

Issues and Crises Emerging from Managing Natural Resources (Oil and Gas) in the Developing Countries

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Abstract—Petroleum industry has contributed to rising the economy of the petro-states. It has also negative impacts on the exporting countries. The importance of the subject is that it has to do with all the sectors of governance and includes all aspects of life. The predominant explanation for the reverse outcomes of managing natural resources has enhanced assortative mating. Previous studies have been made on the relationship between oil prices and the economic growth regardless of the later consequences on all the sectors of all oil exporting countries. In this study, qualitative approach is used, depending on the secondary data, also using content analysis method to explore the main negative effects that the developing countries face in all sectors and all aspects due to managing natural resources. That is, 38 studies and books as well as a report from the World Bank related to the issues that are emerged from governance and marketing of the oil and gas were reviewed. In contrast to what has been conducted in previous works, our findings indicate that governance of the natural resources (drilling, producing and exporting) have created many issues and crises in the developing petro-states. Further, the study ends with a conclusion for further study on these issues and crises so that governments make suitable policies on solving or mitigating them..

Keywords: Natural Resources, Oil and Gas, Developing Countries, Petro-states, Government Policy, Crises, Economic Crisis, and Political Crisis.

INTRODUCTION

This Despite the fact that natural resources have played a great role in providing their countries safe revenues, managing and marketing the natural resources (drilling, producing and exporting) also have reverse outcomes (Campbell, 2019). Oil and Gas are two energy sources considered as extremely crucial for the economic growth and human developments (Nathaniel, S. P., & Adedoyin, F. F., 2020). Many studies have been generally conducted on the impacts of natural resources on the economy of their exporters (Nathaniel, 2021). Nonetheless, few research has been conducted on the negative consequences of governance and exportation of natural resources especially in

the developing countries (Haseeb, M., Kot, S., Hussain, H. I., & Kamarudin, F., 2021). The main purpose of this study is to explore the issues and crises emerging from managing natural resources in the developing countries. This study is going to find these issues and crises in the governmental releases, international organizations' reports, and in the content analysis of the previous works conducted on managing natural resources.

The importance of the subject is that it has to do with all the sectors of governance and includes all aspects of life. The predominant explanation for the reverse outcomes of managing natural resources has enhanced assortative mating. Previous studies have been made on the relationship between oil prices and the economic growth regardless of the later consequences on all the sectors of all oil exporting countries. In this study, we are going to rely on secondary data, using content analysis method to explore the main negative effects that the developing countries face in all sectors and all aspects due to managing natural resources. In contrast to what has been conducted in previous works, our findings indicate that governance of the natural resources (drilling, producing and exporting) have created many issues and crises in the developing petro-states.

The following sections attempt to review the most important works on the issues that are emerged from governance and marketing of the natural resources (drilling, producing and exporting) in some developing countries such as Libya, Iraq, Iran, Venezuela, and Nigeria. In addition to that, some issues of the Arab states of the Persian Gulf (such as Saudi Arabia, Kuwait, UAE, Qatar, and Bahrain) are going to be elaborated. This is because most of the developing countries that their economy is oil dependent have similar issues. Further, the nature of crises in most of such petro-countries shows that the natural resources are among the main reasons for the emergence of these crises. Therefore, the present study tries to review the literature on the main crises and issues facing the petro-states

due to drilling, producing and exporting natural resources.

1. Environmental Issues and Air Pollution

One of the most significant issues that face the environment of petro-states comes from oil drilling, production and refinery operations that contribute to air pollution. Iran's climate, as an example, is considered as one of the world's most polluted one. Most of Iranian territories suffer from poisonous gases, overgrazing and desertification in which oil industry has great contribution in maximizing these issues (Emadodin I., Reinsch T., & Taube F., 2019). Apart from industrial liquid waste and emissions produced by the vehicles, natural resources drilling, production and refinery operations gave a share in polluting the air of Iran (Emadodin *et al*, 2019). Nonetheless, this is the same issue in Venezuela and Iraq where in the latter the air pollution issue is greater for the technologies used in oil industry is older.

During oil crude and natural gas drilling and production, different types of gases and liquid wastes would be generated, among them are Hydrogen Sulfide and other oil liquids. Burning these gases pollutes the surrounding air of the area. The Hydrogen Sulfide, even without burning, is a chemical compound with the formula H_2S is a poisonous gas that affects Iranian people (Boczka G., Fernandes A., & Gałol M., 2017). Furthermore, the liquid wastes of oil and gas production such as Asphalt (also called Bitumen) which is a sticky and highly viscous liquid helps to desertification of the land (Boczka *et al*, 2017). This is the problem of most of oil producing countries such as Iraq, Iran, Venezuela, Saudi Arabia and Nigeria.

