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China and Afghanistan Anti-Poverty Collaboration: Based on Performance Evaluation of Afghanistan Band-e-Amir Saffron Company

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Abstract
Afghanistan is an underdeveloped country with extreme poverty, poor infrastructure, unemployment, and underemployment. Even though, the country is reached of natural resources, but unfortunately the people of the country are suffering from a high poverty rate receiving lower income. In order to utilise the existing resources, the government is keen to facilitate and encouraged forging investment. Therefore, this article aims to evaluate the performance of the anti-poverty cooperation between China and Afghanistan based on Chinese investment company known as Band-e-Amir Saffron Company. The study focused to analyse the current situation of poverty, the causes of poverty, and the performance of the stated Chinese company related to poverty reduction. The study was based on primary and secondary data. The primary data was collected through personal survey method, whereas the secondary data was obtained from various databases viz. NSIA, and FAO (FAOSTAT), Afghanistan National Statistical Year Book, etc. In doing so, the article is expected to contribute to understanding the present state of poverty in the country and the level of China-Afghanistan cooperation in poverty reduction based on the Chinese-based investment in saffron production in the country. The study shown a positive correlation between prices and the production level of saffron and during the study period the price of saffron increased significantly, this has lead to the reduction in poverty level in the study area.
Keywords: Afghan saffron, China-Afghanistan Cooperation, Chinese Company, Poverty Reduction, Saffron Production

Introduction

The world is running on a dynamic of change, with some countries thriving and achieving success, while others lag behind. These transformative forces can leave entire countries in their wake, condemning millions to a life of poverty, which is a universal ill plaguing societies across the globe (NSIA 2020). The majority of the world's impoverished population resides in South Asian and African nations, where economic disparity is particularly pronounced. In Afghanistan, one of the main goals of the National Development Strategy is to eradicate poverty and a crucial tool for policymakers in this effort is the development of a comprehensive poverty profile. A poverty profile is a common way of describing the degree and nature of poverty in a nation or area. It evaluates the magnitude and distribution of poverty across different geographic and socioeconomic domains, offers insights into characteristics of impoverished populations, highlights their diversity, and identifies the underlying factors contributing to poverty. Although precise and current data on poverty in Afghanistan remains elusive, historical context reveals that the situation began to worsen following the Soviet invasion. During this period, many Afghans were forced to flee neighbouring countries, resulting in the loss of their possessions and businesses. This displacement not only deepened individual and familial poverty but also disrupted the broader economic stability of the nation.

Since 2001, international forces have injected millions of dollars into Afghanistan, aiming to stimulate economic growth across key sectors (NSIA 2020). Despite these financial inflows, the World Bank reports that poverty in Afghanistan remains stubbornly persistent, which contrast sharply with global poverty reduction trends. Between 2007 and 2008, 36.3% Afghans were considered to be living in poverty. While figures show a slight dip to 35.8% in 2011 and 2012 (Wafa, 2021), this marginal improvement hardly signifies meaningful progress. Furthermore, a recent joint study by the World Bank and the Afghan government revealed a troubled trend as the poverty rate increased to 35.8% in 2013 and 39.1% in 2014, which is a worrying reversal from the previous years.

Following the establishment of a political government in Afghanistan, China emerged as a major economic player, pledging a substantial aid package worth USD 510 million, along with initiatives for human resource and technical training to the people of Afghanistan. Unlike the international community's broader development goals, China's involvement is driven primarily by economic interests and therefore requires a stable environment conducive for its enterprises to thrive (Shwoban *et* al. 2020). By 2012, China had significantly boosted trade volume with Afghanistan, and Chinese-established companies are credited with creating employment opportunities and increasing trade volume by 2012.

One area where this economic partnership has shown tangible benefits is in the agricultural sector, specifically in the production of saffron. Among the most expensive agricultural and medicinal items, saffron has a significant impact on global agribusiness due to its medicinal properties, which attract considerable investment. Afghanistan began producing saffron in 2001, leading to a significant expansion in its production (Katawazy, 2013). Currently, Afghan saffron is renowned for its high quality, with a kilogram selling for up to USD 2000. This lucrative market has drawn numerous foreign investors, including those from China, who have contributed to Afghan farmers' incomes and helping them escape poverty (Azimy *et* al. 2020). Afghan saffron production has grown exponentially in both volume and value. In just over a decade, cultivated land dedicated to saffron expanded significantly from 16 hectares in 2004, yielding 60 kg, to a staggering 5,205 hectares in 2017, producing 10,600 kg (Figure 1). This upward trend is projected to continue, solidifying Afghanistan's position as a major saffron producer (MAIL, 2018).

