, are engulfed with the grave problems of tumultuous recession and the structural sovereign debt crisis with the repercussions for the rest of the world. In such a scenario, it is important to explore the areas in which India can increase its exports. The promotion of export of leather and leather products be it raw hide and skin can play a significant role in earning of foreign exchange in India.

The present paper had tried to analyze through use of Hirshchman-Herfindhal and Export Concentration Ratio as to whether diversification or concentration of export of raw hide and skin had increased or decreased during the period 1990-91 to 2013-14 for fifty-five major countries of the world.

## **2. MATERIAL AND METHOD**

### **2.1 REVIEW OF LITERATURE**

The review of literature is focusing on export of leather and leather products from India.

This study will be dealing with export of leather and leather products in India so this study will review literature in terms of export performance of leather in India.

In 1970, NCAER<sup>4</sup> completed a very seminal work whose objectives were mainly to find the prospects of exports of Indian footwear industry besides necessary measures which government of India ought to take to achieve its targets. This seminal work stresses on promotion of export of Leather footwear industry for earning forex. Footwear industry has high value-addition as per their study. Various factors were identified which can add to comparative strength and affect world trade of footwear market like preference of consumer, pricing policy and various distribution arrangements, competition between domestic and foreign exporter, import policy, term of sale and system of advertisement. Further the seminal work suggested vertical integration of footwear industry and to improve quality through adoption of production designs which match the European standards.

Murugesan and Subramaniam<sup>3</sup> (1970) remark that Indian leather industry is the oldest and traditional industry which is highly export oriented. They stresses on timely investment on finished leather and quality goods promotion so that India can continue as a major supplier of raw-material. Further their study stresses on knowing the market potential for Leather products besides product-wise analysis which reveals heavy demand in international market for footwear and semi-finished products.

Kumar<sup>2</sup> (1985) in his paper has analyzed the trend in India's export of leather products in last few years. His study reveals that in international market, especially in developed countries there has been a great increase in the demand for leather and leather goods. It is due to the fact that tanning operations are being discouraged due to rising pollution problem and increased labour cost in developed countries. India thus can take benefit of this situation due to availability of huge livestock population. He suggests various steps like financial incentive, modern design and quality control and expansion of production base besides adoption of genuine export strategy and its implementation with firm determination.

Rai and Reddy<sup>5</sup> (1989) hold that in the export kit of India Leather export is the major item. Due to rising international competition and slackening or reduction in demand in various countries that export of leather from India have been showing a fluctuating trend. India has the added advantage of good quality raw-material base to various countries unlike exports of countries like Brazil, Taiwan, Italy and Korea which have poor raw-material base. He stresses on upgradation of technology besides ensuring smooth or good marketing of leather products like buy back arrangements with foreign collaborations. According to his study, big organization should take the responsibility for securing huge orders and developing necessary infrastructure facilities to execute them in number of units. India should explore the new markets abroad.

Sinha and Sinha<sup>6</sup> (1991) in their study attempt to analyze the performance of export of Indian leather industry. Their study further tried to determine the constraints or problems in future prospect of growth in the light of policy measures. The author believes that leather industry attracts or lures many leather traders to undertake small scale production for export due to low investment and high turnover in this sector or industry. The entry of these new exporters has a adverse or negative effect on India's export market. It is due to the reason that the motivation is to harness the export incentive and capital building in short span of time.

Gupta<sup>1</sup> (1990) in his paper has tried to analyze the global demand for leather footwear and to analyze the trend of import of leather footwear in ten major countries of the world. His study reveals that there has been a substantial increase in export of leather footwear to 60.2 per cent from 1983 to 1987. The percentage share of leather footwear export in total world export of leather and leather products has declined from 51.4 per cent to 45.8 per cent. In developed countries like USA, UK and France leather footwear export has increased. However, in case of some countries like USSR, Denmark and Netherland export declined which need rethinking and reorientation. Government thus should frame appropriate strategy and should provide various facilities for import of raw-material, machinery equipments and consumables.

