



Strategic policy-making for natural resources management in Iraq and control the related constraints to achieve sustainable development between reality and ambition

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Abstract

Natural resources can provide transformational opportunities to support development but ultimately are depleted resources. How can Iraq optimize these limited resources while managing a complex sector while minimizing affect at the local level In the long run, natural resources can transform Countries in the area of development or other forms of income in the case of good governance. Wealth of natural resources can also have a significant affect on the country's sustainable development efforts, as well as many other direct and indirect benefits of the Iraqi economy. But these benefits do not happen spontaneously Indeed, in many cases wealth from natural resources does not turn into long-term sustainable development because of the many real challenges associated with resource-based development. Many of these deposits are located in places with governance-related constraints and significant development-related challenges.

There are also economic challenges in managing the volatile revenues of natural resources and technical complexities associated with the management of these large-scale projects. There are real risks of environmental and social imbalances and impacts. The interests have different and different interests. In many cases, these agreements are surrounded by secrecy, in addition to other reasons. In this paper we highlight the challenges faced by rich countries in natural resources in trying to contain Resources to sustainable development and management of investments in the extractive industries in a sustainable manner and to clarify the complex and overlapping governance of natural resources aspects, as well as in some of the strategies that

help some countries, including Iraq, to achieve success and the optimal use of these resources to achieve long-term development.

رسم السياسات الاستراتيجية لادارة الموارد الطبيعية في العراق و السيطرة على القيود المرتبطة بها لتحقيق التنمية المستدامة بين الواقع و الطموح

الخلاصة:

من شأن الموارد الطبيعية أن تقدّم فرص تحويليّة لدعم التنمية ولكنّها في نهاية المطاف موارد ناضبة، فكيف يمكن للعراق تحقيق الامتلية من هذه الموارد المحدودة، وفي الوقت نفسه إدارة قطاع معقّد مع الحدّ من الآثار على الصعيد المحلي وعلى المدى الطويل، حيث يمكن للموارد الطبيعية أن تحدث تحولات في البلدان في مجال التنمية أو غيرها من أشكال الدخل في حالة الإدارة الجيدة، كما ويمكن أن تكون للثروة من الموارد الطبيعية تأثيراً كبيراً على مستوى جهود التنمية المستدامة للبلد إلى جانب العديد من المنافع الأخرى المباشرة وغير المباشرة لاقتصاد العراق. لكن هذه المنافع لا تحدث بشكل ذاتي، ففي الواقع و في الكثير من الحالات لا تتحول الثروة من الموارد الطبيعية إلى تنمية مستدامة طويلة الأمد لوجود العديد من التحديات الحقيقية المرتبطة بالتنمية القائمة على الموارد. فالكثير من هذه الترسبات تتواجد في أماكن تتضمن قيوداً مرتبطة بالحكومة وتحديات كبيرة مرتبطة بالتنمية، كما ان هناك تحديات اقتصادية في إدارة الإيرادات المتقلبة للموارد الطبيعية وتعقيدات تقنية مرتبطة بإدارة هذه المشاريع الواسعة النطاق، وثمة مخاطر حقيقية بحدوث اختلالات وتأثيرات بيئية واجتماعية، وثمة شبكة واسعة من أصحاب المصالح لديهم مصالح متعددة ومختلفة، وفي الكثير من الحالات تكون هذه الاتفاقيات محاطة بالسرية إضافة الى اسباب اخرى، ففي هذا البحث نسلط الضوء على التحديات (القيود) التي تواجهها البلدان الغنية بالموارد الطبيعية خلال محاولتها تحويل مواردها إلى تنمية مستدامة و إدارة الاستثمارات في الصناعات الاستخراجية على نحو مستدام وتوضيح النواحي المعقدة والمتداخلة لحوكمة الموارد الطبيعية وكذلك في بعض الاستراتيجيات التي تساعد بعض البلدان ومن ضمنها العراق على تحقيق النجاح والاستعمال الامثل لهذه الموارد لتحقيق تنمية طويلة الأمد.

Introduction

Energy is one of the main components of civilized societies and needs from all sectors of society, as well as the urgent need for them in the various fields of daily life. Oil is of great importance to the Arab countries, especially Iraq, in providing necessary funds to support economic and social development plans and improve economic growth especially as it has the greatest impact on the economic activities and fiscal and monetary policies of many countries in general and on the Gulf countries, especially Iraq. Sustainable development as a concept was introduced 30 years ago within the framework of the famous World Commission, chaired by the then Prime Minister of Norway, Harlem Brentland. That Commission has adopted

sustainable development as a governing principle of planning and action. This research is a qualitative study to diagnose the challenges around Iraqi Oil Sector and how to pass these drawbacks and limitations, and the use of a series of decisions of sustainable development to optimize the extractive industries in Iraq.

1. The history and challenges of natural resources and some of government's decisions.

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The invention of steam engine invented by James Watt, which was introduced in the market around 1776, changed the world economy by allowing humanity to extract coal to generate huge amounts of energy, paving the way for the industrial era.

