



UDC 332

## TRADE SCENARIO OF CUT-FLOWERS IN NEPAL

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### ABSTRACT

This study examines the cut flower industry in Nepal, focusing on the global and national market scenarios, trade trends, and policy implications. The report uses various trade-related data from sources like the Trade and Export Promotion Centre (TEPC), International Trade Centre (ITC), and Floriculture Association of Nepal (FAN). The global cut flower market, valued at \$10.5 billion in 2021, is expected to grow at a compound annual growth rate (CAGR) of 4.2% from 2022 to 2032. The Nepalese cut flower industry has witnessed significant growth since its inception in the 1990s, with the number of nurseries and cut flower showrooms increasing over the years. The industry is primarily concentrated in Kathmandu, Lalitpur, Morang, Kaski, and Bhaktapur, with local production meeting summer demand and imports supplementing winter demand. In 2022, Nepal exported 1 metric ton of cut flowers, primarily to Australia and Qatar, while importing 845 metric tons, mainly from India. The study identifies challenges such as high production costs, neglected potential, limited export diversification, and the impact of regulations on Nepal's cut flower industry. To address the trade deficit, the study recommends government support, infrastructure development, and market research. The findings of this study can be beneficial for policymakers, industry stakeholders, and researchers in understanding the dynamics of the cut flower industry in Nepal and developing strategies to enhance its competitiveness and sustainability.

### KEY WORDS

Domestic production, floriculture, global market, policy interventions, trade diversification, sustainability.

Floriculture is a branch of horticulture that deals with the cultivation of ornamental plants, including flowering plants, foliage plants, seeds, seedlings, and cut flowers (Anumala & Kumar, 2021). It is a fast-growing industry globally, but in Nepal, it is still in a relatively premature phase (Gauchan et al., 2010). Cut flowers are flowers or flower buds that have been cut from the bearing plant and are commonly utilized for decorative purposes like bouquets or ornamental displays. They contrast with potted flowers due to their extended post-harvest life and their adaptability for creating bouquets, floral arrangements, or undergoing treatments such as dyeing, drying, or bleaching (Sujani et al., 2022). This sector holds notable global importance within the floral industry. In 2021/22, cut flowers made up 15% of the floriculture market share in Nepal (FAN, 2022). The inception of the commercial cut flower industry in Nepal can be traced back to the late 1980s. The pioneer of this venture was Mr. Rajendra Rai, Founder president of FAN, who in 1988 initiated the cultivation of *Gladiolus* for cut flowers in the Godavari area (Gaire et al., 2023). In 1993, FAN initiated the opening of the first cut flower shop at Tribhuvan International Airport, and since then, the country has seen remarkable growth in the floral industry, with approximately 137 flower shops now operating nationwide (FAN, 2022). Despite its relatively short history, the cut flower business is rapidly gaining ground in Nepal. Beginning in Kathmandu, it has now expanded to other urban centers such as Biratnagar, Dharan, Chitwan, and Pokhara. Primary cut flowers in Nepal encompass a range of species including



Carnation, Chrysanthemum, Gerbera, Lilium, Rose, Gypsophila, Lisianthus, Fern, Palm leaf etc (Gaire et al., 2023).

The study has the following key objectives: to become acquainted with the global and national trade situations concerning cut flowers; to gain understanding of the current status of the market; to investigate the factors that have an impact on trade in this sector; to identify sustainable approaches and strategies for improving the trade in cut flowers.

### METHODS OF RESEARCH

The report is prepared by collecting various trade-related data from sources such as the Trade and Export Promotion Centre (TEPC), International Trade Centre (ITC), and Floriculture Association of Nepal (FAN) to support the research objectives. Further information is derived from various journal articles, reports found on different websites like wikipedia, google scholar, and research gate. The information thus obtained was analyzed using Excel and displayed in tables and figures.