### **3. OBJECTIVES OF THE STUDY**

The objective of the study is aimed at comprehending the status of India's trade of leather and leather products in the global market.

The specific objectives are following

1. To analyze India's position and growth trend in the global trade of raw hides and skin.

2. To examine the market share or power of various countries in the imports of raw hides and skin.
3. To examine the export concentration ratio of four largest importers of raw hides and skin.
4. To study the impact of WTO on export of leather and leather products in India.
5. To explore the possibility to promote raw hides and skin from India.

#### 4. SOURCES OF DATA

The study will be mainly based on secondary data available from various authentic government sources. Most of the data has been collected from Directorate General of Commercial Intelligence and Statistics (DGCI & S), Ministry of Commerce, Government of India, New Delhi.

#### 5. METHODOLOGY

The present research work will be primarily an analytical and critical study of the figures related to the performance of India's leather and leather products in global market for the period 1990-91 onwards. The exports of leather and leather products are contributing significantly in the domain of Indian exports and play a vital role for the overall economic growth and sustainable development of the Indian economy. To achieve the various objectives of the study, some mathematical and statistical tools like Hirschman-Herfindhal Index and Export Concentration Ratio have been used.

##### 5.1 HERFINDHAL INDEX (HHI)

It is a measure of size of firms in relation to industry. High value of HHI indicates increase in market power and low value of HHI indicates decrease in market power or increase in competition. HHI index give more weight to larger firms.

$$HI = \sqrt{\sum_{i=1}^N \left[ \frac{x_i}{X} \right]^2}$$

Where H1 = Hirschman-Herfindhal index

## 5.2 Export Concentration Ratio (CR<sub>4</sub>)

Concentration ratio signifies the percentage of market share held by largest four firms in an industry. CR<sub>4</sub> signifies the percentage of market share held by largest four firms in an industry.

For the present paper, the export concentration has been used using the following formula:

$$CR_4 = \frac{\text{Top four countries imports}}{\text{Total Exports of the industry}} * 100$$

Where CR<sub>4</sub> = Export concentration ratio of top four importing countries.

## 6. EMPIRICAL FINDING

To understand the overall pattern of exports and imports, we use the ITC (HS) code classification. The ITC classification has following four subgroups for the leather industry.

ITCHS 41 Raw hides and skins (other than furskins) and leather

ITCHS 42 Articles of leather, animal gut, harness, and travel goods.

ITCHS 43 Furskins and artificial fur, manufactures thereof

ITCHS 64 Footwear, gaiters and the like, parts thereof.

The present paper will be focusing on export of raw hides and skin (ITCHS 41) from India to fifty-five major countries.

The fifty-five major countries for the present paper are Hong Kong, Italy, China P RP, Vietnam, Korea RP, Malaysia, Spain, Germany, Thailand, Turkey, Indonesia, Netherlands, South Africa, Portugal, Russia, USA, France, Bangladesh PR, Japan, Czechoslovakia, Norway, Korea DP RP, U Arab Emirates, Poland, Taiwan, Sri Lanka DSR, Phillipines, UK, Austria, Hungary, Singapore, Morocco, Tunisia, Ukraine, Lithuania, Australia, Pakistan IR, Israel, Dominic REP, Myanmar, Canada, Jordan, Slovenia, Gautemala, Angola, Belarus, Romania, Ethiopia, Greece, Mexico, Nigeria, Lao DP RP, Belgium and Oman.

### 6.1. EXPORTS OF RAW HIDES AND SKINS FROM INDIA

The exports of raw hides and skins have shown more or less a fluctuating trend. Many international trade blocs, regional groupings and free trade agreements from time to time have affected its exports. Besides some of the international factors like recession and sovereign debt crisis have affected exports of raw hides and skins.

