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Hussein Zuhair Abdel Amir Zainy ✉



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The Role of Measurement and Disclosure of Sustainable Development Activities in Proving the Effectiveness and Efficiency of the National Development Plan 2018-2022

Hussein Zuhair Abdel Amir Zainy ^{a)}

Najaf Technical Institute, Al-Furat Al-Awsat Technical University, Al-Najaf, Iraq

^{a)} Corresponding Author: inb.husseinzainy@atu.edu.iq

Abstract. Public sector units in Iraq consume limited economic and social resources in their daily operations, and from the point of view of sustainability, these units also need to strive to achieve effectiveness and efficiency in all their activities while preserving future resources as the proportion of public sector consumption of resources constitutes a large percentage in Iraq, which It requires the preparation of development plans that take into account the indicators of sustainable development and the study of the efficiency of resource utilization and the effectiveness of its impact in the medium and long term. As a result, the researcher sought to conduct an evaluation of the national development plan 2018-2022 issued by the Ministry of Planning and compare its implementation rates in the state's general budget with the results of measurement indicators and disclosure of sustainable development activities, as it was relied on indicators issued by the United Nations to evaluate sustainable development activities of countries and disclosure indicators published by the Organization for Economic Co-operation and Development (OECD).

The research concluded that four goals in the national development plan were implemented at high rates, namely (the development of the industry and energy sector 132.54%, the development of the buildings and services sector 204.08%, the rule of law, human rights and access to justice 91%, poverty alleviation and social welfare expenditures 74.47%). as for the rest of the goals, they were implemented at low rates.

With the high rates of implementation of some of the goals of the national development plan in the state's general budget, these percentages do not constitute a true assessment of the effectiveness of the national development plan. the results of the indicators of measurement and disclosure of sustainable development activities showed a significant decrease in the impact rates of this plan during the period from 2018- 2022, which shows the inefficient exploitation of resources, as well as the ineffectiveness of preparing the national development plan and its impact on the medium and long term.

The research was divided into five main axes, the first included the concept of sustainable development, then measurement and disclosure of sustainable development activities in public sector units, after which the objectives of the national development plan and the results of its implementation were addressed. finally, indicators of measurement and disclosure of sustainable development activities and their role in evaluating the national development plan 2018-2022 were studied.

Keywords: sustainable development activities, national development plan, efficiency and effectiveness

RESEARCH METHODOLOGY

Research Problem

The national development plan in Iraq for the year 2018-2022 was prepared to study the most important economic, social and environmental problems, address poverty and move towards supporting investment, but this plan did not achieve its desired goals, which raises the following questions:

- Has the national development plan 2018-2022 been implemented with all its objectives and funds allocated in the state's general budget to achieve them according to the planned percentages?
- Has the national development plan been prepared in a way that achieves efficient investment of resources and effective impact in the medium and long term?
- Do the indicators of measurement and disclosure of sustainable development activities reflect the effectiveness and efficiency of the national development plan 2018-2022?

Research Objectives

The research aims to assess the efficiency and effectiveness of the national development plan 2018-2022, by making a comparison between the percentages of implementation of the plan in the state's general budget with the results of measurement indicators and disclosure of sustainable development activities.

The Importance of Research

The importance of the research derives from the importance of the national development plan 2018-2022 in addressing economic, social and environmental problems in Iraq, and the extent of resource investment efficiency and the effectiveness of the impact of the plan in the medium and long term, by comparing its implementation rates with the results of measurement indicators and disclosure of sustainable development activities, if not a study has been presented so far linking the rates of implementation of the national development plan 2018-2022 with the results of measurement indicators and disclosure of sustainable development activities and the effectiveness and efficiency of this plan.

Research Hypothesis

To solve the research problem and achieve its objectives, the researcher relies on the following hypothesis:
“Indicators of measurement and disclosure of sustainable development activities do not affect the effectiveness and efficiency of the national development plan 2018-2022.”

Data Collection Methods

Data on the practical side was collected from the official websites of the Ministries of Finance, Planning, Health and Environment, Construction and Housing, the National Committee for Sustainable Development, the Committee on Revitalizing the Marshes and the Poverty Reduction Strategy, for the period 2018-2022.

THE CONCEPT OF SUSTAINABLE DEVELOPMENT

Public sector units should be characterized by development and sustainability, which is reflected in achieving sustainable development by using the social, economic and environmental essence of the internal work of society, as public sector units that should be sustainable in the long term in terms of economic, environmental and social aspects generate added value to society in terms of sustainable development, by carrying out its activities and at the same time ensuring its strong position in society and achieving balance in the competitive environment. due to its basic nature, public sector units participate in almost all transformations of the concept of sustainable development and their activities cover a wide range of population needs. according to the global understanding of sustainable development, they depend on three main pillars, which are the social, environmental and economic pillars (Hommerova, 2016:28).

The Oxford English Dictionary touches on two definitions of sustainability: the ability to maintain something at a certain rate or level (for example, sustainable economic growth) and the ability to support or advocate for something (for example, sustainable professional practices). and that sustainability in the public sector includes shades of both stakeholders, which are closely related (Provost by Oxford, 2013:8).

The social pillar refers to cohesion between individual generations or social groups, equal rights, access to education or poverty reduction. between them, the economic pillar refers to economic growth, unemployment, international trade, globalization, regional development, and organization of institutions. as for the environmental pillar, it discusses pollution reduction, sustainable consumption of non-renewable resources, protection of ecosystems and combating climate change (Hommerova, 2016:29).

