

Localization of the Sustainable Development Goals in the Persian Gulf Marine Environment: Challenges and Opportunities

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Abstract:

Localization of sustainable development goals could reasonably provide a framework to how local and regional governments meet their requirements in respective jurisdictions. Due to the importance of the environment protection in the process of the “sustainable development”, it is crucial for the states to include sustainable development goals in their regulations, laws and policies. In this perspective, presenting new approaches is utterly requested to protect the maritime environment of the Persian Gulf from destruction and degradation. Undoubtedly, there are a number of challenges and obstacles regarding the localization of SDGs in this region that the

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present paper will examine the strategies for addressing them. In fact, if environmental rules are internalized as a part of the domestic legal system, they will become more prominent and will be more respected. For this reason, one of the fundamental goals of this paper is to elaborate a suitable methodology to explain and design localized indicators of development sustainability at the regional level of the Persian Gulf. The main goals of sustainable development are to attain durable development in maritime areas in which efforts are made to provide a balance between economy, community and the marine environment.

Keywords: Sustainable Development, Marine Environment, Persian Gulf, International Environmental Law.

Introduction:

Central to the analysis is the concept of sustainable development as a principle of integration between environmental, social and economic considerations, with a particular focus on its evolution and progressive refinement since the publication in 1987 of the report *Our Common Future* of the World Commission on Environment and Development (World Commission on Environment and Development (WCED), 1987). Sustainable development (or sustainability) is a decision-making framework for maintaining and achieving human well-being, both in the present and into the future. (Dernbach & Cheever, 2019) and consists of two parts: sustainability and development. Hence, sustainable development means to preserve sustainability in things, natural environmental protection, social balance through growth change processes and satisfying reasonable human needs (lele, 1995, p. 608). Sustainable development is considered as one of the main concepts of international environment law. By talking abstractly about development in a community, we mean a development in various dimensions. Certainly, a development community is the one in which the development has sustainability within various aspects .(Ghali, 2002). The origins of sustainable development have been traced to “ancient

civilizations and traditional legal systems” all around the world (Gabčikovo-Nagymaros Case, ICJ, 1997).

The concept also has roots in European land use and forestry laws, some of which date back to the Middle Ages (Bosselmann, 2005, p. 57). Environmental and conservation laws of United States and other countries also provide a point of departure for sustainable development (Cordonier & Khalfan, 2004). As sustainable development is a framework for making decisions based on the integration of development and environmental objectives or considerations, it is important to understand what “development” means in this context. Americans tend to be uncomfortable with the term “development”. They often see it in terms of the conversion of their favorite woodland or field into housing or a shopping mall that is after all, the term that is often used when woodlands and fields are ploughed under and paved over. However, development has a different meaning at the international level, where the term sustainable development is originated in. Development came into prominence as an international project at the end of the World War II, when a series of international agreements and treaties created an architecture that supported and fostered it. The development itself encompasses not only the economic development, but also the social development or human rights, and it relies on peace and security (Dernbach J. , 1998). The overall objectives of alleviating poverty, humans’ suffering and improving their condition are generally the desired end products of development process (Sarkar, 2009). This model has been successful in many ways e.g. it has helped preventing a third world war (Mandelbaum, 2002), has fostered economic growth, and has improved living conditions (United Nations Environment Programme, 2011).

The concept of “sustainable development” was first introduced by Brundtland (1987)⁵, who defines development as “sustainable” if it “meets the needs of the present time without

⁵ Brundtland, 1987. *Our Common Future*, World Commission on Environment and Development (WCED) Oxford: Oxford University Press.

compromising the ability of future generations to meet their own needs”. Sustainable development implies minimizing the use of exhaustible resources, or at least ensuring that revenues obtained from them are used to create a constant flow of income across generations, and making appropriate use of renewable resources (Bellù, 2011, p. 5).

As a preliminary consideration, it is nevertheless widely acknowledged that such instruments do have certain “legal and behavioral effects” whether or not one accepts the considerable scholarly supports available for reconsidering the role and normativity of non-binding instruments in international law (Handl, 1998) (Friedrich, 2013) (Brunnee, 2008), and they may carry a strong instrumental value (Brunnee, 2008) both at the international or national level, and for private actors (and potentially in different scales at the same time) (Friedrich, 2013).

After the approval of Agenda 21 in 1992, one of the challenges has been how to make the policy programs more efficient and purposeful in various countries to achieve sustainable development and strategy improvement in this field.

Following Agenda 21 and specifically the Rio final act, which was considered as an epigraph for the governments, we are led to the Agenda 2030 now. The 2030 agenda is the newest Sustainable development goals plan and has 17 goals and 169 targets. One of the 17 goals in 2030 Agenda, which governments agreed on in September 2015, was to find a path towards constant conserving and utilization of the oceans, seas and marine resources to achieve Sustainable development that is determined in goal No.14. These goals nominated a coherent collection of the countries’ duties until 2030 and declared a guideline to solve the global problems in poverty, healthy water, environment, justice, energy and training using previous experiences namely the millennium development goals. However, environmental problems mostly root in the method of applying Sustainable Development Goals in the countries that face with difficulties in guaranteeing the implementation of

Sustainable Development Goals within their goal frameworks. Therefore, there is a need for establishing natural international committees in order to localize the implementation of Sustainable Development Goals which accommodate these goals in various fields like:

- economy,
- social and environmental development plans,
- raising democratic contribution and reinforcing humanity,
- associations and civil communities,
- simplifying the relationship between national humanity constitutions and the international ones,
- encouraging information evaluating mechanisms in the methods of achieving the Sustainable Development Goals,
- conducting local training courses and regional meetings,
- reviewing the policies of natural resources and environmental utilization policies etc.