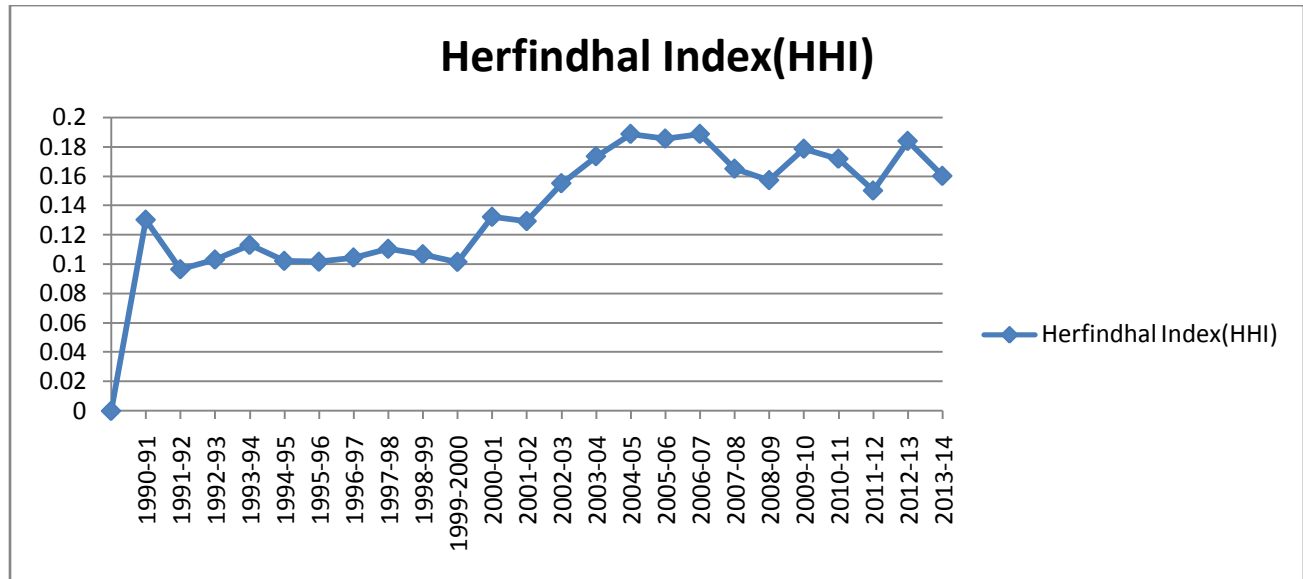
In the present paper HHI value has been classified as follows:

HHI value	Market Concentration
1) Less than 0.11	Low
2) Less than 0.17	Moderate
3) 0.17 and above	High

**TABLE 1: Exports of Raw Hides and Skins from India from 1990-91 to 2013-14.**

YEAR	HHI	Market Concentration
1990-91	0.13024	Moderate
1991-92	0.0965	Low
1992-93	0.1031	Low
1993-94	0.1131	Moderate
1994-95	0.1022	Low
1995-96	0.1016	Low
1996-97	0.1045	Low
1997-98	0.1104	Moderate
1998-99	0.1067	Low
1999-2000	0.1015	Low
2000-01	0.1322	Moderate
2001-02	0.1293	Moderate
2002-03	0.1551	Moderate
2003-04	0.1735	High
2004-05	0.1887	High
2005-06	0.1855	High
2006-07	0.1887	High
2007-08	0.165	Moderate
2008-09	0.1572	Moderate
2009-10	0.1786	High
2010-11	0.1718	High
2011-12	0.1501	Moderate
2012-13	0.1839	High
2013-14	0.1601	Moderate

SOURCE: Computed from data of DGCI & S of ITCHS code 41.