MEASURING SUSTAINABLE DEVELOPMENT ACTIVITIES IN PUBLIC SECTOR UNITS

The IPSAS framework focuses on the primary users of public sector accounting information who are the recipients, service providers, resource providers and their representatives. This means that the more resources that public sector units collect, manage and/or have the ability to distribute, the more liabilities they incur. the greater the economic or social impact of their activities, and thus the greater the likelihood that service recipients or resource providers will rely on the IPSAS framework for information on them for accountability and decision-making purposes (4.7, IPSASB 2014).

As the accounting rules for the public sector differ in most countries, but it is often relied on the guiding guide issued by the Ministry of Finance, which integrates accounting standards for the local and international public sector with laws and official government documents, as a few countries depend on international accounting standards for the public sector only in preparing their financial data, most of these countries have changed their accounting policies and rules to become compatible with international accounting standards, and despite some differences between official laws and international public sector accounting standards, the issue of sustainability is one of the most important rules that all public sector accounting systems in all countries may share. which confirms the important role of accounting in assessing the economic and social position of countries (Giosi, 2020:161).

Accounting frameworks in the public sector aim to strengthen governance structures and rational control in government units, these frameworks are not only present for preparing financial reports, but also to enable accounting and financial management, including budgeting and performance management, as well as national accounts and other reporting practices that differ from data, therefore, the scope of public sector accounting frameworks is wide enough to include financial reporting, budget systems, national accounts, management accounting, and performance reporting systems, and that all of these frameworks are appropriate for sustainable development (Dennis, 2018: 400).

These frameworks indicate that most public sector units enjoy limited discretionary power regarding their revenues, and depend on the allocations of the state's general budget, while they may be required to maintain the quantity and quality of services they provide, if not increase them, given the objectives based on the establishment of these government units in providing services, and thus assessing the long-term sustainability of public sector units on the basis of purely financial factors only would be vague and misleading (Tsygankov, 2021:41).

The conceptual framework of the International Public Sector Accounting Standards IPSASB 2014 acknowledges the fact that the primary objective of most public sector units is to provide services to the public, and therefore the performance of these units can only be partially evaluated by examining their financial position, financial performance and cash flows, on the other hand, government units depend on government funding, which depends partly on measured performance in terms of outputs and results and not on costs, thus there is a risk of relying on cost accounting tools in measuring sustainable development activities, which will not contribute effectively to the sustainability of these units unless the social, economic and environmental characteristics are taken into account (Caruana et al., 2019: 3-6).

There are many approaches to accounting measurement for sustainable development, which should be compatible with the economic, social and environmental dimensions, the most important of which are: (Abdul Hamid, 2023: 886-887)

- 1- Measurement using the social utility unit: which is concerned with quantitatively measuring the degree of social benefit or satisfaction in the form of units called social utility units.
- 2- Measurement using the monetary unit: it is used to measure the economic and social effects in monetary units.

- 3- Multistage quantitative measurement: It includes all quantitative measurement methods (ratios, numbers, weights) to provide quantitative information on the impact of environmental processes.
- 4- Descriptive Measurement: It is the conversion of the characteristics of the event into a quantity that reflects to the information reader the characteristics of the event.

DISCLOSURE OF SUSTAINABLE DEVELOPMENT ACTIVITIES IN PUBLIC SECTOR UNITS

Public sector units are important employers and service providers and primary consumers of resources, so they have a significant impact on national and international progress towards sustainable development, peace support operations are putting increasing pressure on public sector units to manage and report on sustainability issues given the serious impact of peace support operations on environment and society, it has become increasingly necessary to explore accounting and accountability practices and prepare their own reports, as sustainability accounting enables the systematic identification and interrelationship between social, environmental and economic costs and the benefits of organizational strategies and procedures and the inclusion of these considerations in organizational decision-making and therefore, the preparation of sustainability reports as a means To assess the economic, environmental, and social impacts of public sector units' operations, products, and services, and their overall contribution to sustainable development (and Lodhia, 2019: 498-499 Kaur).

Many researchers have studied the practices of disclosure of sustainable development and identified a set of different factors to increase the disclosure of information. (Argento et al. 2019) showed that the ownership and size of public sector units greatly affect the sustainable development disclosures of these units, as public sector units wholly state-owned provide relatively less disclosures of sustainable development information compared to partially state-owned units, and that large public sector units provide relatively more disclosures about sustainability compared to small public sector units. while (Andrades and Larran, 2019) determined the extent to which public sector units adhere to mandatory non-financial disclosures, and it reached a low level of information disclosure due to the lack of clarity in the laws that allow disclosure of mandatory non-financial information, on the other hand, it supported the study (Argento et al. al. 2019) on the impact of the factor of the size of public sector units in increasing the level of disclosure.

On the other hand, (Farneti et al., 2019) studied two different factors to influence the disclosures of sustainable development activities, as it discussed the impact of international pressures on the provision of non-financial disclosures to public sector units, and the increase in the impact of this factor on disclosure, especially with regard to the needs of stakeholders. while a group of researchers (Che-Ku-Kassim et al., 2019) & (Midina et al., 2016) studied the most common means of providing mandatory and voluntary non-financial disclosures in government units, they concluded that they used more than one media to publish These disclosures, the most important of which were websites, due to the impact of this method on communicating information to stakeholders to increase transparency and accountability, which in turn works to promote sustainable development in public sector units.

