

# Pak-Iran Oil Smuggling Impacts:

## Challenges and Strategies for Effective Solutions

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### Abstract

Pakistan-Iran oil smuggling is a decades long phenomenon. Smuggling is a transnational illegal entry of goods and people for financial gain, leading to violation of law. Oil smuggling from Iran to Pakistan is carried out through different land and sea routes; using different payment mechanisms. This research endeavor is undertaken to examine the economic impact of oil smuggling, the key challenges that hinder the efforts of different national stakeholders to tackle the alleged menace and delineate strategies to curb oil smuggling. This study used a mixed method approach: structured approach using a questionnaire as well as Key Informant Interviews (KII). The study also employed Stakeholder Analysis and PESTEL analysis. Oil smuggling has huge economic impact in terms of loss of revenue (tax and duties), distorting domestic fuel prices, reducing private sector appetite for investment in energy sector, environmental pollution, money laundering and terror financing. However, it has some positive externalities: availability of cheaper oil, saving of foreign exchange reserves, and creation of employment for local population. There are a number of challenges in way of curbing oil smuggling like deprivation of local population of Balochistan, complexity of different stakeholders involved, regional geostrategic tensions in the Middle East, Pakistan-Iran cross border skirmishes, fluctuating global oil prices, porous borders, outdated laws for prevention of smuggling, and US sanctions against Iran. Findings of the study indicate that various logistics are used in smuggling with involvement of transporters, local traders, LEA and politically influential people. Payment mechanism is both barter and monetary system. There is no seasonality in oil smuggling.

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Leading factors behind oil smuggling are competitive prices, limited economic opportunities in Baluchistan and weak enforcement mechanism. The study recommends short, medium and long-term strategies to tackle the menace of oil smuggling.

**Keywords:** *Pakistan, Iran, smuggling, challenges, strategies.*

## **1. Introduction**

Smuggling is broadly understood as the clandestine movement of goods, people, or materials across borders in violation of legal frameworks, primarily to avoid taxes, duties, or other forms of regulatory oversight. Pakistan and Iran, though geographically proximate and sharing cultural, historical and religious ties, face economic challenges. Both states are separated by 909 km long border from heights of Kuh-i-Malik to the Kaih-e-Gavetar on the Arabian Sea. Furthermore, there are four crossing points across the border (Anjum, 2024).

Pakistan is energy-deficient country with a burgeoning population. Over 40 million population lacks access to electricity while half of the population has no access to clean cooking facilities. According to Pakistan Economic Survey (2024), oil and natural gas are the primary sources of energy in Pakistan. Secondary sources are wind, solar and hydropower. Hence, dependency on oil is inevitable.

Pakistan and Iran, though separated by 909 km of border, have different demographic, political and strategic dynamics. Both of the countries differ markedly in demographic, economic & geopolitical circumstances. Demographically Iran is moderately populated in the Middle East with its rivalry with KSA and hostile relations with USA; while Pakistan has a huge population and strong international partnerships with great partners like USA, has a high demand for affordable fuel and goods (Ali, 2022).

Smuggling is an organized crime involving a diverse activity from transportation, recruitment, procurement activities for illegal transfer of goods from one place to another. It is twofold: shipping illegal goods for sale elsewhere or purchase of goods in cheaper markets and its sale in pricy markets bypassing payment of taxes or excise duties with profit motive. This involves avoidance of tax, criminality and others (Hayat and Waleed, 2024). Given the fact, smuggling is a structured phenomenon: geopolitics, economic inequality, border geographic, demographic, failure of formal trade mechanism, economic pressure in Iran and compulsion for cheaper oil in Pakistan.

### **1.1. Smuggling: definition and characteristics**

There are different definitions of smuggling in different contexts:

- UN office on Drugs and Crime (UNODC) defines smuggling under article 3(a) of Smuggling Protocol as *“the procurement, in order to obtain, directly or indirectly, a financial or other material benefit, of the illegal entry of a person into a*

State Party of which the person is not a national or permanent resident". It has focus on human trafficking, transnational criminal networks and others (UN, 2000).

- World Customs organization (WCO), in glossary of International Customs Terms, defines smuggling as "Customs offence consisting in the movement of goods across a Customs frontier in any clandestine manner, thereby evading Customs control". It has primarily focused on drugs, weapons, counterfeit goods, trade compliance and customs enforcement (World Customs Organization, 2024).
- Interpol defines smuggling as "procure, usually for financial or material gain, the illegal entry of an individual into a country of which he or she is neither a citizen nor a permanent resident", with emphasis on cross-border organized crime groups involved in arms, human smuggling and narcotics in a coordinated manner (Interpol, 2017).
- Financial Action Task Force (FATF) defines smuggling as "illicit movement of goods/people to generate profits integrated into the financial system", majorly focusing on anti-money laundering, counter-terror financing and financial flows among different countries.

Chief characteristics of smuggling which can be derived from various definitions, are as follows:

1. Illegal entry of goods or people or any material things lacking legal status (Protocol Against Smuggling of Migrants, Art. 3(a)).
2. Financial gain for self, but economic harm for the government (WTO, 2020).
3. Transnational character of activity (UNODC, 2000).
4. Violation of laws and rules made there under.

## 1.2. Current situation of oil smuggling

Since 2001, oil smuggling is one of the major trans-border activities in the region (Baloch and Lashari, 2021). There is no consensus on the volume of oil smuggled into Pakistan due to undocumented nature of transactions. According to Butt (2023), annually 2.81 billion liters of oil is smuggled, incurring a loss of PKRs. 60 billion to Pakistan's economy. Shahid (2023) investigates that 35% of diesel sold in South Asian economies are smuggled illegally from Iran.

Aslam (2024) investigated that once oil enters into Pakistan's territory, it is stockpiled in Gwadar, Mashkhail, Chaghi, Queta and Panjgur and subsequently supplied across the country: 45% of the total annual smuggled oil is shifted to Sindh, while 25% goes both to Punjab and KP and the rest is consumed in Balochistan.



In 2023, the amount of smuggled oil reached 10.1 million liters a day which was reduced to 5 million liters due to authorities' crackdown. However, after general elections in 2024, it reached to 8.9 million liters/ day. Annually, 2.8 billion liters are smuggled. To stop smuggling, with minimal success, an integrated approach was adopted by involving Anti-Narcotic Force (ANF), Federal Board of Revenue (FBR) and provincial departments through 54 joint check posts established in 2023 (Bhutta, 2024) as given below:

**Table 1**

*Provincial Comparison*

<b>Province</b>	<b>Number of check posts</b>
Punjab	13
KP	12
Sindh	10
Balochistan	19

*Source: Bhutta (2024)*

The Government of Pakistan is taking all necessary steps to tackle illegal oil smuggling but due to involvement of multiple stakeholders, it is becoming highly challenging. For instance, the Nation (2024) reported that Frontier Corps Balochistan (North) captured the smuggling of 379,000 liters of Diesel on Sindh-Balochistan border in 10 trucks and was handed over to the customs authorities.

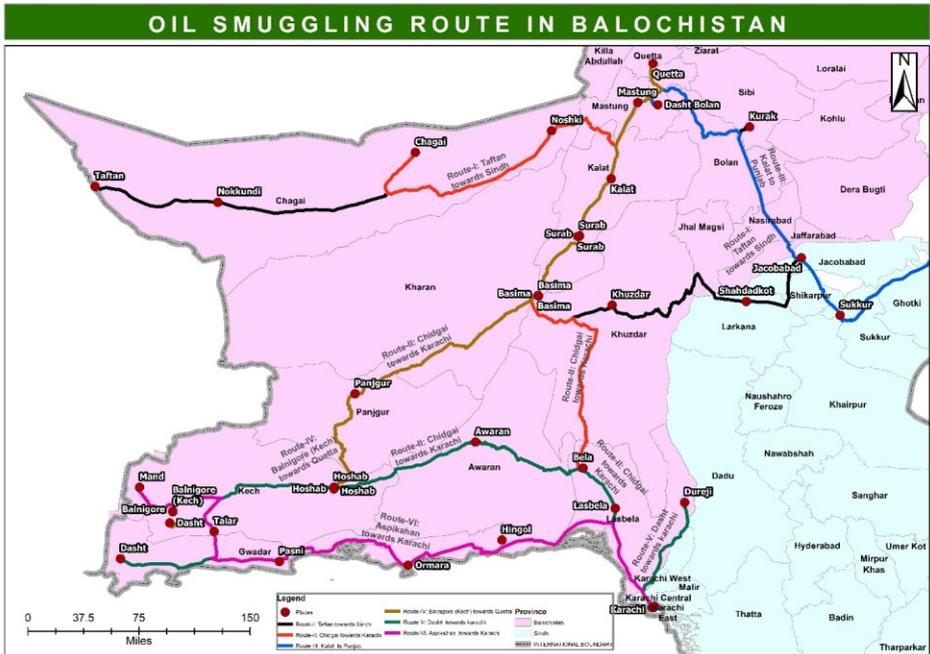
**Routes from Iran to Pakistan for Oil Smuggling**

According to Mehmood (2004), there are six (06) land and sea routes across five districts through which 70% of oil is shipped from Iran into Pakistan and then to other provinces. These routes are given as under:

1. Route-I: Taftan → Nokkundi → Noshki → Basima → Surab → Khuzdar → Kurk → Shahdadkot → towards Sindh
2. Route-II: Chidgai → Panjgoor → Basima → Surab → Hoshab → Lasbella → Karachi
3. Route-III: Kalat → Mastung → Dasht Bolan → Jacobabad → Sukkur → Punjab
4. Route-IV: Balnigore (Kech) → Dasht → Hoshab → Basima → Surab → towards Quetta
5. Route V: Dasht → Hoshab → Awaran → Bela → Dureji → towards Karachi
6. Route VI: Mand → Balnigore → Talar → Pasni → Ormara → Hingol →

toward Karachi)

**Figure 1**  
Routes used for oil Smuggling



### 1.3. Organization of the paper

This study is organized in a number of sections. The first section of the study will focus on the economic impacts of the Pak-Iran oil smuggling. The second section will delve into the challenges to mainstream the bilateral oil trade. Third section will revolve around the analysis of the results and its discussion. Next section will focus on conclusion. The last section will present some concrete strategies for effective solution for Pak-Iran oil smuggling.