**Figure 1: Computed from table 1**

It is clear from the above table and diagram that during the year 1991-92, 92-93, 94-95, 96-97, 98-99, 99-2000 the HHI value lie in low market concentration range indicating presence of diversification. This is due to the fact that some big countries who had earlier occupied predominant place in market share have now been occupied by small new players or countries. There has been thus decrease of market share or power leading to low HHI value. It further lead to increase in competition.

In other words, we can say that market share or market power of some small countries like Bangladesh, China P RP, Malaysia, Norway, Korea DP RP, Poland, Austria, Morocco, Canada, Oman, Philippines, Austria, Greece etc has increased and of some big countries has decreased. The increase in market share of small countries is significantly more than decrease in market share of large or big countries leading to overall decrease in HHI value showing increase in market diversification. In simple words we can say that market power has decreased leading to more competition in the market.

During 2003-04, 04-05, 06-07, 09-10, 10-11 and 2012-13, the HHI value is high (above 0.17) indicating high market concentration. It thus indicates increase in market power. The reason for high market concentration is the fact that market share of some large or big countries like Italy, China P RP, Vietnam, Hong Kong etc has increased while on the other hand for small countries like Nigeria, Gautemala, Czechoslovakia, Angola etc the market power has decreased . It thus led to overall increase in HHI value.



During the year 1990-91, 93-94, 97-98, 2000-01, 2001-02, 2002-03, 2007-08 and 2011-12 the HHI value lie is moderate market concentration range i.e. less than 0.17. This is due to the fact that there has been a moderate increase in market share of some countries and a moderate decrease in value of some countries leading to overall moderate HHI value.

In 2008-09, during global meltdown the value of HHI has comparatively decreased leading to diversification as during this time period the market share of Asian and South East Asian economies has risen and that of USA declined. In aftermath of financial crisis of 97-98, Asia's trade and output recovered strongly.

Overall it can thus be said that adoption of policy of Liberalization, Privatization and Globalization has made the raw hide and skin market moderately concentrated. In the moderately concentrated range HHI values have however moved towards high market concentration range signifying concentration in export of raw hides and skins. This may be due to adoption of membership of certain organization like WTO in 1995 and India's Look East policy in 1996 besides international relations with South-East Asian economies.

Besides this various trade agreements and factors have affected the export of raw hides and skins to the major fifty-five Countries of the world which are briefly discussed below:

In 1997, a new sub-regional grouping was formed in Bangkok known by the name BIS-TEC which is a group of four countries named Bangladesh, India, Sri Lanka and Thailand. Myanmar also joined it It is noticed that after 1997 the export of raw hide and skins has increased to Thailand, Bangladesh and Sri Lanka DSR and Myanmar. India's "Look East" policy was developed and enacted during the governments of Prime ministers P.V. Narasimha Rao (1991–1996) and Atal Bihari Vajpayee (1998–2004). India's strategy has focused on forging close economic and commercial ties, increasing strategic and security cooperation and the emphasis of historic cultural and ideological links with ASEAN countries. ASEAN had six members, namely, Brunei, Indonesia, Malaysia, Philippines, Singapore and Thailand. Vietnam joined in 1995, Laos and Myanmar in 1997 and Cambodia in 1999. As a result of it export of raw-hides and skins increased to Indonesia in after 1994, Singapore in 1994, Phillipines in 1996-97, with Myanmar in 1999 and Vietnam in 1994-95.

ASEAN-India relations had been rapidly developed and enhanced since the establishment of the Sectoral Dialogue Partnership in 1992 and especially since India became a full Dialogue Partner in December

1995 and subsequently participated in the ASEAN Regional Forum (ARF) in July 1996. The ASEAN–India Free Trade Area (AIFTA) is a free trade area among the ten member states of the Association of Southeast Asian Nations (ASEAN) and India. The initial framework agreement was signed on 8 October 2003 in Bali, Indonesia and the final agreement was on 13 August 2009. After 2009 it is seen that the export of raw hide and skin had increased in Malaysia, Phillipines, Singapore and Thailand.