All of the above items are efforts that have to be made nationally and internationally in order to localize the Sustainable Development Goals.

Thus, we first start with an explanation of the challenges and hurdles in generating sustainable development in protecting the Persian Gulf marine environment, then proceed to providing detailed descriptions of the suggested methods and their challenges for implementing sustainable development in the maritime environment of the Persian Gulf.

1-Geopolitical features of the Persian Gulf and its alignment with sustainable development

The Persian Gulf is a unique model of a geopolitical region, which contains nations that are culturally different but harmonious in terms of political, strategic and economic issues. The region includes Iran, Iraq, Saudi Arabia, Kuwait, Oman, the United Arab Emirates, Qatar and Bahrain (Mojtahedzadeh, 1994). Since the Persian Gulf has been one of the busiest areas

in marine transportation in the past, wastes from ships, discharge (depletion) ballast water, the rest of the oil from leaking and washing the rooms and facilities (installations) of the powerhouses enter it and as a result pose a serious threat to the region's marine environment especially its living organisms.

Severe pollution in the marine environment of the region is also a consequence of the lack of ballast water and waste centers in the region. Also, this region has been witnessing three periods of war. Two of these periods resulted in a large number of broken and destroyed ships buried beneath the sea. These ships are problematic for commercial shipping, handling of loads and threats the environment due to dangerous materials in their hulls in general. Therefore, the lack of proper planning to clean the area is the other challenge in this regard (Shojaei, Farshchi, & Dabiri, 2008) and in order to implement a sustainable development program in the Persian Gulf region and the Oman Sea, support and protection of the maritime environment is an integral part. However, if the issue of protecting and exploiting living resources including various maritime is not considered in a program, it will not be seen as a complete one (Talaie, *The Persian Gulf in a Pollution Bed*, 2002). It is obvious that the Persian Gulf is a semi-closed sea and it is very sensitive to environmental changes. This and the unique geopolitical conditions, make the Persian Gulf unique in compare to other maritime environments in the world. Protecting this region against the mentioned risks in this article, is not a single-state-task. All the countries located around the gulf have to work together and coordinate their efforts to meet these challenges.

Accordingly, it is possible to seek the help of the strategies mentioned in the goal 14 of World Agenda 2030 in order to protect and make sustainable use of the Persian Gulf and solve the ongoing challenges. The Persian Gulf countries ought to preserve the environment of this region as knowingly as possible via using the paths to the sustainable development. They should prevent and significantly reduce marine pollution, sustainably manage and protect marine and coastal ecosystems to avoid

significant adverse impacts, increase the economic benefits to small island developing states and least developed countries from the sustainable use of marine resources, increase scientific knowledge, develop research capacity and transfer marine technology, taking into account the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology, in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular small island developing states and least developed countries, and at last, enhance the conservation and sustainable use of oceans and their resources by implementing international law as reflected in UNCLOS, which provides the legal framework for the conservation and sustainable use of oceans and their resources, as recalled in paragraph 158 of “The Future We Want”.

One of the ways to align the Persian Gulf marine environment with sustainable development is to use relevant targets of documents such as the 2030 Agenda to strengthen sustainable development in this area. The goal 14 of this document protects coastal and marine areas based on the best available scientific information through considering the different capacities and national levels of development in order to prevent and significantly reduce the types of marine pollution.

2-Challenges and Barriers to Sustainable Development in the Protection of the Persian Gulf Marine Environment

2-1The challenge of sanctions against countries on the Persian Gulf Marine environment

Sanctions are one of the tools to apply international pressure to change the behavior of governments (Ghamami, 2014). In summary, there are three general reasons why economic sanctions are applied:

1. They tend to influence the policies of a government or even change the regime,

2. They are penalties for government policies,
3. They show the abstract symbolic protest against a government policy (Carter, 1987).

In the scope of environmental protection, environmental problems are associated with the level of development as well as economic problems in the country. Economic sanctions are often criticized because of their negative effects on human rights (Petrescu, 2010).

There raise significant concerns with the increased sanctions and parallel expansion of the destructive effects of these restrictions on the people of targeted countries (Zamani & Mazaheri, 2011). Knowing the financial problems arising from the sanctions which push people into poverty, it is far from a realistic viewpoint to believe that they will take care of environmental issues. Logically, when a country's economy is weak, environmental issues may entitle a lower priority compared to other issues (Carussi, 2000).

Undoubtedly, environmental issues and development are examples of human rights in contemporary international law and belong to the category of the third generation. Ultimately, human life is closely related to his natural life or environment, and human rights can barely be ensured in a polluted environment. The fundamental right to human life is destroyed in a polluted environment (Dashab, 2009).

Unilateral sanctions imposed by countries and some other international organizations including the European Union, are major obstacles to the realization of this principle. Thus, it is naturally concluded that sanctioned countries are no longer able to enhance the quality of their environment, development and technology (Mashhadi & Rashidi, 2015).