### 2. Objectives and scope of the study

The objectives and scope of this study spans around the following:

1. Examine the economic impacts of oil smuggling on Pakistan and its population
2. Identify the key challenges that hinders effort to combat oil smuggling;
3. Propose short term, medium term and long-term strategies to combat oil smuggling.

Scope of the study is Pakistan-Iran border area where oil smuggling is rampant being, among other factors, a source of livelihood for local communities.



## 2.1. Statement of the problem

The rampant oil smuggling on Pak-Iran border region has alleged economic repercussions, including revenue loss to the state, fostering unfair competition in oil industry, unleashing instability in border region and terror financing. Despite various measures taken by the government to tackle the issue, the illicit activity thrives due to challenges like inadequate regulatory framework, perforated border region, vested interests of various stakeholders involved, crippled state of Pakistan's economy and impact of US sanctions on Iran; thus having both negative and positive externalities. This research endeavor aims to explore the economic impacts of oil smuggling, highlight the key challenges and propose strategic solutions in short, medium and long term to address the cross-border oil smuggling.

## 2.2. Significance of the Study

This research endeavor holds substantial academic significance because illegal trade especially cross-border oil smuggling has multifaceted repercussions on the state and society of Pakistan. Furthermore, this research endeavor has taken into account an integrated analysis including but not limited to economic, environmental, legal, social and political dimension of the study. Furthermore, this research study has undertaken mixed-methods approach: primary data in the form of interviews using questionnaires encompassing closed-ended and open-ended coupled with interviews from stakeholders and secondary data analysis using policy papers, published research papers and other data available online. In addition, this study has theoretical backing of neo-functionalism theory and transnational crime theory. And lastly, this study has significance to be used for policy formulation using evidence-based strategies to tackle trans-border oil smuggling.

## 3. Review of Literature

There are a number of research studies on theoretical basis of smuggling which gives insights about the major factors behind smuggling. A research study by Bhagwati and Bent Hansen (1973) modelled smuggling in trade and economics framework. Accordingly, due to high tariffs, taxes and formal trade barriers, cross-border trade becomes costly and smuggling becomes a substitute and a price differential. Furthermore, this can reduce state revenue, distort state market. However, it can increase consumer welfare due to low price. Furthermore, criminological and transnational crime perspective, smuggling is termed as Illicit International Political Economy (IIPE) where criminal markets operate cross-nationally, that leads to unbridled corruption, price disparity and undermines state's capacity and writ (Legrand & Leuprecht, 2021).

Ali (2022) conducted a research study on the politics of energy trade between Iran and Pakistan. The study was based on primary data. The study highlighted that the energy trade is subjected to US Sanctions on Iran or bypassing it. The

study concluded that if Pakistan honours the US Sanctions against Iran, it faces energy shortage in the country. Conversely, if Pakistan bypasses the US Sanctions, it will face the same fate as Iran. The study recommended that Pakistan must pursue safer policy to efficient energy import while keeping good relations with USA. Furthermore, making India as beneficiary of the Iran-Pakistan energy corridor will increase the probability of successful trade.

Khalil (2023) explored the trend of Pakistan-Iran trade relations indicating that lack of banks in each other's capital city is impeding the growth of trade which is also affected by the US sanctions and geo-economics and recommended free trade agreement, opening of commercial and other banks in each other's capital, improving government-to-government ties, currency swap arrangement; streamlining customs procedures, strengthening government and private sector participation as measures to facilitate and expand the trade between two countries.

Hayat and Waleed (2024) empirically assessed the socio-economic causes behind smuggling in Pakistan using various socioeconomic indicators. The dependent variable was smuggling participation while independent variables were age, education, marital status, monthly earnings, household size, assets and ownership. The results indicated that age, people living in rural area, level of education, employment status, earnings and ownership status reduces the probability of participation in smuggling activities. However, marital status, household size, and monthly expenditures of the household increases the probability of smuggling. The study recommended government should take measures for imparting education; trade policies to reduce smuggling; ensuing employability and alternative livelihood and poverty alleviation programs in the study area.

Shah and Tayyab (2023) explored the phenomenon and highlighted that smuggling is fueled by economic disparities, regional tensions and international sanctions against Iran as challenge. The study recommended that there should be compulsive free trade policy framework, boosting border security on both sides, establishing special economic zones at border region, ushering diplomatic dialogue between the two countries, fostering regional economic collaboration, setting up a joint task force and raising public awareness to address the menace of smuggling.

Sharif et al. (2000) conducted a research study regarding illegal trade of Pakistan with Afghanistan and Iran through Balochistan with focus on agricultural and non-agricultural products and concluded that trade on Pakistan-Afghanistan border is in favor of Afghanistan while in case of Iran-Pakistan border, it is in the favor of Iran and there is huge revenue loss. The study recommended rotation of the duty of collectors to reduce corruption; award exemplary punishment to those involved in assistance to smugglers, and huge penalties to smugglers. Similarly, Raheem et al (2021) explored the political economy of Pakistan-Iran



smuggling and its significance for local population and concluded that local population shown satisfaction on illegal trade due to dependency on it for sustenance. A study conducted by Butt and Malik (2024) explored that due to lack of implementation of existing policies and legal framework, political and economic inequality are the major factors behind transnational crimes.

Moazam et al (2021) explored the impact of oil smuggling on environment with special focus on green turtles at Daran beach of Balochistan, Pakistan. The study revealed that oil smuggling and oil spilling disrupted sea turtle nesting, sand compaction, changing nest-chamber structure, reduced its concealment and due to trampling by smugglers, turtles' eggs and hatchlings were damaged.

Aziz et al (2014) investigated the causes and indicators of smuggling across the world over a period 1990-2009. The study compared smuggling in developed and developing countries. The results revealed that increase in tariff increases the probability of smuggling while unemployment rate, trade openness, rule of law and higher education reduce smuggling in both developing and developed nations. The study recommended granting of incentive to work in the formal economy and disincentives in working in informal economy as measures to curb smuggling.

A study was explored by Mahmood and Ahmad (2015) regarding measuring smuggling in Pakistan in the period 1973-2010 shown upward trend followed by a decline, indicating that the factors considered for this trend were restrictions, tariffs and other import barriers during 1970s through 1980s and due to relaxation of restrictions, smuggling reduced.

The research has novelty: the available literature on smuggling has limited span, while this study addresses the underexplored areas like economic, legal, and socio-political dimensions of trans-border illegal trade. Furthermore, this study has interdisciplinary contributions e.g. economic, international relations, energy policy and law. This study will fill the research gap of routes used for the oil smuggling, use of payment mechanism, and other aspects of the study.

#### **4. Methodology**

This research endeavor is based on both primary and secondary data.

- Sampling technique: a purposive sampling method was adopted to identify individuals with direct experience and knowledge of border trade, smuggling, and enforcement mechanisms. The study used Key Informant Interviews (KIIs) method employing questionnaire having 23 open-ended and closed-ended questions from more than 30 respondents from the population frame encompassing border security and custom officials, local traders, district administration and others to assess the mechanism, scale and economic impacts of Pakistan-Iran oil smuggling. The questionnaire is attached as **(Annex-I)**.

- Secondary data is taken from various online sources majorly research papers, articles and other publications.
- The data was analyzed using descriptive statistics methods and thematic analysis for qualitative input.

## **5. Economic Impact of Pakistan-Iran Oil Smuggling**

### **5.1. Massive Revenue Losses**

The volume of oil smuggled is 5-6 million liters per day—equivalent to \$1 billion annually and to 14 percent of Pakistan's annual petrol consumption (Iran International, 2024). Similarly, ISPR (2024) reported that following strengthened border security, smuggling fell from 15-16 million liters to 5-6 million liters daily. There are 2000 vehicles involved in this activity. Furthermore, 1300 boats each with 1600-2000 liters capacity are involved in smuggling (Iran International, 2024; Gul, 2024). According to Pakistan Intelligence report (2024), approximately \$1.02 billion worth of petrol and diesel is smuggled annually, causing a tax and duty shortfall of 820 million USD in taxes/duties annually. However, Shah (2024) reported loss of 1 billion USD annually in term of taxes. Anees (2023) reported a monthly loss of 35.6 million USD to exchequers.

### **5.2. Distorted Oil Markets**

Shah (2024) reported that the influx of illegal oil threatens local economy as it accounts for more than 30% of the import bill. Furthermore, 35% of all consumer goods in Pakistan are smuggled and are untaxed which leads to distortion of competition and deter foreign investment accounting for the total annual loss of \$5 billion approximately (Haq, 2025).

### **5.3. Refinery Downturn, Reduced Investment and Job losses**

According to Kiani (2024), government directed Ministry of Interior and FBR to take legal action against oil smuggling based on a complaint received from Oil Companies Advisory Council (OCAC) that due to influx of Iranian oil into the country all 05 domestic refineries owned by OCAC are facing survival challenges and threat to \$6 billion worth of upgradation plans.

Oil and diesel refineries are operating between 50% to 70% of their capacity. For instance, Attock Oil Refinery Limited reported that due to low sales, it is operating at 25% capacity. Among multiple reasons for low sales, oil smuggling is one (Shahid, 2023).