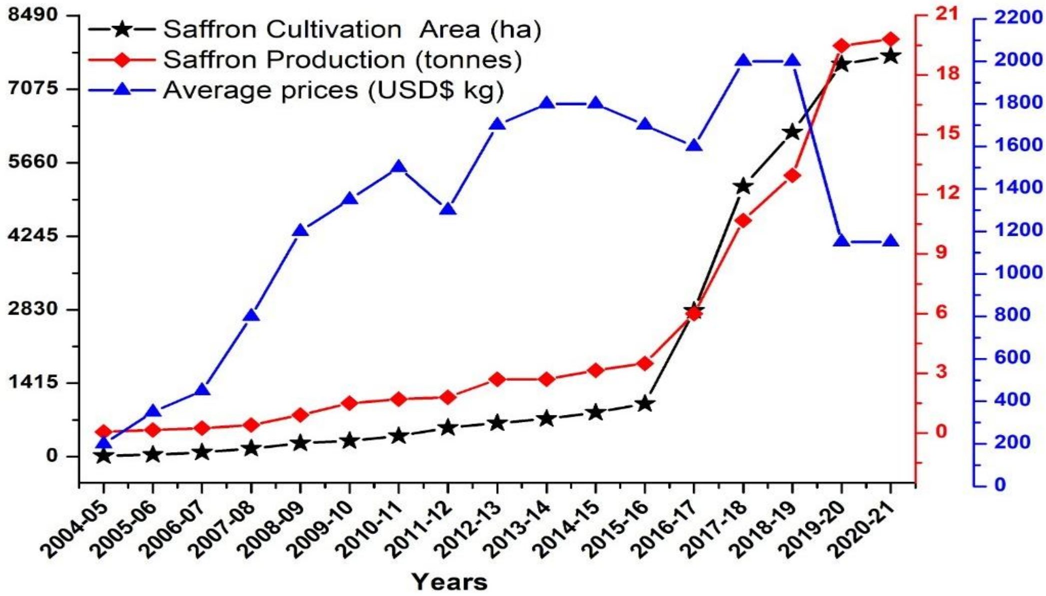

Figure 1. Saffron cultivation area, production and prices in Afghanistan (2004-2020)
Source: National Statistics and Information Authority (various issues).

Despite boasting rich deposits of natural resources and mines, Afghanistan remains mired in poverty. Decades of war and political instability present a significant challenge that contributes much to the vulnerability of the people to poverty. The government has struggled to provide access to social services and create employment opportunities, resulting in a society with poor living conditions and minimal signs of improvement (Wali *et* al. 2016). One potential solution is to attract foreign direct investment (FDI). By opening its doors to foreign investors, Afghanistan can leverage its resource wealth to create jobs and generate income. A historical example exists in the long-standing trade relationship with China. Since 1955, this relationship has been crucial to Afghanistan's economic growth and transformation, with tremendous contributions to the overall poverty reduction through job creation and income generation (Fazil, 2014).

To that end, this study aims to analyse the impact of Chinese investments on alleviating poverty in Afghanistan. The study used Band-e-Amir Saffron Co. Ltd. as a case study to examine the contributions of Chinese investment firms by examining the trends in poverty over the years, identifying the underlying causes, and exploring potential solutions to alleviate the situation in Afghanistan. By examining the impact of these investments, the study hopes to provide insight on how FDI might be used to promote long-term economic growth and reduce poverty in conflict-affected regions.

Data and Methods

This research was based on both –primary and secondary data; primary data was collected through survey, using personal interview methods. While, secondary data was obtained from various sources viz. National Statistics and Information Authority (NSIA), Ministry of Agriculture, Irrigation and Livestock (MAIL), Ministry of Industry and Commerce (MOC), Afghanistan Statistical Yearbooks, Expenditure and Labour Force Survey (IE&LFS) -which is a series of national households' surveys previously known as Afghanistan Living Conditions Survey (ALCS), and National Risk and Vulnerability Assessment (NRVA). Additional updates on poverty status were obtained by reviewing previously published journals and reports from international organizations such as the World Bank, United Nations Development Program (UNDP), and IMF.

The study targeted key stakeholders involved in the cooperation, specifically focusing on Band-e-Mir Saffron Co. Ltd. in Afghanistan. A purposive sampling method was employed to select a total number of 20respondents who are directly engaged with poverty alleviation initiatives facilitated through Sino-Afghan collaboration. To gain a first-hand perspective from a key player in the China-Afghanistan cooperation effort, semi-structured interviews were conducted with representatives of Band-e-Mir Saffron Co. Ltd. A well-structured questionnaire was developed to gather data on the perceived effectiveness in reducing poverty in Afghanistan.

Qualitative data obtained from predetermined respondents was analysed using coding and categorisation techniques to identify emerging patterns and themes related to the company's experiences with China-Afghanistan cooperation and its impact on poverty alleviation. Quantitative data from secondary sources was analysed using descriptive statistics. Key poverty indicators such as the poverty line, poverty gap, and Gini coefficient were examined. The analysis included estimation of the poverty line over the period from 2007 to 2020, using data from the Income and Labour Force Survey (2020), primary spending capacities per person, categorised into food and non-food expenditures, and the poverty trends by percentage, classified by province and by rural and urban regions. The Gini coefficient was employed to measure economic inequality within the region. This index, ranging from 0 to 1, with 0 indicating perfect equality (everyone has the same income) and 1 indicating perfect inequality (one person has all the income).