The most important indicators of disclosure of sustainable development in the public sector issued by global international organizations can be clarified through the following:

Sustainable development indicators issued by the United Nations European Economic Commission UNECE and the Organization for Economic Cooperation and Development OECD: These are indicators based on the capital approach, which depends on a set of national indicators derived from policy frameworks, and this approach depends on five basic types of capital, which are Industrial, economic, natural, human and social capital, and these indicators help to make comparisons in the field of sustainable development activities between countries of the world (UNECE/OECD, 2008:1-5).

Sustainable development indicators issued by the Global Sustainability Standards Board (GSSB): these are the indicators known as the Global Reporting Initiative (GRI), which were prepared according to the tools of public sector units and common expectations among organizations related to environmental, social and economic responsibilities, these indicators consist of five main sections: disclosures about the organization and its reporting

practices, various activities, governance, strategies, policies and practices, and stakeholder engagement (GRI, 2021:2-4).

The indicators of sustainable development issued by the United Nations Conference (UNCTAD): they are four main indicators that are adopted as a basis for achieving harmony between reporting sustainability for private and public sector companies and the extent of their contribution to the goals of sustainable development, they are divided into four main groups: indicators of the environmental, economic, and social and institutional, and in line with the dimensions of sustainable development, and these indicators may be directed more towards profit-making sectors (UNCTAD, 2022: 5-10).

THE OBJECTIVES OF THE NATIONAL DEVELOPMENT PLAN 2018-2022 AND THE RESULTS OF ITS IMPLEMENTATION

The Iraqi Ministry of Planning has developed the national development plan for the years 2018-2022 after identifying the most important problems and goals that the state seeks to achieve, from reducing the disparity between the governorates, maximizing the exploitation of resources and supporting investments for the private sector, through strengthening the role of local administrations and increasing decentralized powers to increase their ability to achieve the goals of sustainable development, and the reconstruction of cities destroyed by the war, the return of the displaced, addressing social problems and poverty, and participation with the private sector in the completion of stalled projects., undoubtedly, all these set goals fall within the goals of sustainable development and in a way that enhances the achievement of Iraq's vision for the year 2030.

The objectives of the national development plan are reflected in the preparation of the state's general budget, as the most important fields that need support and treatment are identified, such as the problems of poverty, the spread of diseases, and weak economic growth, passing through maximizing non-oil state revenues and supporting industry and agriculture, then moving to reducing environmental pollution and establishing sustainable cities, as all these goals are subject to an in-depth study to determine the financial amounts necessary to allocate in the general budget to achieve them, therefore, the implementation of the goals of the national development plan 2018-2022 is reflected in the amounts allocated in the state's general budget.

Accordingly, the researcher studied the objectives of the national development plan 2018-2022 and the results of its actual implementation by analyzing the percentage of amounts allocated to achieve the objectives of the plan in the state's general budget, this can be reviewed through the table of objectives of the national development plan and its results as follows:

TABLE 1. The objectives of the national development plan and its results

Objectives of the National Development Plan	indicators	planned/actual	2018	2019	2020	2021	2022
Labor force and economic growth	The ratio of investment spending to public spending	planned	30%	30%	30%	30%	30%
		actual	13%	14%	3%	13%	8%
	The ratio of non-oil revenues to total revenues	planned	15%	15%	16%	16%	17%
		actual	10%	8%	10%	10%	5%
	The ratio of investment revenues to total revenues	planned	6%	6%	6%	6%	7%
		actual	0.15%	0.07%	0.02%	0.05%	0.06%
Industry and energy sector development	The number of employees working in the government sector	planned (growth)	1.03%	1.03%	1.03%	1.03%	1.03%
		actual	2,885,716	2,941,890	2,941,890	3,263,834	3,263,834
	The ratio of amounts allocated to the industry and energy sector to the total non-oil investment budget	planned	13%	13%	13%	13%	13%
Development of the buildings and services sector		actual	17.70%	15.23%	24.76%	19.67%	8.80%
	The ratio of amounts allocated to the construction and services sector to the total non-oil investment budget	planned	22.53%	22.53%	22.53%	22.53%	22.53%
Human and social development of the education sector		actual	39.61%	52.18%	41.11%	45.14%	51.86%
	The ratio of the amounts allocated to the education sector to the total non-oil investment budget	planned	27.80%	27.80%	27.80%	28.10%	28.10%
Health and environmental sustainability		actual	17.16%	5.92%	4.70%	8.46%	6.98%
	The ratio of amounts allocated to the health and environment sector to the total non-oil investment budget	planned	10.20%	10.20%	10.20%	10.20%	10.20%
Rule of law, human rights and access to justice		actual	2.12%	0.53%	1.92%	1.81%	3.09%
	The ratio of the amounts allocated to the interior and justice sectors to the total non-oil investment budget	planned	2%	2%	2%	2%	2%
Development of water resources and services		actual	0.02%	0.50%	0.01%	2.93%	5.64%
	The ratio of amounts allocated to the water resources and services sector to the total non-oil investment budget	planned	17.63%	17.27%	16.91%	16.56%	16.21%
Marsh recovery		actual	20.78%	6.61%	0.68%	1.39%	0.96%
	The ratio of the amounts allocated to the strategy of reviving the marshes to the total non-oil investment budget	planned	1.2%	1.2%	1.2%	1.2%	1.2%
Poverty Alleviation (Poverty Strategy)		actual	0.02%	0.0004%	0.10%	0.0004%	0.10%
	The ratio of amounts allocated to the poverty alleviation strategy to the total non-oil investment budget	planned	8%	8%	8%	8%	8%
Poverty alleviation (social welfare expenditures and ration card)		actual	0.05%	0.13%	0.60%	0.27%	0.96%
	The ratio of social welfare and ration card expenditures to the total expenditures of the current budget	planned	32%	32%	32%	32%	32%
		actual	23.58%	23.48%	22.54%	23.67%	25.87%

The source was prepared by the researcher based on the objectives of the national development plan and the data of the Ministry of Finance for the period 2018-2022.

