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Abstract:

Purpose: the purpose of the study is describe the trade relationship of China and Afghanistan. China, most populous and rapidly growing industrial country of the world, has shown its strong political, economic and security-based interests in Afghanistan. Afghanistan is rich in terms of natural reserves. China is trying to gain access to these natural resources like Aynak copper and oil reserves, providing economic aid and thus improving political relations. Shanghai Cooperation Organization (SCO) is playing a part in addressing security problems of Afghanistan and China is observer while Afghanistan is a member of SAARC. On the other hand, Afghan government is appreciating and taking this greater role in a positive sense because it is bringing modesty in their relations from bilateral partnership to strategic partnership.

Keywords: Host country growth, FDI, Capital formation

JEL Classification Codes: A12, B17, C82

1. Introduction

Historian Arnold Toynbee has described Afghanistan as the “roundabout of the ancient world” (Blood and Aghajanian, 2007, p.3). Indeed, this topography has remained at the connection of the terrestrial ways from China and India to the West and a residence of junction for numerous, dynamic nations and cultures. It, consequently, is correctly supposed that Afghanistan is a bond linking the current day South Asia, Central Asia, West Asia and East Asia. Over the years, the refugees who approved through this area left behindhand “a medley of cultural and verbal groups” (Mazhar, Khan and Goraya, 2013). Therefore, Afghanistan is truthfully a multi-cultural terrestrial and there have remained Chinese civilizational influences ended this republic.

Both China and Afghanistan have common borders and share good political relations. This is clear from the detail that China resisted foreign interference in Afghanistan during Cold War era. At the time of Soviet invasion in Afghanistan, China supported United States and other allies against Soviet Union. After the removal of Soviet militaries from Afghanistan, China stopped supporting them. After the decline of Soviet-sponsored government of Afghanistan, Taliban came into the helm of Afghanistan’s affairs and like many other countries, China also did not favour this regime and clogged all official relations and closed its embassy in Kabul. After the decline of the Taliban government in Afghanistan in 2001, China redeveloped official political relations with the newly-elected government of Hamid Karzai. Since then, China is developing its business relations with Afghanistan in an effort to protected its commercial interests.

1.2 China’s Economic Character in Afghanistan

Afghanistan is an extremely under-developed country with extreme poverty, unemployment and poor infrastructure. Presently, extra than 90 per cent of Afghan budget is founded on foreign aid. In 2001, after the development of political government in Afghanistan, China appeared as a main actor in the redevelopment of war-torn country. Initially in January 2002, China promised to give the aid of \$150 million for the reconstruction of Afghanistan. In the start, China provided economic support to Afghanistan on dissimilar schemes which comprise 10 million dollars for Parwan Irrigation Development and for a hospital in Kabul.

Moreover, China gave human resource training to more than 800 different officials of Afghanistan and also gave technical training to local Afghans in different departments. In 2003, China gave the grant of \$15 million after signing Financial and Mechanical Assistance

Agreement.²⁴ Later on, China appeared as a energetic economic player in Afghanistan. Then in 2009, it provided 75 million dollars as economic aid. From 2002 to 2010, China provided economic support of 205.3 million dollars, and 19.5 million dollars as loan to Afghanistan. In 2011, China gave free aid of 23.7 million dollars to Afghanistan. Despite all this economic assistance and mutual trade agreements, Sino-Afghan economic committee identified many new areas of cooperation like: agriculture, infrastructure building, hydroelectricity and natural reserves.²⁷ Both countries are also doing fine in bilateral business. Chinese telecommunication companies, Huawei and ZTE, updated 200,000 Afghanistan's analog telephone lines to digital.

Afghanistan has the largest unexplored reserves of copper, coal, iron, gas, cobalt, mercury, gold, lithium and thorium, estimated to more than 1 trillion dollars. The sites of these deposits are now open for international investors. After the opening of these sites, China showed its interests in these reserves. In prevailing international environment, China has largest economy of the world while Afghanistan needs this economy badly. China's industry is excelling amongst world's industries and in order to maintain its smooth growth, China needs massive natural reserves. Its domestic resources are insufficient to fulfill the demand of its growing industry, so in order to meet this demand China is improving its role in Afghanistan. China is interested in the stability of Afghanistan because it has economic interests behind all this and wants favorable environment for its companies which are working in Afghanistan and sending natural resources back to China.

1.2 China's Role in the Economic Growth of Afghanistan

Sino-Afghan political relationship, financial assistance and profession relatives date spinal to the epoch of Silk Road. The relatives remained established in 1955 and then were further strengthened through the 'Treaty of Economic and Mechanical Assistance in 1964.' In the recent years, trade among the 2 countries has progressively augmented and China has swiftly appeared as one of the chief exporters to Afghanistan in the past decade.