### RESULTS AND DISCUSSION

Cut flowers constitute a significant portion of the global floral industry, accounting for a total trade value of \$10.5 billion in 2021. This represents a small fraction, specifically 0.05%, of the total world trade. In 2021, cut flowers ranked as the 344th most traded product globally (OEC, 2021). Notably, there was a substantial increase in exports between 2020 and 2021, surging by 24.1% from \$8.47 billion to \$10.5 billion. However, this growth trend shifted in 2022, with a decline of 21.3%, bringing exports down to \$8.7 billion (ITC, 2023). The significant export growth in 2021, followed by a steep decline in 2022, suggests a volatile and potentially difficult export situation. A thorough examination of the causes behind these shifts is crucial for businesses and policymakers to make informed choices regarding export strategies and economic planning.

Anticipated to grow at a CAGR of 4.2% from 2022 to 2032, the global cut flowers market is expected to achieve a market size of approximately USD 53.9 billion by 2032 (Spherical Insights, 2023). This information highlights the significant prospects within the cut flower industry, indicating that it's an ideal time to explore investment opportunities in this sector.

The global cut flowers market is highly concentrated in developed regions like America, Europe, and Asia, which make up 90% of the market. The primary exporters of cut flowers in 2022 included the Netherlands, Ecuador, Colombia, Kenya, and Ethiopia. On the other side, the leading importers of cut flowers encompassed the United States, Germany, the Netherlands, the United Kingdom, and France. The Netherlands held a dominant position in the floriculture market with approximately 54% of the export share in 2021, while the United States accounted for around 25% of the import share (ITC, 2023).

Table 1 – Scenario of Cut flower in Nepal

Year	1992/ 1993	2000/ 2001	2005/ 2006	2010/ 2011	2015/ 2016	2020/ 2021	2021/ 2022
Fulfilment of demand by import	95	20	20	20	30	28	50
Number of Nurseries	80	250	550	635	678	732	751
Number of cut flower showroom	0	33	58	86	87	97	137
Number of Districts	2	16	34	35	39	44	48

Source: FAN, 2022.



The cut flower industry in Nepal has gone through different stages of evolution since its establishment up to the current era. This journey is marked by remarkable advancements, both in terms of quality and quantity, as demonstrated by the illustrative Table 1.

Summer flower demand is largely met by local production, with Kathmandu, Lalitpur, Morang, Kaski, and Bhaktapur contributing significantly, especially Kathmandu where most cut flower enterprises are based. Conversely, during the winter season, the demand is satisfied through imports and flower cultivation in the Terai region (Acharya et al., 2022).

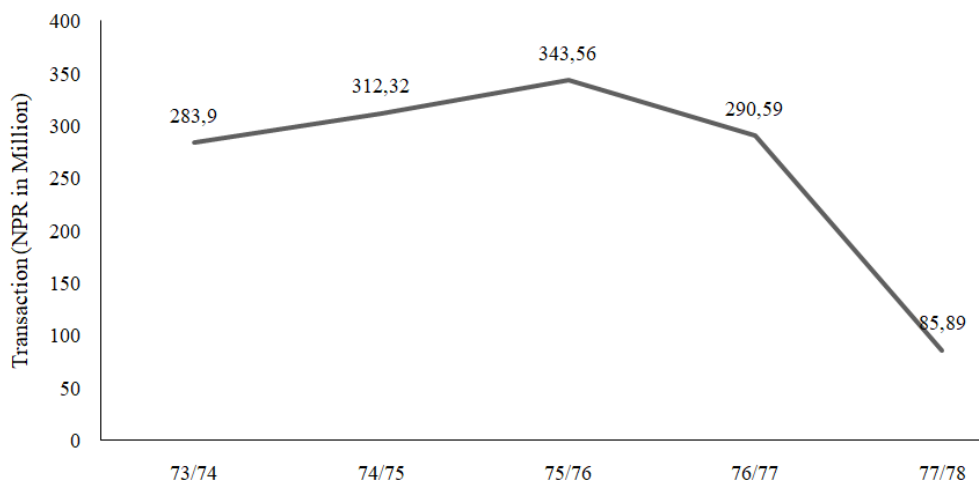


Figure 1 – Transaction of cut flowers in Nepal over 5 years (Source: FAN, 2022)

The graph clearly illustrates a consistent upward trajectory in turnover from 2073/74 to 2075/2076, with the annual growth rate of approximately 10 percent. This encouraging trend might be due to factors like expanding economy, heightened consumer expenditure, and potentially more flourishing business. However, in contrast to this initial surge, there was a significant downturn in transaction from 2075/76 to 2077/78, marked by 15.42 percent decrease in 2076/2077 and 70.4 percent decrease in 2077/78. This abrupt decline strongly implies a profound disruption in business operations, primarily due to the adverse effects of the COVID-19 pandemic and the strict lockdown measures implemented in response to it.

