






Modeling Approaches to Achieve an Adequate Standard of Living: A Study Within the Framework of the UN Sustainable Development Goals



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ABSTRACT

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The main purpose of the article is to identify ways to ensure an adequate standard of living in terms of the UN sustainable development goals. The object of the study is the standard of living of a person in the framework of the implementation of the UN sustainable development goals. The scientific task will be to present in graphic language the main ways to ensure an adequate standard of living in the aspect of the UN sustainable development goals. The research methodology involves the use of a methodology for forming a data structuring model for ensuring an adequate standard of living within the framework of the UN sustainable development goals. As a result, two models were presented: a model of directly defined ways to ensure an adequate standard of living in terms of the UN sustainable development goals; a model of the main functions that should be performed within the framework of ensuring the sustainable development of the UN. The innovative nature of the study implies the presented approach to identifying ways to ensure an adequate standard of living in terms of the UN sustainable development goals. A key implication of our study is its approach to better decision making within sustainable development through the models presented. The study has a limitation by not taking into account all aspects of determining the ways to ensure an adequate standard of living in terms of the UN sustainable development goals. Other aspects should be taken into account in further studies.

1. INTRODUCTION

One of the main tasks of modern international law is the international protection of human rights, the creation of norms regulating relations between states and other subjects of international law, aimed at ensuring the rights and freedoms of the individual guaranteed by international agreements. The normative nature of human rights connects them with such a concept as "human rights standards", which in recent years in international relations have become increasingly important in the framework of sustainable development. It is the standardization of human rights that is the key basis for recognizing a particular legal system as corresponding or not meeting the democratic aspirations of sustainable development of mankind. In a general view, the standardization of human rights is aimed primarily at ensuring the minimum legal means of protecting a person to the extent that this allows him to realize his personal potential in various fields. Thus, the standardization of human rights is a necessary process, at least from the standpoint of recognizing the dignity of every person, regardless of his citizenship, religious, national, gender, linguistic and other characteristics within the framework of the standard of living.

Personal human rights are called natural, that is, those that a person receives from birth. Personal rights constitute the content of human freedom and provide a person not only with vital conditions for existence, but also provide an actual opportunity to freely realize their potential, guarantee non-

interference in the sphere of their individual equality of life. That is why they apply not only to citizens of a particular state, but also to all other people located on its territory as part of sustainable development.

The United Nations plays an important role in promoting sustainable development, the central goal of which is to strike a balance between meeting the current needs of humanity and preserving opportunities for future generations. This work spans many dimensions, including environmental sustainability, economic growth and equity.

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The structure of the article provides for an assessment of the literature and the formation of appropriate conclusions, a description of the research methods and their application, the presentation of the main results of the study and their discussion.

2. LITERATURE REVIEW

The problem of ensuring human rights in the modern world is of great international legal significance and is acquiring a planetary character. That is why the problem continues to be relevant, despite the numerous scientific studies of scientists

on this issue [1-3].

As noted in the scientific literature [4, 5], after the Second World War, during which there were unprecedented mass violations of natural, inseparable human rights and freedoms, open disregard for the fundamental human right - the right to life, the international community realized the whole the urgency of creating such human rights mechanisms that would make it impossible to repeat such horrors in the framework of sustainable development. The decisive step in this direction was the creation in 1945 of the United Nations, as a result of which a number of international legal acts were adopted, at the highest international legal level, enshrining international standards in the field of human rights: the Universal Declaration of Human Rights (December 10, 1948), International Covenant on Civil and Political Rights (December 16, 1966), International Covenant on Social, Economic and Cultural Rights (December 16, 1966).

As researchers note [6-8], despite its political nature, the General Declaration of Human Rights, in its international significance and influence on both international and domestic legal systems and social processes, is "a document of great importance, acting in its field as a conscience" of the world, and a standard on the basis of which the positions of societies and states can change. At the same time, it is important to note that the provisions of the Universal Declaration of Human Rights began to be perceived in the practice of states as customary legal standards, according to which national legislation should be established.