The Sino-Afghan employment has previously touched over \$700 million. A appearance at China-Afghan Trade volume highlights certain facts which points towards the environment conducive for China's business interests. Just between 2002 and 2010, the occupation capacity continued significantly high i.e. China's spread capacity augmented from \$19.91 million to \$704 million. There also is a small but significant increase in China's import volume which increased from \$.08 million to \$11.7 million (Huasheng, 2012, p.7). Furthermore, recently the Afghan

Administration and the donor agencies are contracting a quantity of Chinese businesses for miscellaneous zones of rebuilding actions.

Afghanistan is lucky to have abundance of ordinary incomes like; copper, iron, coal, marble, precious metals, lithium, gemstones and above all hydrocarbons, some of which have remained exposed while most remains un-explored, owed to the ongoing conflict. According to Afghan and American Geological Surveys, conducted between 2007 and 2009, deposits of copper, mercury, rare-earth elements, sulfur, chromites, asbestos, potash, graphite, and shingle and shingle were originate in above 20 mineralized areas. The survey reveals that, “The most significant known metallic credits are of copper and iron. The total copper resources in Afghanistan range up to 60 million metric loads of copper of which the sediment-hosted copper deposits at Aynak are projected to comprise approximately 30 million metric loads copper. Possessions in undiscovered porphyry copper and scorn payments are projected to be around 28.5 million metric loads of copper, with additional molybdenum, gilded, and hoary resources. Alluvial iron payments are plentiful, and the Haji Gak and nearby payments are projected to comprise around 2,260 million metric loads of steely ore with marks advanced than 62 heaviness out of a hundred iron. Extra resources in alike payments are probable” (Huasheng, 2012).

1.3 Chronology of Sino-Afghan Association

The antiquity of Sino-Afghan association can be drawn spinal to 7th Period when Chinese Friars used to transportable to Afghanistan finished Silk Street, staying Buddha statues in Bamyian province of Afghanistan (Scott, 2008), providing that the Afghan terrestrial had as soon as been the focus of Buddhism. Under Buddhism, by 500 B.C, Kandahar and Heart backwaters (then recognized Arachosia and Aria) remained measured as the jewelries of the biosphere. Buddhist instruction on Afghanistan continued from 650-321 B.C (the Mauryan Age) (Alikuzai, 2013). The major Buddha figurine (one thousand tempos long, Slumbering Buddha statuette) was made in the Bamyian area. There remained twelve minor and great Buddhist kingdoms in Afghanistan; Kingdom of Bactria through its wealth at Kandahar as the major and greatest important (Alikuzai, 2013). Certainly, the Buddha figurines of Bamyian (demolished by Taliban in March 2001) had superior magnetism for Chinese individuals, separately from frequent groups of this belief (UNESCO). During the current quarrying at the Aynak copper excavations, some archaeological locations have remained originate that are not solitary portion of Afghanistan’s national inheritance but likewise of Chinese welfares. Afghan and extraneous archaeologists and historians

have recurrently emphasized the cross-border national links scattered during the course of this county.

These sites are also fragment of China's antiquity. Rendering to China, “this is China’s community, and they are dedicated to manufacture sure it everything available healthy” (UNESCO).

Through the wide-ranging usage of the Silk Street, a healthy trade association were amongst Asia and Europe. Though China was the center of Asian employment, Afghanistan occupy yourself important role as important transportation trade direction among the two landmasses; Asia and Europe. The pleasant Sino-Afghan associations have been preserved finished ages. It was subsequently the re-positioning of worldwide influence middles, development to Biosphere War-II, People’s Nation of China and Afghanistan recognized their two-pronged association in 1950s.

The ambassadorial associations, though, were recognized amongst the two nationals in 1957. Throughout the Emotionless war era, Chinese Major Minister, Mr Zhu Enlai stayed Afghanistan in 1957. Previous, Major Minister Daud Khan remunerated a appointment to Peking in the identical year. These appointments supported the two-pronged association amongst the two conditions.

The Sino-Afghan Agreement of Acquaintance and Non-Aggression was contracted in August-1960 (Rahimi, 2008). Thereafter, the Peking Agreement of recognized differentiation of borderline among China and Afghanistan was employed in 1963, thus relaxing the 76 Kilometres extended boundary issues when and for all (Rahimi, 2008). Existence a participant of 'Good Neighbors' Declaration-2002, China has promised to admiration Afghanistan's individuality and regional truthfulness. Certainly, both the conditions relished approachable relatives since the commencement of the two-pronged association in 1950s; approximately that could perchance be extraordinary in the monarchy of worldwide relatives.