Since the transfer of environmental technologies is expressed as a commitment of developed countries against developing or less developed countries, these technologies are also mentioned in international documents, including Agenda 21, the Rio

Declaration, and the Convention on Climate Change. However, due to the non-binding nature of declarations and orders, they are not binding on environmental conventions and are not particularly enforceable, while having a significant impact on the development of international environmental law (Poorhashemi & Arghand, 2013)

The most important EU's decisions on sanctions of which can significantly affect the Persian Gulf's marine environment especially regarding Islamic Republic of Iran as one of the biggest involved countries out of its eight states, go as follows:

1- The EU's resolution on 23 January 2012 about the prohibition of importing, purchasing or transferring crude oil, oil and petrochemical products or selling and transferring of equipment to the Iran's oil and petrochemical industry (Council Decision.2012/35/CFSP, 2012).

2- The EU's resolution on 15 October 2012 about the prohibition of importing, purchasing and transferring the Iran's natural gas (Council Decision.2012/635/ CFSP, 2012).

The imposed restrictions of these decisions consist limitations on importing the Iran's oil and gas and oil-related goods to EU, prohibition of selling key equipment and technologies to energy industries, manufacturing and selling oil tankers and providing them with flag, insurance and other services, allocating loans and credits for the Iran's energy resources development, investing and acting new contracts in the path of developing the oil and energy section, and the expansion of the sanctioned people list and properties seizure, etc. The imposed sanctions against Iran by Security Council, EU and countries like US are similar to the above-mentioned restrictions and they targeted parts which have vital roles in the Iran's economy and advancing the nuclear program. This includes the energy sector in which, the sanctions in addition to limiting Iran in proper use of energy resources, affected the economy and lowered the country's development level. (Mashhadi & Rashidi, 2015)

2-2 The Sustainability Challenges of Energy Policies on the Persian Gulf Marine Environment

It is obvious that achieving sustainable development is a huge challenge and requires making strong political decisions in this regard. To implement a sustainable energy system is one of the most important challenging issues for the future of the entire world. The general criteria of recognizing the sustainability of energy policies are providing the desired balance among three aspects of sustainable economic, environmental, and social developments (Salimi Torkamani, 2014).

According to the Brundtland Commission, the concept of sustainable energy is achieved through overlapping of the three areas of environment, energy and development, and in the opposite sense, there would be a possibility of conflict between the provisions of these three areas which can prevent the materialization of sustainable development. At the international level, international development law policies and international energy law are largely in line, and they are contrary to international environmental law policies. Resolving this problem requires the international community to find appropriate solutions to achieve the goals of these three interrelated areas i.e. energy supply security, economic growth and environmental protection (Etherington, 2009).

One of the major measures that countries are needed to take at national and international levels to advance the position of energy components in the field of international law of sustainable development, is the adoption of a comprehensive strategy for energy and environment. In light of the issues raised, those policies can be adopted that will lead to progress for countries in achieving sustainable development. Although the situation in the countries is certainly not the same, there are some common developmental features that can pave the way for sustainable development (Dippenaar, 2004).

Since most countries with oil and gas resources suffered low political, economic, and technological capabilities (Aryankia, 2009), changing energy policies in order to attain sustainable development goals, requires a strong reduction in the dependence of fossil fuel-dependent countries on fossil fuel production and the use of oil, and the change in the core economy of such countries (Lysterand & Bradbrook, 2006) . Considering this understanding, the nature of global patterns of energy production and consumption, has always posed serious challenges to achieving sustainable development goals with its relying heavily on fossil fuels (IERD Secretariat CANMET Energy Technology Centre, Energy and Sustainable Development, Energy in the Context of Sustainable Development, 2007). One of the characteristics of sustainable energy is that it produces less greenhouse gases in general and per capita (National Science Board, Building a Sustainable Energy Future, 2009).

Unstable processes in energy production and consumption have caused many environmental troubles, the most important of which are climate change, acid rain, ozone depletion, nuclear radiation, urban air pollution and oil pollution in seas caused by oil and transportation industries etc. Meanwhile, developing and developed countries were always pointing the finger at each other; developing countries accusing developed countries of destroying the environment due to excessive consumption caused by intensified energy demand, and developed countries blaming developing countries for environmental degradation due to their increased consumption caused by population growth. These claims sound true (Holm & Arch, 2005).

Nowadays, managing the interaction of energy and environment is one of the sustainable challenges against decision-makers in the field of energy. Both governmental and private sectors should cooperate to succeed in such management and modify the entire energy sector, and particularly the United Nations must play a significant role in this matter (Grob, 2004). Despite significant advances during the last two decades and provision of

the vast spectrum of sustainable energy services, exploiting efficient energies is troubled due to some barriers such as high initial costs and lack of desired financial supplies (Chakroun, 2007). On one side, very few policies, programs and projects are dealing with improving energy efficiency in developing countries and on the other hand, a small number of developed countries step forward to create sustainable interests in the energy field of developing countries (Holm & Arch, 2005).