Results and Discussion

Poverty Line, Poverty Gap, and Poverty Gap Squared

A person is deemed to be living in poverty if their income falls below a certain threshold, which is known as the poverty line. This threshold is determined using the national poverty line, which comprises two components: one for food and one for non-food items. The food poverty level, which is typically higher, is based on the Cost of Basic Needs (CBN) methodology. This methodology defines the food poverty line as the cost required to consume a bundle of food that meets a minimum caloric requirement. For instance, in Afghanistan, the cost of obtaining 2,100 kilocalories per day, based on typical consumption patterns, equates to 1,330 AFs per person per month in 2007-2008 (Figure 2). This bundle normally has a monthly cost of 1,330 AFs for each individual purchaser. In addition to food costs, the poverty line also includes necessary non-food expenditures to maintain a basic standard of living, which averages937 Afs per person per month. Together, these components total 2,268 Afs per person per month, which is the benchmark for severe poverty.

The proportion of persons living below the poverty line is referred to as the poverty rate. Historical data from various surveys illustrate the changing landscape of poverty in Afghanistan. In 2007-08, the poverty rate stood at 33.7%, rising to 38.3% in 2011-12, and significantly increasing to 54.5% in 2016-17 (Figure 3). By 2020, the rate slightly decreased to 47.1%. These fluctuations highlight the persistent challenges and socio-economic pressures faced by the Afghan population. While the poverty rate indicates the overall proportion living below the poverty line (Figure 4), the poverty gap offers a more nuanced perspective. This measure reflects the average shortfall each impoverished individual faces relative to the poverty line. In 2007-08, the poverty gap was 7.2%, increasing to 9.9% in 2011-12, and further to 15.0% in 2016-17, before slightly improving to 13.5% in 2020 (Figure 4). The squared poverty gap, which captures the disparity among the poor by giving increasing weight to distances below the poverty line, showed similar trends. It was 2.3% in 2007-08, rose to 3.6% in 2011-12, peaked at 5.6% in 2016-17, and marginally increased to 5.7% in 2020 (Figure 5). These indicators underscore the depth and severity of poverty over time, highlighting the need for targeted interventions.

The Gini Index, measuring income inequality, calculates how much the consumption distribution among individuals or households deviates from a completely equal distribution. Extreme equality is represented by a Gini Index of 0, where everyone consumes the same amount, while absolute inequality is represented by a Gini Index of 100, where all consumption is concentrated in one person (Figure 6). In Afghanistan, the Gini Index provides critical insights into the levels of income inequality, which can inform targeted policy measures to promote more equitable economic growth.

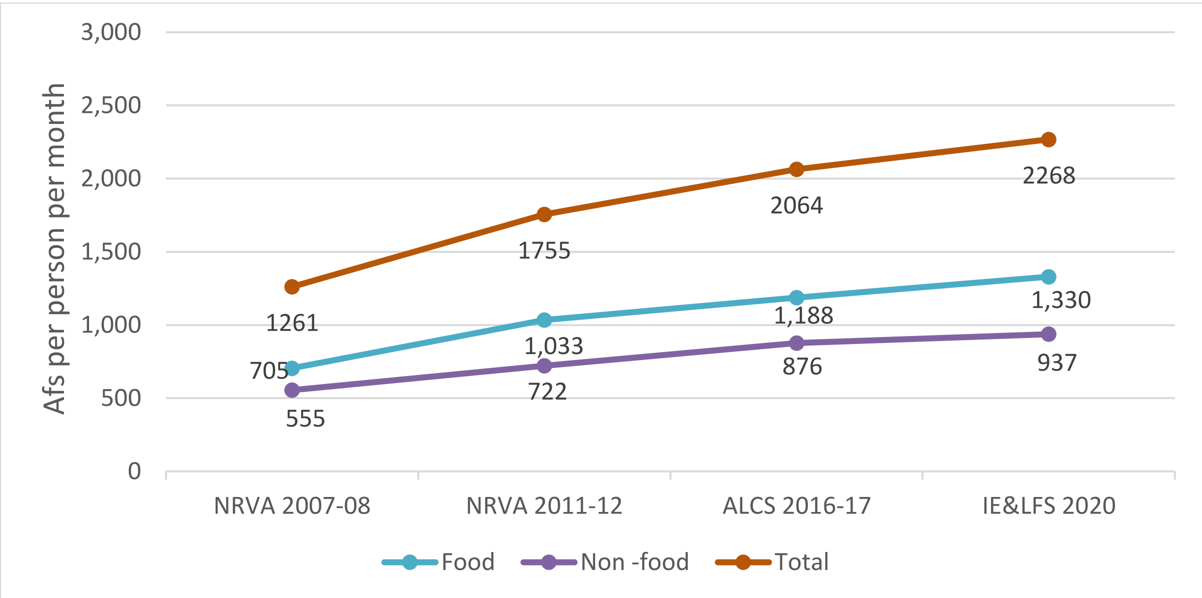

Figure 2.National poverty levels by primary spending category (in Afs). Source: (NSIA, 2020)