China postponed her authorized relations with Afghanistan amongst the Soviet Amalgamation and reestablished relations only after the fall of Taliban government in 2001. Since then, the Sino-Afghan kindred have transformed and improved. Recently, the two-pronged conferences and high equal conferences have develop quite recurrent. Impartial last year, Chinese Distant Minister, state Councilor, and Second-in-command Chief of PLA Wide-ranging Staff go to Afghanistan unconnectedly.

In fact, this is the principal period in antiquity that this numerous Chinese appointments have remained completed to Afghanistan in a span of one year only. Furthermore, China's has enormously promoted aid to Afghanistan. Although it providing a entire of \$240 million assistance to Afghanistan from 2001-2013; in 2014 it has on condition that \$80 million assistance to the republic and The ambassadorial associations, however, were recognized amongst the two nationals in 1957. Throughout the Emotionless war epoch, Chinese Major Preacher, Mr Zhu Enlai visited Afghanistan in 1957. Earlier, Major Minister Daud Khan paid a appointment to Peking in the identical year. These appointments supported the two-sided association among the two countries.

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overcome the devastation of additional than a period long war. On its part, Afghanistan can offer China the easiest transport route for exploration of energy and mineral resources within Afghanistan and cutting-edge its neighboring district of Dominant Asia and Caucasus.

1.4 China in Fundamental Asia

China uses the Shanghai Collaboration Association (SCO) as the multilateral forum to promote issues in Fundamental Asia. This forum allows China to placed a multilateral spin on its predominantly bilateral efforts. Russia and China cooperate in the SCO as a means of playing regional powers like India, Iran, and the United States off each other, but the forum offers little action or solutions to regional problems. The charter of the 25 Ibid., 3–5. organization defines the security threat in the region as the three evils of terrorism, separatism, and religious extremism.²⁶ Security cooperation in fighting terrorism has been the organization’s biggest success.

China’s new engagement with Central Asia began when the region split into independent republics after the fall of the Soviet Union. The relationship developed initially to settle border disputes but quickly evolved into deeper security ties to help separatist–terrorist groups in Xinjiang. Beijing’s campaign to “open up the west” predominantly focused on economic integration with Central Asia. Deepening security and economic ties have worked to prevent the separatist movement in Xinjiang from growing, even though it is popular with the citizens of Central Asia. The dual track of developing economic and security relationships is the major theme of the SCO.

The SCO was built as a forum to construct ties with Central Asian countries to fight terrorism, increase stability, and promote economic development. This began in 1996 when China, Kazakhstan, Kyrgyzstan, Russia and Tajikistan—the Shanghai Five— joined to settle border disputes and enhance border security. In 1998, the forum began to focus on regional security and economic integration. The Shanghai Five had expressed concern about developments in Afghanistan through communiqués released in 1998 and 1999. While the member states were affected by terrorism in Afghanistan, they were “neither qualified for, nor capable of, solving the Afghan issue on their own.”²⁸ The attacks of 9/11 and the subsequent invasion of Afghanistan accelerated the creation of the SCO, according to Vladimir Putin. The forum became the SCO in 2001 and began to focus on fighting the three evils of terrorism, separatism, and religious extremism.²⁹ The pre–9/11 conflict in Afghanistan was viewed by the SCO as an internal conflict that needed a negotiated political solution, not a military invasion.

1.5 Trade Relations

In 21st century, China emerged as the biggest trading partner of Afghanistan, and in its first nine years, bilateral trade between the two countries reached \$250 million from \$25 million. This was considered to be a very strong trade development yet it was mediocre and unilateral. Majority of official trade comprised of Chinese electrical products.

In 2006, 'Sino-Afghan Economic Committee', for increasing bilateral trade, was set up and it gave duty free access to about 278 goods. Later on in 2010, both countries signed 'Comprehensive Cooperative Partnership Agreement', to boost their economic trade. This agreement promised larger economic and technological cooperation, giving a favorable tariff to many products of Afghanistan.

In 2012, China promised to give 23.8 million dollars to increase investment and bilateral trade. Along with the increase in bilateral trade and resource exploration, both countries would focus in the fields of agriculture, engineering and the growth of infrastructure.³⁵ Afghanistan's government is interested in enhancing bilateral trade with China, importing technological items. It is expected that this would boost up after the stabilization of Afghanistan.