Consequently, in case we write long-term development plans and seek development according to the capacity of the region's ecosystem and environment, and perform the locating with the right studies and environmental considerations, there would be no contradictions between the development of energy policies and marine environmental protection in the Persian Gulf. Then, we can keep pace with environmental protection as we develop, and this is a process that has been achieved in countries like Australia and New Zealand as they preserved their environment while achieving development. Of course, this requires a thorough cognition of the environment and understanding its capacities. However, these items are somewhat overlooked in the countries of the Persian Gulf due to the lack of cooperation and coordination among them, strategic condition of the region which affect its environment, and the lack of diplomatic and close relationships among the countries of the region that ended up in initiation of wars in several times. Thus, the positive and negative effects of any project from the environmental protection point of view, must be evaluated by a specialist because it is the expert who has the knowledge and can price natural capital in a way that is beneficial in the long run. Also, countries need to act on the planner's plan, cause weakening the environment to achieve development is somewhat inevitable. (Nazeri & Zafarani, 2006)

2-3 Challenges of implementing international and regional conventions for protecting the marine environment by the countries of the Persian Gulf

International environmental and regional laws have been weak in developing countries because they have often been general, ambiguous, contradictory, and moderate⁶. Since the exploitation of natural resources has led to environmental degradation, no effective measures have been taken to protect these resources. This is due to the insufficiency or inefficiency of environmental rules and the inadequate measures of judicial authorities and the ease of court decisions. It seems that the verdicts in this area should be issued more carefully because the category of the environment is of human rights that originate from natural human rights.

The rules of international environmental law are among the most important regulations for governments and nations, as they are not only a fundamental principle of the ecosystem, but also a substantial principle of national sovereignty and protection of human nature. International environmental law seeks to reach a consensus between governments and international organizations on the prohibition of environmental damages and protection of the environment in accordance with national sovereignty. Hence, neither environmental rights nor environmental educations can

⁶ Governments have taken steps to support the environment, including the implementation of administrative, disciplinary, civil, and penal enforcement. In order to attain the desired goals of environmental protection, it is necessary to provide the means by which the Iranian legal system can be transformed in this area. Developing new regulations or revising existing regulations is the first step in this area. This has a major advantage for the government of the Islamic Republic, as the development of new environmental regulations and the revision of previous regulations are considered directly and indirectly in line with fulfilling the obligations arising from international environmental treaties to which Iran is committed.

be successful while there is no power to deal with uncertain economic development, no appropriate alternatives are foreseen for economic growth and the development, and global environmental protection does not turn to concern. It is crucial to mention that the International Court of Justice in some judgment recognized *Erga Omens* rules in environmental protection matters. The decisions of the Court emphasized the implementation of environmental conventions, including multilateral marine environmental agreements (Khalatbari Y, Poorhashemi A, , 2019)

As a result, the realization of the goals of international environmental law in today's world is made possible by mechanisms designed to prevent environmental degradation and pollution. Many of these mechanisms are ignored in some cases due to poor execution guarantees. Though, international environmental law is taking steps to identify soft commitments in the form of consistent rules that if violated, are to be compensated in an organized manner (Shahbazi & Berlian, 2018).

2-3-1 Failure to ratify the 1982 United Nations Convention on the Law of the Sea by the Persian Gulf states

There are a large number of international documents and conventions on different aspects of the environment that in one way or another address the important issue of the marine environment, and particularly their sustainable development and exploitation. Accordingly, the state of the Persian Gulf should attempt to identify ways of integrating sustainable development into their national environmental and economic policy in an efficient manner. These states must make an effort toward establishing a sustainable development policy in order to meet the environmental needs of the region and to protect its most valuable marine environmental resources. (Talaie, Dynamism of Marine Environment: Issues in Law and Development, Fall 2002 & Winter 2003)



The main international framework convention on the marine environment, which includes provisions on many aspects of the uses of the seas and oceans is the 1982 United Nation Convention on the Law of the Sea (UNCLOS).

The convention provides a comprehensive and integrated structure for the protection of the marine environment. Fast paced advance of sciences and technologies on one side and lack of access to facilities by all the states on the other side were followed by the weakness of traditional marine law which in turn, was not sufficient to resolve the resulted issues by this advancement. (Madani, 2013) The increasing destruction of the environment as well as seas and oceans, further stressed the significant lacks of the traditional approaches towards the environment. (The GESAMP Report on the state of the oceans, 1990)

Additionally, with the Iran and the United Arab Emirates' lack of approval in the 1982 Convention on the Law of the Sea, only those rules and regulations of the convention are binding on these countries that are classified as customary international rules. Furthermore, according to Article 18 of the 1969 Vienna Convention on the Law of Treaties, they must not take any action contrary to the purpose of the convention. (Allahverdizadeh & Hafeznia, 2016) Except for countries that have not ratified the convention, countries that have ratified or acceded to the convention have also avoided observing all the details of the convention. (Moghtader, 1998)

Therefore, in major documents such as Law of the sea and Chapter 17 of Agenda 21 (Protection of the Oceans, All Kinds of Seas, Including Enclosed and Semi-Enclosed Seas, and Costal Areas and the Protection, Rational Use and Development of Their Living Resources), the regional cooperation is highly emphasized and all of these documents affirm the development of regional mechanisms to be the most efficient method for protecting the environment. In addition, the marine law system in all major regional seas from Caribbean to South Pacific is implemented and enforced via the regional conventions.

2-3-2 Weaknesses and inefficiency of the Kuwait Regional Convention

The Kuwait Regional Convention is a comprehensive and umbrella agreement for protection of the marine environment. It identifies the sources of pollution which require control, such as pollution from ships, dumping, land-based sources, exploration and exploitation of the sea-bed, and pollution from other human activities. It also identifies environmental management issues for which co-operative efforts are to be made, such as combating pollution in cases of emergency, environmental impact assessment and scientific and technological cooperation. There are also provisions dealing with technical assistance, and liability and compensation in case of pollution of the Sea Area.