The world economy began to grow nonstop in the modern economic era, Coal and James Watt Another major breakthrough began in about 1850 and developed more in the 1960s, 1970s and 1880s, such as Daimler and Benz and car names that led to one of the first internal combustion engines The use of oil, which was before the internal combustion engines, is used for very limited purposes, but is now used for mass transportation and a third important achievement is the gas turbine, which allowed the use of natural gas to produce huge amounts of energy, power generation and power to operate giant cargo ships and jet operating power Today, this means that thanks to the steam engine, the internal combustion engine and the gas turbine, there has been a series of achievements resulting in the modern energy world, but they are all essentially part of the mining sector and the extractive sector, of course, 70% of the proven oil reserves in the world but they are depleted resources and need a strategy that takes time into account and this is the backbone of this research how to convert these resources to sustainable development, which may be depleted in twenty, thirty or forty years, it is no coincidence that the Kingdom, The United States, France and others have become very interested in the Middle East in the twentieth century because oil is there. It is no accident that the United States has repeatedly entered wars in the Middle East because, in its view, it keeps oil lines open.

And Sun Fossil fuel energy must drive economic development in order to operate in a sustainable manner and take into account responsible management so as to ensure that their working methods, production patterns and use of their products are appropriate for a world in

which economic development is combined with social justice, fair treatment and environmental sustainability.

2. Natural resource governance and transformation of natural resources into sustainable development.[1, 6, 14]

The price of a barrel of oil in the global market is currently about 60 dollars may be the cost of extraction and discovery and pay the costs of workers and capital costs and return on risk by companies about 30 dollars and the difference is the difference between the cost of 30 dollars and the price of a barrel, which is 60 dollars, Taxes and transfers to the government. Thus, a natural resource tax system should be designed by selling it in auctions and by selling rights to extract resources through a transparent auction process. Companies do not usually favor auctions because they force them to compete with other companies with the same amount of knowledge T. Thus, the government does not know anything that can greatly benefit as long as the companies that have the knowledge to compete with each other in an orderly manner and the auction reveals the real value of resources should therefore strike a balance between local rights and national rights.

For example, until 1920, half of Chile's government revenues came from nitrates and nitrate taxes. In 1920, a German scientist discovered how to obtain industrial fertilizers. The price of natural nitrates collapsed and half of government revenues disappeared. Overnight, because of technological obsolescence, we need to save heavily on assets, whether these are domestic investments or foreign assets called savings. In this case, savings are called internal investments. Norway, for example, is considered to be the richest country in the world. The world has created a sovereign fund in which to put part of its oil money and investment in this sovereign fund abroad in countries such as China, Brazil and America It makes sense Norway to take this step because the capital invested internally per capita is the highest in the world Norway is rich in infrastructure Factories, schools, universities and all things that can be bought through invested capital that make the future more productive.

As Norway no longer has what it spends on it, as an internal investment, it decided to invest in China, Brazil or America. A policy that does not succeed in Iraq is because it lacks a lot of internal investment. Therefore, creating a sovereign fund and depositing money abroad is a

stupid step, for example, in Africa with respect to the establishment of sovereign funds and the deposit of funds abroad. Africa has not spared much, but what it has saved has been saved abroad rather than domestic infrastructure. This is a mistake. Poor countries need electricity, ports, better roads, better education and health systems, and all these investments should be properly planned, properly selected and properly evaluated to see which investments were good, bad and learning from failure. The Public Investment Management Index (PIP) is a useful tool for assessing the performance of any country in public investment management processes. Some countries in Africa, Botswana and Asia, Malaysia, have successfully used proceeds for consumption Rather than spending too much. For this reason, Botswana and Malaysia are now prosperous countries with average to high incomes, unlike they were 40 or 50 years ago.

The vast wealth of resources may affect the weakness of institutions. Institutions in resource-rich countries often become better in favor of providing services that Iraq has been through for a few years ago and Now Nigeria is an interesting example. The military in these countries has become part of a system based on Corruption and nepotism, and countries are unable to provide one of the most basic public goods it is security

In Nigeria, the political leaders have a very short horizon, and those in power have to allocate a lot of resources and energy to manage a large and competitive elite. The presence of a national oil company that has authority over it and can be used for nepotism is very valuable and beyond the goal of a national oil company Successful generation produces greater returns for the country in the long run, especially those who want to promote good governance, it must understand these types of political dynamics, but there are some ways in which governance reform can change political incentives. The abuse of power by the official is even more serious. Even if he is not exposed today, he will feel some tension because everyone knows what is happening and may be pursued by someone in the future because of what he did as well. The rules based on the law on how to spend resource revenues can help reduce Politicians' cynicism about common types of corruption. In 2010, a Canadian company called Griffiths paid about \$ 2 million in bribes, as well as some shares in the company to a government official from Chad as part of its bid to secure rights in several oil fields in Chad. In Azerbaijan, investigative journalists also revealed that the government granted a large gold mining license to a union that

included a company owned by the president's daughters. These and many other cases show the importance of disclosing owners of beneficial ownership, which reveals the actual owner of companies involved in the extractive industries sector. This type of disclosure is spread in the Extractive Industries Transparency Initiative (EITI) on several occasions where political elites use agents to officially dealing with the business or money that is earned, corruption comes in the extractive industries in both legal and illegal forms.