In 2022, Nepal experienced a noteworthy increase in its cut flower exports, totaling 1 metric ton with an approximate value of \$5 thousand. This represented a substantial growth rate of 356% when compared to the export of the preceding year, 2021 (ITC, 2023).

Exporting fresh cut flowers from Nepal requires two essential documents: a phytosanitary import permit and a phytosanitary certificate (Gautam et al, 2020). Additionally, entry permission is necessary when importing plants, following TPEC guidelines. However, specific requirements may vary depending on the destination country's import rules. Australia and Qatar were significant export destinations for Nepal in 2022, contributing \$2,000 each, equivalent to 40% of the total export value. Nepal faced varying tariff rates when exporting cut flowers to these markets: Australia charged 0%, while Qatar imposed a 5% tariff. The prominence of these countries could be due to favorable trade agreements, demand, and effective promotion. Different tariff rates results from country policies and the competitiveness of Nepali cut flowers.

According to TEPC data for 2022, the leading categories of exported cut flowers included those meant for bouquets and ornamental purposes, processed cut flowers, and orchids. Australia, Qatar, and the USA were major markets for the first category, while Qatar exclusively dominated the market for processed flowers. Nepal's orchid exports were solely focused on Hong Kong, China.



According to ITC, Nepal imported 845 metric tons of cut flowers in 2022 of worth \$410 thousand. This import marked a notable decline of 51% in the value when compared to the preceding year, 2021.

India emerged as the predominant destination for Nepal's cut flower imports, accounting \$406 thousand which represents 99% of the overall import value. The remaining fraction of Nepal's cut flower imports was sourced from Thailand and Ecuador, with each contributing approximately 0.7% and 0.5%, respectively. Nepal, in its import process, applied average tariff rates of 9%, 10%, and 10% for cut flowers imported from India, Thailand, and Ecuador, respectively. The differential tariff rates applied could reflect trade agreements, market competitiveness, or regulatory considerations among these trading partners (Chumacero, 2004).

Concerning the categorization of specific cut flower types, the highest-imported category was cut flowers meant for bouquets or ornamental purposes followed by roses and others including orchids, processed flowers, and chrysanthemums. Notably, while most of these flower varieties were sourced from India, Thailand had a distinctive role as the sole exporter of orchids and chrysanthemums (TEPC, 2023).

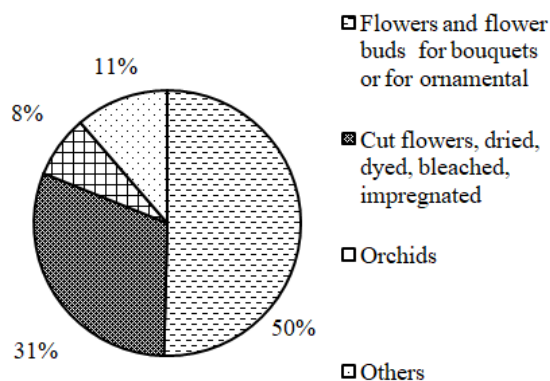


Figure 2 – Major category of exported cut flowers in 2022 (Source: TPEC, 2023)

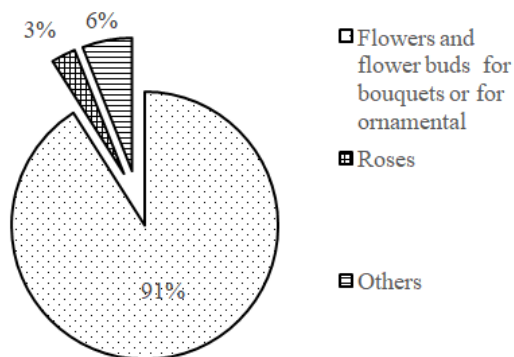


Figure 3 – Major category of imported cut flowers in 2022 (Source: TPEC, 2023)

Nepal possesses substantial potential for cut flower exports due to its favorable climate and an existing market for these products. The burgeoning interest in Nepal's cut flower industry, coupled with a focus on cultivating specific flower varieties, signals further growth prospects in this sector (Gauchan et al., 2009).