India's association with CLMV countries as strategic trade partner has also led to increase in exports of raw hide and skin with the CLMV countries after 2004. The first CLMV Summit was held in November 2004. The CLMV countries, comprising Cambodia, Lao People's Democratic Republic (Lao PDR), Myanmar and Vietnam are integral part of the ASEAN region. These countries have been undergoing economic transition from central planning to market economy, from inward looking to outward - looking economic development strategies and policies.

The Comprehensive Economic Cooperation Agreement (CECA) is an agreement between Japan and India to strengthen bilateral trade. The agreement has been finalised by the end of 2006. Comprehensive trade agreement was also signed in May 2011 with Australia, Malaysia, Singapore (2008).

The Indian government has said that it will focus on increasing bilateral ties with countries in the CLMV region, comprising Cambodia, Lao PDR, Myanmar, and Vietnam under its "Look East" policy.

Since 1990, India and Hungary have signed several Agreements that have contributed to further intensification of bilateral relationship. These include: Double Taxation Avoidance Agreement, Bilateral Investment Protection and Promotion Agreement, Social Security Agreement, Agreements on Cooperation in Health, Agriculture, IT, Science and Technology and Defence. The visit of Shri Sachin pilot, minister of state for communication and It technology in Oct 2012 and by Salman khurshid, minister of external affairs to Hungary in July 2013. The Joint Economic Commission is an institutional dialogue chaired by the respective Commerce Ministers of both countries in 2009.

Bilateral Investment Promotion Agreement was held in 1995 between India and Italy. Leather Trade Fairs in Italy and India are being organized from time to time. As a result of it exports of raw hide and skin had increased with it. India and Japan EPA/CEPA Negotiations were also held from time to time. The first meeting of the JTF was held from January 31 to February 2, 2007 in New Delhi. As a result of it India's export of raw hide and skin had increased after 2007.

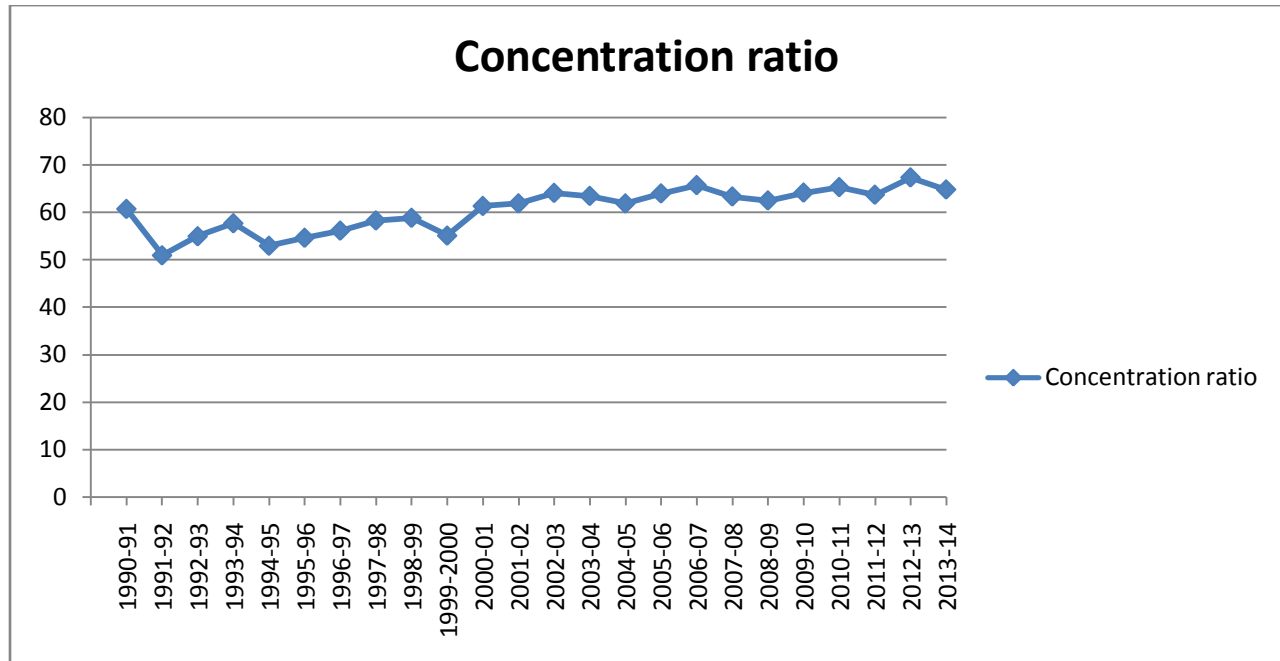
India's trade of raw hides and skins with the North East Asian region comprising of China, Japan, Hong Kong, Taiwan has been increasing. Hong Kong from 1990-91 to 2012-13. With Japan after 1994-95 till 2013-14 the exports of raw hides and skins had increased. With Taiwan exports of raw hides and skins have increased after 1996-97 and 2008-09.