Especially in corrupt governance where corruption takes on real systemic dimensions, political elites can manipulate the oil sector without fear of any ramifications of law enforcement. Because they are the ones who shape the rules of the game, so they do not have to worry about their violation, some international NGOs have been created to address issues related to resource governance only, such as Global Witness and the Revenue Monitoring Institute, and a number of non-governmental organizations such as Oxfam and Transparency International In 2010, the Charter for Natural Resources was launched by a group of independent international experts that provides guidance on the key decisions governments face in managing natural resources 2013, the Natural Resources Charter and the Revenue Monitoring Institute have merged into the Natural Resources Governance Institute.

Governance has three basic dimensions related to the exercise of institutions of authority, the first of which is the political dimension of governance, the second is the economic dimension, and the third is the institutional dimension that begins with the political dimension, that is, the process by which to choose who is in power, to monitor and replace them. The second dimension is the extent of political stability and the absence of violence and terrorism. The second dimension of governance is the economic dimension, which refers to the government's ability to formulate policies, implement them and provide public services.

This can also be categorized into two measurable indicators: first, government effectiveness; and secondly, the quality of regulation. The third dimension is the respect of institutions, that is, the respect of the government and the state, that corruption can not be fought by fighting corruption. Governance evidence needs to be addressed across the institutional system. In many countries, freedom of expression and accountability, evidence, absence of press freedom, lack of transparency, absence of the rule of law, and weak regimes, as the case may be, a

country that improves the quality of governance in terms of corruption, rule of law and other Time per capita income is three times higher. On improving governance in reducing child mortality and improving education. Another study also has a very positive impact on reducing inequalities. In Chile, in almost two decades we have witnessed this kind of rise in well-being, largely due to this tremendous improvement In governance. Natural resource governance focuses on the decision-making chain that begins with the discovery of an oil well, gas or mine. The decision to extract is taken in the early stages of this series. Then focus on the best practices in the country to reach a good deal, and then manage the revenues from these resources on the basis of this transaction and in advanced stages of industry focus on optimal policies to implement the basic tasks of investing these resources.

3. Oil industry and mining.[3, 10]

In the 1970s and 1980s, several major oil and gas companies diversified into mining on the assumption that geology was the same but geology was different. Both require long-term, resource-based capital, but there are fundamental differences. All major companies sold their mining projects in the late 1990s or early 2000s. Hydrocarbon production includes only three liquids: oil, gas and water. A prerequisite for the development of any oil, gas or mining project is the availability of funding

Large companies operating in the oil and gas industries depend on their sources of financing. These are three main sources: cash from existing projects and retained earnings, borrowing from the bank against the company's balance sheet if shareholders do not benefit from existing shareholders, their share is diluted. It can be a substitute for selling the shares of the parent company to a major company, entering into a kind of alliance with a major company that has a minority or majority of the company's shares and may bring technology and reliability to the company. In an attempt to reduce the company's parent equity at the project level in the oil and gas industry, it is probably worth nine or 10 billion or even more.

Therefore, this is what actually determines the optimal size before deciding to invest, the company should have done a number of things. It has to drill enough wells to make sure that the reserves are present, and most likely have a third party estimate of these reserves. An independent consultant must be recruited to confirm that they have looked at the well data and

so forth. They must have conducted a full site assessment and land survey. Decide which technology to use and assess the risks and rewards resulting from the use of new technology and perhaps less proven effectiveness with concern over cost overruns. They will have carried out an environmental and social impact assessment and, in our time, human rights impact. They also assessed the need for any infrastructure needed to develop the project and talked with the government about integrating such infrastructure into any national plans or perhaps for funding for infrastructure assistance, such as building a port, a railway or a pipeline. Most importantly, they assessed the availability of skilled manpower at the local or national level and any potential ethnic or religious complications.

And that they have considered housing, medical and school facilities. Whether there will be family homes in the area, or of course they have obtained the necessary government licenses or obtained licensing guarantees and worked with local communities to ensure that job descriptions were given, that they were in line with expectations, consulted on these expectations, cut off future benefit commitments, The relationship between the community and the company is very important and the project's solidity against future changes in government is very important.

We can divide energy sources into two main categories: first, renewable energy, renewable continuously when consumed, and therefore immature. This category includes hydropower, biofuels, biomass, solar energy, wind power and tides. With the exception of biofuels, renewable energy is transformed into electricity that can be used.