When examining a decade of data, we observe significant fluctuations in export values. Notably, there was a substantial increase in exports in 2014 which was attributed to a more



diversified export portfolio and a lower Herfindahl-Hirschman Index (HHI) when compared to the year 2012 (Pazzini et al., 2016). However, this was followed by a steep decline of approximately 58% in 2015, continuing into 2016. The drop in Nepal's cut flower exports in 2015 can be attributed to a devastating earthquake that inflicted damage on infrastructure, including flower farms and greenhouses (Gauchan et al., 2017). This disruption affected both production and logistics, resulting in decreased exports. Additionally, during this period, Nepal experienced political instability characterized by constitutional uncertainties and governance transitions (Coulthard et al., 2019). This further contributed to disruptions in trade, reduced investment, and diminished confidence among exporters and importers.

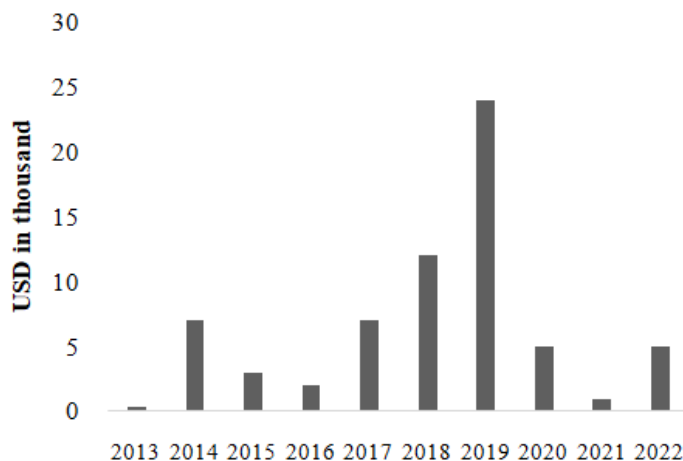


Figure 4 – Export trend of cut flowers in Nepal over a 10-year period Source: ITC , 2023

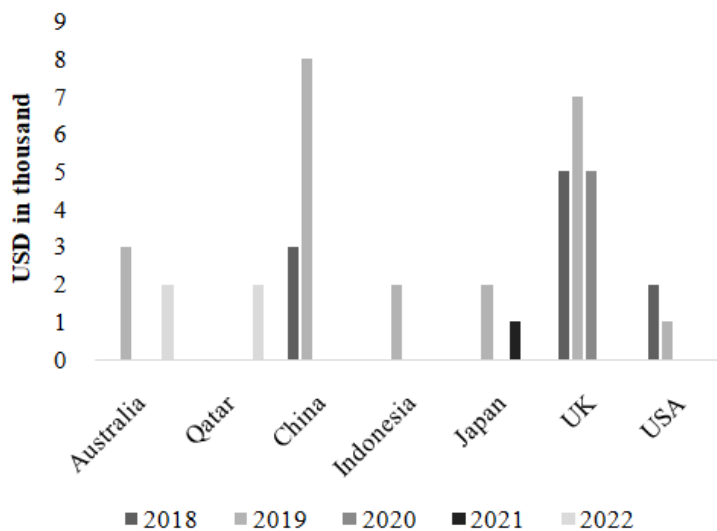


Figure 5 – Major cut flower importers in 5 year period Source: ITC , 2023

Nepal's cut flower exports experienced significant growth, reaching a peak export value of \$24 thousand in 2019. However, the export value saw a steep decline of around 80% in 2020, primarily due to the impact of the COVID-19 pandemic. Disrupted supply chains, decreased demand, closed markets, economic downturns, and changes in consumer behavior worsened the decline.