The Kuwait Regional Convention is basically concerned about three factors of ships, land resources, and marine discovery and exploitation as the source of pollution in Persian Gulf waters. During implementing the protocol of this convention, an establishment came into existence titled as Organization for the Protection of the Marine Environment which its target was to deal with sudden pollution cases like collision and drowning of ships and oil tankers, and it led to the formation of Regional Organization for the Protection of the Marine Environment (ROPME) with the crucial increase in marine pollution of the Persian Gulf region. (QareGozlou, 1998)

The most important drawback of this convention is that it does not consider the issue of protection and preservation of living marine resources in the region during quarrels, and also the issue of their sustainable use. The Kuwait Regional Convention falls short in satisfying its objectives during war and military clashes in the Persian Gulf with eight coastal countries producing 40% crude oil of the entire world and its emergency operation plan for controlling the pollution loses its functionality in case of invading oil facilities, harbors and oil tankers, due to the vastness of the catastrophe and military

nature of the region. For the reason, it is suggested that with developing a separate protocol to commit the member countries to refrain from targeting one another's oil facilities in case of initiation of wars or recognize and cooperate with the immediate intervention of the emergency operation plan for controlling the pollution during wars. (Nagafi Asfad & Darabinia, 2012) (Talaie, *The international Law of the Sea*, 2013, p. 267)

Although the Kuwait Convention is enforceable in form of operational plans like the regional conventions, the main components of environment management, evaluation, regulations, and existing financial and structural agreements of the operational plans, are not included in a clear and detailed manner in the convention's articles. Likewise, issues such as integral leadership in the region and establishment of periodical patrols and environmental analysis with the cooperation of the region's countries are not seen in this document. On the other hand, despite the fact that the Persian Gulf witnessed war events during last decades, increased ships traffic, and enacting contracts with foreign contractors based on its conventions and protocols with no necessities for the Special Regions, no measures are taken in order to update and revise the current convention articles. Although two organizations of ROPME and MEMAC⁷ are present in the area which are active in protecting marine environment, their performance, the cooperation of the region's countries, and using legal instruments in this regard were far from being successful (Shojaei, Farshchi, & Dabiri, 2008).

It seems necessary to add additional protocols to the current convention in the field of some sources of pollution. Such measures could have positive effects on the Persian Gulf marine region if the protocol provisions are implemented. (Talaie, *The International Law of the Sea*, 2013). Therefore, this convention

⁷ Marine Emergency Mutual Aid Center

does not meet the today's development requirements due to the dramatic regional changes.

2-4 The challenge of compensating for environmental damage and the rules of international responsibility of states of marine environment of Persian Gulf

The protection and maintenance of the international environment is a commitment to the international community as a whole (Shelton, 2009), and consequently governments will not only adhere to the principle of non-harm to others but will also adhere to the principle of non-harm to public commonalities (such as categories of common concern, And subsequently common heritage of mankind concept) (Hunter & Salzman, 2002). In a situation where all states including members and non-members of treaties and customary international law, are obliged to ensure that activities under their control or jurisdiction do not harm the environment of other states or areas outside their national territory. Obviously, governments are committed to paying compensation for neglecting these responsibilities (Salehi, 2019).

In recent decades, the Persian Gulf environment faced many losses and damages due to the collection of undesirable human activities in various forms. Therefore, the countries of the Persian Gulf and the members of the Kuwait Convention are obliged by international law to refrain from causing damages and pollution in the transnational environment and to compensate in the event of environmental damages.

If we consider the natural world as a "common asset of nations," environmental damages are not merely damages to an individual or a community of individuals, and the traditional civil liability is not effective in responding to such damages because it is not able to fully compensate for the damages to the environment and

its human victims⁸. In other words, the fines imposed in the form of civil liability are often less than guaranteeing effective intimidation from an economic point of view (Faure & Visser, 2003). Furthermore, the nature of liability for environmental damage is mainly subject to public law (Katoozian & Ansari, 2009). Accordingly, civil liability rights are not appropriate to respond to damages intentionally or maliciously inflicted on others, and such liability is often delegated to criminal law.⁹

For this reason, a distinction must be made between environmental crimes that harm people's property and crimes against the public interest. For example, if a crime is committed against an animal that belongs to a person, the injured party can claim damages under the Civil Liability Act. However, if environmental crimes such as deforestation or the elimination of biodiversity are against common and collective interests, civil liability laws can no longer be claimed, and these claims must be demanded in accordance with environmental regulations (Jafari & Ahmadi, 2019).

On the other hand, the challenge of compensating environmental crimes for future generations will raise, because the environment is a gift from mother nature that does not belong only to the present generation and if destroyed, future generations will also suffer. These challenges include not criminalizing damages, and some of them have a transnational aspect in which, the multiplicity of domestic and international decision-making and judicial institutions is one of the main problems (Jafari & Ahmadi, 2019).

⁸ In 1970, for example, in West Germany, only about 1 to 2 percent of environmental damages were compensated through civil liability.

⁹ The use of this type of damage for environmental damage is an option of a place of reflection that requires independent study. For further study on the nature of punitive damages, see: Abdollahi, Mohsen, "Punitive Damages in International Law", *Legal Journal of the Office of International Legal Services of the Islamic Republic of Iran*, No. 30, 2004, pp. 85-119.