### **5.4. Oil Smuggling and Corruption Nexus**

According to Butt (2023), there are multiple stakeholders involved in the illegal oil trade which includes 90 government officials, 29 politicians and 722 currency dealers are involved directly and indirectly in this illicit trade as middlemen for transaction and payments.



## 5.5. Environmental Degradation: Threat to Aquatic Biota

According to Moazzam et al (2021), Daran beach in Jiwani—Gwadar, Pakistan, the natural habitat for green turtles is facing threats. Movement of large number of vehicles on beach for loading the smuggled consignments leads to sand compaction which reduces nesting success, affecting nest size and shape. Furthermore, frequent movement of people and vehicles crushes all eggs and kills the hatchlings. Sasoli (2018) reported that oil spill affects the livelihood of local fishermen in the Mubarak Village-Churna, for whom fishing is the only source of income. Hence, economically impact the local communities.

## 5.6. Fueling money laundering and Illicit Networks

Money laundering is the cross-border illicit cashflow especially via Hawala or Hundi network (Gul, 2024). According to Mehmood (2024), there is a strong connection of oil smuggling profit and the armed groups in southwestern Balochistan like Balochistan Liberation Army (BLA), Balochistan Liberation Front (BLF) and others. If alternative livelihood is not ensured, they may turn into crimes, drug trade and exacerbate Balochi separatist movement. Mehmood, A. (2024) reported the interview of Malik Siraj Akbar, an ethnic Baloch and Washington-based expert on Balochistan issues told Media Line, *“amid a backdrop of deprivation and underdevelopment in the Baloch regions, Baloch militants on both sides of the border have exploited these grievances to further their agendas. They attribute the backwardness of their areas and the creation of hostile environments to the central governments of both countries.”* He further added that if crackdown against smuggling is expedited, these groups will search for alternative sources of funding and external factors will exploit these vulnerabilities. Furthermore, Dr. Dost Barrech, a geostrategic analyst at the University of Baluchistan is of the opinion that oil smuggling is a source of sustenance for 50% of the local population in Balochistan belt and any kind of crackdown will lead to unemployment and financial misery.

## 5.7. Positive Externalities: Unintended Benefits

### 5.7.1. Availability of cheaper energy in Pakistan

Since 2013 US sanction, Iranian petrochemical products' prices are down due to smuggling (Anees, 2023). Shah (2024) reports that oil smuggling leads to saving of trillions in foreign exchange reserves. Furthermore, the smuggled oil offers between 30 to 40 USD saving per barrel to international price. Shahid (2023) reported that according to an S&P Global Commodity Insights report, smuggled oil from Iran is around PKRs. 53/liter cheaper than official price. Smuggled oil offers a discount of 30-40 USD per barrel compared to existing international prices (Shah, 2024)

## 5.7.2. Saving of foreign exchange reserves of reserve-deficient Pakistan

According to Economic Survey of Pakistan (2024), net import of petroleum product and crude oil was around 11 million tons equivalent to \$8.4 billion during July-March FY 2024, excluding smuggled oil. According to Pakistan Intelligence report (2024), approximately 1.02 billion USD of petrol and diesel is smuggled into Pakistan. These \$1.02 billion is saving to national exchequers of Pakistan which will reduce Pakistan's dependence on IMF to reduce current account deficit.

## 5.7.3. Oil smuggling is a source of livelihood for local residents

Around 1B USD of Iranian Oil is smuggled into Pakistan annually which caters 14% of Pakistan's annual oil and fuel consumption. There are 2000 vehicles involved daily and around 2.4 million people are directly and indirectly involved in it for livelihood due to dearth of economic opportunities (Middle East Monitor, 2024).

# 6. Challenges to mainstreaming Pakistan-Iran oil Trade

## 6.1. Insights from Secondary Data of Reviewed Literature

### 6.1.1. Deprivation of local population and Livelihood Dependency

Baloch and Lashari (2021) reported that 71% of Baluchistan's population is earning less than 2 USD a day, coupled with food insecurity, drought and other natural disasters. There is lack of infrastructure, agriculture activity, lack of formal trade and development schemes. Low literacy also fuels illegal economic activities.

Due to dearth of foreign exchange reserves, Pakistan has lukewarm attitude towards oil smuggling. However, if border is sealed, and oil smuggling is stopped without provision of alternative livelihood opportunities will have disastrous impact on the locals who are dependent on oil smuggling. As of 2024, 2.4 million people, 14-16% of local population in insurgency-stricken Southern Balochistan are dependent on Iranian oil smuggling as livelihood (Gul, 2024; Mehmood 2024). Furthermore, according to Iran International Newsroom (2024), due to dearth of job opportunities, Baloch citizens are involved in smuggling as vital source of livelihood. Furthermore, A case study of Mashkel desert across Pakistan-Iran border which is the home for around 6000 people. In this desert region 2-3 people/household are involved in illegal oil smuggling (Mehmood, 2024).

While quoting Shams-ul-Haq, the president of the Gwadar Chamber of Commerce and Industry (GCCCI), Anees (2023) reported that "Thousands of people across the border rely on the Iranian fuel trade. A sudden halt to a major source of income that has been there for ages is depriving people of their livelihood".



### 6.1.2. Complex Stakeholders' Network

According to Butt (2023), there are multiple stakeholders including 90 government officials, 29 political, 995 petrol pump stations involved in sale of smuggled oil. Pakistan State Oil (PSO) vehicles are also involved in the logistic support of smuggled oil. There are 76 sellers in the border region for this. Mehmood (2024) reported that there are 105 smugglers involved in 14 districts of Balochistan including Quetta.

A report published by Pakistan Intelligence under title "Smuggling of Iranian Oil", indicated that there are 722 currency dealers involved through "Hawala Hundi", running oil smuggling cartels as given below:

**Table 2**

*Provincial comparison of currency dealers in oil smuggling*

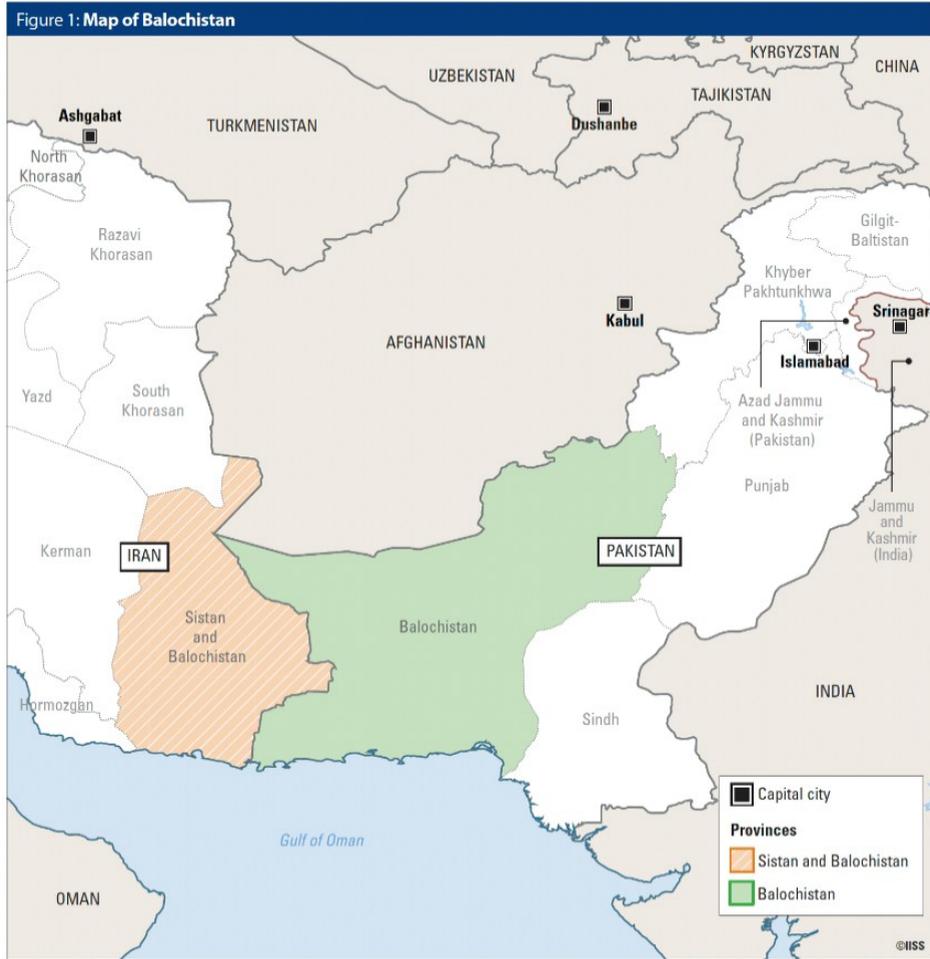
<b>Province</b>	<b>Number of currency dealers involved</b>
Punjab	205
KP	183
Sindh	176
Balochistan	104
AJ&K	37
Islamabad Capital Territory	17
Total	722

*Source:* Butt (2023) and Pakistan Official Report

### 6.1.3. Geostrategic Tensions in the Middle East

Iran has been active supporter of Palestinian resistance movement. During the Operational Al-Aqsa Flood, Iran openly supported the cause of Palestinians which led to direct confrontation with Israel and its allies in the Middle East (Anjum, 2024). Furthermore, Strait of Hormuz is the critical chocking point in the Middle East for oil trade to the global market (Book et al, 2024). Cross-border terror attack and military strikes in 2024 and in response Iranian attack on Jaish Al-Adl group within Pakistan which are struggling for independence of Sistan and Balochistan province of Iran affected trade relations between two states. Some of the Baloch separatist operatives take refuge in Iran (Boltuc, 2024; International Institute for Strategic Studies, 2024).