The lasting impact of the pandemic probably contributed to the low export value of \$1,000 in 2021. Despite gradual recovery, ongoing uncertainties, economic difficulties, and changing consumer behaviors likely continued to affect the demand for cut flowers. The increase in export value to \$5,000 in 2022 could indicate a partial improvement of market with eased restrictions and resumed events and celebrations. Although it may not have fully returned to pre-pandemic levels, these factors likely contributed to the modest recovery in export value.

The Nepalese cut flower market has limited diversification, with only a few export destinations over five years and an irregular market presence. Nepal encounters difficulties in maintaining a steady market presence due to factors such as strong competition, inconsistent product quality and supply, logistical challenges, unfavorable trade regulations, economic fluctuations, and ineffective market development strategies. These complex challenges collectively hinder Nepal from becoming a consistent and dependable exporter to these nations.

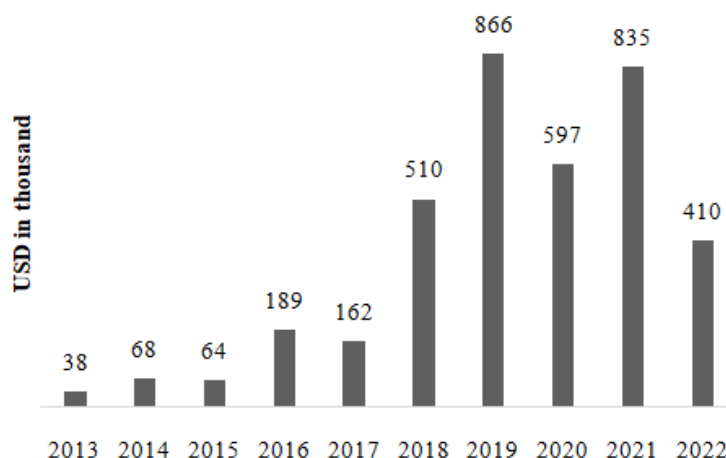


Figure 6 – Import trend of cut flowers in Nepal over a 10-year period Source: ITC, 2023

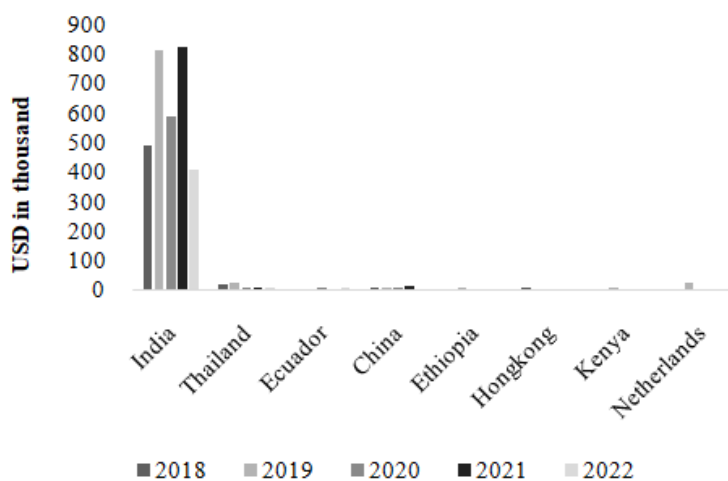


Figure 7 – Major cut flower exporters in 5 year period Source: ITC, 2023

Cut flower imports in Nepal have shown fluctuations, peaking in 2019 but declining in 2021. The significant increase from 2017 to 2018, with a growth rate of approximately 215%, can be explained by factors like higher consumer demand, improved market access, and



economic recovery following the 2015 earthquake. The peak import value in 2019 likely indicates continued market demand and favorable economic conditions.

During the COVID-19 pandemic, cut flower production in Nepal faced a severe decline of about 97% (Acharya et al., 2021), compounded by the loss of imported mother plants by several farms. In 2021, there was a 40% increase in import value, indicating a gradual recovery as markets adjusted to the pandemic's impact. With the easing of restrictions and the resumption of events, there was probably an increase in cut flower demand. Yet, the closure of a quarter of cut flower farms resulted in heavy imports, causing concerns about sustainability. The subsequent decrease in imports the following year may be due to the re-establishment or expansion of farms, leading to higher domestic production.