In the literature it is noted [9, 10] that the structure of international standards in the field of human rights, according to some authors, consists of a set of principles and norms that establish: human rights and freedoms in various spheres of life; the obligations of the state to ensure and respect human rights without discrimination, both in peacetime and during armed conflicts; general principles of natural law; responsibility for criminal violation of human rights; directions of sustainable development and expansion of the sphere of human rights; directions for strengthening the control mechanism for the fulfillment by states of their obligations in the field of human rights. On the basis of these standards, each state is obliged to streamline the current legislation, eliminate contradictions with the norms of international law, cancel outdated norms, and eliminate gaps. Appeal to standardization is an indispensable element of the universalist concept of human rights, which is based primarily on the achievements of international law. At the same time, the existence of regional human rights standards, oddly enough, does not in any way refute the universalism of the normatively of human rights, but only supplement this system of knowledge.

As correctly described in the literature [11-14], the human right to an adequate standard of living is closely related to the right to sustainable development, since the social value and significance of the right to an adequate standard of living lies primarily in creating conditions not only for the simple reproduction of psychophysical, physiological and spiritual forces, as well as in ensuring sustainable comprehensive sustainable development of the individual. However, the recognition of the right to sustainable development by the international community was very difficult, for a long time, constantly encountering misunderstanding and various obstacles. In our opinion, the right to sustainable development should be recognized as one of the mandatory components (elements) of the human right to an adequate standard of

living. Thus, at the constitutional level, it will be emphasized that the standard of living, the conditions for achieving which should be provided by the state and its institutions, should be sufficient not for simple existence or survival, but precisely for the sustainable development of the personality of a person and members of his family.

However, it should be noted that a number of modern aspects of ensuring an adequate standard of living in terms of the UN sustainable development goals are still not disclosed and give relevance and weight to our study. The scientific task will be to present in graphic language the main ways to ensure an adequate standard of living in the aspect of the UN sustainable development goals.

3. METHODOLOGY

Of course, the methodology of our study involves the use of certain methods and technologies. Let's consider them in more detail within the framework of ensuring sustainable development. The classical description technology, developed at the dawn of process technologies, is quite simple and consists of only two process description standards - Data flow diagram method and WFD. The first is a data flow diagram used to describe top-level processes; the second is a workflow diagram used to describe lower-level business processes. Most other modern standards represent variations and additions to the two classical approaches.

Data flow diagram method is a diagram of data flow and processes used to model and analyze data flows in a sustainable development system.

Components of Data flow diagram method in the Framework of Sustainability:

- functions - processes of processing input and formation of initial information flows necessary for the formation of ways to improve the process of ensuring an adequate standard of living for a person for sustainable development;
- data warehouses;
- input and output information flows between processes, data repositories and external entities of ways to improve the process of ensuring an adequate standard of living for sustainable development.

The elements of Data flow diagram method in our study include logical processes, functions, external entities and data flows, with the help of which they model the transfer of information between processes, data stores and external entities in order to improve the effectiveness of programs to ensure an adequate standard of living as an element of sustainable development. The logical function is given a name (UN) in accordance with the essence of the process of processing input data streams and generating output data, and a unique number for references (1,2,3) to it inside the diagram is also provided.

Also, as part of our study, we should conduct a PEST analysis, that is, use an appropriate method, in order to better understand the factors that most affect a person's standard of living.

In general, the PEST analysis method is a strategic tool that organizations (including international ones) use to identify, evaluate, systematize and track macroeconomic factors that may affect the object of interest to them even now. PEST is an abbreviation for four English words: political, economic, social and technological. The results of the analysis are the basis for strategic planning processes and contribute to the study of the state of the situation in the framework of

sustainable development. The main goal of the PEST-analysis in the framework of our study is to understand what external forces can affect the standard of living of a person in the system of sustainable development of countries.

Data flow diagram method components are blocks of implementation of each of which will help a UN member country complete the process of achieving sustainable development. At the same time, before conducting a PEST analysis, factors influencing this. The UN is a large organization that includes an overview through the external environment perspective. To make decisions, you must first analyze the factors influencing sustainable development. Then use it further and perform modeling via Data flow diagram method.

4. RESULTS OF RESEARCH

To begin with, we will conduct a PEST analysis within the framework of our study, its results are presented in Table 1.

It should be noted that according to Table 1, a number of key factors are presented that influence the improvement of living standards and can have an effect on ensuring sustainable development. The PEST result shows what you should pay attention to first.