This also applies to nuclear energy in the second category of non-renewable energy. Non-renewable energy is produced at a geologic pace over millions of years, but it is consumed and therefore depleted. In this category, fossil fuels, particularly oil, natural gas and coal, and of course nuclear energy, because they depend on uranium. With increasing concern about climate change, renewable energy is becoming increasingly popular, and it has been the fastest growing energy source in recent years.

Hydropower is the oldest form of renewable energy. But its expansion was limited because it depended on the availability of rivers. Oil and gas still provide 57% of the world's energy needs, and if we add coal to that figure, we get more than 85%. That's a lot. According to the

International Energy Agency, by 2040 more than 37% of the world's energy investment \$ 25 trillion - will be placed on oil and gas. This is a huge figure, which is equivalent to about twice the world's largest economy, the United States. Thirdly, many economies, particularly in developing countries, rely heavily on oil and gas revenues. Think of countries like Iraq in the Middle East or Nigeria in Africa where oil and gas revenues are the backbone of these economies and government revenues. If we focus on oil in particular because of the physical characteristics of crude oil, its liquid state, oil is more precious than all other sources of energy For energy content and ease of transmission.

This has had important implications for the development of the oil market compared to the gas market. For oil, there is a global oil market. As for natural gas, we talk more about regional markets. China and India are the second and third largest consumers of oil. As for supply, we distinguish between OPEC producers, non-OPEC producer countries.

4. The legal framework governing for extractive industries [8, 13, 15]

In most countries, the constitution sets out some basic principles on oil management or mining, but does not give any of the many details that govern how these basic principles are actually implemented. For example, many constitutions state that ownership of all inland natural resources belongs to the state and is responsible for the management of such resources In which the interest of the people is established.

The constitutions of the basic constitution are often drawn up and some basic economic rights which have a significant impact on the way the state manages its extractive industries are defined. Some constitutions also include the right to access information or other civil rights that affect how these industries are run in Nigeria.

For example, the Constitution provides that all oil and gas contracts signed by the government must be published and made available to the public, but this is rare. The Constitution is at the level of basic principles and structure. It is Norway, where legislation gives a great deal of detail, giving the government the right to work on different floors in the Norwegian continental shelf. Each year the Norwegian government grants oil and gas licenses in a standard format fully compatible with law and System, and all that changes in it, is the proportion of ownership

among the various actors involved in the project, and the exact coordinates and other details associated with a specific oil patch. Otherwise, all licenses are similar to each other and the Iraqi Ministry of Oil can benefit from the promotional experience to determine the legal frameworks for the oil and gas industry in Iraq, and there are many advantages for this type of regulation. It helps the government maintain consistent action to apply its selected strategy to a range of projects, and reduces the challenges associated with negotiating each project in which bargaining skills can be played.

The reasons why many countries do so are that investors may not trust deals in accordance with For certain conditions. Otherwise, governments may feel they risk losing a chance to invest. When all the rules of the project depend on the negotiation of one long contract, this actually increases the importance of negotiation skills and bargaining power. Countries that lack these things can get bad deals as a result. Over-reliance on complex individual contracts can limit the ability of the state to develop future policies as its expertise and understanding of the sector evolves because many contracts include so-called "Future legislation passed after the date of signature or ratification of a contract has no effect on the specific application of this project.

If a country can limit the risks associated with excessive reliance on contracts, which is to standardize the conditions as much as possible, Law and a licensing system Rather than large and complex contracts, but when this is not feasible, the country can count on the use of a model contract from a core set of conditions and only allow negotiation of certain elements and thus can reduce the amount of differences between contracts and grant licenses on the basis of competitive bidding Another way is also to reduce some of the risks associated with contracting. Competitive bidding can result in uncertainty and an increase in the likelihood that the country will get a good deal for its resources.

The finalization of the contracts ensures that citizens know the rules that apply to their country's oil and gas sector and can increase public confidence in the government and companies operating in the sector. This can provide significant long-term benefits to citizens and their governments.

Most constitutions state that mining rights are the property of the people in the country concerned, and therefore governments authorize companies and individuals to develop mineral and petroleum resources through two types of licensing or contract methods. The reason is that extractive industries require a lot of money and capital to be invested to develop mineral resources. It is also of paramount importance that the industry is largely subject to the leadership of individual companies that often obtain the negotiation or acquisition of mineral rights over the ownership of geological information. This type of relationship is often characterized by asymmetric information between the industrial sector and the government's predictability is therefore essential to the integrity of the rights assignment process.

The second principle is that good attribution of rights should not be optional and this completes the first rule. Everything must be known as far as possible to avoid surprises and changes. The third rule is non-discrimination. It is essential that no parties, companies or individuals receive preferential treatment from the Government in the process of assigning rights. There should be no distinction between state-owned companies and private companies, nor should there be a distinction between foreign and domestic capital. Everyone must be subject to the same rules. The fourth principle is security. This is very important because investment in mineral resources includes, as I mentioned, large amounts of money and long-term commitments, and therefore the rights of investors must be protected. They must feel safe.