India dominates Nepal's cut flower import market, accounting for 99% of imports favored by strong historical, cultural, and economic bondings. While Nepal also imports from other countries like Thailand, Ecuador, China, Ethiopia, Hong Kong, Kenya, and the Netherlands, their market share remains limited probably due to factors like distance, transportation costs, and market dynamics (Basnett & Pandey, 2014). Diversifying imports from other countries could offer more variety and potentially competitive pricing (Narain & Varela, 2017).

A trade deficit, commonly known as a Negative Balance of Trade, arises when a country's imports exceed its exports within a certain timeframe (Bloomenthal, 2020). The issue of trade deficit has been on the rise in numerous developing nations, Nepal being no exception. Nepal broadened its global trade engagements after joining the World Trade Organization (WTO) on April 23, 2004. Consequently, the country began its journey towards enhancing an open economy by embracing trade liberalization. Despite having unrestricted foreign trade capabilities, Nepal has not been able to fully capitalize on its potential in this regard.

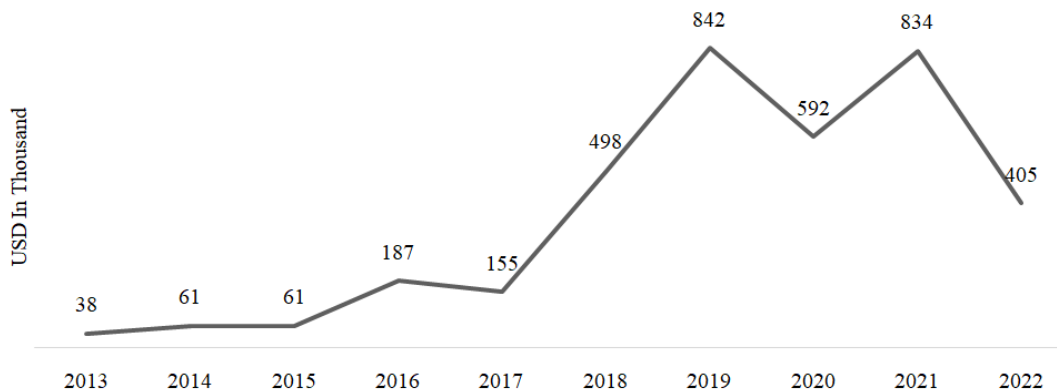


Figure 8 – Trade deficit of cut flowers in Nepal

The higher cost of raw materials can escalate the production expenses for cut flowers reducing the country's global competitiveness. Exportable cut flowers receive minimal subsidies (1%), coupled with substantial taxes and customs duties at the border (Defever et al., 2017). Limited demand and production capacity hinder economies of scale, posing challenges in global competition. The production cost is lower in India due to the government subsidy of 50% on horticulture (NHB, 2022). The elevated prices of local goods limit consumer choices and purchasing ability, prompting the influx of cheaper international products and replacing local ones (Seyfang, 2006).

Despite its considerable export potential, Nepal's floriculture sector remains neglected. Inadequate attention is given to its production, marketing, and trade opportunities. A significant obstacle is the lack of reliable statistical data on cut flower production, productivity, and domestic transactions, making it challenging to assess the sector's true potential and monitor its development.



Nepal's policy regime has not been very effective in improving trade competitiveness. This suggests that there may be challenges in terms of export diversification and competitiveness, which could impact the export volumes and values of cut flowers.

**Impact of Regulations:** Regulations like the SPS (Sanitary and Phytosanitary) and TBT (Technical Barriers to Trade) agreements have been shown to have a substantial negative impact on the exports of developing countries to Organisation for Economic Co-operation and Development (OECD) member countries (Disdier et al., 2008). A report by Asian Development Bank (2019) highlights that the lack of competence in effectively addressing the SPS measures and TBT has significant adverse effects on Nepal's export and trade, including the cut flower industry.