1.6 China and Afghanistan's Oil and Gas Cooperation

Currently, China's most vital investment in natural resource sector is in Amu Darya oil field in north of Afghanistan. It makes China biggest investor in Afghanistan's history. In December 2011, China National Petroleum Corporation won the tender to drill three oilfields for the period of next 25 years at Amu Darya River Basin.⁴³ Under the conditions of the agreement, in the start, CNPC will invest approximately 400 million dollars in the exploration of oil and it may generate the revenue of \$7 billion, for this conflict ridden country.

According to the terms of agreement, China will pay Afghanistan 20% tax on income and 15% royalty and 70% of revenue on income. It is estimated that during the period of 25 years, Afghan government should take \$7 billion. CNPC's actual work on oil exploration will be for 23 years, and 2 years will be consumed on installment of the project. This project will give annually \$304.35 million to Afghan government. According to a survey, these oilfields have reserves of more than 87 million barrels, and Afghan government is considering this tender to be a test for larger oil reserves in upcoming years.

Exploration of oil is giving another platform to China to enlarge its footprint in Afghanistan. Furthermore, by giving jobs to local people in these oilfields, China will help

political government of Afghanistan in ensuring peace and stability. By exploration of oil, China can further improve its economic ties with Afghanistan and to some extent can meet the increasing thrust of its rapid growing industry. On the other hand, these reserves of oil will give biggest revenue to Afghan government and it would be better able to improve the condition of this war-torn society.

1.7 The Shanghai Assistance Organization

From SCO forum in June 2012, China obviously articulated its longing to play a superior character for the steadying of Afghanistan together with Russia. As mentioned earlier that President Hu vowed to make sure China would play an active role to manage the “regional affairs” against the “shocks from turbulence outside the region” and that would also include the reconstruction of Afghanistan and rehabilitation of Afghan population (Bryanski and Buckley, 2012).

According to Mr Zhang Deguang, Chairman of China Substance of Worldwide Educations (CFIS), “SCO can and determination play a superior character in Afghanistan subsequently the NATO extraction” (Bryanski and Buckley, 2012). He additional that Porcelain would deliver \$10 billion for responsibility developments in the SCO republics. Since greatest of the SCO republics are biologically adjoining with Afghanistan, and thus are vulnerable to spillover effects of terrorism and Afghan-originated drug trafficking. Indeed, Afghan issue occupies importance throughout the history of SCO.

This probably is the reason that SCO policy towards Afghanistan is evolving Owing to these facts, they have an interest to stabilize this country. SCO has laid down its views regarding Afghan policy and they are: promote political stability and economic development in Afghanistan, build a stable terrorism, narcotics and poverty-free Afghanistan, encourage the country to build an environment favourable for good relations with the neighbours, and further maintains that the international community must assist using the platform of United Nations (Huasheng, 2012).

As presumed by scholars, the biggest test of the SCO would be its developmental role in post-2014 Afghanistan. Looking at China’s growing attention of Afghanistan, it becomes clear that China is well aware of all these realities and is ready to make an effort to ensure regional stability connected to that of Afghanistan. Former Chinese President Mr Hu once said that, “China will continue actively contributing in worldwide and provincial collaboration regarding Afghanistan” (Bryanski and Buckley, 2012).

Furthermore, Afghanistan has developed the observer state to SCO. In a statement, Chinese Extraneous Preacher Yang Jiechi said that associate conditions ought to boost sanctuary partnership to protection provincial constancy, together with walking up the contest in contradiction of intimidation, independence and Extremism, enhancing the prototypical for collaboration in safeguarding sanctuary for foremost intercontinental proceedings, and resounding on combined anti-terrorism movements. Yang also called for healthier links amongst the SCO affiliate states, improving infrastructural building, additional facilitating employment and speculation and increasing cooperation in subdivisions such as finance, transport, energy, telecommunication and agriculture amid the economic slump.

The historical Ufa Conference of SCO-2015 has formally initiated the expansion plan for membership of this organization. The Ufa Conference of SCO has provincial and international suggestions. Provincially, two imperative South Asian republics have remained contained in the association as full memberships; a step onwards the regional incorporation progression of the Asian Landmass. Globally, Russia and China has given a clear indication to present a joint disagreement against the current uni-polar world order, where US is the sole super power. At the level of South Asia, it is a well coming step that Pakistan and India have been formally accepted as the members of SCO. Their entry into the organization will pave way for improvement in their bilateral relationship. This aspect has been even supported by Chinese Vice Foreign Minister Cheng Guoping, who said that, “India and Pakistan’s admission to the SCO will play an important role in the SCO’s development and it will play a constructive role in pushing for the improvement of their bilateral relations” (Daily Times, 2015). Chinese President also welcomed the expansion of SCO and called the members to “uphold the “Shanghai Spirit” for common development.