**Figure 2**  
Geostrategic location of Pakistan



Source: International Institute for Strategic Studies

#### 6.1.4. Security and Border Instability

Oil smuggling acts as “safe haven” for anti-state activities (Shah, 2024). There is a volatile security apparatus in the Middle East. Due to involvement of non-state actors (TTP, BLF, BLA and others) and cross-border terrorism, relations between Pakistan and Iran are strained. Baloch insurgents on both sides of the borders are involved in this activity (Mehmood, 2024). According to Iran International Newsroom (2024), between March 20-30 march, 27 oil smugglers, mostly of age between 18 to 28 years old killed by the action of security forces, road accidents and vehicle fire.



Porous and unstable border region is one of the challenges to curtailing oil smuggling into Pakistan (Middle East Monitor, 2024). It makes difficult to monitor and control movement of goods and human across international border, especially militants which leads to terror attacks against security forces on Iranian side (Raja, 2024).

#### 6.1.5. Global Spike in Oil Prices

Due to a number of geopolitical events and economic sanctions, oil prices have faced volatility. Firstly, Russian invasion of Ukraine and Western sanctions against the former led to distortion of oil prices in international market. For instance, in 2022, the oil prices increased from \$90 per barrel in early February to \$140 per barrel in early March with 50% rises in oil prices (International Energy Agency, 2022). According to Khan (2025), Trump imposed additional sanctions on Iranian oil companies which led to supply chain tightening.

#### 6.1.6. Outdated and Fragmented Legal Framework

Pakistan's laws regarding smuggling and custom activities are outdated. These are stagnant, rigid and lack the element of evolution with time, space and circumstance. For instance, Pakistan's anti-smuggling act was passed in 1977 which is not aligned with Customs Act of 1969 (Shah, 2024). The Prevention of Smuggling Act (1977) criminalizes smuggling but lacks provisions regarding transnational organized crimes network.

#### 6.1.7. US Sanctions on Iran

According to Ali (2022), Pakistan is in the quagmire of US-Iran antagonistic relations affecting trade between the two. Pakistan has good relations with both but energy import cannot be materialized due to US-Iran strained relations. Iran wants hegemony in the Middle East which is not acceptable to USA and its regional allies (KSA and Israel). US sanctions against Iran are fueling oil smuggling into Pakistan (Gul, 2024).

According to Anjum (2024), Iran-Pakistan Pipeline, known as "peace pipeline" was proposed in 1994 by three states (India, Iran, Pakistan). On strategic grounds, India withdrew in 2008. To tackle with the US sanctions, oil as alternative source of energy, there has been proposal for barter system and opening of branches of banks in respective cities, guided under preferential trade agreement (PTA) of 2006. Some experts suggested replacing PTA with Free Trade Agreement (FTA) which is yet to be materialized. According to Shah (2024), US sanction acts as a deterrent to import oil. However, Iraq, China and Taiwan got waivers from USA to trade with Iran. Similarly, USA granted a waiver to India regarding Chabahar Port development. Pakistan has not requested such waiver so far.

### 6.1.8. Payment Mechanism Complexity

According to Bhutta (2024) and Aslam (2024), around PKR. 284 billion/ annum is paid to the Iranian oil dealers via various mode of payments. Some of the financial transaction/ payment mechanisms are given below:

- a. **Payment Through Hawala & Hundi:** payment is done through third party country and after confirmation of the payment, shipment of oil is done. This process involves truck or van drivers receiving receipt at border who handover receipt to Hawala dealers in Quetta, Rakhshan and Makran region. After confirmation back to oil suppliers, shipment is done.
- b. **Hand-to-hand cash payment:** the least used method
- c. **Barter system:** payment in kind e.g. gold bullion and other commodities which is around 3-5% of total trade (Kiani, 2024)
- d. **Small suppliers:** at border, Iranian suppliers are paid in Tuman currency by Pakistani buyers
- e. **Payment in US Dollars:** when the smuggling involves bulk deal, payment is done in USD through a third-party country
- f. **Token or parchi system:** Aslam (2024) confirms that 95% of trade is done through parchi system, established in 2021 by FC and local administration in Makran & Rakshan Districts of Balochistan.

## 7. Results and discussion and Insights from Primary Data

To commence with, regarding the number of barrels smuggled, respondents had differing views. Some are of the view that it is 7000 barrels per day and 184000 per month while others quoted 9500 barrel/ day and 285000/ month. While others reported 45,000 /day and 1.35M/ Month. However, all agreed that substantial amount of oil is smuggled across 06 routes.

Regarding economic value of the oil smuggled, 66.67% respondents opined that more than PKRs. 200 billion is smuggled while 33.33% said that less than PKRs. 50M is smuggled annually as depicted in Figure 3.

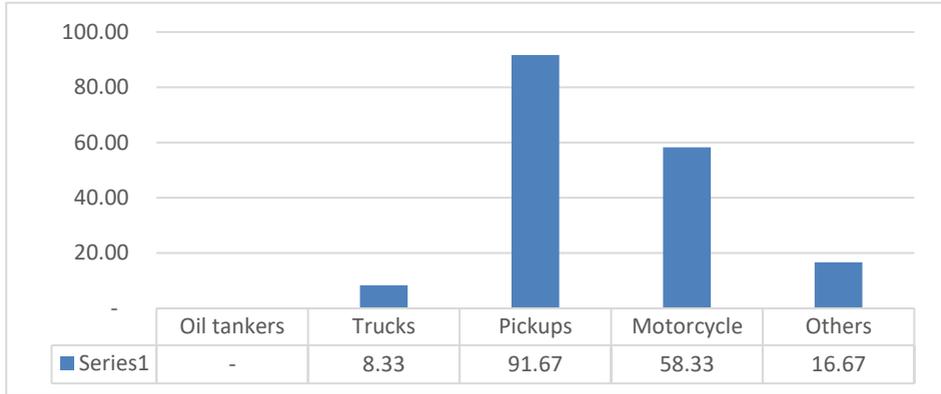
**Figure 3**

*Economic value of smuggled oil*



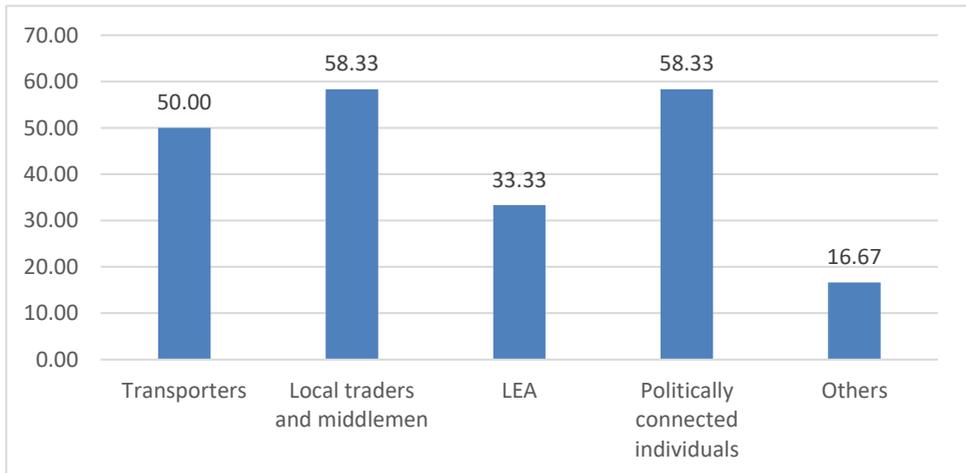
Regarding the logistics/ vehicle commonly used for oil smuggling, 8.33% respondents said that trucks are used. Majority (91.67%) said that pickups and a specially modified vehicle “Zamyad” is used. 58.33% respondents said that motorcycles are also used. 16.67% respondents said that other category of vehicles is used i.e. small speed boats are used.

**Figure 4**  
*Vehicles used for oil smuggling*



Regarding stakeholders involved, respondents mixed view i.e. 50% responded that transporters are involved. 58.33% opined that local traders and middlemen as well as politically connected individuals are the major stakeholders. 33.33% said that Law Enforcement Agencies are also directly and indirectly involved in the activity. 16.67% highlighted the involvement of district administration (labelled as “others” category).

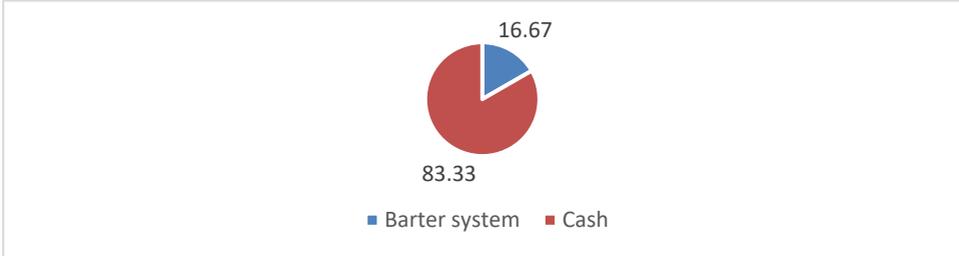
**Figure 5**  
*Stakeholders involved in oil smuggling*



Regarding the Transaction mechanism, 16.67% responded that barter system is used while 83.33% opined that cash is used as depicted in the Figure 6.