The overall exports to fifty five major countries has increased from Rs 76710.69 lakh crore in 1990-91 to Rs 776,969.84 in 2013-14.

**TABLE 2: Concentration ratio of exports of Raw hides and Skins for fifty-five major countries of the world.**

	Top four countries Exports from India	Total exports of the industry from India	Export Concentration ratio (CR <sub>4</sub> )
1990-91	46549.86	76710.69	60.68236383
1991-92	38632.74	75881.95	50.91163314
1992-93	41932.86	76344.92	54.92554056
1993-94	46320.7	80328.62	57.66400568
1994-95	61346.9	115914.89	52.92408939
1995-96	66016.22	120883.73	54.61133603
1996-97	58552.08	104346.74	56.11299404
1997-98	62550.91	107,384.20	58.24964008
1998-99	65321.17	111071.75	58.8098864
1999-2000	55598.86	100975.06	55.06197273
2000-01	103691.37	169146.59	61.30266652
2001-02	130279.59	210638.54	61.84983527
2002-03	153550.31	239700.53	64.0592284
2003-04	159401.89	251329.07	63.4235785
2004-05	166761.95	269717.61	61.82835077
2005-06	178855.01	279682.18	63.9493764
2006-07	216739.26	329914.63	65.69555888
2007-08	209936.34	331640.71	63.30234307
2008-09	205113.29	328336.85	62.47038369
2009-10	193170.66	301267.28	64.11936271
2010-11	249253.44	381848.57	65.27546771
2011-12	311503.24	489207.49	63.67507578
2012-13	396187.41	588566.34	67.31397687
2013-14	503316	776,969.84	64.77934845

SOURCE: Computed from Data of DGCI & S for ITC HS code 41.



**Figure 2: Computed from values of table 2**

It is clear from table 2 and diagram 2 above that export concentration ratio has comparatively decreased from 60.68 in 1990-91 to 55.06 in 1999-2000 with few fluctuations showing presence of diversification. It is also clear from above that the concentration ratio has increased from 55.06 during the year 1999-2000 to 64.77 during the year 2013-14. It shows that over the period of time from 1999-2000 to 2013-14 the export concentration ratio of raw hide and skins exports has increased thus showing increase in export concentration and hence increase in productivity of raw hides and skins. As product concentration increases productivity and labour specialization increases thus leading to more exports of raw hides and skins. It also shows spillover effects and improvement in technology and more economies of scale of production. On the other hand, according to Prebisch and Singer (1950) concentration is associated with deteriorating terms of trade, volatility and low growth of the economy.