The environmental issues in the oil and gas producing countries include air pollution and water pollution for both human beings and the livelihood of all marine animals. Estimations indicate that the losses inflicted on the economy of the oil producing countries as a result of deaths and diseases caused by environmental issues reach more than billions of US dollars in each oil producing country. The losses emerged from air and water pollution partly caused by oil drilling and production happen in all developing countries and even Persian Gulf countries such as United Arab Emirates and Saudi Arabia as well.

The damages of Iraqi oil infrastructure and the Iraqi refineries caused various spills that led to air and water pollution. These issues resulted diseases and deaths to Iraqi population (Ashour A. L. A. J., & Wahab H. A., 2016). Moreover, according to the reports of the World Bank and the United Nations Environment Programme, Iran has been ranked 117th among 133 countries in the environmental indexes (Vahabi, 2011). Further, losses faced to Iran's economy due to the disease and deaths as a result of air pollution reach at least \$900 million US dollars every year (World Bank, 2018). Moreover, the boom in oil-industry of the United Arab Emirates in the 21st century put the UAE in the 29th highest carbon dioxide releaser (Almansoori A., & Betancourt-Torcat A., 2015). Last but not least, oil industry magnified the carbon dioxide in the Saudi Arabia, the largest oil producer of OPEC (Farahat, 2016).

Apart from air pollution, due to oil drilling, production and exportation, sometimes oil spills are happening and makes long-lasting environmental issues. In 1975, the Strait of

Malacca between Malaysia and Sumatra was polluted because of oil spill from Japanese supertanker Showa Maru which caused environmental catastrophe in the Sumatran coastline (Mendez, Forcadell, & Horiachko. 2022). In addition to that, one of the environmental disasters that affected the Guarapiche River in Venezuela was due to oil spills in 2012 that led to water pollution because a pipeline blew up next to the river (Mansurov & Rifailevna. 2021). Moreover, the 1991 Gulf War resulted the largest oil spill in the history that had considerable and irreversible impacts on the livelihood of all marine animals of the Saudi Arabian coastline (Issa N., & Vempatti S., 2018).

2. Neglecting Other Sectors

From the very beginning of the oil discovery, a question of whether natural resources became a blessing or cursing for the producers has stayed as an indecisive question. On the one hand, producing natural resources bring the country great revenues for the country. That is, the natural resources raise the government income, exports, and also reduce unemployment rates by providing more jobs. Furthermore, the oil producing countries can achieve fame for seeking foreign loans since they have guarantee for returning the loans. On the other hand, natural resources are cursing for making people and countries lazy in working in other sectors since the foreign exchange obtained from selling the natural resources is so easy that made petro-states do not plan thoroughly and strategically for other sectors.

To illustrate, having a glance on the budget of most of the developing oil producing countries, this issue proves that exporting natural resources has negatively affected other sectors. The oil revenues dominate the financial income of the annual budget of a country like Iraq. That is, after the collapse of Saddam's Regime more than 85% of the revenues of Iraq come from natural resources (Khalil, 2019). Further, although Venezuela is recognized as having the largest oil reserves in the world, nowadays this country has become a poor country for their oil dependent by more than 80% the government revenues since 2005 (Joëts M., Mignon V., & Razafindrabe T., 2017). Finally, Saudi Arabia has become the 18th world's economy with second-largest oil reserves but still under the threat of economic collapse due to their petroleum-based economy; roughly more than 63% (Alotaibi, 2019).

Together with the easiness in earning foreign exchange, there are some other reasons that influence petro-states to neglect other sectors. Among these reasons are the oil industry occupies an extremely huge area for drilling, producing and exporting. To illustrate, some of the agricultural lands are dedicated for oil manufacturing processes in Iran, Nigeria and Venezuela, although these lands are fertile (Sam K., Coulon F., & Prpich G., 2017). Moreover, despite the large occupation of the agricultural area by the oil industry, it also does so for the industrial and tourist sectors. Oil drilling, producing and exporting mostly requires straight ground. That is, production and exportation of natural resources take more useful areas and thus leaves little for industrial sector as the latter (Sam K. *et al*, 2017).