Nepal's landlocked status introduces various hurdles in foreign trade, impacting the import and export of goods. Transportation charges, and the risk of spoilage for perishable items contribute to these challenges (Duval et al., 2015; Sourdin & Pomfret, 2012). Inadequate foreign aid and utilization capacity directly impact both the production sector and trade, including the cut flower industry. Recent political disruptions, including trade strikes along the Indo-Nepal border, have directly affected foreign trade, exacerbating the trade deficit (Gurung, 2013).

Rising inflation is driven by high consumption and an excessive reliance on imported goods, surpassing the country's production and exports. This phenomenon leads to currency devaluation and increased prices for goods and commodities (Khanal & Khanal, 2020). This connection between inflation and competitiveness contributes to the widening trade deficit, affecting sectors like cut flowers.

To address the trade deficit in Nepal's cut flower industry, the following measures could be taken:

- **Government support:**

The Nepalese government could provide subsidies and incentives to cut flower producers to reduce production costs and increase competitiveness in the global market (Tiwari et al., 2004). Subsidies might include financial assistance for purchasing equipment, technology, or inputs needed for cultivation, while incentives could take the form of tax breaks or grants for adopting sustainable and efficient farming practices.

- **Infrastructure development:**

Infrastructure improvement, including transportation and logistics, can lower shipping expenses and prevent spoilage of perishable items such as cut flowers. Refrigerated transport is crucial for this purpose (Kärkkäinen, 2003). Additionally, the use of technology like temperature-controlled containers and real-time tracking ensures the freshness of cut flowers during transit (Baxter & Kourousis, 2015).

- **Market research:**

The dynamic cut flower industry undergoes frequent fluctuations. Gathering statistics on production, efficiency, and local sales can uncover market prospects and enhance marketing approaches. This valuable information can assist growers, exporters, policymakers, and industry stakeholders, fostering the growth and advancement of the cut flower sector (Gabellini & Scaramuzzi, 2022).

- **Market strategy:**

Nepal possesses a unique opportunity in the global cut flowers market by adopting a strategic approach as a high-cost, low-volume producer. By specializing in rare and superior flower varieties, capitalizing on its geographical advantages, and emphasizing quality and exclusivity, Nepal can command premium prices and build a strong brand reputation. With limited competition in niche markets, Nepal can meet the specialized demands and secure dedicated customers. Further, Nepal can adapt quickly to changing trends and become known for its exceptional flowers worldwide.





- **Export diversification:**

Encouraging the export of cut flowers to a wider range of countries and offering various types of cut flowers for export can significantly contribute to diversifying Nepal's export portfolio. This approach reduces reliance on a limited number of export destinations and flower varieties, enhancing the country's economic resilience and potential for growth. With the European Union accounting for over 50% of global flower consumption, including cut flowers, Nepal has a promising opportunity to grow its cut flower exports in this lucrative market (Gauchan, 2010).

- **Compliance with regulations:**

Ensuring compliance with regulations such as SPS and TBT agreements could help increase exports to OECD countries (Kang & Ramizo, 2017). The Trade and Competitiveness Study for Nepal recommends that country should focus on increasing its export competitiveness by improving the quality and value of its exports, reducing production costs, and promoting trade diversification (Agarwal & Cutura, 2004).

- **Political stability:**

Ensuring political stability and reducing trade disruptions such as strikes along the Indo-Nepal border could help improve foreign trade and reduce the trade deficit (Sharma, 2015).

## **CONCLUSION**

In conclusion, Nepal's cut flower trade presents significant potential due to its unique agro-climatic conditions and the growing global demand for such products. However, the industry faces a multifaceted set of challenges, including high production costs, limited export diversification, political disruptions, and regulatory hurdles like SPS and TBT measures. Despite these obstacles, there are positive signs of a gradual recovery and increased domestic production capacity. To unlock the full potential of this sector in the global market, Nepal must take strategic policy actions. These should encompass policies that encourage investment, prioritize the sector's development, strengthen institutions like NARC and FAN for research and product enhancement, provide tax exemptions for initial years, establish effective communication channels at the provincial level for farm registration, offer subsidized credit, and promote cooperative farming for diversification and access to the national market. Additionally, investments in infrastructure and the enhancement of product quality to meet international standards are essential steps toward ensuring the competitiveness and sustainability of Nepal's cut flower industry.

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