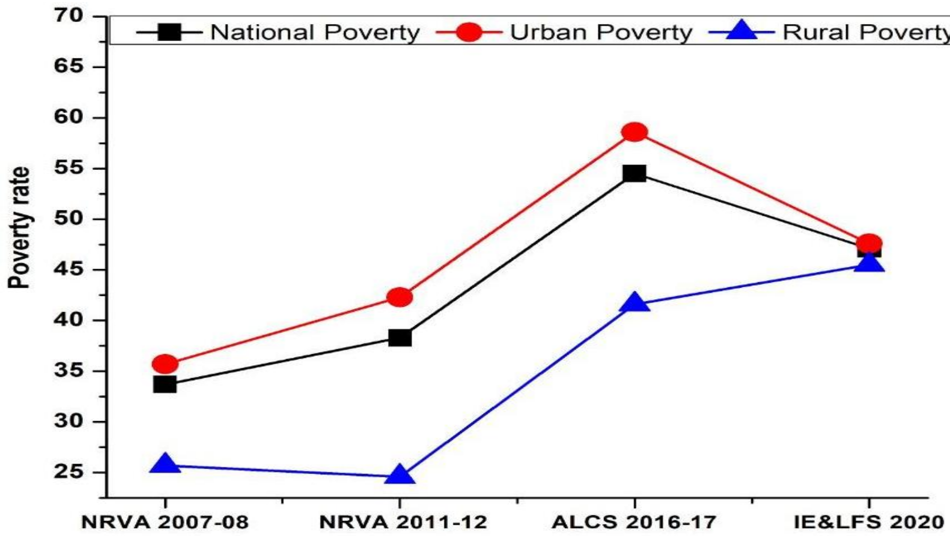

Figure 3: Poverty rate by residence (in percentage). Source: (NSIA, 2020)

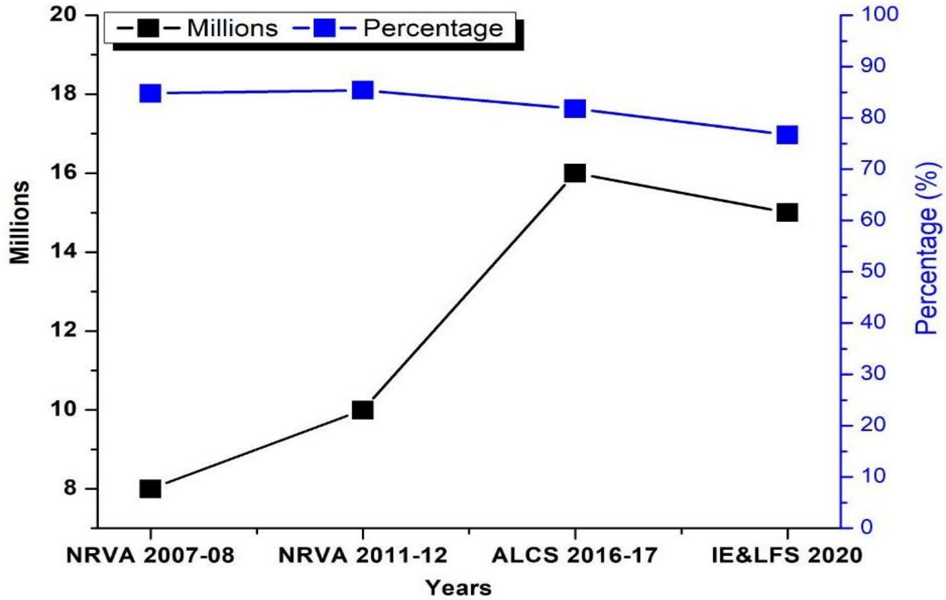

Figure 4.The percentage of the population and the number of the poor (in million) who live below the poverty line. Source: IE&LFS (2020)

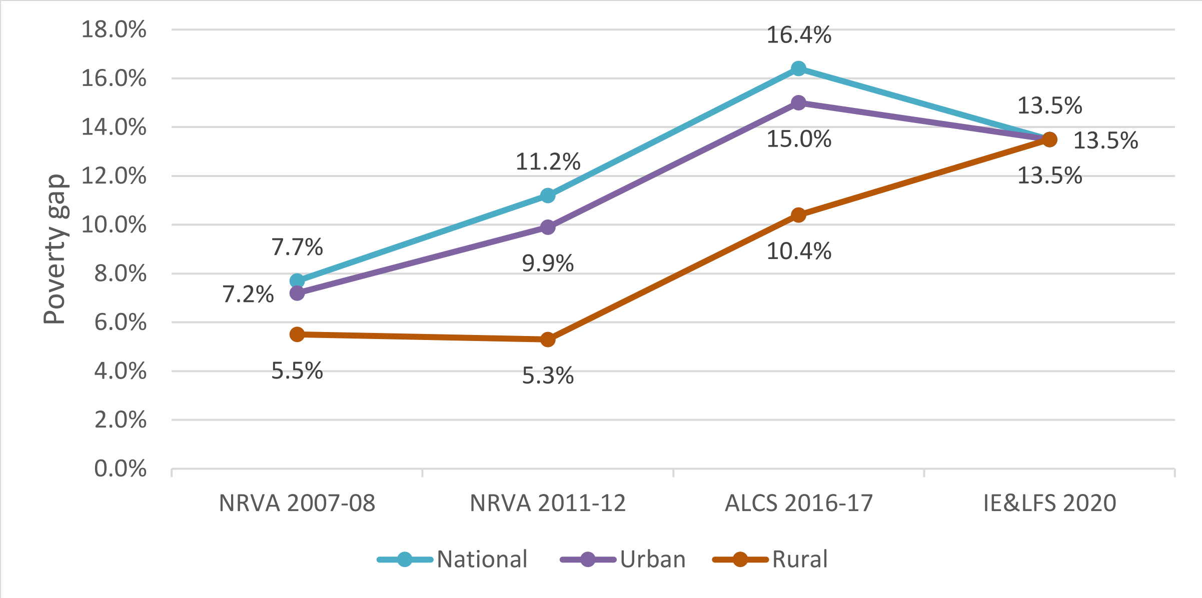

Figure 5. Poverty gap index, by survey years and residence. Source: (NSIA, 2020)