In addition, the environmental pollution (air, water, and land pollution) caused by oil drilling and production affects both

agricultural and tourism sectors. As explained in the previous section, the oil spills from Japanese supertanker Showa Maru polluted the Strait of Malacca between Malaysia and Sumatra in 1975. This catastrophe in the Sumatran coastline costed millions of US dollar for the fisheries and mariculture resources (Thia-Eng *et al.*, 2000). Moreover, oil spills in Niger Delta region from 2007 to 2015 have damaged the fertile lands of this region that the lands would not be usable for the near future (Sam K. *et al.*, 2017). Due to the water and air pollution caused by the oil industry, the agricultural products will become fewer in quantity and worse in quality. That is why most oil blocks in Iran, Iraq, Venezuela, Nigeria and Syria are unfertile for agriculture.

Finally, Tourism also would be affected by the oil industry since tourism craves beautiful scenery and landscapes. For keeping the security of the oil farms and providing easiness in working, governments do not provide the needs of tourism. In Iraq, the Ministry of Oil prohibits people to enter the oil industry zones (Simons, 2016). In Iran, the authorities arrest those who enter these areas (Ehsani, 2017). Furthermore, one of the conditions of tourism is the existence of attractive scenes and amazing weather (Wilkins E., de Urioste-Stone S., Weiskittel A., & Gabe T., 2018). As a result, tourists do not visit places that have polluted environment. Therefore, it is concluded that the oil industry has negatively affected other sectors.

3. Political Crises, Wars and Conflicts

Most of the developing petro-states encounter revolutionary governments and politicians, dictatorship, succession attempts, political agreements and invasion attempts. Oil rich countries have had tendencies to enter international conflicts. For example, Abadan crisis due to Iranian nationalization of the oilfields in 1950s, Libya's continuous assault on Chad in the late 1970s and 1980s, the Igbo Secessionism in Nigeria in 1970s, Iraq's invasions in Iran and Kuwait, US and their allies existence in the Persian Gulf, US invasion in Iraq in 2003, recent Iranian involvement in the issues in the Middle East and oil pipelines in Eurasia, Caucasia, and Middle east are all related to the term (Petro-Aggression). In this section the relationship between the governance of natural resources and political issues, conflicts, wars, revolutions, and dictatorship is going to be reviewed.

Political issues related to petroleum sector in the developing countries can be traced back to the discovery of oil. The discovery of oil belongs to the occupation era when the great powers like the USA, the UK, France, Italy, and Russia (Soviet Union) invaded the developing countries in the Middle East, Africa, Eurasia, Caucasia and two American continents. After several decades, when the nations became cautious about their natural resources the nationalists tried to nationalize their petroleum. The nationalization of natural resources caused political issues and crises. The Abadan Crisis in 1950s was emerged from Iranian nationalization of the oil blocks. The crisis led to the USA and the UK coup arrangement as a punishment against the democratically elected Prime Minister, Mosaddeq (Maghdid & Din, 2020). The same scenarios

encountered in Libya and Iraq, but the latter failed due to the Soviet relations with Ba'ath Party.

Sometimes the wealth of a region encourages the local people to think of separation especially when the wealth comes from the natural resources as it is easy and long-lasting income. To illustrate, the Igbo separationism in Northern Nigeria arose to secure profits from the petroleum income combined with the ethnic issues acted as a catalyst for the Igbo-spearheaded secession (Babalola, 2019). Although the Igbo secessionist leader, Ojukwu, denied in later years, it was proved that Ojukwu's insistence on separation was under the influence of his knowledge of the extent of the area's oil incomes. The Igbo Secessionism Crisis concluded in 1970 with the loss of more than two million lives with the victory of the Nigerian Central Government (Babalola, 2019). Thus, the oil revenues have influenced local people to think of separation and this caused deep crises in the developing countries.

In some developing countries, the petroleum involvement in political issues reached to the military clashes. The Chadian-Libyan Conflict and Iran-Iraq War in the 1970s and 1980s are suitable examples of the petro-aggressions. During the Chadian Civil War, Libya entered the tensions between the Muslim National Liberation Front of Chad and the Christian President François Tombalbaye. Both of Chad and Libya affected each other's petroleum sector and also used the petroleum revenues for the military activities against each other (Akpan & Umoh, 2021). Moreover, during the Iranian-Iraqi tensions, Iran supported Kurds to have influence on the Iraqi oil industry in Kirkuk. Furthermore, during their war, Iraq and Iran initiated their attacks on the oil fields to destroy the economy of their enemy (Walsh, 2018).