**Figure 6**

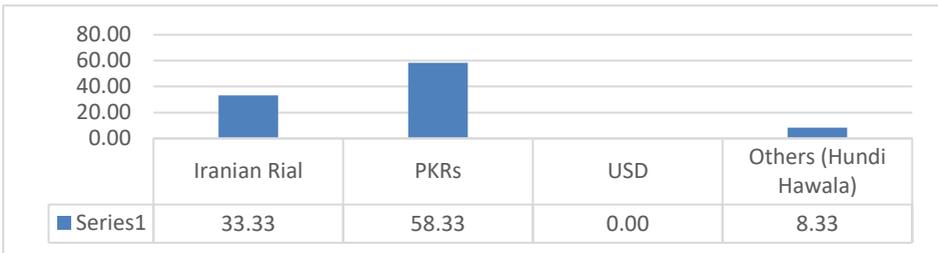
*Mode of payment in oil smuggling*



Within the cash payment, the respondents had differing opinion. 33.33% said that Iranian Rial is used while 58.33% said that Pakistani currency is used. 8.33% also said that Hawala or Hundi method is also in place as shown in graph 7.

**Figure 7**

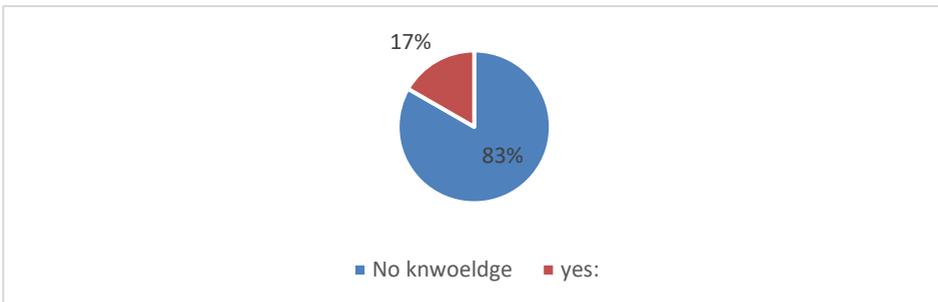
*Monetary medium used for oil smuggling transaction*



Regarding smuggling infrastructure on Iranian side of the border, 83.33% had no knowledge while 16.67% knew infrastructure on Iranian side of the border. One respondent said that pickups and small boats are used and, *“on Iranian side, it is quota allowance permitted to bordering population and is duly documented as export from Iran.”*

**Figure 8**

*Awareness regarding infrastructure used on Iran side for oil smuggling*



One respondent delineated three routes for oil smuggling from Iran to Pakistan as given below;

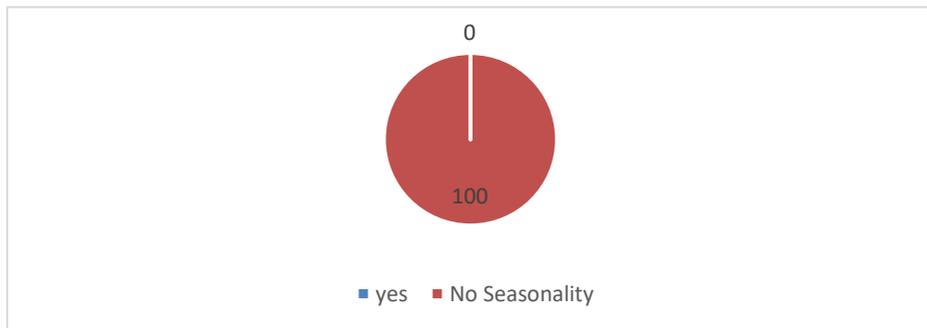
1. Border Point Kuntani → through Sea Kiaks / Speed Boats
2. Border Entry points in Turbat, i) Abduee, ii) Riedgee → through Zimyad and Pickups
3. Borders points in Panjgur i) Cheedgi ii) Jeerak → through Zimyad and Pickups

When the respondents were asked an open-ended question of impact on infrastructure due to oil smuggling, majority responded had differing opinion. Some were of the view that due to locally-designed heavy vehicle (Zamyad) for smuggling purposes, local road infrastructure is badly affected. One expressed his views as *“vehicles used in smugglings in the concealed manner are high risk transportations and resultantly many times severe incident of fire happened”*

Regarding seasonality of smuggling, 100% responded that there is no seasonality. It is round-the-year activity. One opined that September to May is the peak season through sea route. One responded that *“It continues in all the seasons to meet the needs of local districts as there are very limited setups / approved Pumping stations of Oil Manufacturing Companies (OMCs) in these areas of Balochistan”*

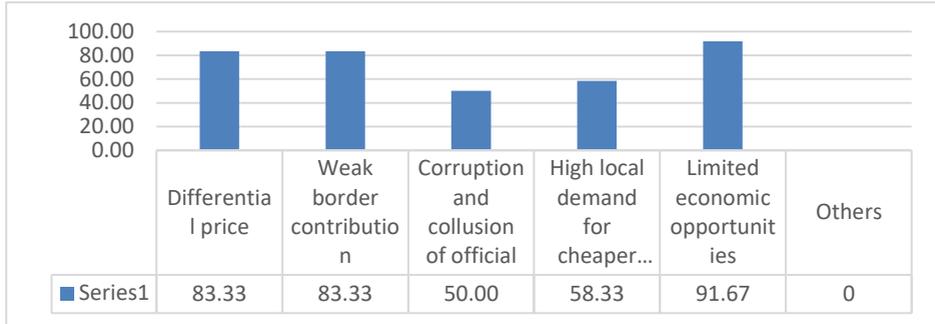
**Figure 9**

*Seasonality of oil smuggling*



Regarding the major factor behind oil smuggling, 91.67% said that limited economic opportunities is the basic reason, followed by 83.33% who said differential prices and weak border management; 58.33% labelled high demand for cheap oil and 50% highlighted corruption and collusion of the official as driving force behind smuggling.

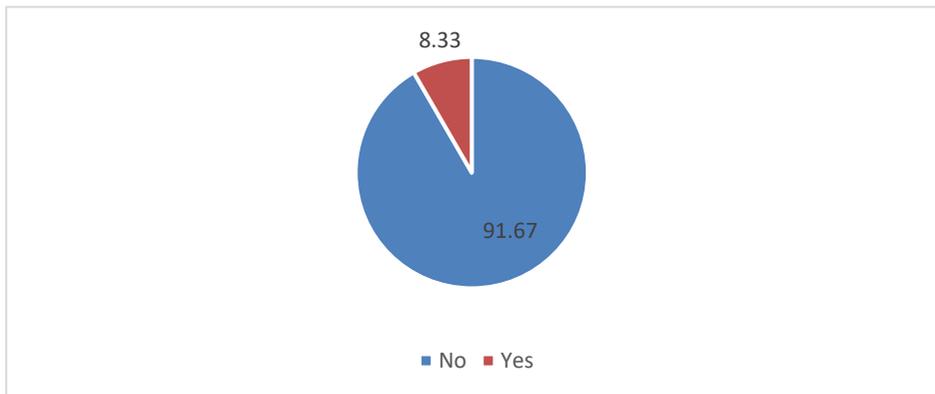
**Figure 10**  
Factors behind oil smuggling



Respondents opined that no efforts have been taken to regulate or document the oil smuggling. 91.67% said no concrete measures have been taken to regulate the smuggling. While 8.33% opined that some semi-structure method is adopted as depicted in graph-09. For instance, one respondent said “District administration of Gwadar, Kech, Panjgur, Washuk and Chaghi in Balochistan issue tokens and stickers to boats (in Gwadar) and pickups. Daily 600 pick-ups and 600 boats are permitted to carry Iranian oil from Iranian borer for consumption of bordering districts and adjoining areas”

Other responded that “POL products are restricted in IPO and importation is allowed only to Oil marketing companies (OMCs). Besides auction/bidding is permitted only to those who have been authorized by OGRA”. One expressed that “The District management has imposed certain restrictions for stoppage of these activity on two days Saturday and Sunday and now on Friday as well. Further they have limited the number of Kiaks/ Speed Boats from 4000 to 600 per day and Zimiyad from Entry points form 600 to 250 per day.”

**Figure 11**  
Efforts for Regulating of Oil Smuggling

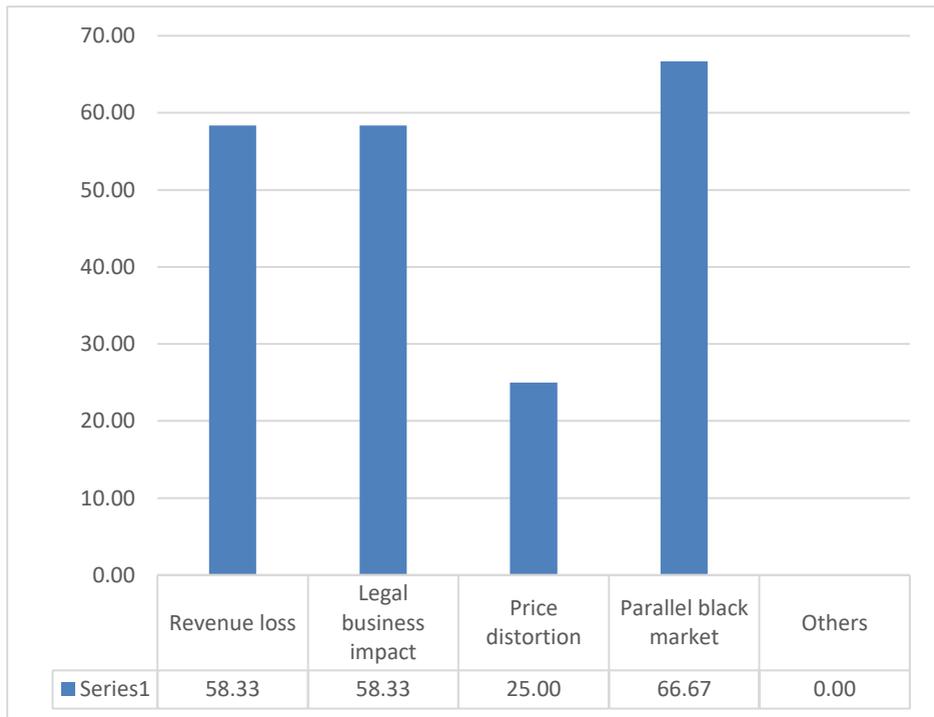


When the respondents were interviewed regarding the opportunity cost of smuggling, they were of the view that it leads to loss of government revenue. One respondent responded, *“sea is polluted by dripping oil at Gwadar, and government loss revenue in billions of rupees”*. Other responded the following cost of the oil smuggling *“loss of revenue, mixing of oil, damage to roads, regressive taxation, flourishing undercounted economy”*. Another respondent expressed that *“Kuntani Marine life has been endangered due to oil mixing in the sea water. There is Loss of Revenue as well as limits the legal business opportunities for OMCs”*.