The best way to ensure investors' rights is to define rights and obligations from the start of the process, in addition to ensuring that everyone is committed to it. The fifth principle is fundamental and is increasingly emphasized and is transparent. Given the complexity of the negotiations and the sheer volume of investments, transparency is essential. All components of society have the right to access basic rules. The sixth and last principle is the disclosure of information. It is necessary for all to know what mining rights are assigned in a given country, the level of expenditure, winning bids, tenders or non-winning auctions. The society has the right to know the owner of the concessions and contracts related to the development of oil and mineral resources in any country.

I would like to talk about the role that non-governmental organizations (civil society organizations in Iraq or independent media) To promote effective monitoring and enforcement

of rules in oil-rich and mineral-rich countries. Non-governmental organizations such as trade unions or non-governmental organizations can complement the work of the regulatory authorities and become a vital source and more than 50 countries in the world have started to deploy their oil or mineral contracts in whole or in part. Visit (resourcecontracts.org) which publishes the contracts per se.

The area of international law I will focus on is the International Investment Law, a special area that focuses on the protection of foreign investors and foreign investment. The International Investment Law consists of some 3,000 treaties concluded by the International Investment Law that are important for the governance of extractive industries, for two main reasons. First, the investment law limits the ability of governments to regulate or take other steps that affect investments in projects in the extractive industries and other projects. The second reason is that the International Investment Law can remove disputes related to extractive industries from local courts and domestic legal systems and take them towards a more private system of international arbitration. For example, in a lawsuit against the Canadian government, the government committed \$ 17 million to oil companies as a result of those requirements Performance.

Governments can not similarly use investment treaties to protect themselves from renegotiation at the request of the investor. Therefore, it is a one-sided obligation towards States to prevent them from renegotiating deals that may have been unbalanced or poorly formulated when negotiated. Normally, treaties allow investors to take these cases directly to international arbitration, where they are resolved before a panel of three arbitrators who are dismissed from local courts , Domestic law and the domestic legal system. Such arbitrations are usually costly. It is reported that the cost rate is currently approximately \$ 8 million, which does not include the fees and fees of the arbitrators per se. In addition to the cost of the proceedings, the results of disputes are often costly to governments. In 2014, an arbitral award was issued against Russia, in which it ordered \$ 50 billion and the rate of arbitral awards was approximately \$ 76 million over time. Investors. Just over 20 years ago, there are more than 600 known cases, creating awareness and concern about these investment treaties and their impact on investment governance. It is important for governments to determine the optimal timing for concluding investment treaties.

State-owned enterprises play a dominant role. It controls about 90% of the world's total oil reserves (as in Iraq's Sumo Company). It is responsible for about 75% of the production and successful state-owned companies have become industry leaders in the technical and commercial fields. Others also distinguish them from other companies in the private sector alone. They have been used as tools to develop national skills as their employees often turn into leaders within their own countries.

It has promoted the development of small and medium-sized enterprises that serve as service providers for the national company and in the long term. The country has also helped to take advantage of a larger share of financial revenues from the sector by reducing the country's dependence on private contractors, but there are also many risks associated with corporate governance Of the State, and in countries that do not effectively protect themselves, they can de facto become a parallel treasury that would actually disrupt other public financial management procedures. Here is an example. In Venezuela, where the National Oil Company was used for many years not only as an oil company but as a parallel ministry responsible for managing all types of projects that could not be considered an oil company, such as building clinics, building and managing schools. In fact, in some years, Pédiveza has spent more on these social tasks than on its basic oil and gas jobs.

To solve this problem, the role of the state-owned company can be clearly defined and the border between the state-owned and other state agencies is carefully delineated. The authority to grant licenses, carry out business activities on its own, and define the strategy and carry out all the matters required by the State to manage its sector without any kind of restrictions. Typically, the most successful state-owned companies are those that are audited by independent auditors.

5. Oil and gas management systems [9]

Setting the right balance is the essence of an effective financial system. Things may look great on paper, but in the absence of the right management mechanisms, the benefits the country gets may be far below the government's expectations. It is important to note that this section is very important but also very complex. The most interesting and important element of the financial systems of extractive industries lies in the details. Choosing the right financial

system is of paramount importance. The primary objective of the design of the financial system is to maximize the economic returns of the State from the wealth of resources. But that does not mean that the best system for the country is necessarily the system with the largest tax burden. When taxes are too low, the country may be poorer when resources are depleted than before. If taxes are too high, investors may go elsewhere. When thinking about maximizing value, it is also necessary to think about timing issues.

The general system must match as much as possible with the time frame of the country's financial needs. For example, a government that uses a 15% discount rate can voluntarily waive \$ 200 of tax revenue for the next year versus a \$ 180 premium it gets immediately because the value of \$ 200 is lower in net present value. On the other hand, the government favors a discount rate of 8% of future tax revenues.