Lack of an integral method for receiving environmental compensations (when wars and events happen) in the Persian Gulf maritime region is one of the problems created in the Regional Marine Environmental Protection Organization¹⁰. ROPME is not judicial competent of addressing pollution violations and the countries that undergo a crash by any reason, should refer to the competent court to receive the compensation. By the way, the organizational structure of ROPME has a juridical commission which in case of any discrepancies between the members about the interpretation or enforcement of the contract or the member countries' agreements, would be referred to. For this reason, for addressing the crashes in territorial seas, exclusive and economic regions, and international waters, the countries of the region must obey the internal regulations or legal instruments of the region (Kuwait Convention and its protocols). These treaties in the aspect of legal instruments of the region have referred to the existing international conventions that are: "International Convention on Civil Liability for the Compensation of Oil Pollution Damage" and "International convention on the establishment of an international fund for compensation of the damages resulted by the oil pollution". Based on the Civil Liability Convention, the owner of the ship is responsible for compensating the oil pollution damage incurred by his ship to a certain extent.

There is no regional fund for compensating damage in ROPME region, but the international fund for compensating damage is available. Among the countries of the region, only Bahrain, Oman and Qatar have joined the 1992 protocol of the Convention on the Establishment of International Fund. (Shojaei, Farshchi, & Dabiri, 2008)

¹⁰ The Regional Conference of Plenipotentiaries on the Protection and Development of the Marine Environment and the Coastal Areas of Bahrain, I.R.Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates was convened in Kuwait from 15-23 April 1978. (htt2)

3- Proposed solutions to sustainable development for facing environmental challenges in the Persian Gulf

Prolonging challenges is not good matter for long-term development. Providing a variety of financial incentives, such as green taxes (which also help consumers pay), subsidies, increased competition, support for environmental investments, and financial facilities will help reduce pollution and environmental protection programs (Klarer & Francis, 2000). In this section, we first discuss the general strategies for dealing with environmental challenges and mention the extent of usefulness and effectivity of localization in implementing the executive role of sustainable development. Then, in the following section, we mention the participation of non-governmental organizations and indigenous activity centers in international decision making via the establishment of independent or integrated centers as further solutions.

The true sense of development and localization is that the development based on localization and local knowledge of self-reliance, helps to strengthen society and social empowerments. Given the shift in the components of power and the fact that today power and ability are defined on the basis of knowledge, systems of knowledge are called systems of power and domination. This link between knowledge and power is also relevant in relation to indigenous and non-indigenous developments, and indigenous knowledge can also be considered a part of this ability. Developers and natives will find more effective solutions by recognizing and understanding their common and different definitions of problems and priorities. Using native solutions in such an environment that encourages consensus and cooperation will feature a chance to be more effective. Therefore, in order to achieve more effective ways of development, the experiences and abilities of the indigenous knowledge of the local community should not be neglected in order to localize the pattern of development. However, it is not enough for development executives to be aware of the necessity

of indigenous knowledge during development and the next step is to understand various types of indigenous knowledge, how to preserve and pass them on to future generations, and how to use them in the evolution and development of society (Emadi & Abbasi, 1998). Therefore, localization through self-reliance development and based on indigenous knowledge, helps to strengthen the indigenous community and to increase its efficiency. In order to help poor, rural and indigenous communities of developing countries, addressing indigenous knowledge and reviving and developing appropriate and efficient forms of it, are major steps in strengthening deprived individuals. With the greater capability of the residents, we will see the acceptance and appropriate use of some non-indigenous technologies in the future (Thrupp, 1989). This reflects the process of localization, which firstly helps the local community's strengthening via reviving and enhancing efficient local methods and knowledge, and secondly enables the conscious selection of new methods by increasing the power of choice.

Defending the rights of indigenous people on earth is one of the most important factors in protecting their livelihood and the environment. The implicit implication of citation of right to property in commissions and courts, is to respect the indigenous people's right to enjoyment of an appropriate environment to live in. The International Labor Organization Convention, "the 2007 Declaration", and various international human rights instruments play important roles in drawing the attention of the international community to the vulnerability of the indigenous people's environment. Because of the matter that lands and resources are complementary parts to any environment, indigenous peoples' rights to their lands are easily considered within the scope of emerging environmental rights (Hajjar Lib, 2018).

3-1 Implementation of sustainable development natively in the Persian Gulf marine environment

If we consider localization as the conscious use of patterns, methods and techniques of development and adjusting this usage to the conditions of the indigenous society along with updating and strengthening local techniques and methods and connecting the official knowledge with local knowledge and conditions, we can empower people and their participation during the development and formation of an endogenous, self-reliant and sustainable development flow.

Furthermore, many of the heterogeneous events that are taking place in developing countries are due to the unknowing implementation of general and outside of the relevant ecosystem patterns and imitation of other powerful countries model without science and knowledge of their conditions. In the case that localization is performed properly through adjusting global development patterns and solutions with the internal conditions of local communities via strengthening these development-friendly indigenous patterns, it can contribute to the growth of the local community of the Third World and reduce its negative consequences. To this end, in order to achieve a smoother and more effective path of sustainable development, the experiences and abilities of the indigenous knowledge of a local community should not be deprived in order to localize the development pattern.