By further interviewing regarding the economic consequences of the oil smuggling, majority (66.67%) were of the view that it flourishes parallel black market while 58.33% of the view that it leads to revenue loss and impact legal businesses. Some 25% responded that it also leads to price distortion.

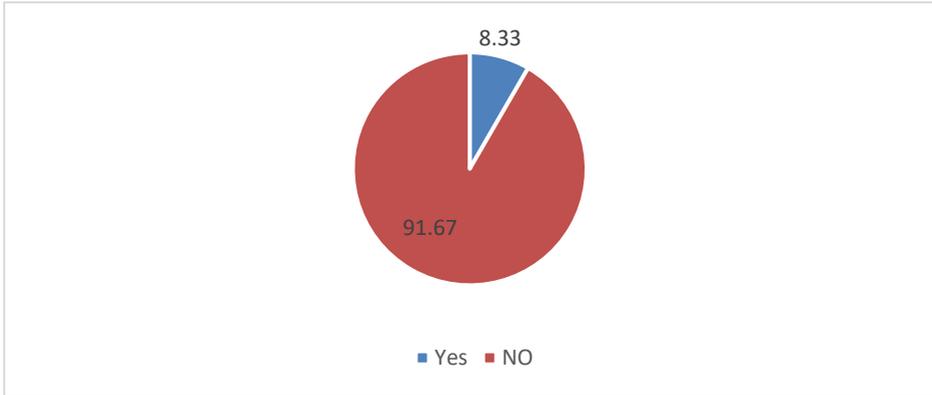
**Figure 12**

*Economic Consequence of Oil Smuggling*



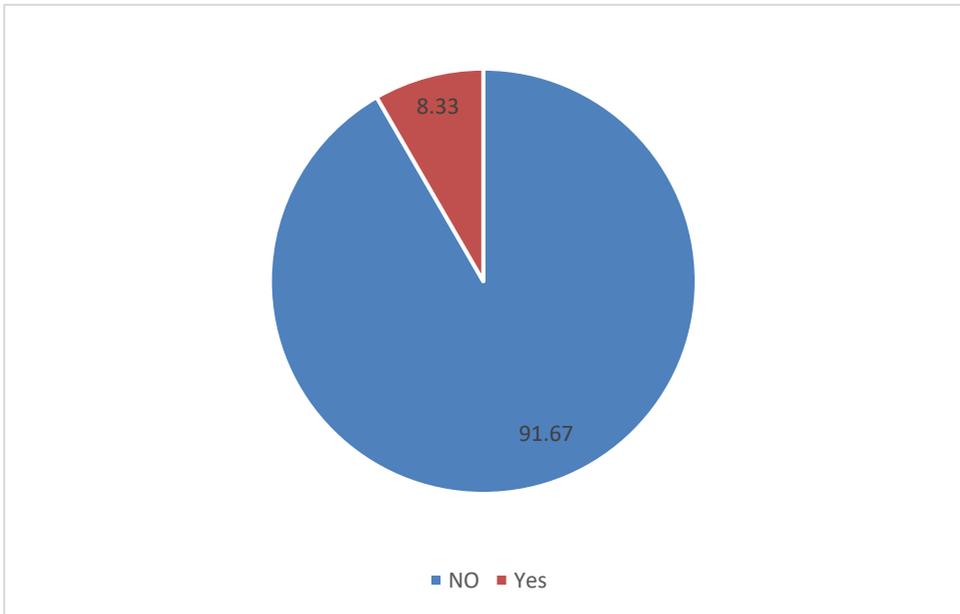
Regarding local taxation mechanism, majority (91.67%) was of the view that there is lack of any taxation mechanism or Rahdari in oil smuggling. One respondent responded, *“local administration of bordering district with Iran issues token/stickers from 50,000 to 150,000 to one pick up per month”* while other responded that *“district administration is collecting it in informal means or formally through GST”*

**Figure 12**  
*Local Taxation Mechanism*



There is lack of effective enforcement mechanism to curb oil smuggling. 91.67% were of the view that there is no enforcement mechanism while 8.33% said that there exists. One responded that “*enforcement mechanism exists in the form of FC, customs and levies. However, law and order situation pushes to refrain from enforcing the legal apparatus*” Other responded, “*FC, levies, police, coast guard, customs, FIA and excise department are enforcing the law*”

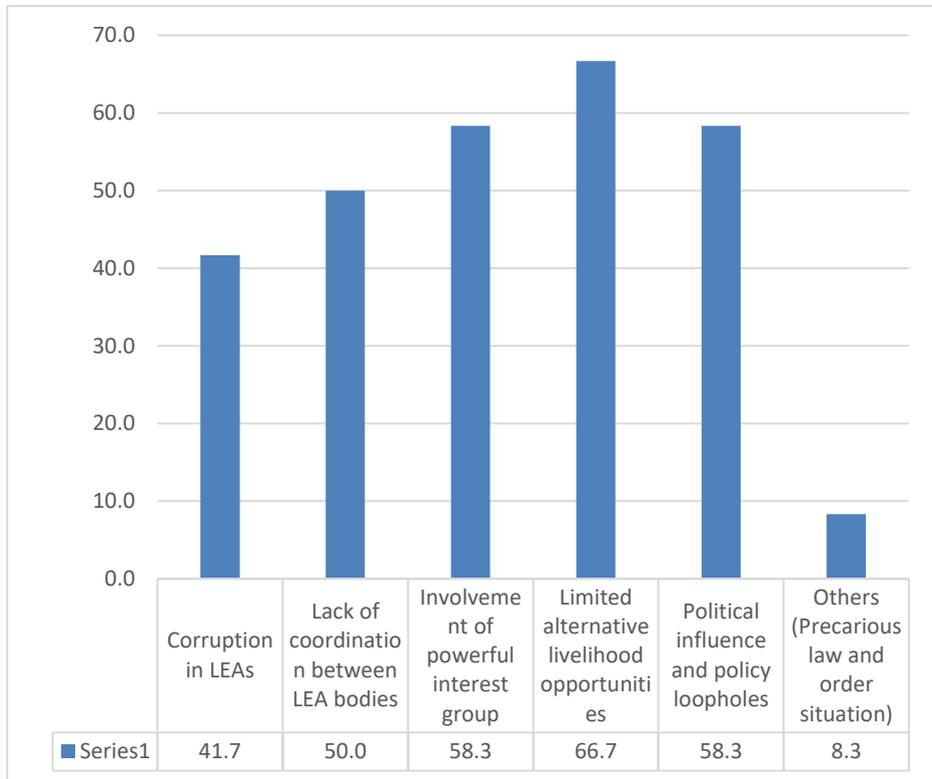
**Figure 13**  
*Enforcement Mechanism Exists*



When asked regarding the biggest obstacle in way of curbing oil smuggling, 66.7% were of the view that local population lack alternative means to livelihood. 58.3% respond ended that there is involvement of powerful interest groups, political influence and policy loopholes. 50% labelled that lack of coordination between LEAs is also an obstacle for effectively curbing smuggling. While 41.7% said that corruption in LEAs and 8.3% highlighted precarious law and order situation as stumbling block for effectively tackling oil smuggling.

**Figure 14**

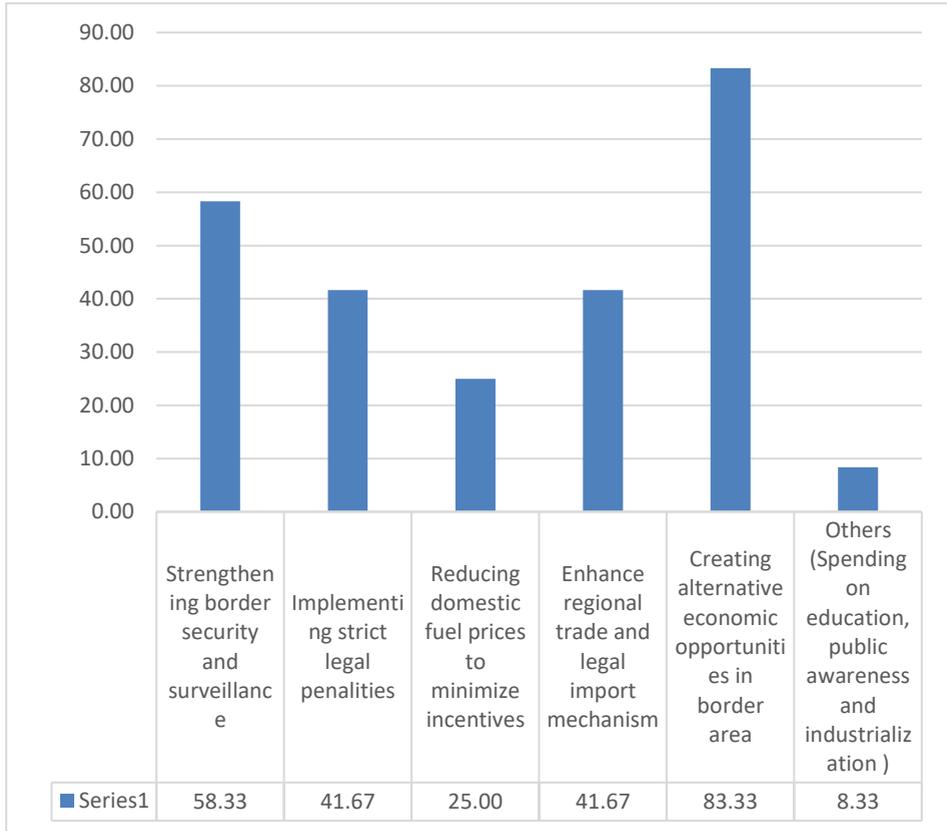
*Obstacles to curb oil smuggling*



With respect to effective measure for enforcement to curb oil smuggling, majority (83.33% of the total) were of the view that creating alternative economic opportunities in the border area is the concrete solution followed by 58.33% responded for strengthening border security and surveillance. Furthermore, 41.67% favored implementing stringent legal penalties and enhancing regional trade and legal import mechanism. While 25% said that reducing domestic oil prices (through subsidies) will minimize incentive for oil smuggling. Lastly, 8.33% highlighted spending on education, public awareness and industrialization as solution to oil smuggling.