In addition to that, the Oil Embargo imposed by Arab States against the USA, the UK and other supporting countries to Israel in 1973 have had several short as well as long-term impacts on global politics and economy as well (Zulkifli & Hageem, 2022). The Libyan-France and Libyan-Italian relations have been under the influence of the Oil Embargo impacts. The Arab countries and Turkish relations have been under the challenges in the light of the 1973 Oil Embargo (Maghdid, 2016). Further, the First and Second Gulf Wars belong to the wealth of the territory that comes from the oil revenues. The oil reserves pushed Iraq to invade in Kuwait in 1990 and in return the USA has seen this as an opportunity to impose their control over the Persian Gulf.

At the present moment, the oil reserves have played a pivotal role in the extension of the conflicts ignited in the some of the Middle East countries such as Iraq, Syria, Libya and Gulf countries., the USA has attempted to confirm their vital interests in the region by occupying Iraq in 2003 and controlling Iraqi oil exports for about a decade. The ISIS (Islamic State of Iraq and Syria) attacks in the oil rich territories prove the fact that the conflicts have to do with the natural resources. Additionally, the US troops affirmation in the oil fields of Syria is just to control over the economic missions. Further, oil revenue is one of the factors of Iranian involvement in the Middle East crises. That is Iran uses the petroleum incomes to

assure their influence in Syria, Lebanon and the Yemen. Therefore, one of the issues of governing the natural resources is the petroleum involvement in the political tensions.

The oil pipeline routes are other issues that sometimes have had negative influences on the political and economic relations. The superpowers that have interests in some territories do not allow other developing countries to export their oil products as they see the pipelines as a threat on their advantages. For instance, Russia has let the construction of the Baku-Tbilisi-Ceyhan and Baku-Tbilisi-Erzurum pipelines to transport oil and natural gas from the western side of Caspian Sea to Turkey and then to Europe because these pipelines were under the control of Russia (Abdel-Hassan, 2018). Nevertheless, when the USA and the EU proposed Trans-Caspian Oil and Gas Pipelines to transport oil and gas from Kazakhstan and Turkmenistan, Russia warned both ex-Soviet countries not to ratify any agreement with neither the USA nor the EU. Instead, Russia signed political-energy agreements with Kazakhstan and Turkmenistan in 2007 to join the Russian pipeline system and thus put the USA and the EU undersea route to death (Bajrektarevic A. H., & Posega P., 2016).

To conclude, oil and gas became a curse for the developing countries. The existence of oil has produced crises as it has encouraged super powers and the neighboring countries to have the greed to invade the oil-rich countries. Such as what happened in Libyan-Chadian Conflict, Iraq-Iran war, first and second Gulf Wars, US and their allies' existence in the Persian Gulf, US and Russian compete to control over Syrian oil fields and the pipeline tensions between pro-Russia and pro-USA powers. Furthermore, the petroleum revenues have been used as an easy and immediate support to extend the military clashes. Like the Iraq-Iran war, Libyan Civil War, the ISIS attacks, and the Iranian involvement in the crises in the Middle East.

4. Economic Fluctuations, Crises and Sanctions

Managing and marketing natural resources have direct and considerable influence on the micro and macro level of the economy of the petro-states. Nonetheless, the impacts of this sector on the political and economic stability of the petro-states differ from a country to another. The impact of managing natural resources in the micro level is related to the daily life of people. That is, higher oil prices have implications on the gasoline and gasoline purchases are daily needs that have indirect relation for many other daily needs for almost all households. Therefore, larger shares of peoples' budgets are supposed to be spent on different types of fuel. In return, people are likely disrupting against the increases of the prices of their daily needs. Such disruptions affect the economy of the country; therefore, the equation switches to the macro level as it is this literature review's main focus.

In the macro level, the economy of each country is very sensitive to any change inside and outside the country especially for those which dependent on one type of revenue. In this section the impact of administration and exportation of oil and gas on the economy of these countries will be literature in sub-sections such as: international political sanctions, inflation due to high prices of oil, reduction of the GDP due to the fall of oil prices, political economy instability and migration. This

section explains the influences of oil prices in both sides; rising and falling cases in the oil exporting countries. For each sub-section different developing countries is going to be illustrated as actual examples that are negatively affected by managing natural resources.