3-1-1 Participation to co-create cities and territories

Instruments of participatory democracy at the local level are expanding. The report presents a diversity of existing mechanisms and channels, including digital instruments that create ‘virtuous circles’ of engagement between citizens and institutions. However, it also warns that citizen participation can be limited to a consultative role (public surveys, workshops, forums and polls) when the decision-making process is mainly controlled by political and administrative authorities or driven by economic development interests. To move forward, participation is needed to frame a new paradigm for sustainable development: the ‘co-creation’ of cities and territories based on a

stronger involvement of local actors throughout the process. (HLPF, 2018)

3-1-2 An expanding global movement of involved LRGs

Both large and small cities, as well as regions and their associations at the national, regional and international levels, are championing a “localization movement”. Large cities have been particularly vocal in calling for transformation. This raises awareness of the links between local action and the global agenda, while strengthening action and aligning policies and action plans with the 17 Local government associations¹¹. Sub-national Governments¹², cities and regions are leading the localization process in many countries (e.g. Australia, Brazil, Canada, Spain, as well as most Northern and Western European countries). They have also been proactive in establishing multilevel and multi-stakeholder partnerships to catalyze the localization process (e.g. Benin, Costa Rica, Indonesia, Korea, Japan and South Africa). In countries with strong centralized planning traditions, SNGs usually follow the guidelines from national governments (e.g. Armenia, China and Vietnam) or adopt a more “passive by default” approach, particularly in countries where the local administration is limited or there no longer exists a formal autonomy. Despite these trends, the outreach is still limited. It is important to recognize that the vast majority of LRGs are either not acquainted with the SDGs or perceive the 2030 Agenda to be yet another external “burden” and an “internationally imposed agenda”. Global, regional and national organizations of LRGs, including specialized thematic networks, are increasing their efforts to raise awareness to mobilize and guide their constituency. Clear high-level political support at the global level and the commitment of national governments are critical to fostering greater action at the local level. The report calls for clear and unequivocal actions to empower LRGs and to develop collaborative governance

¹¹ Local government associations (LGAs)

¹² Sub-national Government (SNG)

approaches as an integral part of the national framework for implementation. (HLPF, 2018)

3-2 Involvement of NGOs and indigenous centers in international decision-making

Public participation is based on the fact that every voice should be heard. In other words, individuals through the participation are able to intervene in matters that are related to their destiny (Ramazani Qavam Abadi, 2010). Likewise, states are under an obligation to pursue sustainable development. They are bound by an obligation of means and by implementing these countless treaties, they contribute day after day to progressively for materializing sustainable development requirements (Barral, 2012).

The non-governmental actors' participation is very vital in international environmental laws, especially in the two processes of environmental decision-making and referring to judicial authorities. The specific information of some environmental NGOs is a source for the preparation and development of environmental programs and policies among which, the experiences of cooperation of these organizations in conducting studies on evaluation of environmental effects can be exemplified. Cooperation of these organizations during the process of referring to judicial authorities is also crucial because, these organizations are typically appeared as true defenders of the environment through various steps of the trial process, regardless of their direct and indirect participation as a part of a case (Ramazani Qavam Abadi, 2010). More formal structures for NGO involvement can be helpful in removing some of the barriers to civil society participation in environmental governance. If the rights and responsibilities of governments and non-governmental organizations are defined in a clear and stable manner, then governments are less cautious about the participation of non-governmental organizations.

Communities around the world are implementing projects, plans and strategies to attain the Sustainable Development Goals (SDGs). Local 2030 hubs include both local and thematic hubs. Local hubs are spaces where communities—together with the UN system and external partners—identify their priorities with respect to the SDGs and apply innovative solutions that address local needs. The thematic hubs develop best practices and raise awareness on issues that are key to the local achievement of the SDGs. They are designed as partnerships between thematic experts, local actors and UN agencies, and work to display the best practices that can be replicated globally. It would be a wise idea for the Persian Gulf countries to plan having a similar structure to refer for resolving their regional issues. To step forward towards the sustainable development of the region via the implementation of the articles of 2030 Agenda with the establishment of independent centers with independent management in each one of eight countries of the Persian Gulf area, or through the formation of an integrated center with its periodical administration under the title of Persian Gulf Hub with the cooperation of the countries of the region. For example:

Paraná Hub

This hub, hosted by the Paraná state government, is focused on supporting all municipalities within the state in localizing the SDGs. Municipalities are moreover supported in reporting on SDG implementation.

Sahel Hub

It will focus on the local-level promotion of climate resilience, evergreen agriculture and sustainable livelihoods for agricultural out-grower communities.

Malmö Local Ocean Action Hub

The focus of the City of Malmö's hub - the Malmö Local Ocean Action Hub - is on coastal cities, oceans, ocean literacy and the effect of land-based activities on marine and coastal environments.

Liverpool 2030 hub

The 2030 hub seeks to contribute to the achievement of the SDGs by fostering sustainable entrepreneurship. In addition to a co-working space, the hub offers support to businesses and non-profit initiatives with a focus on SDGs and the related impact investing (Local SDG Action Around the World, 2017).