Through the results of the previous table (1), the percentage of implementation of the objectives of the national development plan can be determined as follows:

1- The first objective (labor force and economic growth) notes the large gap between the percentages that are planned to be achieved and the actual results, in a way that does not achieve economic sustainability, my agencies:

- Investment spending to public spending recorded a ratio ranging between (3%-14%), which is much lower than the planned percentage, which is estimated at (30%), which means that most of the expenditures specified in the budget are current expenditures.

- Non-oil revenues to total revenues recorded a percentage ranging between (5%-10%), which is much less than the planned percentage, which is estimated at (15%), which means that non-oil revenues (industrial, agricultural, taxes and fees) do not constitute a significant revenue percentage. Compared to the volume of spending on these sectors, and that the lowest percentage achieved was in 2022, which means that the country tends to neglect sustainable sectors.

- Investment revenues to total revenues recorded a ratio ranging between (0.02%-0.15%), which is much lower than the planned ratio, which is estimated at (6%-7%), which means that the revenues generated from investment projects do not constitute a significant percentage compared to the volume of spending on this. sectors, as well as the lack of importance of the investment projects that are planned and on which the increase in the volume of revenues depends.

- A planned growth rate of about (1.03%) was determined to increase the number of employees in line with the population increase and the expansion of the size and number of establishments. It is noted that the number of employees remained unchanged during the years 2019 and 2020, with an estimated increase of (1.1%) in the year 2021 and the number of employees remaining Without an increase in 2022, and that this increase was mostly in the security institutions, with the rest of the sectors remaining unchanged in the number of employees.

2- The second objective (industrial and energy sector development) it is noticed that the results of the actual percentages are higher than the planned percentages, which are estimated at about (13%), if the percentage of the amounts allocated to the industry and energy sector to the total investment budget ranges from (15.23%-24.76%), this means that attention is directed this sector and its development in the future term, and here it must be noted that the plan estimated the country's need for the development of industry and energy at about 13% of the total non-oil investment expenditures, although the actual need necessitated an increase in the percentage in line with the shortage in support for this sector, which means that no the accuracy of the planned ratio in the development of the industry and energy sector, and this has affected the reduction of the specified ratios for the rest of the sectors.

3- The third objective (development of the buildings and services sector) the national development plan aimed to achieve a rate of approximately 22.5% to achieve this goal during the period 2018-2022, and it is noted that a significant decrease in the target percentage compared to the actual results, which ranged between (39.61%-52.18%), and this disparity gives an image clear about the inefficiency of building this goal with the actual need to develop the buildings and services sector.

4- The fourth objective (human and social development for the education sector) the national development plan 2018-2022 focused on the education sector and aimed to achieve a ratio of about (27.8%-28.1%) of the total amounts allocated to the investment budget to support building schools and increase student enrollment, but it turned out the actual results are that the allocation rate did not exceed 8.46%, but in 2018 the percentage was 17.16%, which is much less than the percentage that is planned to be achieved.

5- The fifth objective (health and environmental sustainability) the actual percentages for allocating funds to support the health and environment sector from the total investment budget show a percentage ranging between (1.81%-3.09%), the highest percentage was recorded to support this sector during the year 2022, however, the gap is still large between the target which ranged around 10.2% from the actual investigation rate, certainly, this matter will lead to a deterioration in the reality of health and environmental services.

6- The sixth objective (rule of law, human rights, and enforcement of justice) the planned percentage of the amounts allocated to the interior and justice sectors ranges around 2%, while the actual results indicate an increase in the increase in allocation for this goal during the years 2021 and 2022, reaching 2.93% and 5.64%, respectively, which means the inaccuracy of determining the target percentage in the plan compared to the actual need.

7- The seventh objective (development of water resources and services) the national development plan indicates an increase in interest in this sector by specifying the allocation percentage of the amount of the investment budget at a range of (16.21%-17.63%), while the actual results indicate a significant decrease in the percentage, from 20.78% in 2018 to 0.96% in 2022, which is negatively reflected in the development of water resources and the provision of clean water.

8- The eighth objective (reviving the marshes) the percentage of the planned amounts for the strategy of reviving the marshes is about 1.2% of the total investment budget, in contrast, the actual achievement rate is about (0.0004%-0.1%), as the highest percentage was 0.1% in 2022, and the lowest percentage is 0.0004. % in the year 2021, it is noted that the large and unregulated discrepancy in the increase in allocations in an ill-conceived manner does not depend on the natural increase or the gradual natural reduction in the allocation of amounts from the investment budget, and without relying on the percentage of the planned amounts that were estimated based on an urgent need to address the problems of the marshes, and the researcher believes the strategy to revive the marshes is not only related to the climate, wild and marine life, but also works to address the high rates of poverty and unemployment due to the dependence of a large number of the population on living and working in the marshes, and as a result the planned amounts should be approved in the national development plan.