The concept of net present value is central to understanding the economics of resources and financial systems, and the design of financial systems must take into account the relative capabilities of investor and state risk tolerance. Affect the project economy, and thus the optimal design of the financial system. Companies typically have more information than policy makers, with regard to the geological and commercial components of the project. This further complicates the design of the financial system. , Because the poor tax policy of the extractive sector would cause much greater damage than the bad tax policies in other sectors.

A well-designed financial system cannot be effectively managed and financial systems should strive to simplify without being too simple to fail to achieve other objectives. These fees fall into three categories: fixed fees, unit charges, and quotas of measured profits. For example, a fee of \$ 1 per tonne of ore extracted, as well as the share of the measured profits, cannot be determined by the fee or the value of production. This includes taxes on profits, dividends and dividends, production distribution agreements, resource royalties, special profit taxes, and other revenue collection mechanisms.

The royalties in the extractive sector represent a charge imposed by the resource owner on the extraction of mineral resources. There are two basic types of commodities. Valuation royalties are calculated as a percentage of the value, while the liabilities are calculated on a unit basis by unit of weight or volume, allowing some countries to deduct the cost of a particular project

from the income of other projects. While some countries impose so-called immunization, each extraction project is treated as a separate entity subject to tax. But we will adopt three specific forms of free capital, share capital and full participation.

The free share capital means that the state receives a share of the distribution of profits without having to make any investment in the operations. The transferred capital means that the State actually purchases shares of the project by abandoning certain categories of revenue until the payment of its obligations. Full participation implies that a country participates in the project on an equal footing with other investors, has a proportionate share of costs and receives a proportionate share of benefits, contract-based systems including production sharing agreements and service contracts, a much shorter date than the date of the tax royalty system . The royalty dates back to the Middle Ages, and the tax royalty systems, sometimes called the concession system, formed the basic system of tax-mining in the late 1960s. In the late 1960s and early 1970s, the dramatic rise in the prices of mineral resources in a number of oil-producing countries led to the nationalization of their assets. In the context of this global transformation, Indonesia signed its first production contract in 1966.

The infrastructure for arranging production participation is as follows: Of the oil produced to cover its costs, this is called the cost oil, the remainder is called the profit oil, which is then shared between the government and the group of contractors on the basis of specific percentages of service contracts. Service contracts emerged in the early 1980s. They take various forms but essentially contain a fee for a service-based agreement.

Contractors are compensated for oil sales or resources for the costs they incur, and receive a certain fee. This fee may be a fixed amount determined by the unit of production or a fixed charge calculated on the basis of the expected costs. Another important concept is progressivity, or the notion that the government's share of tax revenues must rise as profits increase. Although this concept is often regarded as the fundamental principle in the design of the financial system, it is often difficult, if not practically impossible to implement, but it is useful to think of this principle when designing financial systems. It usually requires authorities to develop new procedures as the financial framework evolves.

6. Potential environmental impacts of natural resource extraction [5]

In December, the 193 members of the United Nations signed the Paris Climate Convention in Paris after negotiations in which it was decided to set a strict and official goal to avoid double-digit warming and to seek to maintain global warming below the two degrees. And even strive for a temperature rise of below 1.5 ° C. , We have to move within a short period to a global economy based on carbon-free sources of energy such as wind, solar, hydraulic, nuclear and other sources of energy that do not lead to increased carbon dioxide in the atmosphere. The effects may be very complex, including air, water, and soil and can occur at very different time scales. Many of the impacts are project-specific and depend on geological features, terrain, and technology.

EIA is an analytical process that systematically examines the potential environmental impacts of project, program and policy implementation. The first comprehensive effort to develop environmental assessment legislation may be due to the US National Environmental Policy Act (NEPA) passed in 1969 and only to government-funded projects.

First, the authority conducting a domain analysis to assess project size and assess whether a comprehensive environmental assessment, secondly, if a comprehensive assessment of environmental impacts is required, a process of verification is undertaken by the service suppliers who would carry out the assessment. It should be noted that the developer usually finances the evaluation. Thirdly, when the technical assessment is completed, which is often extensive and full of high-level technical details, it is presented in a simplified format for community consultation. Subsequently, comments on the evaluation are sought and a revised statement is issued. The governing authority then decides whether the impact assessment and the developer's impact reduction measures will allow the project to move forward.

7. Revenue Management and Challenges [2, 4, 7, 11, 12, 14, 16]

Extractive resource revenues, as we know, are an important source of revenue for most resource-rich countries, and the degree of reliability varies from country to country. The degree of reliance on resource revenues is measured by the volume of resource income as a share of GDP, which makes three essential features for extractive industry resource revenues from

managing them particularly challenging. They are volatile, and, if large enough, can adversely affect other industries, particularly manufacturing or agro-industries, and commodity price fluctuations and production volumes can lead to volatile budget revenues.