4-Conclusions

Sustainable development is one of the concepts existed in the international environmental law. Thus, it is better for it to get out of the conceptual state and become an important principle in international environmental law in order to find practical application. The indicators of sustainable development can be summarized as follows: Development must be environmentally sustainable, socially equitable and befitting, and economically viable and compatible. The sustainable development which is in accordance with the culture, geography, national laws, regional policies, has the flexibility that depends entirely on the conditions of the region. Meanwhile, it is a global concept, and to it should be localized be better implemented. Studies conducted in most developing countries for facilitating the creation of a resilient development show that the steps taken so far, have not only failed in reducing the poverty but also ended in a lower quality of life, migration from small cities to large ones and inadequate employment. Given the fact that border demarcation in countries is not limited to lands and sometimes ends in water borders, so this water termination can affect the economy, society, culture and environment that is enclosed in the land. Similarly, the unwritten or written right to develop and operate with no sufficient guarantee of legal implementation, leads to lost parts of inland water and its inhabitants. Unfortunately, there are very few international regulations in connection with activities relevant to the onshore oil and gas industry and no significant efforts are made to make a comprehensive international treaty that includes all these activities. The matter can lead to dangerous consequences such

as: First, the pollution caused by onshore oil and gas industry activities has a key effect on oil pollution in seas compared to other sources of pollution. Second, regional regulations such as Barcelona and Kuwait treaties are entitled to specific regions in which the need to their expansion has not been felt so far.

However, the most important reason for this can be considered the lack of countries supporting the implementation of such treaties at the international level. It is worth noting that some regions like North Atlantic and Mediterranean areas have some treaties, but other regions such as Pacific Northwest have no treaty in this regard. Although numerous countries have tried to develop regulations through setting standards for offshore activities and every country with regard to its economic and political problems have passed these laws, some other nations have not managed to pass such regulations yet.

The approach of the Persian Gulf states regarding the protective and even security arrangements of the Persian Gulf is so while the leaders of these countries believe that trans-regional powers should be withdrawn from the Persian Gulf and a collective security system should be established with the participation and cooperation of all Persian Gulf states. This reflects the conflicting views in the Persian Gulf and the continuing trend of negative competitions and mistrusts, and the presence of trans-regional powers, hinders the moderation of mistrust and the formation of indigenous security arrangements in view of their interests and goals in this area.

After examining these factors as well as other issues that have impeded the ratification of comprehensive international treaties, it can be seen that achieving comprehensive and even limited international agreements among several countries have a much more useful and efficient guarantee of more accurate and practical implementation than other agreements among more countries that rarely interact during the implementation of initial commitments. Hence, effective steps can be taken to strengthen regional, local and indigenous agreements and also if necessary, by forming the relevant commission to monitor the duties

applied in the letter of commitment, try hard to prevent the lack of implementation of agreements and have a safe marine environment in all respects. However, since environmental protection guarantees peace and order in the region (and vice versa) and is also effective in practical cooperation, through creating great confidence to discover solutions to overcome massive environmental problems and barriers, we should take effective steps to save the rich heritage in such region based on abundant resources.

It is clear that sustainable development in indigenous regions will be facilitated by identifying the role and effect of the knowledge level of the people who live there. It is because the people's participation in creating valuable natural and cultural civilization and heritage, indicates the acceptance of the concept of global human heritage or common human heritage that is linked to the future generations' rights and is a sort of sustainable development. Accordingly, it can be seriously stated that the people's indigenous knowledge, which has been inherited from previous generations and will be passed on to the next generations, is more congruent with the concept of sustainable development.

Reports from international organizations suggest that what signifies the matter of localization, is the emphasis on point that benefiting from the experiences of international societies requires attention to the differences between communities, cultures and locations. Otherwise, sustainable development can barely be witnessed in these societies. Thus, traditional methods in indigenous and local communities are much more accurate, efficient and vital due to their adaptation to the specific environment of these areas.

On the other hand, the study of indicators that move towards localization and futurism in this path is a fairly substantial and functional matter regarding the novel concept of sustainable development. The investigation of complexity and ambiguity of this concept, how to make it operational and how to measure the

progress towards sustainability in development seem to be necessary as well.

5-Suggestions

Although general suggestions have been made by some jurists in books or scientific articles, the details have not yet been addressed, no precise solutions have been proposed in this regard. By the way, it is a bit difficult to say for sure what necessary and needed regulations should be enacted in this regard that can implement the concept of sustainable development.

Nonetheless, in this article, it is attempted to provide solutions and suggestions that can be useful by examining all aforementioned aspects which go as follows:

- Encouraging eight countries in the Persian Gulf region to enact effective domestic and national laws and regulations and strengthen existing laws¹³.
- Establishing a monitoring committee to coordinate legal and economic affairs by creating practical, comprehensive and clear objectives that ensure achieving a balance between the three dimensions of sustainable development, which of course is established with the presence of a permanent representative from each Persian Gulf country to participate in various commissions.
- National support for information publications on various subjects relevant to sustainable development by acknowledging the complexity of the basic concepts of sustainable development and promoting environmental awareness in each Persian Gulf country according to its own ecological culture.

¹³ Only six countries, Iran, Kuwait, Oman, the United (ht)Arab Emirates, Bahrain, and Saudi Arabia, have national laws on marine environmental protection, which require years of approval to comply with new maritime environmental protection laws and regulations.

- Establishing environmental governance away from political considerations, in the implementation of domestic laws of countries and therefore the practical commitment of governments in the international arena.
- In the end, considering all the dimensions and angles of sustainable development, summarizing the mentioned issues and presenting the above suggestions beside it, while creating a suitable platform for the realization of sustainable development and sustainability of development, will cause practical commitment of governments.

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