9- The ninth objective (poverty alleviation), which is one of the most important goals, for which the national development plan 2018-2022 has developed several strategies to address it, namely:

- Poverty strategy: if the planned percentage of the total investment budget reached about 8% for the purpose of completely eradicating poverty, but unfortunately, the actual allocated percentages did not exceed 0.96% in 2022, which is the highest allocation percentage from 2018, which means that there are no real efforts to address poverty problems in a comprehensive manner ultimate .
- Social care expenditures: the planned percentage during the years of the national development plan is about 32% of the total current budget, and the actual completion rate for the year 2022 is close to achieving the planned percentage, as it reached 25.87%, but the percentage of planning for the coming years will certainly increase as a result of the increase in the population, and therefore it must be commensurate with it the actual increase to address the problems of poverty and eradicate it.

As a result of comparing the planned and actual percentages during the years of the plan, it is noted that three goals of the national development plan 2018-2022 have been actually implemented, which are (development of the industry and energy sector, development of the buildings and services sector, the rule of law, human rights and access to justice), but the targets for achieving them have not been clearly defined. it is true that most of the percentages were low in the plan, and therefore higher amounts were allocated for them than the planned percentages in the state's general budget, which were determined as a result of the actual need. on the other hand, it is noted that there is no actual implementation of six goals of the national development plan, which are (labor force and economic growth, human and social development of the education sector, health and environmental sustainability, development of water resources and services, revitalization of the marshes, and poverty alleviation), the next national development plan 2023-2027 to address the significant decline in the rates of achieving the goals, taking into account the population increase and the scarcity and scarcity of resources, as well as the timeline specified in the vision of Iraq, which indicates the achievement of all planned goals by the end of 2030.

The following is a table that summarizes the actual implementation rates compared to the planned rates for achieving the goals of the national development plan 2018-2022 and is calculated by taking the average of the achieved and planned rates for the period from 2018-2022 :

TABLE 2. Percentages of actual implementation of the objectives of the national development plan

Objectives of the National Development Plan	planned average ratio	actual average rate	implementation rate
Labor force and economic growth	17.36%	6.29%	36.23%
Industry and energy sector development	13.00%	17.23%	132.54%
Development of the buildings and services sector	22.53%	45.98%	204.08%
Human and social development of the education sector	27.92%	8.64%	30.95%
Health and environmental sustainability	10.20%	1.90%	18.63%
Rule of law, human rights and access to justice	2.00%	1.82%	91.00%
Development of water resources and services	16.91%	6.09%	36.01%
Marsh recovery	1.20%	0.04%	3.33%
Poverty Alleviation (Poverty Strategy)	8.00%	0.40%	5.00%
Poverty alleviation (social welfare expenditures and ration card)	32.00%	23.83%	74.47%

The source was prepared by the researcher based on the rates of actual and planned achievement of the Objectives of the national development plan.

The effectiveness and efficiency of the national development plan can be studied by analyzing the results of indicators of sustainable development activities for the period 2018-2022, which can be reviewed through the following topic:

Sixth: Measurement and disclosure of sustainable development activities and evaluation of the National Development Plan (2018-2022)

The researcher used the indicators for the study of sustainable development activities specified by the United Nations in 2015 to determine the percentage of achievement of sustainable development goals for the countries of the year, as he chose nine activities from these goals, which are commensurate with the axes set in the National Development Plan 2018-2022, with regard to the disclosure of sustainable development activities, the researcher relied on the indicators of the Organization for Economic Cooperation and Development OECD to suit them with the reports and bulletins issued by government agencies interested in sustainable development activities, Iraqi Planning, Ministry of Health and Environment, Ministry of Construction and Housing, National Committee for Sustainable Development, Committee on Poverty Strategy, Committee on the Recovery of the Marshlands.

For the purpose of evaluating the effectiveness and efficiency of the national development plan 2018-2022, the framework for evaluating sustainable development plans for public sector units has been relied upon, which is known as the New Public Management Framework (NPM). It can be illustrated by the following figure, the NPM framework for assessing sustainable development plans:

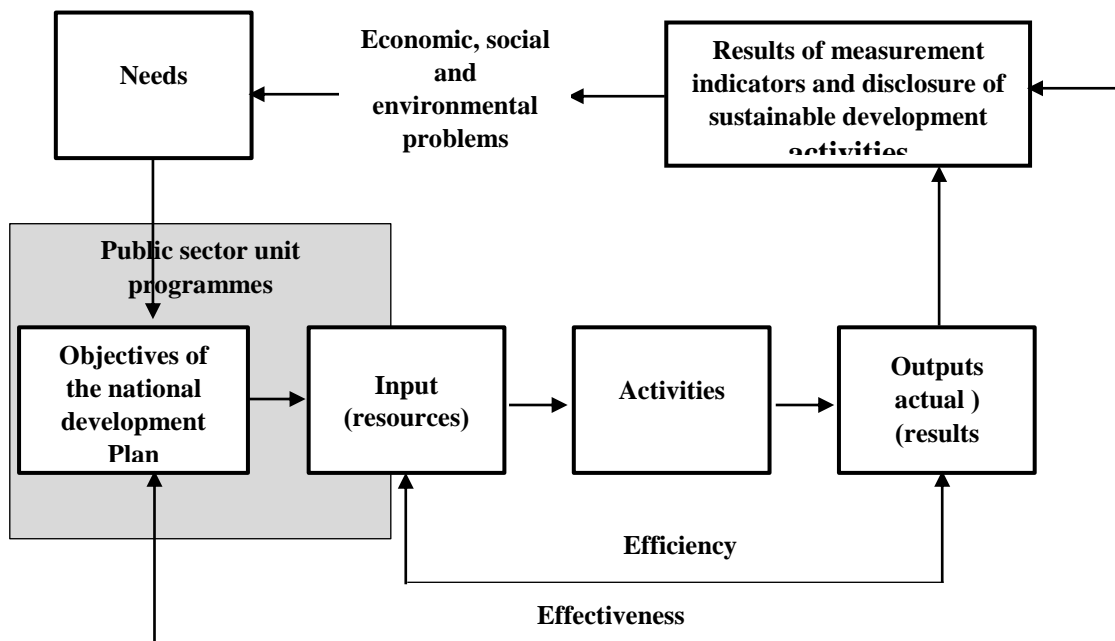


FIGURE 1. NPM framework for assessing sustainable development plans

The framework of the new public Management (NPM) has been modified to suit the national development plan, as the evaluation process relies on studying the efficiency of the exploitation of planned economic resources and comparing them with the actual results in the state’s general budget, and then studying the effectiveness of the goals of the national development plan and comparing them with the results of measurement indicators and disclosure of development activities, sustainable development and its impact in the medium and long term.

The results of indicators for measuring and disclosing sustainable development activities for the period 2018-2022 can be reviewed through the following table (3):

TABLE 3. Results of measurement indicators and disclosure of sustainable development activities

sustainable development activities	indicators	2018	2019	2020	2021	2022
Decent work and economic growth	Average per capita GDP (million dinars)	7.1	7.1	5.4	5.4	4.9
	Unemployment rate for women *	31%	32%	31%	30.1%	28.2%
	Unemployment rate for men *	10.9%	11.7%	12.4%	13.2%	14.7%
Industry , Innovation and infrastructure	The percentage of the industry's contribution to the GDP *	2.0%	2.1%	2.7%	2.6%	2.6%
	Illiteracy rate at the age of (10 years) for women and men *	22%	20%	19%	17%	13%
	Ratio of the number of school buildings to the number of primary schools (the gap in the number of buildings)	19%	27%	27%		
Quality education	Ratio of the number of school buildings to the number of secondary schools (the gap in the number of buildings)	30%	45%	45%		
	Number of primary schools to population growth rate ratio (total number of schools needed)	18701	22521	22521		
	Number of secondary schools to population growth rate ratio (total number of schools needed)	8321	10808	10808		
	Student enrollment rate in primary school *	94%	90%	90%		
	Student enrollment rate in intermediate school *	57%	58%	58%		
	Student enrollment rate in preparatory studies *	28%	32%	31%		
	Ratio of availability of essential medicines for common and life-saving diseases to total medicines *	12%	12%	11%	13%	12%
Good health and well being	Density of health professionals per 10,000 inhabitants	9.9%	9.8%	9.9%	9.5%	9.3%
	The number of government hospitals to the population per 100,000 inhabitants (the gap in the number of hospitals) *	65%	65%	68%	68%	68%
	The number of primary health care centers to the population per 10,000 inhabitants (the gap in the number of centers) *	28%	28%	29%	30%	30%
	Percentage of the population served by the sewage system *	35%	35%	36%	36%	36%
sustainable cities and communities	The ratio of the number of sanitary landfill sites that obtained environmental approval to the total number of sanitary landfill sites	28%	28%	51%	51%	51%
	Percentage of air pollution in residential cities (dust) *	26%	23%	28%	30%	
	Ratio of clean energy use to total energy in cities *	0%	0%	0%	0%	0%
Peace , Justice and strong institutions	Number of victims of intentional homicide per 100,000 inhabitants *	1740	1509	1470		
	Conflict-related deaths per 100,000 population *	370	299	113		
	Proportion of the population who have been subjected to physical and psychological violence per 100,000 *	0.01%	0.02%	0.02%		
Clean water	Percentage of population served by potable water networks *	83%	83.4%	83.4%	83.8%	83.8%
Climate action	Percentage of uncultivated lands in the marshes (sq.km) *	2370	2250	2370	3500	
	The total amount of water for the marshes *	74%	81%	77%	49%	16%
No poverty	The ratio of the number of people who live on less than 3,700 dinars per day (\$3.1) to the total population	21%	24%	29%	30%	30%
Zero hanger	The ratio of the population covered by the minimum levels of social welfare expenditures to the number of the poor population	3.0%	3.4%	3.3%	3.4%	3.6%

The source was prepared by the researcher based on government statistical reports

* Indicators of disclosure of sustainable development activities

The process of analyzing sustainable development activities relied on indicators of measurement and disclosure together to study the rates of completion and development of these activities, the results of these indicators can be clarified and compared with the rates of actual achievement of the national development plan 2018-2022 and to discuss the efficiency and effectiveness of this plan through the following points:

1. decent work and economic growth (labor force and economic growth): this activity is concerned with studying the unemployment rate and per capita income compared to the gross domestic product. the results of the following indicators showed:

- The results of the availability of job opportunities show a gradual increase in the unemployment rate for men, as it increased from 10.9% in 2018 to 14.7% in 2022, offset by a slight decrease in the unemployment rate for women, which is estimated at 31% in 2018 to 28.2% in 2022, noting the increase the high rates of unemployment of women compared to men, which shows the lack of equal distribution between the sexes, and when comparing the unemployment rate with the growth rate of government jobs, which exceeded 1%, this shows the inefficiency of the first goal of the national development plan due to the inability to reduce unemployment rates compared to the population increase, and this affected the the effectiveness of the procedures specified for this goal in the future impact of addressing the high rates of unemployment.