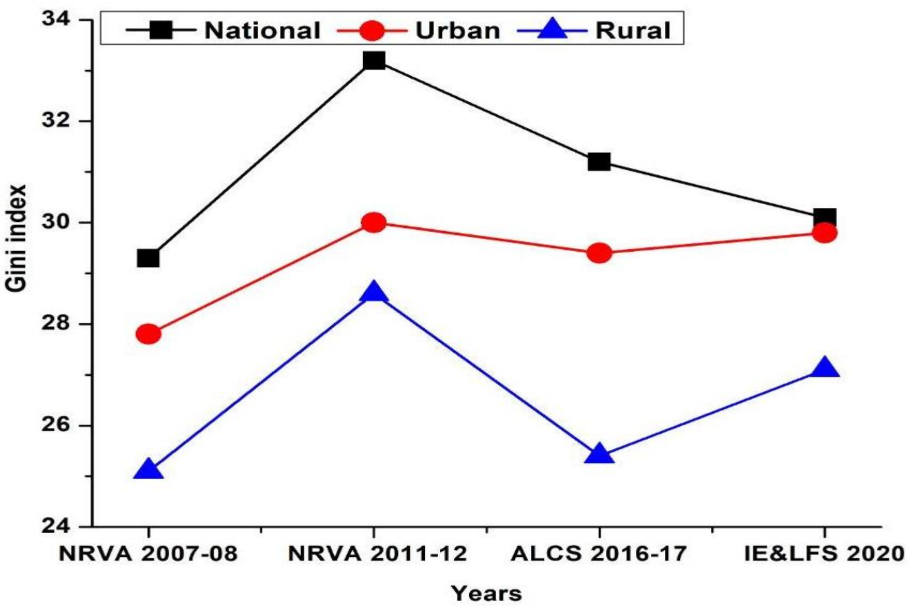

Figure 6. Expenditure inequality, Gini Coefficient, by survey years and residence. Source: (NSIA, 2020)

Strategic Relationship between China and Afghanistan

The historical and strategic connections between China and Afghanistan dates back to the seventh century, when Chinese monks travelled through the Silk Road to visit the Buddha sculptures in Bamiyan, Afghanistan. Today, China, as a major economic player and neighbour to Afghanistan, may be crucial in assisting Afghanistan in overcoming the effects of decades of bloody conflict (Wishnick, 2014). As a promising indicator, thousands of Afghan individuals are already applying for Chinese visas as they seek to benefit from China's robust economic and commercial opportunities. Additionally, hundreds of Chinese nationals live and work in Afghanistan, further cementing the ties between the two countries (Huasheng, 2016). The geo-economic importance of Afghanistan, coupled with China's significant investments in the region, should serve as an impetus for both nations to deepen their relations and economic cooperation.

The Sino-Afghan relationship is significant in that China and Afghanistan have never had any political or ideological disagreements (Pandey, 2019). Since 2002, a number of Chinese construction firms have been involved in developing crucial infrastructure in Afghanistan, including roads, schools, hospitals, and irrigation systems. A particularly notable investment is in railway development, which China has prioritise to diversify its trade routes amidst technical and security issues. The Sino-Afghan Railway project exemplifies how infrastructure development can serve as a conduit for deeper bilateral relations, promoting economic growth and cooperation between the two nations. In a landmark achievement, the first train from China arrived in Hairatan, a northern Afghan city, in September 2016 after travelling there for around 14 days. The train has the capacity to transport commercial cargo worth $4,000,000 USD.

China Assistance to Afghanistan

China has been a long-standing provider of humanitarian assistance and has an active policy of supporting Afghanistan in reconstruction, health and human resource development, including training for the Afghan National Security Force (ANSF). Beijing places significant importance on domestic stability and peace in Afghanistan, as it directly impacts the security of China's western border area and Chinese investment in the region. Reflecting this, China's approach to Afghanistan has evolved from a stance of non-interference to one of active assistance in the country's rehabilitation (Samim and Zhiquan, 2020).