Fluctuations also appear in the way governments estimate their revenues. Some governments underestimate their revenues, while others overestimate them. In the event of depletion of resources there is a need for countries to strike a balance between the amounts of revenue that the current generation should benefit versus the amount to be invested for future generations. One of the most important challenges of managing resource revenues is what is often described as the "Dutch disease" Resource revenues are incurred when they are too large to damage other industries. Unless a deliberate effort is made to diversify the economy by investing resource revenues in the productive sectors of the economy, their funds can be invested in building the country's overall capital stock, such as investment in infrastructure, Education, road infrastructure, health-related infrastructure, etc.

The Natural Resources Fund is a sovereign wealth fund with funds from the oil, gas and mining sectors. The Sovereign Wealth Fund (SWF) is defined as extra-budgetary and state-owned, created to achieve macroeconomic goals, and investing parts of its funds in foreign financial assets. It also has no obligations, therefore, different from other extra budgetary mechanisms, such as development bank, state-owned enterprises, or central bank reserves. With this in mind, the oldest fund was established in Texas in 1876, and the largest fund today is the Norwegian Fund with \$ 900 billion of assets under management. The growth of both sovereign wealth funds and natural resource funds in recent years has been remarkable. According to some estimates, sovereign wealth funds will reach \$ 15 trillion of assets under management by 2020, in the event of good design and management, can help countries avoid the curse of Dutch resources and disease. See, for example, Chile, Norway, and some Gulf states.

The Columbia Sustainable Investment Center and the Natural Resources Governance Institute have developed research on natural resource funds and have shown that good governance of natural resource funds requires six criteria to be met. First: to set clear objectives for the Fund. Second: The establishment of financial rules. Third: Establishing clear investment rules.

Fourth: Clarify what is a good institutional structure. Fifth: Enforce disclosure and auditing requirements. Sixth: Establishing a strong and independent control. The lack of rules is associated with an under-performing financial performance of the Fund. For example, in Azerbaijan, the drag rule was not present. This led to these estimated withdrawals and to government spending on high oil prices.

All this has led to drastic cuts in the budget when oil prices fall. It can be considered that the Fund should invest directly in the local economy. Success requires a strict governance framework that isolates and protects against any political interference. The Norway Fund is a good example of how it is possible. The internal and external directors raise reports of the Norwegian Banking Management Department, a unit specialized in Norges Bank, the central bank responsible for the operational management of the Fund.

The Norwegian Banking Department is reporting to the Executive Board of the Central Bank, which in turn reports to the Ministry of Finance, which is itself accountable to the Norwegian Parliament. The Norwegian Banking Investment Department is under the control of an internal audit unit. The Executive Board is subject to the supervision of an external auditor. The Ministry of Finance itself is under the control of the Office of the Auditor-General. Thus, at each stage of the management system of the Norway Fund, there are multiple layers of supervision and control that have prevented mismanagement and mismanagement of public revenues in Norway.

The issue of income sharing at the sub-national level refers to a type of mechanism by which national government revenues are derived from extractive activities with subnational authorities (region or governorate). Revenue sharing between national and local governments serves many important purposes. Another reason for sharing revenue with local governments is to avoid conflicts. (This chapter can be used to solve the oil export problem between the Iraqi central government and the KRG). An example of this is the experience of Indonesia in Aceh. During the negotiation process, the Government agreed to grant a share of revenues to Aceh, which helped to end the conflict and to give the Territory sufficient resources to reactivate the economy after the war. Other reasons for transfers at the subnational level include redistribution, trying to achieve equity among sub-national governments. For example, some

local governments may not have enough resources to raise funds to finance basic services they have to provide.

We can address the inequalities between LGUs in three types of decentralization: first, the decentralization of administrative functions, To national government offices at the local level, and supervision and oversight remain in the hands of the national government. We also have another kind of mandate, where we can find national governments that move decision-making and financial authority to semi-autonomous, institutional and governmental institutions. The latter exercises intensive decision-making powers, but supervision and authority remain in the hands of the national government. Another type of decentralization is the transfer of powers. And refers to the transformation of decision-making and financial management to sub-national governments such as regions, regions, cities and municipalities. Local governments elect their officials and exercise enormous powers. Another problem is unclear sharing rules.

Linkages between local and international companies involved in extractive industries can be trained. People can be trained from different levels, from the professional and technical level to technology experts, engineers, geologists and scientists. At each level, these skills are needed, which is the benefit of this training and this expertise on the local economy, Which could benefit other sectors as well.

For example, we can train engineers and geologists exclusively concerned with oil and gas. Lawyers, accountants, and others can also be trained and equipped with skills that can be used in other economic areas. The idea of local content is to establish alliances between local companies and foreign companies and to allow the transfer of know-how in the areas of strategic skills is to strengthen the local company. The second relates to the expansion of the local company. The third is the establishment of a local company that transforms into a world-class company (as in Iraq's Sumo Company). Resource-rich countries in the developing world typically have less innovation, technology, research and development than countries that have investment companies.