1.8 Rationale for the study

After the custom free trade agreement between China and Afghanistan the trade mainly focus on goods because the trade in services has not been allowed. This study will show the revealed comparative advantage and trade intensity of Afghanistan and China and to know about trade in which commodity will be beneficial for exporter as well as importer. So, that exporters and importers will get knowledge regarding which product should be traded.

1.9 Objectives of the Study

- To know the composition and pattern of trade between Afghanistan and China.
- To evaluate the trade Compatibility between Afghanistan and China.

- To analyse the degree of intensity of trade between the two economies.

1.10 Data type and nature of sources

The type of research data is secondary, collected from UNCOMTRADE. The data is time series in nature as it is about the exports and imports for Afghanistan and Japan. The trading classification is SITC Revision 3 in 10 sectors encompassing 64 broad commodities.

2. Data Variables & Methodology

In this study Trade Intensity Index (TII) and Revealed Comparative Advantage (RCA) Index has been used to see trade complementarity and Similarity between Afghanistan and India. The trade intensity index (TII) is used to determine whether the value of trade between two countries is greater or smaller than would be expected on the basis of their importance in world trade. In other words, the trade intensity index is the ratio of two export shares. The numerator is the share of the destination of interest in the exports of the region and denominator is the share of the destination of interest in the exports of the world as a whole. It is defined as the share of one country's exports going to a partner divided by the share of world exports going to the partner. It is calculated as,

$$\text{Trade intensity index (TII)} = (XIA / XIT) / (XWA / XWT)$$

Where XIA and XWA are the values of country I's exports and world exports to country A's and XIT and XWT are Country I's total export and total world export respectively. An index values greater than 1 indicate an „intense“ trade relationship. Trade Intensity Index is further divided in to Export Intensity Index (EII) and Import Intensity Index (III) for looking the pattern of exports and Imports.

$$\text{Export intensity index} = (XIA / XI) / [MA / (Mw - MI)]$$

XIA = Country I's Export to Country A; XI = Country I's total Export; M = Total Import of Country A; Mw = Total World imports MI = Total Imports of Country I.

$$\text{Import intensity index} = (MIA / MI) / [XA / (XW - XI)]$$

M IA = Import of Country I from Country A, MI = Total Import of Country I, XA = Total Export of Country A, XW = Total World Export, and XI = Total Export of Country I.

Trade Intensity Index is calculated for Afghanistan and India for the period 2008 to 2015 taking data from Direction of Trade Statistics (DOTS), IMF and accessed through World Integrated Trade

Solutions (WITS). Both Export Intensity Index and Import Intensity Index are calculated for Afghanistan and India.

Revealed Comparative Advantage Index shows how competitive is a product in countries' export compared to the products share in world trade. A product with high RCA is competitive and can be exported to countries with low RCA. Measures of revealed comparative advantage (RCA) have been used to help assess a country's export potential. The RCA indicates whether a country is in the process of extending the products in which it has a trade potential, as opposed to situations in which the number of products that can be competitively exported is static. It can also provide useful information about potential trade prospects with new partners. Countries with similar RCA profiles are unlikely to have high bilateral trade intensities unless intra industry trade is involved. RCA measures, if estimated at high levels of product disaggregation, can focus attention on other nontraditional products that might be successfully exported. The RCA index of country „I“ for product J is often measured by the product's share in the country's exports in relation to its share in world trade:

$$\text{Revealed Comparative Advantage (RCA}_{ij}) = (X_{IJ} / X_{IT}) / (X_{WJ} / X_{WT})$$

Where X_{ij} and X_{wj} are the values of country I's exports of product J and world exports of product J and where X_{IT} and X_{WT} refer to the country's total exports and world total exports. A value of less than unity implies that the country has a revealed comparative disadvantage in the product. Similarly, if the index exceeds unity, the country is said to have a revealed comparative advantage in the product. Revealed Comparative Advantage (RCA) for India is calculated at three levels namely Commodity Groups, HS-2 and HS-4 and compared them against Afghanistan's RCA to see trade complementarity between these trading partners. At the aggregate level, RCA is calculated for India across 16 major commodity groups for 8 years to identify specific advantage in trade.

The commodities for which RCA are calculated include Agricultural Products, Food, Fuels and Mining, Fuels, Manufactures, Iron and Steel, Machinery and Transport Equipment, Office and Telecom equipment's, Pharmaceuticals, Chemicals, Automotive, Textiles and Clothing.