**Figure 15**

*Effective Measures to curb oil smuggling*



When the respondents were questioned regarding the feasibility of regulating oil import from Iran to tackle smuggling, majority of the respondents answered that it is feasible and were of the view that Pakistan should negotiate with Iran for formal import of oil a subsidized rate. One respondent when interviewed, explained the reasons for highly feasibility as *“smuggling oil is cheaper, less transportation cost, beginning of economic activity and employment for the populace”*

Furthermore, majority who were interviewed agreed that Pakistan should negotiate with Iran for formal oil import agreement at subsidized rate however, one pinpointed that *“but subject to keeping in view the international sanctions/embargoes on Iran”*

### 7.1.1. Stakeholders’ analysis

This study has identified a number of stakeholders involved in the transboundary oil smuggling, their interests, influence, impact and key concerns regarding the subject illegal activity.



**Table 3**  
*Stakeholders involved in oil smuggling*

Stakeholder	Interests of the stakeholder	Influence of the stakeholder	Impacts	Stakeholder's Key concerns
Government of Pakistan	Ensure energy security Curb smuggling and recover lost revenue \$820M/year Compliance with International obligations (WTO, FATF, US Sanctions)	High influence involving enforcement agencies and policy makers.	Direct impact: loss of taxes and duties, market distortion Positive externality: cheaper oil, saving foreign exchange reserves	Curbing smuggling while struggling to achieve energy security Curbing smuggling & livelihood of insurgency-hit Balochistan 909 km Border management
Government of Iran	Bypass US sanctions Sustain informal trade revenue Maintain regional influence	Moderate (only have control over supply side)	Indirect (geopolitical tensions with regional and international players)	Concerned about losing market if Pakistan formalizes
Local communities	Economic dependency & livelihood vulnerability (2.4M people)	Low (limited say and political power)	High (economic survival risk)	Anti-smuggling measures without ensuring alternative source of livelihood
Cartel of	Illicit profit	High	Direct	Law

<b>Stakeholder</b>	<b>Interests of the stakeholder</b>	<b>Influence of the stakeholder</b>	<b>Impacts</b>	<b>Stakeholder's Key concerns</b>
smugglers	motive (\$1 billion annually)	(Access to border and network)	(control oil supply chain)	enforcement action and asset seizure
Domestic oil market players (OCAC)& Petroleum Dealers Association (PPDA)	Protect market share domestically Revenue loss	Moderate (lobbying power to influence policy makers)	High (refinery operating at sub-optimal level) Reduce investment in infrastructure Social unrest (PPDA strikes)	Price distortion Profit fall Threats \$6B upgradation (Kiani, 2024) Market pressure
International actors (USA, KSA)	Enforce sanctions Regional security Curtail Iran's influence	High (economic & diplomatic pressure)	Indirect (Sanctions curtails formal trade)	Pakistan's alignment with USA/KSA alliance vs Iran (Ali, 2022)
Security and customs agencies (FC, ANF, customs)	Secure border Counter terror finance	Moderate (Operational constraints)	Direct (action and seizure curtails volume of smuggled oil)	Collusion with smugglers (Butt, 2023) Over 90 officials involved Poor surveillance technology Interagency coordination



Stakeholder	Interests of the stakeholder	Influence of the stakeholder	Impacts	Stakeholder's Key concerns
Environmental activists	Protect ecosystem (Daran Beach Turtles and fisheries)	Very Low	Indirect (spilling oil harms habitat)	Lack of integration of environment into policy framing

## 7.2. PESTLE Analysis

Oil smuggling has a wide-range of impacts, from political to economic, social, technological, legal and environmental.

**Table 4**

*PESTLE analysis of the study*

Aspect	Features
<b>Political</b>	<ul style="list-style-type: none"> <li>▪ US sanctions on Iran: Sanctions restrict Iran's legal oil exports and push Tehran to seek alternative markets, making illicit smuggling of Iranian oil into Pakistan a lucrative outlet.</li> <li>▪ Cross-border terrorism: Ongoing militant activity and insurgencies in the border region undermine state control and enforcement, creating security vacuums that smugglers exploit to facilitate illegal oil trade.</li> <li>▪ Regional rivalry and geopolitics: Saudi Arabia/USA/ Israel vs Iran: Iran's adversarial relations with regional powers and Western allies isolate it economically and politically, increasing the incentive to bypass official channels and engage in covert oil smuggling.</li> <li>▪ Weak or unstable diplomatic/trade frameworks, shifting sanctions regimes and lack of consistent border-management cooperation reduce formal cross-border trade options, leaving smuggling as an informal substitute</li> </ul>
<b>Economic</b>	<ul style="list-style-type: none"> <li>▪ Price disparity: 30-40 dollar cheaper per barrel</li> <li>▪ Revenue loss: \$820M/year in unpaid taxes and duties</li> </ul>

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<b>Aspect</b>	<b>Features</b>
<b>Social</b>	<ul style="list-style-type: none"><li>▪ Refinery underutilization: 50–70% capacity utilization of domestic refineries due to influx of smuggled oil in the market</li><li>▪ Saving foreign exchange reserves: \$1.02B/year</li><li>▪ Damage to road infrastructure due to use of heavy vehicles for smuggling</li><li>▪ Dependence on smuggling for livelihood and lack of alternative livelihood: 2.4M Balochis</li><li>▪ Livelihood dependency: 2.4M people in Balochistan</li><li>▪ Social unrest risk: lack of alternative livelihood sources may lead to protests, if crackdown against oil smuggling is carried out</li><li>▪ Community complicity: local population at border region are involved</li></ul>
<b>Technological</b>	<ul style="list-style-type: none"><li>▪ Weak border governance due to outdated surveillance, lack of drones, thermal cameras, AI system</li><li>▪ Hawala network for financial transactions</li></ul>
<b>Legal</b>	<ul style="list-style-type: none"><li>▪ Outdated laws: prevention of smuggling act (1977)</li><li>▪ Outdated legal system: the Prevention of Smuggling Act (1977) lacks provisions regarding modern smuggling methods, networks and financial crimes; lack clear definitions and enforcement mechanism; regulatory overlap;</li><li>▪ Weak enforcement due to complicity and collusion</li><li>▪ International constraints: US sanctions against formal trade with Iran</li><li>▪ Non-alignment of legal framework with international best practices and conventions regarding smuggling and illicit trade</li><li>▪ Lack of enforcement of existing laws due to complicity of stakeholders</li><li>▪ Corruption: 722 currency dealer and 90+ officers</li></ul>

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<b>Aspect</b>	<b>Features</b>
<b>Environmental</b>	<ul style="list-style-type: none"><li>▪ Enforcement capabilities; Agencies (FIA, FC, Customs, Army) has reduced smuggling, but due to corruption and resources constraint, coordination issue is persistent. Limited accountability and transparency</li><li>▪ Environmental damage: due to oil spill, Green Turtle at Daran beach and Fisheries are affected</li><li>▪ Ecosystem damage affecting fisheries which is the only source of livelihood for local population of the costal belt</li><li>▪ Environmental degradation due to unregulated use of vehicles</li></ul>

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## **8. Conclusion**

Smuggling is a transnational illegal entry of goods or people for financial gain in violation of law. This research study examined oil smuggling across Pakistan-Iran Border, its economic impacts, key challenges and viable strategies for mitigation. There are multifaceted impact from revenue loss, fuel market distortion to money laundering and other externalities, both positive and negative. The prime challenge in curbing is deprivation of local population of Balochistan and use of it for livelihood purposes. The descriptive analysis of the data gleaned using questionnaire and interview of various stakeholders indicated that most of the respondents are of the view that more than PKRs 200 billion oil is smuggled annually. Furthermore, majority of the respondents observed that mostly used vehicle for transportation of oil is Zaymad pickup. Most stakeholders involved in smuggling are locals, oil trader, and politically influential people. Also, cash is a major medium used for transaction, chiefly in Pakistani currency. Respondents were not aware of smuggling infrastructure on Iranian side but some knew that small speedboats and pickups are used there as well. All respondents opined that no seasonality exists and oil smuggling occurs throughout the year. The leading factor behind oil smuggling and obstacle in curbing oil smuggling is lack of alternative sources of livelihood. Respondents were of the view that oil smuggling has huge economic and environmental impacts and there is weak enforcement mechanism to curb it. The study further concludes that besides adoptive preventive measures to effectively tackle oil smuggling, there is greater need to create alternative sources of livelihood for the poverty-stricken population of Balochistan to reduce their dependency on it. Keeping in view the economic and financial hardships being faced by Pakistan's economy, Pakistan-Iran oil smuggling appears to be a blessing in disguise rather than a menace. It is saving costly foreign exchange for the state of Pakistan,

providing cheaper energy to national market, and is a source of employment, directly and indirectly, to huge chunk of population and providing support to local economies of the border areas. This study has a theoretical and practical contribution as oil smuggling is less studied as compared with smuggling of drugs and consumer goods. It will enrich border-economy and political economy literature in context of Pakistan-Iran. Furthermore, this study provides empirical evidence of smuggling routes, actors, mechanism of payment in oil smuggling. It will add to global analyses of illicit trade of oil with reference to Pakistan-Iran oil smuggling.