Foreign companies in this matter despite the demand for local content Local residents do not have the ability to build technology themselves there if four major channels of technology deployment or transfer if the first channel is expressed through the offer or meet That is to say,

seeing someone who does something gives you the ability to learn and repeat this and get it with the companies that provide the goods and services as a contractor and the second channel for technology diffusion or transfer is the mobility of labor ie people move from one company to another and from one industry to another and transfer skills Which they learned from one place to another.

There are four steps to get a good public investment project , This is the easy part the ability to design good projects, such as good airport design and good road system design. These skills can be purchased in the international market at a relatively low cost. There is a competitive market in this area, so the design phase is easy. After designing a few projects, the difficult step to be done internally is the selection process. By Botswana, the establishment of a system of checks and balances that prevented the selection of stupid enterprises.

Consequently, all projects were subject to a cost-benefit analysis by technical experts. If the project did not meet the required return threshold, it was not implemented. This is very important. In addition, there is good implementation of the project. Rwanda is the most successful country in Africa in recent years. It is the only country that has recorded the fastest pace of poverty reduction in Africa. Personal accountability for the successful implementation of a project is very important and rare. But learn from Rwanda and the last stage in public projects is assessment. If you do not assess whether things are successful or not, you will not be able to improve your system. Public investment and private investment are not alternatives. They complement one another.

The government builds roads and the private sector invests in trucks Roads, we in Iraq need a complementary process of private investment and that the main body that can build the private investment sector is the central bank because it oversees the financial sector, so the task of the central bank in a country rich in resources to build the capacity of the cat P financial allocation in the event of deposits has become the government has a surplus in the years in which the price of the commodity is high.

The marginal capital cost of increasing the power generation capacity of an existing power plant is less than the cost of building and since the investment of companies involved in the

current and future extractive industries in infrastructure is expected to reach \$ 2 trillion by 2030.

For example, when managing revenue volatility, the central bank is considered the best government agency to carry out this task. Therefore, the Central Bank must be involved and its understanding that this is his job.

We must reorient our economies towards sustainability and justice if we are to maintain our integrity and prosperity. In September 2015, all Governments in the world adopted the so-called 2030 Plan, a framework of global cooperation on sustainable development and 17 specific targets for sustainable development.

The 17 sustainable development goals are large and bold objectives centered on the three pillars of sustainable development. The first pillar of sustainable development is economic prosperity: eradicating extreme poverty, defeating hunger, ensuring access to basic social services such as health and education, ensuring access to basic infrastructure for safe water, sanitation and electricity, decent jobs and quality infrastructure; the first pillar is the economy. The second pillar of sustainable development is social justice: that the entire society can enjoy the benefits of modern technology and economic prosperity in a world that is generally prosperous but contains two billion of the poorest of the poor, which is neither safe nor fair, and not the world we want. The third pillar of sustainable development objectives is environmental sustainability: that is, our cities are safe and environmentally resilient

Conclusions

Through this research, extractive industries in many countries (may be Iraq is one of them) are a missed opportunity rather than a tool for sustainable development due to problems of corruption, imbalances in the political economy, macroeconomic volatility, environmental damage or social risk, Through which to achieve a lot of success in Iraq through the formulation of strategic policies for the management of natural resources to achieve sustainable development as in the following conclusions.

1. The strategy should be comprehensive and integrated, because many countries have unfortunately dealt with extractive industries in a fragmented manner, addressing tax

provisions sometimes and then environmental provisions, without thinking about how to link these parts. The Iraqi government needs a starting point for a comprehensive strategy that looks at how These parts are a way to pave the way for optimization in all other decisions

2. The importance of transparency in the management of extractive industries, but it is necessary because if the citizens, who are the first concerned with the future of the country, do not have the opportunity to know what is happening and influence the decisions in a positive manner, such as civil society, research institutions and media.

3. The legal system works best in these industries if it is coherent. If there is a set of rules that apply to all and if exceptions are limited, the legal framework works best, especially if the Iraqi government invests in developing policies and developing institutions that will actually be responsible for implementation.

4. The importance of financial conditions and the basis here is to find a sustainable balance of benefits between the private sector and the state If the financial system does not provide enough incentives for investment, the country will find a few companies are ready to invest, leading to the development of the industry is extractive that the financial system must be progressive and have some flexibility.

5. Income is the most important benefit from natural resource projects of the Government. Therefore, proper government revenue management is of great importance to the benefit of present and future generations. Should it be spent on consumption or investment and investment, Should investment be made internally or internationally, Natural and other policies.

6. Strengthening linkages between the extractive sector and other economic sectors and increasing non-financial benefits. It involves promoting direct and indirect job creation, strengthening linkages with other sectors such as the economy and national industry, and sharing infrastructure to enhance access to important infrastructure for citizens as well as other stakeholders in the economy, such as investment in education and other important factors in natural resource management for sustainable development.

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