It is necessary to decide on the main blocks-processes of the model, which will be presented in Figure 1.

We should clarify in more detail our paths and blocks presented in the model for a better understanding of them:

Firstly, there's the development of a system to ensure rights. This system, crucial for guaranteeing an adequate living

standard, forms part of a larger mechanism dedicated to the realization of citizens' social rights. It is, in turn, an essential component of a broader structure that upholds constitutional rights and freedoms. This system is complex, encompassing economic, political, social, legal, spiritual, cultural, and psychological elements. Together, these elements aim to achieve a standard of living that aligns with modern civilization and sustainable development.

Secondly, there's the affirmation of citizens' constitutional rights. To guarantee citizens' constitutional right to a satisfactory living standard, fundamental state social guarantees are exclusively established by laws. These guarantees bind all state bodies, local governments, enterprises, institutions, and organizations, irrespective of their ownership status. The levels of these basic guarantees are determined based on state social standards, established by laws and other normative legal acts, as part of sustainable development.

Lastly, there's the utilization of assistance from donor governments. Within the context of sustainable development, the international community, donor states, and organizations should ensure effective participation of the recipient country's government and the affected population in developing and monitoring assistance policies and programs. This assistance should extend beyond conventional funding to include legal and regulatory aid for the private sector, including transnational corporations. The long-term objective should be to strengthen the recipient states' ability to implement effective poverty eradication programs without external aid, as illustrated in Figure 2.

Table 1. The result of the PEST analysis within the study

P	E	S	T
Level of political stability	Economic development programs	Level of education and medicine	Level of technology development
Level of balance of interests	Level of Financial Assistance	Level of social assistance	Product quality
Integration level	Development of international aid	The level of consciousness of the population	Level of innovation
Development of international cooperation	Growth in imports and exports	Level of human potential	Science level

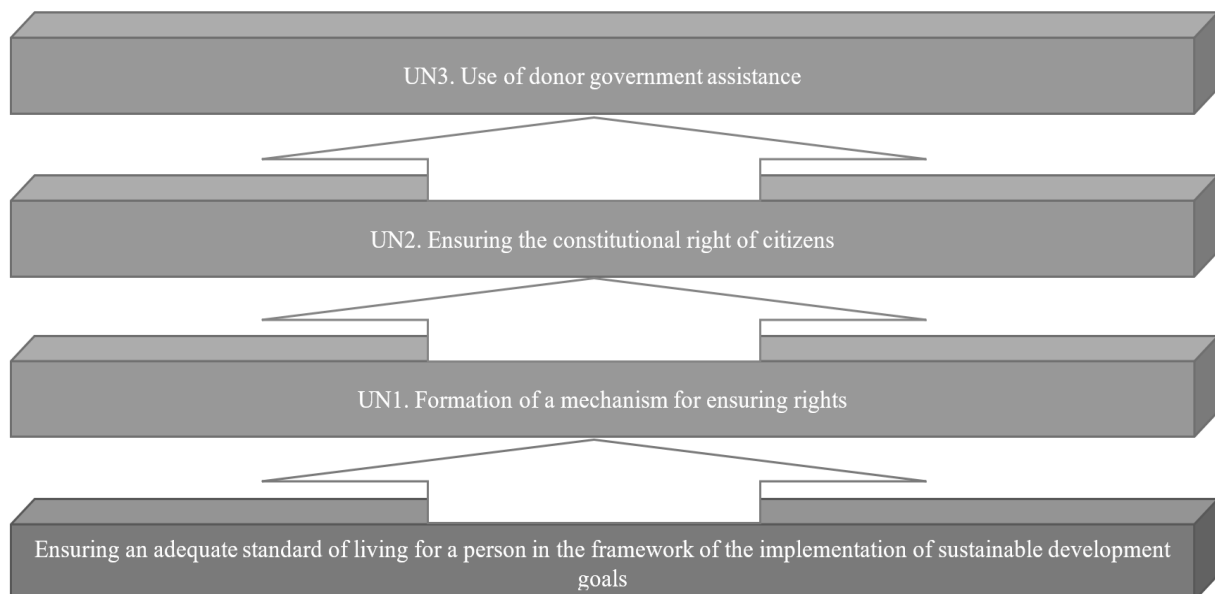


Figure 1. Main block-processes of the model, created by the authors

It is also important for a UN member country to assess its current standard of living within the framework of sustainable development. We will offer a solution. For example, analysts at the UN can, through hierarchical analysis, assess threats affecting living standards in the context of sustainable development. Suppose we were to assess the impact of three different threats on the quality of life in a UN member country in the context of sustainable development:

Threat A: Environmental pollution (Ecology).