Results and Discussion

The mean Revealed Comparative Advantage (RCA) of India and Afghanistan for the period 2008 to 2015 for 10 product categories according to SITC Rev III codes of products is presented in the following table 4.1.

Table 4.1: Mean RCA for Afghanistan and India from 2008-2015.

Division name	Commodity name	SITC code	RCA value
0 - Food and live animals			
	05 - Vegetables and fruit	5	0.4859322
	07 - Coffee, tea, cocoa, spices, and manufactures thereof	7	0.5271761
	08 - Feeding stuff for animals (not including unmilled cereals)	8	0.4555273
2 - Crude materials, inedible, except fuels			
	27 - Crude fertilizers, other than those of division 56, and crude minerals (excluding coal, petroleum and precious stones)	27	0.0008126
	29 - Crude animal and vegetable materials, n.e.s.	29	1.9048586
6 - Manufactured goods classified chiefly by material			
	65 - Textile yarn, fabrics, made-up articles, n.e.s., and related products	65	0.0024331

	66 - Non-metallic mineral manufactures, n.e.s.	66	0.0000071
	83 - Travel goods, handbags and similar containers	83	0.0005808
	89 - Miscellaneous manufactured articles, n.e.s.	89	0.0003127
9 - Commodities and transactions not classified elsewhere in the SITC			
	93 - Special transactions and commodities not classified according to kind	93	0.1146798

Source: Calculation based on data from UN COMTRADE database SITC Revision III.

The products under (0 – 09) codes in SITC revision III are foods and live animals, the mean RCA for (05), fruits and vegetables. (07), Coffee, tea, cocoa, spices, and manufactures thereof, and (08), feeding stuff for animals (not including unmilled cereals) is less than One for Afghanistan, it means that there is no revealed competitive advantage of Afghanistan in export of these products.

The products under code of(5), Chemicals and related products, n.e.s.(51), Organic chemicals.(52), Inorganic chemicals.(53), Dyeing, tanning and coloring materials. (54), Medicinal and pharmaceutical products.(55), Essential oils and resinoids and perfume materials; toilet, polishing and cleansing preparations.(57), Plastics in primary forms. (58), Plastics in non-primary forms.(59), Chemical materials and products, n.e.s. the Mean RCA for all these products is less than One, except for (54), Medicinal and pharmaceutical products. In exporting this product(54), India gain competitive advantage against Afghanistan.

The products under code of (6), are Manufactured goods, classified chiefly by material. From which India exports these products to Afghanistan. (61), Leather, leather manufactures, n.e.s., and dressed furskins. (62), Rubber manufactures n.e.s. (63), Cork and wood manufactures (excluding furniture). (64), Paper, paperboard and articles of paper pulp, of paper or of paperboard.

(65), Textile yarn, fabrics, made-up articles, n.e.s., and related products. (66), Non-metallic mineral manufactures, n.e.s. (67), Iron and steel. (68), Non-ferrous metals. (69), Manufactures of metals, n.e.s. the Mean RCA of above products are less than One, except (65), Textile yarn, fabrics, made-up articles, n.e.s., which has (2.4) and (68), Non-ferrous metals, which has (1.1). it means that India has a competitive advantage in exporting of only these two products to Afghanistan.

The products under code of (7), are Machinery and transport equipment. From which India exports these products to Afghanistan.(71), Power-generating machinery and equipment. (72), Machinery specialized for particular industries.(73), Metalworking machinery.(74), General industrial machinery and equipment, n.e.s., and machine parts, n.e.s.(75), Office machines and automatic data-processing machines.(76), Telecommunications and sound-recording and reproducing apparatus and equipment.(77), Electrical machinery, apparatus and appliances, n.e.s., and electrical parts thereof (including non-electrical counterparts, n.e.s., of electrical household-type equipment).(78), Road vehicles (including air-cushion vehicles).(79), Other transport equipment. The Mean RCA for the above category is less than One, India gains no profit in exporting these products to Afghanistan.

The product under the code of (8), are Miscellaneous manufactured articles. From which India exports these products to Afghanistan. (81), Tools, implements, cutlery, etc of base metal.(82), Miscellaneous articles of base meta.(83), Nuclear reactors, boilers, machinery, etc. (84), Electrical, electronic equipment. (85), Vehicles other than railway, tramway. (87), Aircraft, spacecraft, and parts thereof.(88), Ships, boats and other floating structures. (89), Arms and ammunition, parts and accessories thereof. (93), Miscellaneous manufactured. The Mean RCA for these above category of products is less than One, except for product code (84), Electrical, electronic equipment. The Mean RCA for this product is (2.5), which means India has a high competitive advantage in exporting this product to Afghanistan.