4.1 International Political Economic Sanctions

The economy of the developing countries is very sensitive to any political tension, especially oil exporting states. Obviously, the economy of developing countries' dependence on petroleum industry has jeopardized their political and economic stabilities. Specifically, when these countries are forced under economic sanctions or oil embargo the influences would be very serious because the petro-states' revenues totally comes from oil trade. The history of the developing oil-exporting countries is rich in the severe outcomes of the political economic sanctions. In this sub-section, sanctions on oil industry of countries such as Iran, Iraq, Libya and Venezuela is going to be reviewed that are elucidated in the literature.

For such significant economic sanctions on Iran, there are some reasons among them; Iranian illicit nuclear activities, Iranian support to Lebanese Hizbullah and Palestinian Hamas as they are regarded as terrorist parties by the USA, and Iranian involvement in the Middle East conflicts (Mraz S., Lipkova L., & Brockova K., 2016). Since 1979, Iran was sanctioned for several times, nonetheless the most significant one was the USA and EU economic sanction in 2012. This is because the 2012 US and EU sanction involved oil industry with all its sides including oil trade, oil companies' investment in Iran, importing refinery machines and even punishing other countries violating the embargo (Mraz *et al*, 2016).

The results of the recent oil embargo represent that Iranian economy has been destroyed in almost all sectors. The posed penalty has minimized the Iranian access to the needed product of the natural resources sector. Furthermore, the prompt for withdrawing oil companies from Iran caused a dramatic decline in oil production for not accessing the needed technologies for the production (Pratt S., & Alizadeh V., 2018). Finally, according to Iranian analysts' estimation Iran's budget deficit for the 2011/2012 fiscal year was at between 30 billion to 50 billion dollars. Therefore, the impacts of the EU and US economic sanctions extended to expensive basic goods for the citizens, and an aging and increasingly unsafe civil aircraft fleet (Pratt *et al*, 2018).

Recently, the United States of America is used to impose sanctions against countries that are opposing the US interests. Iran is not the only country that is sanctioned by the US and their allies. Nonetheless, in this literature the focus is on the sanctions on the developing oil dominant economies. The USA has chastised the Venezuelan oil sector in two ways. In 2017, the US sanctions on Venezuela started with blocking the export of American light crude oil to Venezuela for the latter mixed the US light crude with its heavy crude (Fuentes, 2018). Furthermore, during the Venezuelan presidential crisis in 2019, the USA froze 7 billion dollars of Venezuelan state-owned oil and gas company (PDVSA)'s US assets and embargoed any petroleum trade from or to Venezuela. Therefore, the sanctions affected the Venezuela's economy to the extent that people

were not able to purchase food and other imports which could result in further shortages and worsen its economic position (Weisbrot M., & Sachs J., 2019).

It is noteworthy that most of economic sanctions are mostly imposed by the superpowers to reduce the financial ability of the authorities opposing their interests. For instance, Iraq was economically sanctioned twice. The first time was in 1969 when the Iraqi government nationalized the oil industry and the West (the UK, France and other Western countries) imposed oil embargo on Iraqi oil imports. The second economic sanction which included almost all exports and imports was in 1990s due to Iraqi invasion to Kuwait (Caba-Maria, 2021). The latter was more effective and critical because in 1990s' sanctions the international community boycotted the Iraqi oil, meanwhile the 1969's oil embargo did not last more than a year, and Iraqi government had other ways to marketing its natural resources. The result of the 1990s sanctions on Iraq was equivalent to the loss of approximately %15 of annual GDP (Nathaniel, 2021). Researchers like Dizaji and Farzanegan (2021) argue that if Iraq did not depend solely on oil sector the result of the sanctions would become less severe on both Iraqi people and government.

Finally, Libya is another country that suffered from the economic sanctions imposed by the UN. In 1992, when Libya refused to obey the UN Security Council resolution 731, cooperating with the Lockerbie Pan Am 103 flight investigations and paying compensation to the families' victims and cutting all support for terrorism, the UN Security Council approved the Resolution 748, imposing sanctions to force Libya to obey the UN Resolutions (Barnum M., & Fearey B. L., 2016). Therefore, in November 1993 the UN Security Council released the Resolution 883, embargoing Libyan oil products and freezing Libya's foreign assets, in return for Libyan defiance of the UN resolutions (Barnum & Fearey, 2016).