Threat B: Economic instability (Economy).

Threat C: Social inequality (Society).

Thus, our goal is to create a hierarchy in which the top level is the goal (quality of life), the next level is the evaluation criteria (environmental, economic, social aspects), and the bottom level is the alternatives (threats A, B, C). Let's form a pairwise comparison of these threats (Table 2).

Table 2. Pairwise comparison results

Crutetia	A	B	C
A	1	2	4
B	1/2	1	2
C	1/4	1/2	1

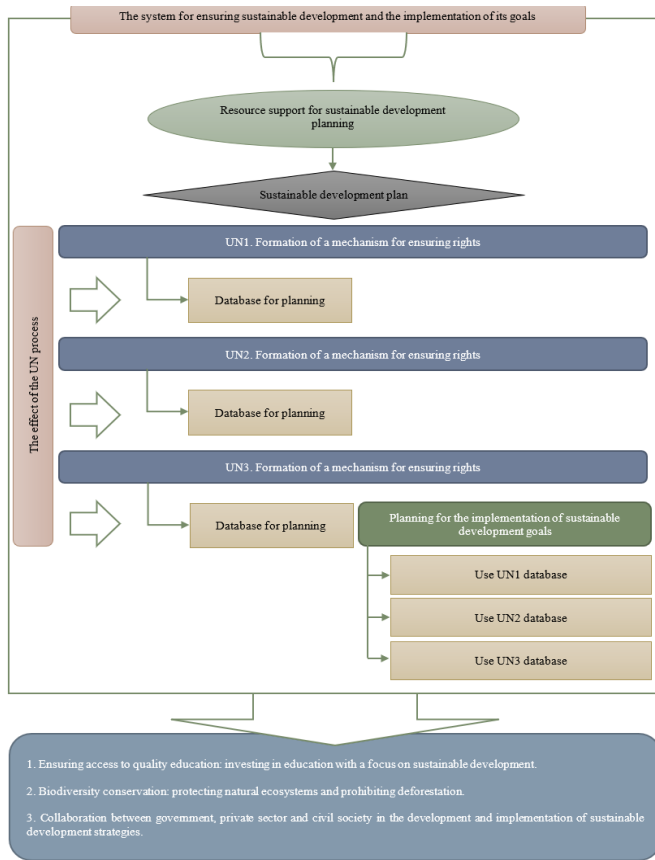


Figure 2. A model for ensuring an adequate standard of living for a person in the framework of the implementation of sustainable development goals, created by the authors

Where, for example, a value of 2 in the cell "Ecology"/"Economy" means that ecology is twice as important as economy. A value of 1/2 in the "Economy"/"Environment" cell indicates that the economy is half as important as the environment. Next, the eigenvector for this matrix is calculated, which displays the weights for each criterion. Then a similar procedure is done for the alternatives within each criterion. Next, to simplify all subsequent

calculations, we present the final matrix (Table 3).

Table 3. Weights of each threat to quality of life within the framework of sustainable development

Crutetia	Environmental Pollution	Economic Instability	Social Inequality
Ecology	0.6	0.3	0.1
Economy	0.2	0.7	0.1
Society	0.4	0.1	0.5

Now, to calculate the total weights for each threat, we need to multiply the threat weights by the criteria weights for each criterion and then sum the results. Simplifying. But at the same time, we note that consistency should be checked according to the following equality (1):

$$CI = \frac{\lambda_{max} - n}{n - 1} \quad (1)$$

where, λ_{max} is the largest eigenvalue of the matrix, and n is the dimension of the matrix. If the CI is close to 0, then the judgments are considered consistent.