It is also seen that from 1990-91 to 2013-14, there is increase in export concentration from 60.68 in 1990-91 to 64.779 in 2013-14 signifying increase in export concentration to some selected countries. It can be due to various reasons, like adoption of Look East policy by India, ASEAN formation in 1996, adoption of membership of WTO in 1995 by India leading to concentration of trade in WTO member countries. Besides this there is change in work culture as more women are coming out to do job and are demanding leather products, change in tastes and preferences due to fashion industry etc. The one

important reason is that some countries have started importing more raw hides and skins and some small countries have stopped or reduced their imports of raw hides and skins.

In 2008-09 due to global recession the concentration ratio has declined a little from 63.3 in 2006-07 to 62.47 owing to the reason that there has been increase in demand from Asian countries of raw hides and skin.

## 7. CONCLUSION

It is concluded from above that HHI values of ITCHS code 41 are not very dynamic. Most of the HHI values signify moderate market concentration, seven values indicates high market concentration and seven HHI value signify low market concentration. The value of HHI has increased from 0.13 to 0.16 from 1990-91 to 0.16 in 2013-14. The value in 2008-09 and 2011-12 is 0.16 and 0.15 respectively which indicates moderate market concentration. In 2008-09, it may be due to global meltdown that in comparison to HHI value in 2004-05, 2005-06, 2006-07 and 2007-08 that HHI value has declined from 0.18 to 0.15 signifying diversification.

The export concentration ratio has increased from 60.68 during the year 1990-91 to 64.77 during the year 2013-14. It shows that over the period of time from 1990-91 to 2013-14 the export concentration ratio of raw hide and skins has increased thus showing increase in productivity of raw hides and skins. As export concentration ratio increases productivity and labour specialization increases thus leading to more exports of raw hides and skins. It also shows spillover effects and improvement in technology and more economies of scale of production.

It is also seen that export concentration ratio has increased from 1990-91 to 2013-14 signifying increase in export concentration ratio to some selected countries. It can be due to various reasons like adoption of WTO membership by India in 1995, global meltdown and sovereign debt crisis in 2008-09, high demand of raw hides and skins from cold countries and change in work culture as more women are coming out to do job and are demanding leather products etc. Besides India also became member of ASEAN and some trade blocs which led to concentration of its exports in some selected countries.

It can thus be said that in post reform and post WTO era India's export concentration ratio has increased and there is less diversification in exports of raw hide and skins. The government should thus frame its trade policies accordingly keeping in mind the fact that whether to diversify its product or not.

## REFERENCES

1. Gupta, K.K., (1990), Export Prospects for Indian Leather Footwear, Foreign Trade Bulletin, June, pp.15-17.
2. Kumar, N.C., (1985), Export Strategy for Leather Products: Some Suggestions in Foreign Trade and India's Export Policy, (Ed.) S. Subrahmanya, Deep and Deep, Publications, New Delhi.
3. Murugesan, B. and Subramaniam, K. (1990) Export of Leather and Leather Products: Strategy for 90's. *Yojana*, April 16-30, pp. 21-25.
4. NCAER ., (1967), Small Scale Industry of Mysore, NCAER, New Delhi
5. Rai, H.L and Reddy, T.S. (1989) *India's Foreign Trade: Retrospective and Prospective*. New Delhi : Uppal Publications, pp. 87.
6. Sinha, S. and Sinha, S., (1991), Leather Exports an Illusory Boom, *Economic and Political Weekly*, Volume XXVI,3132 August pp.M111-116.

## INTERNET SOURCES

1. [www.leatherindia.org](http://www.leatherindia.org)
2. [commerce.nic.in](http://commerce.nic.in)
3. [dipp.nic.in](http://dipp.nic.in)
4. [labour.nic.in](http://labour.nic.in)
5. [www.dgciskol.nic.in](http://www.dgciskol.nic.in)
6. [www.planningcommision.nic.in](http://www.planningcommision.nic.in)
7. [www.leatherindia.org](http://www.leatherindia.org)
8. [finmin.nic.in](http://finmin.nic.in)
9. [dahd.nic.in](http://dahd.nic.in)