## **9. Strategies for effective solution to Pakistan-Iran Oil Smuggling**

An integrated, multi-layered approach is essential to curb oil smuggling. Government must have short term, medium-term and long-term approach to the curb the menace of illegal trade and smuggling in Pakistan as given below;

### **1. Short Term Strategies**

- A. Increasing border governance and checkpoints: government should deploy additional personnel at border region.
- B. There must be rotation policy for official posting to minimize collusion and corruption after vetting by intelligence agencies
- C. Exploitation of surveillance technology for vigilant border management: authorities must install high-definition cameras at check points, thermal imaging and integrate these to a centralized system. There is need for adoption of drone surveillance and automated sensor system for real-time monitoring. The use of AI must be in place for effective surveillance.
- D. Immediate reinforcement of border security for robust deterrence: different agencies involved in border security must be supported by armed patrols and quick response forces (QRFs) and mobile command centers for timely and effective response to smuggling incidents. Furthermore, cross-border intelligence operations must be in place. Joint border operations by Pakistan and Iran must be materialized.
- E. Increasing public awareness campaigns to mitigate illicit trade: using different media, launch targeted awareness to educate local communities regarding long term economic and environmental impacts. Furthermore, in public gatherings, awareness regarding the stringent penalties must be communicated.
- F. Strengthening cross-border security & control with Iran: there must be temporary bilateral coordination centers at crossing points for



sharing intelligence information regarding smuggling.

## **2. Medium Term Strategies**

- A. Diplomatic dialogues between Pakistan-Iran for trust-building, policy agreement and bilateral relations: there must be trust building mechanism and structured diplomatic dialogue between two states for effective trade protocols. Government can materialize currency swap arrangement to avoid US sanctions. Revive Iran-Pakistan pipeline negotiations which is critical for regional oil security.
- B. Establishment of cross-border trade zones/special economic zones: joint agreement for joint border markets and special economic zones in Taftan-Mirjaveh and Mand-Pishin area to regulate trade and legitimate economic activities. Furthermore, fiscal incentives must be given to business enterprises in these zones like tax holidays etc.
- C. Improving criminal deterrence through reinforcing existing legislation: modernizing existing prevention of smuggling act (1977) and other acts by incorporating stringent penalties and punishments. Criminalize token system of transaction used in oil smuggling. Align laws with FATF standards to criminalize smuggling-linked money laundering. Introduce whistleblower protections laws.
- D. Strengthening trade governance and coordination: Strengthen interagency and interprovincial/ interregional cooperation. There must be a centralized digital platform for real-time data sharing among LEAs to monitor shipments. Organize regular joint operation at border and across provinces in Pakistan. Coordination between FBR, Coast guards, Army, and Customs agency is of paramount importance.
- E. Improving enforcement through training programs: capacity building of LEAs through specialized trainings and using modern technology e.g. blockchain based fuel tracking system, drone operations and use of AI. Government must partner with international agencies like World Customs Organization (WCO) and experts for training module development and imparting standard operating procedures.

## **3. Long Term Strategies**

- A. Dedicated joint Pakistan-Iran task force for combating oil smuggling: both Pakistan and Iran must create a dedicated inter-agency, binational task force especially focused on oil smuggling on the analogy of US-Mexico border enforcement task force.
- B. Formalize trade through Free Zones: declaration of free trade zone

at designated borders. There must be joint border markets. These markets must be supported with adequate infrastructure e.g. Dubai's Jebel Ali Model of Free Zone.

- C. Negotiate for US Sanctions waivers: engage in high-level diplomatic negotiation to secure waiver for Pakistan in oil trade with Iran like India's Chabahar exemption
- D. Strengthening economy of Pakistan through structural reforms: structural reforms like overhauling tax regime, enhancing domestic energy production. Government should work for alternative livelihood for the people of Balochistan especially in agriculture, infrastructure and vocational training of youth.

### 9.1. Limitations of the study

1. Data reliability & accessibility constraints: smuggling being illicit and clandestine activity, access to reliable data is hard to obtain. Many transactions are undocumented which makes it hard to estimate the accurate volume, value and economic impacts of smuggling of oil. Some of the respondents were reluctant to share data due to fear, risk of persecution and other pressures.
2. Small and non-purposive data: the study used purposive sampling technique by selecting individuals with direct experience or knowledge of oil smuggling. It is not evenly spread across geography, different social groups and others.
3. Geographic focus on selected border regions may omit alternate smuggling routes or networks, limiting the comprehensiveness of findings

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## **Annexure-I**

### **Questionnaire: Assessing Pakistan-Iran Oil Smuggling**

1. What is the estimated quantity of smuggled oil entering Pakistan daily/annually? (Provide an approximate figure if known)  
\_\_\_\_\_ barrels per day  
\_\_\_\_\_ barrels per month
2. What is the estimated economic value of smuggled oil per year?  
 Less than PKR 50 billion  
 PKR 50–100 billion  
 PKR 100–200 billion  
 More than PKR 200 billion  
 Don't know
3. What types of vehicles are commonly used for oil smuggling? (Select all that apply)  
 Oil tankers  
 Trucks  
 Pickups/SUVs  
 Motorcycles  
 Other (please specify): \_\_\_\_\_
4. What categories of individuals are involved in the oil smuggling network? (Select all that apply)  
 Transporters/drivers  
 Local traders and middlemen  
 Law enforcement officials (corrupt elements)  
 Politically connected individuals  
 Other (please specify): \_\_\_\_\_
5. Do you have any knowledge about the oil smuggling infrastructure on the Iranian side?  
 Yes (please specify): \_\_\_\_\_

- No
6. What are the primary methods of payment for smuggled oil?
- Barter system (exchange for goods)
  - Cash payment
  - Currency used (select all that apply):
    - Iranian Rial
    - Pakistani Rupee
    - US Dollar
    - Other (please specify): \_\_\_\_\_
7. How does oil smuggling impact local infrastructure (e.g., roads, security, utilities)?
- 
8. Are there seasonal trends in oil smuggling?
- Peak season: \_\_\_\_\_
- Other seasons: \_\_\_\_\_
9. What are the major factors driving oil smuggling? (Select all that apply)
- Price differences between Iran and Pakistan
  - Weak border controls and enforcement
  - Corruption in enforcement agencies
  - High local demand for cheaper fuel
  - Limited economic opportunities in border areas
  - Other (please specify): \_\_\_\_\_
10. Have there been any efforts to document or regulate smuggled oil?
- Yes (please specify): \_\_\_\_\_
  - No
11. What is your rough estimate of the number of barrels smuggled into Pakistan daily?
- \_\_\_\_\_ barrels per day
12. Is there an opportunity cost associated with smuggled oil (e.g., loss of



revenue, environmental costs)?

Yes (please specify): \_\_\_\_\_

No

13. Has the issue of oil smuggling been raised in any formal legislative body?

National Assembly

Balochistan Provincial Assembly

Senate

No

Don't Know

14. Are there any local taxation mechanisms linked to oil smuggling?

Yes (please specify): \_\_\_\_\_

No

15. What are the primary economic consequences of oil smuggling in Pakistan?  
(Select all that apply)

Revenue losses to the government

Negative impact on legal petroleum businesses

Price distortions in the local fuel market

Encouragement of parallel black markets

Other (please specify): \_\_\_\_\_

16. How much tax revenue do you estimate Pakistan loses annually due to oil smuggling?

Less than PKR 50 billion

PKR 50–100 billion

PKR 100–200 billion

More than PKR 200 billion

Don't know

17. What are the key factors driving oil smuggling from Iran to Pakistan? (Select all that apply)

Price disparity between Iranian and Pakistani fuel

- Weak border controls and enforcement
  - Corruption and collusion of officials
  - Demand for cheap fuel by consumers
  - Limited economic opportunities in border areas
  - Other (please specify): \_\_\_\_\_
18. How effective are the existing enforcement mechanisms in controlling oil smuggling?
- No enforcement mechanism
  - Yes. Enforcement mechanism exists (please specify)  
\_\_\_\_\_
19. What are the biggest obstacles to curbing oil smuggling? (Select up to three)
- Corruption in enforcement agencies
  - Lack of coordination between law enforcement bodies
  - Involvement of powerful interest groups
  - Limited alternative livelihood opportunities in border regions
  - Political influence and policy loopholes
  - Other (please specify): \_\_\_\_\_
20. What measures would be most effective in reducing oil smuggling? (Select all that applies)
- Strengthening border security and surveillance
  - Implementing strict legal penalties for smugglers
  - Reducing domestic fuel prices to minimize incentives
  - Enhancing regional trade and legal fuel import mechanisms
  - Creating alternative economic opportunities in border areas
  - Other (please specify): \_\_\_\_\_
21. How feasible is legalizing and regulating oil imports from Iran to curb smuggling?
- Highly Feasible
  - Feasible



- Neutral
  - Difficult
  - Not Feasible
22. Should Pakistan negotiate with Iran for a formal oil import agreement at subsidized rates?
- Strongly Agree
  - Agree
  - Neutral
  - Disagree
  - Strongly Disagree
23. Any additional comments or recommendations for addressing oil smuggling?