Table 4.5: Afghanistan’s Comparative Advantage with India on Product Categories Wise

Commodity name	STIC code	High Comparative Disadvantage RCA Less than 1	AVERAGE RCA between 1 to 2	Strong RCA above 2

00 - Live animals other than animals of division	0	0.01		
01 - Meat and meat preparations	1	0.13		
02 - Dairy products and birds' eggs	2	0.51		
03 - Fish (not marine mammals), crustaceans, molluscs and aquatic invertebrates, and preparations thereof	3	0.05		
04 - Cereals and cereal preparations	4	0.06		
05 - Vegetables and fruit	5	0.02		
06 - Sugars, sugar preparations and honey	6	0.08		
07 - Coffee, tea, cocoa, spices, and manufactures thereof	7	0.29		
08 - Feeding stuff for animals (not including unmilled cereals)	8	0.01		
09 - Miscellaneous edible products and preparations	9	0.03		
11 – Beverages	11	0.00		

12 - Tobacco and tobacco manufactures	12	0.83		
21 - Hides, skins and furskins, raw	21	0.00		
22 - Oil-seeds and oleaginous fruits	22	0.01		
23 - Crude rubber (including synthetic and reclaimed)	23	0.02		
24 - Cork and wood	24	0.00		
25 - Pulp and waste paper	26	0.05		
27 - Crude fertilizers, other than those of division 56, and crude minerals (excluding coal, petroleum and precious stones)	27	0.07		
29 - Crude animal and vegetable materials, n.e.s.	29	0.33		
33 - Petroleum, petroleum products and related materials	33	0.01		
42 - Fixed vegetable fats and oils, crude, refined or fractionated	42	0.00		

43 - Animal or vegetable fats and oils, processed; waxes of animal or vegetable origin; inedible mixtures or preparations of animal or vegetable fats or oils, n.e.s.	43	0.00		
51 - Organic chemicals	51	0.44		
52 - Inorganic chemicals	52	0.25		
53 - Dyeing, tanning and colouring materials	53	0.01		
54 - Medicinal and pharmaceutical products	54		1.21	
55 - Essential oils and resinoids and perfume materials; toilet, polishing and cleansing preparations	55	0.25		
57 - Plastics in primary forms	57	0.06		
58 - Plastics in non-primary forms	58	0.06		
59 - Chemical materials and products, n.e.s.	59	0.08		

61 - Leather, leather manufactures, n.e.s., and dressed furskins	61	0.67		
62 - Rubber manufactures, n.e.s.	62	0.59		
63 - Cork and wood manufactures (excluding furniture)	63	0.01		
64 - Paper, paperboard and articles of paper pulp, of paper or of paperboard	64	0.04		
65 - Textile yarn, fabrics, made-up articles, n.e.s., and related products	65			2.42
66 - Non-metallic mineral manufactures, n.e.s.	66	0.02		
67 - Iron and steel	67	0.03		
68 - Non-ferrous metals	68		1.18	
69 - Manufactures of metals, n.e.s.	69	0.40		
71 - Power-generating machinery and equipment	71	0.03		
72 - Machinery specialized for particular industries	72	0.16		

73 - Metalworking machinery	73	0.10		
74 - General industrial machinery and equipment, n.e.s., and machine parts, n.e.s.	74	0.08		
75 - Office machines and automatic data-processing machines	75	0.01		
76 - Telecommunications and sound-recording and reproducing apparatus and equipment	76	0.01		
77 - Electrical machinery, apparatus and appliances, n.e.s., and electrical parts thereof (including non-electrical counterparts, n.e.s., of electrical household-type equipment)	77	0.29		
78 - Road vehicles (including air-cushion vehicles)	78	0.03		
79 - Other transport equipment	79	0.03		
Other base metals, cermets, articles thereof	81	0.02		

Tools, implements, cutlery, etc of base metal	82	0.14		
Miscellaneous articles of base metal	83	0.28		
Nuclear reactors, boilers, machinery, etc	84			2.55
Electrical, electronic equipment	85	0.27		
Vehicles other than railway, tramway	87	0.04		
Aircraft, spacecraft, and parts thereof	88	0.03		
Ships, boats and other floating structures	89	0.35		
Arms and ammunition, parts and accessories thereof	93	0.03		

Source: Calculation based on data from UN Comtrade database SITC Revision III.