We get the following:

Threat A: Environmental pollution (Ecology) = 0.44

Threat B Economic instability (Economy) = 0.38

Threat C: Social inequality (Society) = 0.18

That is, according to the example, the first step is to make a decision to improve the environment as part of ensuring sustainable development. Our idea is to show how a modern tool for assessing the standard of living in a country works within the framework of sustainable development.

It is necessary to determine the main functions of the model, which will be presented in Figure 3.

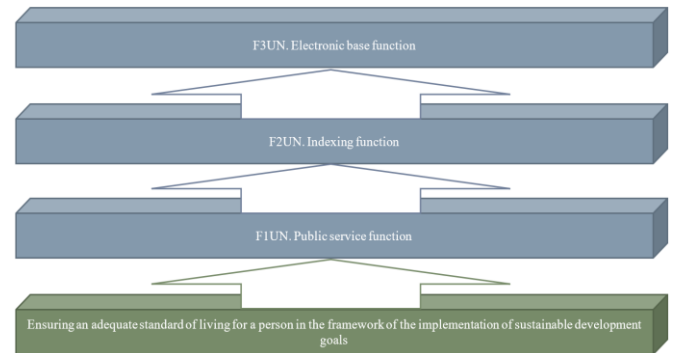


Figure 3. Main functions of the model, created by the authors

The key functions involved in ensuring an adequate standard of living within the context of sustainable development will now be explored in detail:

First, the role of public service is crucial. Social security, as part of sustainable development, should cater to the segment of the population that cannot secure necessary income equivalent to the subsistence minimum. The degree of social protection provided should be such that, when combined with the available income of these individuals, it equals the subsistence minimum.

Second, the function of indexing is considered. The cost of living should be indexed annually (or quarterly) to the level of fixed inflation for goods and services that constitute the minimum consumer budget. This approach helps to eliminate the potential for political influence over the establishment of

these standards.

Third, the creation of an electronic database or registry becomes critical. This registry would contain information about citizens who are entitled to and receive social security. It would serve to prevent an overextension of social protection, which could potentially discriminate against other needy citizen categories within the framework of sustainable development, as depicted in Figure 4.

Ensuring an adequate standard of human life is an extremely complex task in the framework of sustainable development and requires effective planning. Our models have a structural and functional nature of information support of this process in the framework of the implementation of sustainable development goals.

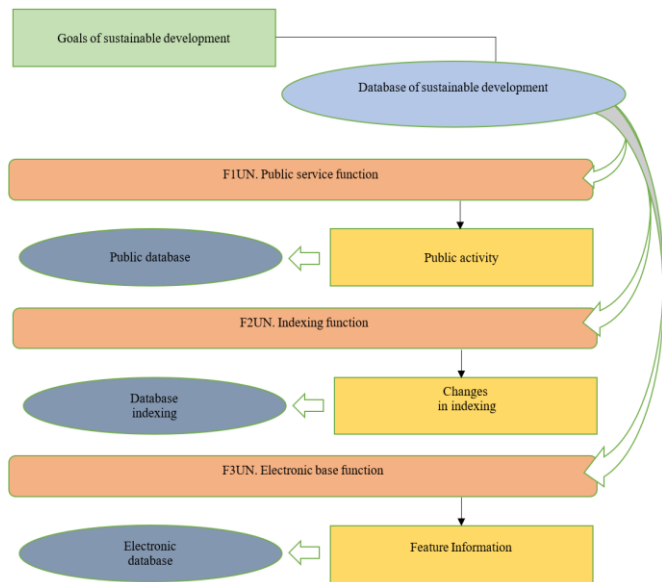


Figure 4. Model of the functions of ensuring an adequate standard of living for a person in the framework of the implementation of sustainable development goals, created by the authors

5. DISCUSSIONS

Discussing the results of the study, it should be noted that our results have certain differences. It should be compared with similar articles. So, for example, other scientists [15-17] propose to pay special attention to the obligations of states in relation to persons in a state of extreme poverty, which include the identification of people living in extreme poverty; respect, protection and fulfillment of the rights of people in poverty; raising awareness of the rights of the poor and guaranteeing their organizational capacity. At the same time, the Independent Expert notes that, in addition to the above-mentioned obligations, other obligations also lie on states, namely, obligations to ensure equality in the exercise of rights and access to social services; access to resources and property as a guarantee of a decent standard of living; the right to decent housing and secure property ownership; rights to decent work and access to social security; securing the legal status of people living in poverty; access to justice and provision of legal aid; equal access to education and culture; the right to protection of family and private life; the right to privacy and security.