- A decrease in the average per capita income compared to the gross domestic product, as it exceeded 7 million dinars in 2018 and decreased to 4.9 million dinars in 2022, and when comparing these results with the first goal of the national development plan, we notice a decrease in non-oil revenues, with the state's tendency towards spending and neglecting investment spending, which greatly affected the increase in non-oil state revenues with the decrease in oil revenues due to the corona crisis.

2. Development of the industrial and energy sector (industry, innovation and infrastructure): the contribution of the industrial and energy sector increased from about 2% in 2018 to 2.6% in 2022, which constitutes a very small increase compared to the allocation of funds in the investment budget for this sector, which is estimated at about 17% and when comparing the percentage of the contribution of this sector with the second goal of the national development plan, which exceeded 132.54% in its implementation compared to the planned percentage, it shows the poor selection of appropriate means to support this sector and increase its contribution to the gross domestic product, which shows the inefficiency of investing resources compared to the actual outputs and the ineffectiveness of plans planned to support this sector compared to the impactful future results.

3. Quality education (human and social development of the education sector): the quality education activity is concerned with studying illiteracy rates, the number of students enrolled in the study, and the availability of the necessary infrastructure for education. this activity is measured and disclosed through the following indicators compared to the national development plan:

- The percentage of actual implementation of the sustainable development plan was about 30% compared to the percentage that is planned to be implemented to allocate funds in the investment budget. however, a good decrease was observed in the illiteracy rate in Iraq, as it reached 22% in 2018 and gradually decreased to reach about 13% in 2022. which notes the efficiency of investing resources to achieve the goal of reducing illiteracy rates and the effectiveness of plans, although the implementation rates for the goal of the national development plan were weak, and in contrast, the enrollment rates of students in primary and secondary schools were almost constant during the period from 2018-2020 with the lack of data for the remaining years, and this certainly indicates not to study the national development plan for the main reasons for increasing the enrollment rate of students and their orientation to work at ages under the age of 15, and not to develop the necessary means to determine the legal age for work and interest in studying during this age period.

- The low percentage of implementation of the goal of the national development plan - human and social development for the education sector greatly affected the gap between the number of school buildings and the number of schools, which forced school administrations to form more than one school in one building, which affected the number of teaching hours required and the speed of buildings disappearance also, the number of primary schools actually available is 13,121 in the year 2019-2020, compared to the actual need that is commensurate with the population, which is 22,521, i.e. a shortage in the number of schools by 9,400 schools in all central and southern governorates of Iraq.

4. Health and Environment (Health and Environmental Sustainability): It is the activity concerned with studying the availability of health service and its basic requirements. Its indicators can be identified and compared with the results of the national development plan through the following:

- The percentage of actual achievement of the goal of the national development plan - health and environmental sustainability reached about 18.63% of the total investment budget allocations, which reflected negatively on the health service, as the Ministry of Planning disclosed in a study it conducted on the availability of basic and life-saving medicines for a list consisting of 531 types, that only about 12% is actually available.

- The ratio of the number of specialized doctors to 10,000 people is about 9.9%, meaning about 10 doctors per 10,000 people. International standards indicate that the lowest percentage is 25 doctors per 10,000 people, which means the need to support the establishment of specialized medical colleges to receive students, in a manner commensurate with the actual need for doctors Specialization, and the National Development Plan 2018-2022 did

not discuss the development of a study to increase the number of specialized medical colleges or the country's future need.

- With regard to the number of hospitals and primary health care centers, the Ministry of Health disclosed that there is a large gap between the number of hospitals per 100,000 people, which amounted to about 68%. On the other hand, the gap in the number of primary health care centers reached about 30%, and the percentage is expected to increase in the future due to the increase in growth. population and the lack of sufficient support for the development of this sector, and the national development plan did not specify the actual need for the number of health buildings required during the period 2018-2022, which is commensurate with the exponential increase in the population for the purpose of developing appropriate mechanisms and means to increase the number of buildings and distribute them geographically.

5. Sustainable cities and communities (development of the buildings and services sector): this activity is concerned with the provision of sustainable health and environmental services for residential areas, as the implementation rate of the national development plan goal - development of the buildings and services sector reached about 204.08%, which is the highest implementation rate among all the other nine goals. on the other hand, the results of the indicators of disclosure of sustainable development activities were as follows:

- Government reports revealed that the percentage of the population served by the sewage system did not exceed 36% in 2022 and did not witness a noticeable improvement from 2018.

- The percentage of sites designated for sanitary landfilling compared to non-designated sites increased from 28% to 51% in 2022, and this activity is witnessing a remarkable improvement, with an increase of about 23% over five years.

- The Ministry of Environment disclosed an increase in environmental pollution rates (dust) in residential areas to 30% in 2021 and did not disclose pollution rates in other harmful gases, noting that the national development plan did not discuss reducing environmental pollution rates in residential areas and did not put in place the appropriate mechanisms to treat it.