The geopolitical landscape surrounding China, characterised by its political, strategic, topographical, and economic, presents several notable challenges (Rostami *et* al. 2017). In 2017, Chinese Prime Minister, Mr. Li Keqiang, pledged USD 325.23 million to Afghanistan, signalling the beginning of a “new era” in Sino-Afghan relations through the establishment of a “strategic and cooperative partnership.” This partnership was outlined in a five-point declaration of principles aimed at resolving Afghanistan’s problem: Afghan ownership, political reconciliation, economic reconstruction, development, and strong external support (Khan, 2015). With this pledge, it brings the total amount of China’s grant aid to USD 524.08 million, as shown in Table 1. Several major projects financed by China include Parwan irrigation project, construction of Jamhuriat hospital, human resource development project that includes training civil servants, transportation equipment for Afghan police (World Bank, 2020), humanitarian assistance for Afghan refugees and construction of auditorium building in Kabul University.

Table 1
A summary of China’s assistance to Afghanistan

Description	Grant
Overall Commitment	$ 85.25 Million
Commitment (2013)	$ 32.5 Million
Commitment (2014)	$ 81.1 Million
New Pledge (2015-2017)	$ 325.23 Million
Total	$ 524.08 Million

Source: Aid Management Directorate, Ministry of Finance (2018)

Trade between China and Afghanistan

Afghanistan, a landlocked country, has made a significant leap in its trade relations by establishing its first direct air route with China. The inaugural cargo trip saw the export of 20 tonnes of pine nuts. According to Afghan authorities, the air route will enable the export of up to 23,000 tonnes of pine nuts to China annually, potentially generating $800 million in revenue. Afghan businesspeople and dealers are optimistic that other raw goods, such as saffron and semi-precious stones, will also benefit from this new connection (Bashardost, 2019). The agreement between the two nations was finalised in less than six months. Since the inception of chartered flights for export in November, 64 cargo aircraft have transported over$15 million worth of pine nuts to China, exemplifying both China's efficiency and strengthening goodwill between China and Afghanistan.

Despite the bleak global economy, the overall amount of our bilateral commerce climbed by 27% in 2018. Afghanistan's overall exports to China hit 24 million dollars, which is a six-fold increase from 2017(Table 2). In 2018, there were 47 direct commercial flights and more than 20 freight trains connecting the two nations, which facilitated the flow of people, products, and information (Mustafa *et* al. 2020). The inaugural China International Import Export in Shanghai garnered considerable interest in Afghan goods, with displays quickly selling out. Through initiatives like the Belt and Road Initiative and improved global connectivity, Afghanistan is transforming from a landlocked nation to a pivotal hub in major economic corridors. Looking ahead, the development of Belt and Road Initiative and the establishment of peace in Afghanistan, along with the increasing prominence in Afghan products in the international value chain, are expected to elevate economic and trade cooperation between the two countries. China is poised to increase its imports of Afghan goods, support Afghanistan in developing its raw material processing industry, create more job opportunities Afghan workers, and contribute significantly to Afghanistan's economic recovery and rapprochement (Khan and Ayaz, 2017).

Afghanistan's involvement in the Belt and Road Initiative (BRI) may benefit from its strategic location, rich resources, demographic makeup, and global connection. Despite challenges such as insufficient funding, an underdeveloped industrial base, and lack of coastal ports, Afghanistan stands to gain significantly from its active participation in the BRI. This engagement can be summarized through six key benefits. First, the BRI promotes commerce by enhancing trade opportunities. Second, it attracts Chinese investment into Afghanistan, fostering economic growth. Third, it expands educational opportunities, with China offering more than 150 scholarships and over 1,000 training opportunities annually to Afghans, significantly benefiting the country's professionals and youth. Fourth, the BRI enhances the sense of security among the Afghan population. China's economic and commercial cooperation, along with various forms of aid, has helped create jobs and reduce poverty in Afghanistan (Raoufi, 2019). Fifth, it increases Afghanistan's cultural and international influence, crucial for the nation's diplomatic and international strategy, especially as a landlocked country.

Table 2
Trade between Afghanistan and China, 2015-2018.

Year	Afghanistan Imports from China (USD Millions)	Afghanistan Exports to China (USD Millions)	Circulation of trade	Percentage of Imports	Percentage of Exports
2015	1090	9	1.099	99%	1%
2016	1091	4	1.095	99.6%	0.4%
2017	1091	9	1.154	99%	1%
2018	1166	28	1.194	98%	2%

Source: ASIA- 2017-18

Case Study: High-Quality Afghan Saffron and the Role of Chinese Technology
On three acres of saffron fields in southwest Kabul, Band-e-Amir Saffron Co. Ltd. employs 15 Afghan labourers, including 12 women, alongside four Chinese staff members. Agriculture, as supported by the Afghan Ministry of Agriculture, Irrigation and Livestock, is practised in 30 of the country's 34 provinces. The extensive agricultural landscape spans approximately 2,800 hectares, engaging about 18,000 farmers who collectively contribute 765,000 workdays annually.

Afghanistan's potential for saffron production is substantial, with estimates suggesting that between 15,000 and 20,000 hectares are suitable for saffron corm cultivation, translating to a production capacity of 60,000 to 80,000 kg. In the autumn of 2016, the saffron harvest was projected to yield 6,000 kg (World Bank, 2015), potentially generating annual revenues between 108 and 144 million dollars. Jia Dongdong, vice-president of the Kabul-based Chinese Band-e-Amir Saffron Limited Company, emphasized the firm's goal to leverage new technology for saffron production, create jobs predominantly for women, and combat the cultivation of opium poppy in Afghanistan (Omid, 2019).