Other researchers [18, 19] have, as a result, sought to

improve the international standard of living pact. The International Covenant on Economic, Social and Cultural Rights more meaningfully defined such human rights as the right to work, strike, health care, education, participation in cultural life, as well as the rights of convicts. The implementation of these rights is associated with the expansion of the paternalistic functions of the state and depends on the level of political, economic and social development of the latter.

Scientists [20, 21] actively present the results in the form of the fact that the development of universal and regional human rights standards occurs in complex and contradictory conditions, in which the states that form and implement such standards differ not only in socio-economic systems, but also in the complication of civilizational features. Sometimes the introduction of universal standards in all areas of life. International standards of human rights and freedoms are established by the international community in international organizations to ensure and protect them both internationally and internationally. basis for sustainable development.

According to scientists [9, 22], the international system of human rights protection requires an immediate response to changes in the economy, politics and public life in the framework of sustainable development. New information and communication technologies are accelerating the processes of globalization on the planet, creating an interconnected and interconnected global society. Consequently, human rights cannot be guaranteed in certain territories while simultaneously being violated in others. The common responsibility of all states declaring respect for human rights means not only refraining from violations, but also positive actions to protect them, ensure legal, ideological, material and other real guarantees of human rights regarding a high standard of living. For the best and full protection of human rights, in fact, international judicial protection is being created.

However, it should be noted that our study has a number of differences. We had a completely different methodological approach to the study of the problem of ensuring an adequate standard of living in terms of the UN sustainable development goals. The innovative nature of the study implies the presented approach to identifying ways to ensure an adequate standard of living in terms of the UN sustainable development goals. The innovation of the proposed approach lies in its convenience for displaying information that will help make adequate decisions to improve sustainable development and the lives of the population.

6. CONCLUSIONS

As a result, two models were presented: a model of directly defined ways to ensure an adequate standard of living in terms of the UN sustainable development goals; a model of the main functions that should be performed within the framework of ensuring the sustainable development of the UN. The study has a limitation by not taking into account all aspects of determining the ways to ensure an adequate standard of living in terms of the UN sustainable development goals. Other aspects should be taken into account in further studies.

In conclusion, we would like to raise a number of questions and problems that arose in the course of the study. Summarizing the opinion of scientists and conducting our own research, we found that, at the same time, a completely different situation arises when a person consciously refuses the

sustainable development of his personality and, by his actions or inaction, in the presence of real opportunities, puts himself in a difficult position and even beyond the poverty line. In other words, it pushes itself to the brink of survival, and the risk of losing health or even life in this case is quite high. We are talking about people affected by alcoholism, drug addiction, substance abuse, etc. It is clear that without the treatment of these diseases, all the efforts of the state and its institutions to provide such a person with appropriate conditions for the realization of the human right to an adequate standard of living will most likely be in vain. But how, for example, to be in the case when a person is not affected by a certain disease and does not need treatment, but due to the peculiarities of his psychological type or composition, he is indifferent (i.e. indifferent) to his own level of well-being (in other words - to one's own standard of living) and precisely by its inaction, negativity (i.e. due to apathy, depression, indifference to one's own future, etc.) leads or even contributes to the gradual degradation and destruction of the personality? On the one hand, this is his (such a person's) personal matter, since legislation only provides the right as an opportunity to choose a certain behavior, but it cannot oblige everyone to strive to achieve the highest or at least sufficient standards of life, i.e. worthy of a civilized person and adequate to the level of sustainable development of human civilization. This is the same as the state or public organizations cannot (and do not have the right to do so) oblige everyone to be happy or oblige all members of society to marry or to profess any religion. On the other hand, society and the state cannot indifferently observe how a person deliberately destroys his personality and by his inaction reduces his own, previously acquired standard of living and the standard of living of his family members. All this should definitely be the focus of further research.

Organizations or individuals are not always ready to strive to achieve sustainable development. There are a number of reasons, such as resource provision or achieving one's own goals, to look for other ways of enrichment, while ignoring the sustainable aspect of development. This is an intriguing part for further research.

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