The sanctions on Libyan oil industry were expected to damage the economic infrastructure of Libya and limited the country's political and military abilities. Prior to the UN sanctions in the 1980s, Libya was among the wealthiest countries and Libyan GDP per capita was higher than some developed countries. Meanwhile, the result of the sanctions was equal to about loss of %10 of annual GDP (Neuenkirch M., & Neumeier F., 2015). Scholars like Gurney Judith (1996) suggest that Libyan dependence on the natural resources was one of the significant factors to urge Gaddafi to obey the West demands in 2003 for the latter put embargo on Libyan main dominant sector, oil products.

4.2 Inflation Due to High Prices

Fluctuations in the prices of natural resources affect the world economy, especially in the developing oil exporting countries. Any rise or fall in the price of oil has positive and negative impacts on the economy of the petro-states. Increases in oil prices can also suffocate the economic growth through their impacts on the supply and demand for goods and services other than oil. Increases in oil prices can minimize the supply of other goods and services because they raise the costs of production and exportation. That is, in the economics science, the high oil prices can shift up the supply curve for the goods

and services for which oil derivatives are inputs.

In this subsection, the negative impact of the increase of oil prices on the developing oil exporting countries is going to be discussed while the next one discusses the negative impact of the fall of natural resources prices. An increase in the oil prices mostly creates inflation in the oil revenue dependent countries. Inflation is a continuous raise in the overall prices of some goods and services in the economy of a country in a particular period. When the overall prices increase, the purchasing power parity falls; that is, inflation mirrors a reduction in the real value (goods and services) in the average of exchange (Nautz D., & Strohsal T., 2015).

Since 2002, oil price has been in an uncontrolled mount. The annual average price has been fluctuating from 31 dollars per a barrel in 2002 to 75 dollars in 2007, 104 dollars in 2008, 113 dollars in 2011, back to less than 30 dollars in 2016 and finally raising to 65 dollars in early 2019 (Chen Y. & Xu J., 2019). As almost all developing petro-states are dependent on the revenues coming from the petroleum industry, thus their economy is growing when the oil prices are rising. Nonetheless, when their economy grows, governments of the oil producers bring more money to their markets; therefore, law of supply and demand dominates their economies. There are three clear examples of the boom of prices in the history of the oil trade; first in 1970s (Arab Oil Embargo), second in the beginning of 1990s (Gulf War), and third in late 2000s and early 2010s.

During the Arab-Israeli conflict, exactly in October 1973, Arab petro-states proclaimed an oil embargo against countries perceived as supporting Israel such as USA, UK, Canada, Japan, Portugal, Netherlands and South Africa. As a result price of oil was on a wild ride moving from 3 dollars per barrel to about 12 dollars per barrel (Karl, 1999). This increase was seen as an opportunity for some oil exporting countries such as Venezuela and Iran to prosper their economies. To illustrate, Terry L. Karl (1999) narrates that the Shah of Iran promised Iranian people "A Great Civilization" and Venezuela's President Carlos Andres Perez expected "The Great Venezuela" by providing more salaries, more employment, more investment and more factories. This spent several years. Nonetheless, inflation occurred and price of goods and services raised for two main reasons. Firstly, they were not industrial countries; secondly, the price of fuel affected the prices of exportations inside and outside the country.

Similarly, identical situations have been recorded in 1990s, 2000s and 2010s. When Iraq invaded Kuwait in 1990 a global oil crisis occurred for Iraq was sanctioned and the petroleum industry infrastructure of Kuwait was destroyed by Iraq and thus oil supply dramatically declined. Consequently, countries like Iran, Libya, Saudi Arabia, Qatar, the UAE, Algeria, Indonesia and Venezuela have seen an economic boom thanks to the explosion of oil price. Meanwhile, the economic growth of most of these did not last more than a year due to the fall of the purchasing power parity for the same reasons of Venezuela and Iran in 1970s. That is, oil producing countries did not take a long term advantage from the increase of their petroleum exports, instead their economy suffered from inflation.

Additionally, the last boost of the prices of natural resources was in in late 2000s and early 2010s. The oil exporting countries encountered two issues. First, like other oil crises, this time exporters were faced with uncontrolled economic fluctuation due to the immediate supply of billions of US dollars. Second, most of the developing petro-states have had wrong expectations for the prices. For example, a country like Iraq has estimated 80 US dollars per a barrel for 2008, nonetheless, after the Iraqi parliament ratified the annual budget, in the middle of the year the oil prices dramatically increased to over 100 US dollars per a barrel (Khalil, 2019). Therefore, there were no strategic plans to use the extra money obtained from the relied price accepted in the annual budget and so inflation affected the Iraqi economy.