"We came here last year to invest in saffron. We will introduce new Chinese technology, taking advantage of Afghanistan's favourable weather conditions to produce high-quality saffron as it had good market in China and it needed plenty women workers," said Jia. Data about Saffron investment by the Chinese company was obtained from the annual summary report of Band-e-Amir Saffron Co.Ltd. The report indicates that investments were made in four economically disadvantaged provinces—Kabul, Herat, Bamiyan, and Daykundi—aiming to assist farmers to produce saffron in a more advanced and productive way (Omar, 2021). The investment in saffron in those provinces is shown in Table 3.

Table 3
The investment of Chinese company in different areas

Year	**Provinces**			
	Kabul	Herat	Bamiyan	Daykundi
2017	3.5 tonnes			
2018	5.5 tonnes	15 tonnes	5.5 tonnes	2 tonnes

Source: Based on field data collected by the author

The investment aims to empower the poor by enabling the production of high-quality saffron on a large scale. This collaboration involves agricultural companies and farmers across the targeted areas. For example, in Kabul, a partnership between an agricultural company and a local farmer in 2018 resulted in a total investment of 3.5 tonnes in 2017 and 5.5 tonnes in 2018. The agricultural company harvested 2.5 kg of dry saffron filaments, while the collaborating farmer received 48.1 g of dry saffron through advanced indoor techniques. In Herat, the company invested 15 tonnes of saffron in 2018, collaborating with Ariyana and Mahtab saffron companies, yielding 4,296 g and 3,336 g of dry saffron, respectively. Additionally, the Chinese company received 1,582 g of dry saffron.

In Bamiyan, the investment involved 17 farmers and Bamiyan University, resulting in a total production of 1,336.11 g of dry saffron from an investment of 5.5 tonnes. In Daykundi, a 2 T investment in cooperation with two local farmers, one of whom leads the women's committee, yielded 443 g of dry saffron.

Among the most expensive agricultural and medicinal goods, saffron has a significant impact on global agro-business. Saffron has received considerably more attention due to its many uses and therapeutic properties. As a result of foreign investment, it is now produced, consumed, and exported more often. Saffron production in Afghanistan began in 2001, and currently, over 850 hectares of land are dedicated to cultivating this commodity. Afghanistan has quickly gained global recognition for its saffron-based products. Recently, the International Taste and Quality Institute in Brussels rated Afghan saffron as having the finest flavour and quality among 300 samples from various countries.

In international markets, Afghan saffron competes with saffron from Iran and Spain, and for the third consecutive year, it has topped global rankings. Most Afghan saffron growers are ISO accredited and export their products to the United States, Europe, and the Gulf States. Afghan saffron's unique quality and aroma command an average global price of $2000/kg, with demand increasing daily. The national council of economics has approved a five-year strategic plan to boost Afghan saffron production to 14 tonnes annually. This strategic plan aims to enhance Afghan saffron production and includes measures to prevent product fraud, such as labelling packaging with distinctive barcodes. President Mohammad Ashraf Ghani has confirmed the plan's approval and announced cooperation with foreign businessmen to expand saffron production. The United Arab Emirates and China have expressed interest in opening markets for Afghan saffron in their respective countries.

A significant development in this regard is the investment by Chinese businessman Jia Dongdong, who has introduced new technology to cultivate, manufacture, process, and export premium Afghan saffron. Inspired by Afghanistan's favourable climatic conditions, Jia has applied innovative technology to create high-quality saffron. As vice president of Afghanistan Band-e-Amir Saffron Co. Ltd., Jia stated, "the right climatic conditions here imply we can invest in the saffron sector and by employing innovative Chinese technology, we can cultivate, manufacture, as well as distribute the highest-quality saffron in the world."

Through a joint venture between the Afghan Apple Agricultural Union and Afghanistan Band-e-Amir Saffron Co. Ltd., high-quality saffron is being grown, produced, and distributed on the world market. An ambitious goal of this venture is to combat poppy trafficking in the impoverished country (Omid, 2019). Jia emphasized that by manufacturing high-quality saffron using innovative technology, farmers could be persuaded to replace poppy cultivation with saffron, thereby improving the country's reputation.

The Chinese businessman said, "I felt that by manufacturing high-quality saffron using innovative technology, farmers may be persuaded to substitute poppies with saffron since I heard that many Afghan farmers are engaged in cultivating poppies, which is hurting the country's reputation.” The country would also benefit from this, he said, since saffron is a highly prized plant with a sizable market in China.

Conclusion and Recommendation

Based on the findings of the study, demonstrated the impact of Chinese investment in saffron production in Afghanistan. This initiative has benefited number of farmers, along with saffron production companies, in such a way that they can sustain their livelihoods through the improved saffron cultivation practices. Moreover, it has facilitated knowledge transfer and technological advancements, such as the introduction of drying machines, which are crucial for poverty reduction. Scaling similar initiatives across other provinces holds promise for further socioeconomic development. This paper examined the anti-poverty cooperation between China and Afghanistan and found a favourable performance of the Sino-Afghan cooperation. The assistance provided by China, including infrastructure development and human resource capacity building, has effectively supported international trade and domestic economic activities in Afghanistan.