- The united nations indicators regarding sustainable development activities focused on the use of clean energy in residential cities, and the national development plan did not discuss the use of clean energy, but rather its focus on reducing environmental pollution rates was very weak.

6. Peace, justice, and strong institutions (rule of law, human rights, and access to justice): this activity focuses on providing the means of good governance, non-infringement of the law, and preserving the rights of citizens. the national development plan focused well on achieving this goal and allocated 2% of the total investment budget. to follow up on the achievement of justice and human rights, the implementation rate has reached about 91%. this can be seen through the results of the indicators of disclosure of this activity:

- The ministry of justice disclosed a significant decrease in the number of deaths as a result of intentional homicide from 1,740 citizens to 1,470 in 2020. it did not disclose this data for the years 2021, 2022. in contrast, there is also a 30% decrease in deaths due to armed conflicts, from 370 citizens to 113 in 2020.

- The reports of the ministry of justice revealed an increase in the number of citizens who were subjected to physical and psychological violence by about 0.02% in 2020.

7. Clean water (development of water resources and services): this activity is concerned with studying the availability of potable water for all citizens, and the results of the indicators of this activity are compared with the goal of the national development plan - the development of water resources and services, whose implementation rate is about 36%, as the results show the indicators for the percentage of the population served by potable water networks is about 83%, meaning that 17% of the iraqi population does not have access to potable water service, which exposes them to many diseases and epidemics, and it is noted that the implementation rate was not reflected in the high percentage of the population served by water networks, which shows inefficient use of resources and the ineffectiveness of the plans developed for the development of this activity.

8. Wild and marine life and climate action (revival of the marshes): the marshes are among the most important places in Iraq that deal with wild and marine life, and as a result of great neglect and for several years, national development plans have focused on setting a goal for reviving the marshes, but unfortunately, the implementation rate of the plan does not exceed 3%, which is the lowest implementation rate among the objectives of the national development plan, and this was negatively reflected in the increase in the area of un reclaimed land from 2370 km² in 2018 to 3500 km² in 2021, with a decrease in the amount of water after it exceeded 74% in 2018 to about 16% in 2021.

9. Poverty eradication (poverty alleviation - poverty strategy): the results of the poverty eradication indicators refer to measuring the percentage of the population who lives with less than \$3.1, equivalent to 3,700 Iraqi dinars, out of the total population of Iraq, as it is noted that the poverty rate increased from 21% to 30 %, and when compared with the national development plan, the poverty strategy got an implementation rate of about 5%, which indicates the lack of serious efforts by the government to eradicate poverty once and for all.

10. Complete eradication of hunger (poverty alleviation - social welfare expenditures): the percentage of the population of the poor covered by social welfare salaries was about 3% in 2018 and increased by a very small percentage to 3.6% in 2022. In contrast, the percentage of implementation of the national development plan reached about 74.47% with the increase in this percentage, it is noted that the percentage of the poor covered by social welfare expenses is very small, and this indicates the inefficiency of the utilization of the allocated resources and the ineffectiveness of the means of the plan designed to address the phenomenon of poverty in Iraq.

As a result of all of the above points for analyzing the relationship between measuring and disclosing sustainable development activities and the national development plan, it is possible to deny the research hypothesis, which states that “the indicators of measurement and disclosure of sustainable development activities do not affect proving the effectiveness and efficiency of the national development plan 2018-2022.” results of indicators of sustainable development activities the possibility of evaluating the efficiency and effectiveness of the national development plan 2018-2022.

CONCLUSIONS

- The national development plan for the years 2018-2022 was prepared to focus on achieving sustainable development activities in Iraq, and it identified 9 goals that are in line with the sustainable development goals set by the United Nations.

- The rates of implementation of the objectives of the national development plan vary. Four objectives have achieved advanced implementation rates, which are (the development of the industry and energy sector 132.54%, the development of the buildings and services sector 204.08%, the rule of law, human rights and access to justice 91%, poverty alleviation social welfare expenditures 74.47%), and the lowest implementation rate among the goals of the national development plan was for the goals (Restoration of the Marshes 3.33%, Poverty Alleviation Poverty Strategy 5%).

- Measuring the rates of implementation of the objectives of the national development plan compared to the planned rates does not reflect the efficiency and effectiveness of the plan and its future impact.

- Measuring sustainable development activities and disclosing them in government reports showed the efficiency of resource utilization and the effectiveness of plans in supporting the goals of sustainable development.

RECOMMENDATIONS

- National development plans should be prepared based on the results of measuring sustainable development activities and disclosed in government reports to find out the required rates of support for sectors and appropriate means to address problems.

- The researcher recommends that the objectives of the national development plans should be reflected in the preparation of the state's general budget and the allocation of funds to activities and sectors depending on what is being studied in the national development plans, and this necessitates reviewing the steps and rules for building the state's general budget.

- When preparing national development plans, the latest methods and means that work to sustain activities, especially clean energy, waste recycling, industrial materials, agriculture by modern irrigation methods, and other means and advanced technology that were not discussed in the national development plan 2018-2022 should be included.

- The need for all governmental institutions to submit reports showing the results of indicators of sustainable development activities to determine the efficiency and effectiveness of implementing their national development plans, and not being satisfied with implementation rates that do not reflect the extent of the sustainable impact of these plans.

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