From the above table it is quit declared that India exports 57 products to Afghanistan, India has only good competitive advantage in few products, in other products India doesn't have any competitive advantage because of a lower RCA than One.

The products which India gains profit through them are related to different product categories, the products with an average RCA of 1-2 are product within code of (54), Medicinal and pharmaceutical products. (68), Non-ferrous metals. And the products which have average RCA more than 2, are products with codes of (65), Textile yarn, fabrics, made-up articles, n.e.s.,

and related products. The second one is with code of (84), Nuclear reactors, boilers, machinery, etc. through exporting these above products India can gain competitive advantage.

Table 4:6: Trade Intensity Index between Afghanistan and India

Year	(xij/xit)/(xwj/xwt)
2008	5.57
2009	4.34
2010	2.34
2011	2.14
2012	2.67
2013	2.79
2014	3.02
2015	6.74

Source: Calculation based on data from UN COMTRADE database SITC Revision III.

Table 4:7: Trade Intensity Index between India and Afghanistan

Year	(xij/xit)/(xwj/xwt)
2008	8.37
2009	5.65
2010	4.54
2011	4.97
2012	4.11
2013	5.62
2014	7.79

2015	9.56
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Source: Calculation based on data from UN COMTRADE database SITC Revision III.

4. Conclusion and Recommendations

The study aimed at assessing the structure of comparative advantage in Afghanistan and India and the change in the scene over a period from 2008 to 2015. Data as per the revision 3 classification was used to compute RCA. The index was constructed for various levels of aggregation for exports. As per revision 3 classification products are categorized like: (0), Food and live animals. (1), Beverages and tobacco. (2), Crude materials, inedible, except fuels. (3), Mineral fuels, lubricants and related materials. (4), Animal and vegetable oils, fats and waxes. (5), Chemicals and related products, n.e.s. (6), manufactured goods classified chiefly by material. (7), Machinery and transport equipment. (8), miscellaneous manufactured articles.

Afghanistan and India has a good trade relationship since past centuries, this relation has become stronger when Afghanistan join SAARC in 2007. It is obvious that Afghanistan accelerate its exports and trade relations and meet better opportunities after joining SAARC, Afghanistan can reap benefits from entrepöt trade between Central Asian countries and the rest of SAARC.

Moreover, even today, Afghanistan is seen as a viable doorway for South Asian countries for access to the oil and gas of Central Asian Republics like Tajikistan, Turkmenistan, and Uzbekistan. Thus, in order to promote economic growth and reduce poverty in Afghanistan, enhancing its cross-border and transit trade with neighboring countries is a must. Road and railway connectivity must be promoted on a burden-sharing basis wherein neighbors share the costs.

Afghanistan exports in total 9 products to India, from which Afghanistan has comparative advantage only in within products code (29), which contains tanning, dyeing extracts, tannins, derives, pigments. In adverse, India exports 57 products to Afghanistan from which India has good competitive advantage in four product categories. 54), Medicinal and pharmaceutical products. (68), Non-ferrous metals. And two other products with high level of competitive advantage are products with codes of (65), Textile yarn, fabrics, made-up articles, n.e.s., and related products. The second one is with code of (84), Nuclear reactors, boilers, machinery, etc. it is quite clear that India gain more advantage in exporting these products to Afghanistan. The researcher has also

conducted the trade intensity index for both countries to examine their intensity in trade. Afghanistan rule the export market in case of trade intensity within two countries.

5. Recommendations

The researcher recommends some recommendations for both countries for promoting their exports. First of all, Afghanistan have to keep improving the export of the commodity with code (29), which contains tanning, dyeing extracts, tannins, derives, pigments. Because this country has only competitive advantage in this product category to India, and have to strive to accelerate its exports to India to gain more competitive advantage in other potential products that aren't part of its export right now.

The figures of trade intensity index of Afghanistan are not showing a good result; it shows that Afghanistan has not a good trade intensity. In compare, India exports product category type, (54), Medicinal and pharmaceutical products. (68), Non-ferrous metals products with codes of (65), Textile yarn, fabrics, made-up articles, n.e.s., and related products. The second one is with code of (84), Nuclear reactors, boilers, machinery, etc. India has to keep preceding the exports of these above products to Afghanistan from 57 other products that India send. India gain high competitive advantage from exporting these products.

The trade intensity of India was better than Afghanistan, India rule the exporting market that is existing within two countries. in general, the export health of the countries is not good, even it is worse, because with having near geographical locations, Afghanistan exports only 9 products to India, and India as well. India should effort to capture Afghan market and replace the countries with whom Afghanistan import from like Pakistan, China, Iran.

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