The following recommendations are based on findings and conclusion of this study: the findings suggest that China emerges as a pivotal trading partner for the nation. Beyond infrastructure and human capital, Afghanistan has also benefited from foreign direct investment, exemplified by initiatives like the Band-e-Amir Saffron Production Co. Ltd., aimed at enhancing saffron quality and boosting farmers' incomes, particularly among women. In conclusion, it is recommended that the Afghan government capitalize on saffron's status as a high-value commodity to expand production, thereby increasing farmers' incomes. Addressing internal instability is crucial to attracting more foreign direct investment, which can further stimulate economic growth and stability in the region.

References

Aid Management Directorate, Islamic republic of Afghanistan, Directorate General Budget, Ministry of Finance. http://www.budgetmof.gov.af/index.php/en/extensions/scorecards

Azimy, M.W., Khan, G.D., Yoshida, Y., Kawata, K. (2020). Measuring the impacts of saffron production promotion measures on farmers’ policy acceptance probability: a randomized conjoint field experiment in Herat Province, Afghanistan. Sustainability, 12(10), 4026. https://doi.org/10.3390/su12104026

Bashardost, Z. (2019). A Comparative Study on the Afghan-China Relation Based on Afghan-US relation. Journal of Social and Political Sciences, 2(2): 285-304.

Fazil, M. D. (2014). China in Afghanistan: Contemporary Engagements and Challenges Ahead. IOSR Journal of Humanities and Social Science, 19(8): 83-88.

Huasheng, Z. (2016). Afghanistan and China's new neighbourhood diplomacy. International Affairs, 92(4): 891-90.

Ministry of Agriculture, Irrigation and Livestock (MAIL). (2018). Report of the third saffron flower festival.

National Statistics and Information Authority (NSIA). (2020). The Income and Expenditure & Labor Force Surveys Report (IE&LFS).

Katawazy, A.S. (2013). A Comprehensive study of Afghan saffron. Report of Research, Planning and Policy Directorate, Afghanistan Investment Support Agency.

Khan, R. M. (2015). China's Economic and Strategic Interests in Afghanistan. FWU Journal of Social Sciences, 1(1), 1-11.

Khan, H. U., Ayaz, F. (2017). China-Afghanistan Relations after 9/11 and its Prospects for Peace Building in Afghanistan. In Proceedings of International Conference on Inter-Regional Connectivity. South Asia and Central Asia, Lahore. GC University.

Mustafa, G., Ahmed, M., Junaid, A. (2020). Role of China and Iran in Afghanistan Peace Process. Sir Syed Journal of Education & Social Research, 3(4). 424-432.

National Statistics and Information Authority (NSIA). (2018). Statistical Yearbook. (2017-2018).

Omid, M. H. S. (2018, August 31). Govt Promoting Saffron Cultivation In Insecure Areas. Tolo News Report. https://tolonews.com/business/govt-promoting-saffron-cultivation-insecure-areas

Pandey, S. (2019). Understanding China's Afghanistan policy: From calculated indifference to strategic engagement. Observer Research Foundation.

Raoufi, S. (2019). EU aid and opium production in Afghanistan. Thesis, University of OSLO

Rostami, R., Khoshnava, S.M., Lamit, H., Streimikiene, D., Mardani, A. (2017). An overview of Afghanistan's trends toward renewable and sustainable energies. Renewable and Sustainable Energy Reviews, 76. 1440-1464.

Samim, S. A., Zhiquan, H. (2020). Assessment of Food security situation in Afghanistan. SVU-International Journal of Agricultural Sciences, 2(2): 356-377.

Afghanistan revamps traditional raisin houses (2018). The Ministry of Agriculture and aid groups are financing the new keshmesh khanas to boost productivity and farmers' earnings. Available online at https://afghanistan.asia-news.com/en_GB/articles/cnmi_st/features/2018/01/12/feature-01.

Shwoban, S., Dourandish, A., Ghorbani, M. (2020). Investigating Afghan farmers' willingness to continue cultivation of Saffron (Case study: Herat Province). Saffron Agronomy and Technology, 8(2). 277-293.

Wafa, A. S. (2021). Assessment of Badakhshan climatic condition for production and marketing of saffron. International Journal of Innovative Research and Scientific Studies, 4(1). 33-36.

Wali, E., Datta, A., Shrestha, R.P., Shrestha, S. (2016). Development of a land suitability model for saffron (Crocus sativus L.) cultivation in Khost Province of Afghanistan using GIS and AHP techniques. Archives of Agronomy and Soil science, 62(7). 921-934.

Wishnick, E. (2014). Post-2014 Afghanistan Policy and the Limitations of China's Global Role. Montclair State University, Weatherhead East Asian Institute, Columbia University. Central Asian Affairs, 1(1): 133-152.

World Bank. (2020). Afghanistan Development Update, January 2020: Navigating a Sea of Uncertainty.

World Bank. (2015, January 19). Saffron: A Major Source of Income and an Alternative to Poppy Available online at https://www.worldbank.org/en/news/feature/2015/01/20/saffron-major-source-income-alternative-poppy