4.3 Reduction of the GDP and Political Economic Instability Due to Low Prices

In contrast to the high oil price situations, when the oil prices decrease, the economy of petro states is encountering crises and the total annual GDP reduces. As explained before, the economy of developing oil exporting countries is definitely dependent on the oil incomes. As a result, any fluctuation in the prices of natural resources affects their economy negatively. The petro-states pay for employees' and workers' salaries and investments costs from the oil revenues. Nevertheless, when the revenues reduce due to the fall of oil prices, petro-governments cannot pay salaries and investment costs. In such situations, these governments rely on abstinence and so the rate of unemployment raises and many investment projects may come to a halt for a period of time. Consequently, the GDP per capita curve shifts down until either the oil revenues increase or the governments take debts internationally or rely on the sovereign wealth fund.

The outcome of the oil price decline is more severe when it happens after a dramatic shift up. To illustrate, the last oil collapse from 2015 to 2017 caused unemployment, reduce of GDP per capita, less or no capacity of providing basic services. More minutely, the sharp fall in the oil prices have impacted the GDP of oil exporters in a diversified manner. For example, the 60% decrease in the oil price has resulted in around a 15.2% reduction of the GDP in both of Caucasus and Central Asia (Kitous A., Saveyn B., Keramidas K., Vandyck T., Rey Los Santos L., & Wojtowicz K., 2016). Furthermore, The GDP of Middle East and Sub-Saharan African petro-states have declined by nearly 8.5%. Therefore, the relationship between the low oil price and reduction of GDP is strongly correlated with import dependence. To explain, a country like Saudi Arabia where crude oil exports represent 35% of the GDP, a 60% reduction in the oil price results in a 14.3% decline of GDP (Kitous *et al*, 2016).

Obviously the reduction of the GDP consequently leads to political economic instability in most of developing oil exporting countries. Most of the developing oil exporters in Africa, the Middle East and other developing petro-states use their sovereign wealth fund to tolerate the price shocks but instead this deepens the wounds for their currency power parity diminishes. Although countries like Iraq, Iran, Syria, Saudi Arabia, United Arab Emirates, Libya, Nigeria, Algeria, and

Venezuela encounter political instability, the situations worsen when their oil revenues mitigate.

Some countries like Iraq, Iran, Syria and Yemen have sectarian and geopolitical issues. From time to time the conflicts there arise and with the fall of oil prices began to transform from risk and issue shape to a crisis one (Kaddorah, 2018). For some scholars, one of the reasons of the rise of Islamic State in Iraq and Syria (ISIS) (and finally in Libya) is the governments' inability of providing basic services and employment due to the recent low oil prices apart from the historical sectarian problems in the region (Ipek, 2017). Further, these countries have used almost all their sovereign funds and got international loans from IMF, World Bank and some other super powers but still could not stop the economic shocks (Kitous *et al*, 2016). Therefore, due to the low oil prices, the developing petro-states undergo serious situation, using their sovereign wealth funds and so encountering a political economic instability.

4.4 Migration

According to Longman dictionary (2013) definition, Migration is the process of dislocating people from a geographic region to another with the permanent or temporary settling intentions. This process is often for a long distance from a territory to another, although there is possible internal migration. Regardless of the reasons behind the process, when a political or economic instability occurs in a country, people think of escaping from the turmoils. Among the most important factors that increases migration is economic or political instabilities induced by fluctuations in oil prices. This subsection aims at reviewing first insights on the migration in the developing petro-states' cases that might emerge from issues caused by managing natural resources directly or indirectly.

Among the direct impacts of oil prices on the migration are reduction in GDP and lack of basic services. When the oil prices fluctuate, economic crises occur. When prices rise inflation happens, when prices fall reduction in GDP occurs; therefore, people cannot endure the outcomes and so they leave their countries. These migrations are from oil exporting countries to other non-petro states with low unemployment and high GDP. Moreover, one of the indirect impacts of migration is political conflicts. While oil exporting countries' economies are totally dependent on oil revenues, their political stability is very sensitive to the oil prices and when political conflicts happen people are trying to leave their home countries. Therefore, one of the indirect factors that pushes people migrate is oil price since the latter affects the insecurity of the political status of the petro-states.

To illustrate, petroleum countries like Iraq, Iran, Libya, Nigeria and Venezuela have huge diasporas in the non-petroleum countries like European Union countries or other neighboring countries. For example, more than 1.5 million Iraqis live abroad, namely in Sweden, Germany and the UK. From 2011 to 2015, Iraqi revenues have decreased around 13 percentage points and so the GDP growth rates. Thus, thousands of people migrated from Iraq (Kitous *et al*, 2016). Moreover, nearly 1.2 million Iranians live in countries around the world, especially in the USA, Germany, the UK and Sweden

(Cheratian I., Golpe A., Goltabar S., & Iglesias J., 2019). Apart from the lower oil prices, the oil embargo of 2012 has also impacted their economy. Therefore, Iranians decided to live outside the country so as to find their daily life needs, far from economic fluctuations (Cheratian *et al.*, 2019).

Obviously, the same situations are encountered in each one of Libya and Nigeria. That is, net migration rate of Libya is 14.0 migrant(s)/1,000 population, most of which live in Europe (Italy and the UK). (Saxena, 2019) Not only the Libyan civil war in 2011 but also the lower oil prices are also among the reasons of Libyan migration for the government savings are declining, and the debts will sharply increase. In addition, more than one million Nigerians immigrated to the USA, the UK, Italy and some other European countries due to bad economic situations and political conflicts (Akinbi, 2016). Despite the fact that Nigerian economy is the largest in Africa, it is heavily sensitive to the oil trade. Since 2011, Nigerian revenues have decreased in 10 percentage points (Kitous *et al.*, 2016). Therefore, Nigerians recently try to immigrate to European countries for they do not have confident economy.

Last but not the least, the economic fluctuations in Venezuela led to inflation, reduction in GDP growth, shut down in the public sector, protests and political conflicts. The economy of Venezuela has been heavily dependent on the oil crude revenues. Over the past five years more than 4 million Venezuelan people left their country because of the political and economic crises mainly caused by the lower oil prices. To summarize, a large budget goes to the Venezuela social support program thanks to a high price per barrel (Strother, 2019). The situations were corrupted when the prices of oil reduced from 100 US dollar per barrel to less than 40 US dollars between 2014 and 2016. Further, the country has experienced world's highest inflation rate in 2015. Finally, the USA imposed more economic sanctions on the PDVSA and blocked billions of Venezuelan state-owned oil company in 2017 (Campbell, 2019). Therefore, Venezuelan people were faced with economic and political turmoils resulting the migration of millions of Venezuelans.

Conclusion

This study aimed at providing a thorough knowledge about the disastrous outcomes of depending on oil and gas a main sector for the developing countries. Although the natural resources have had a significant role in guaranteeing safe incomes, managing and marketing oil and gas (drilling, producing and exporting), of course, have opposite outcomes. Accordingly, many investigations have been conducted on influences of these two natural resources on the economic growth of the developing exporters. Moreover, there are many studies conducted on negative consequences of governance and exportation of natural resources especially in the developing countries. However, these studies have mentioned the separate negative outcomes of depending on natural resources. Some of them discussed the fluctuation of economic growth, neglecting other sectors, political issues, political economic instability, or even some of them investigated this impact on migration. Nevertheless, this study tries to fill the gap of literature in this

context to cover all sectors that are negatively affected by managing natural resources in the developing countries.

Consequently, the present work has found four main common issues and crises that occur in almost all developing countries managing oil and gas. The main crises include; environmental issues and air pollution, neglecting other sectors, political crises, wars and conflicts and economic fluctuations, crises and sanctions. This study has found these issues and crises in the governmental releases, international organizations' reports, and in the content analysis of the previous works conducted on managing natural resources. For this purpose, we relied on secondary data, using content analysis method to explore the main negative effects that the developing countries face in all sectors and all aspects due to managing natural resources. In contrast to what has been conducted in previous works, our findings indicate that governance of the natural resources (drilling, producing and exporting) have created many issues and crises in the developing petro-states.

For this purpose, 38 studies and books as well as a report from the World Bank related to the issues that are emerged from governance and marketing of the natural resources (drilling, producing and exporting) in some developing countries such as Libya, Iraq, Iran, Venezuela, Nigeria, Saudi Arabia, Kuwait, UAE, Qatar, and Bahrain were reviewed. This belongs to the fact that most of the developing countries that their economy is oil dependent have similar issues. Further, the nature of crises in most of such petro-countries shows that the natural resources are among the main reasons for the emergence of these crises. Consequently, this study prefers depending on other sectors such as tourism, agriculture and green energy is more constructive and virtuous for oil and gas have disastrous contradictory consequences.

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