Manuscript ID: XXXX

The Suggested model for possibility of applying budgeting programs and performance In electric power production sector ¹(Department of Accounting, College college of Administration & Economics / Al-Qadisiyah University Iraq,

Prof. Dr Kasem Mohamed AL-bbag, Kasem.mohamad@qu.edu.iq ²(Department of Accounting, College college of Administration & Economics / Al-Qadisiyah University Iraq, Mohanad Sabbar Lafta AL- jpory, Acc.post01@qu.edu.iq

Abstract

This study aims to apply the method of budgeting programs and performance instead of the method of budgeting the traditional items on the electric power production sector in Iraq, especially in the second gas station in the Electric Power Production Company of the Middle Euphrates, because this method of budgets is able to distribute resources optimally and reduce Waste in spending The most important thing that this study has reached is the application of the method of budgeting programs and performance on government units and the shift and shifting from budgeting traditional items to achieve the desired goals and linking them to spending, relying on future results, modifying programs and their course, and allocating optimal resources to them. Applying this modern method of budgets and moving away from traditional methods, limiting the waste of money and preserving the scarcity of resources, whether material or human, especially in the electric energy production sector in Iraq and the weakness and deterioration it witnesses, training the competent cadres in preparing programs and goals, preparing these budgets, and working to update them in every way. General in line with the financial, economic and political reality in the country

He presented some of the methods and methods that can be applied and used in the resources in an optimal manner and to reach the maximum possible benefit, along with presenting a suggested model for the budgeting of programs and performance.

The researcher reached several conclusions, the most important of which is, the division followed in the method of budgeting programs and performance, which requires dividing the unit into programs and then activities for each program and setting goals related to each program, leads to achieving effective control over these programs by following up on the extent to which programs achieve their goals, as well as providing a budget for programs Performance Detailed information about the performance of the concerned authorities for each program activity, thus facilitating the administrative control process in practice.

Therefore, the study recommended many recommendations, the most important of which is the need to shift from the traditional method of preparing the general budget to the method of budgeting programs and performance because it provides decision makers with information and financial and administrative data, which help government units to carry out the tasks entrusted to them and achieve their goals, and to set performance indicators for each activity Programs to measure the efficiency and effectiveness of program performance

ISSN_{Online}: 2312-9883

 $ISSN_{Print}$: 1816-9171

تهدف هذه الدراسة الى تطبيق أسلوب موازنة البرامج والأداء بدلا من أسلوب موازنة البنود التقليدية وذلك على قطاع إنتاج الطاقة الكهربائية في العراق ولاسيما في محطة الحلة الغازية الثانية في شركة انتاج الطاقة الكهربائية الفرات الاوسط وذلك لأن هذا الآسلوب من الموازنات قادر على توزيع الموارد بالشكل الامثل والحد من الهدر الحاصل ّفي الانفاق ،اهم ما وصلت اليه هذه الدراسة هو تطبيق أسلوب موازنة البرامج والأداء على الوحدات الحكومية وتبرزاهميتها في التحول والانتقال من موازنة البنود التقليدية لتحقيق الأهداف المرجوة وربطها بالإنفاق الاعتماد على النتائج المستقبلية و تعديل البرامج ومسارها و تخصيص الموارد المثلى لها و أبرز ما توصلت إليه هذه الدراسة تطبيق هذا الأسلوب الحديث من الموازنّات والابتعاد عن الأساليب التقليدية للحد من هدر الأموال والحفاظ على ندرة الموارد سواء المادية او البشرية لاسيما في قطّاع انتاج الطاقة الكهربائية في العراق وما يشهده من ضعف وترد والعمل على تدريب الكوادر المختصة في إعداد البرامج والأهداف

مقترح من موازنة البرامج و الاداء.

و توصل الباحث الى عدة استنتاجات اهمها، يؤدي التقسيم المتبع في أسلوب موازنة البرامج والأداء والذي يقتضي تقسيم الوحدة على برامج ومن ثم أنشطة لكل برنامج وتحديد الأهداف المتعلقة بكل برنامج إلى تحقيق الرقابة الفعالة على هذه البرامج من خلال متابعة مدى تحقيق البرامج لأهدافها كما توفر موازنة البرامج والأداء معلومات تُقصيلية عن الأداء للجهات المعنية لكل نشاط من نشاطات البرامج وبالاتي تسهل من عملية

لذاً اوصتُ الدَّراسة بجملة من التوصيات اهمها ، ضرورة التحول من الأسلوب التقليدي في إعداد الموازنة العامة إلى أسلوب موازنة البرامج والأداء لكونها تزود متخذي القرار بالمعلومات والبيانات المالية والإدارية ، التي تساعد الوحدات الحكومية على القيام بالمهام الموكلة إليها وتحقيق أهدافها ،وضع مؤشّرات أداء لكل نشاط من أنشطة البرامج ليتم من خلالها قياس كفاءة وفاعلية أداء البرامج.

Introduction

What we are all aware of is the development that took place in the world at the end of the twentieth century and the beginning of the twenty-first century in the financial and catering needs, the inflation of spending on projects and the development in preparing plans from the above. Items from what to what we have to think about moving to a new method of preparing budgets that is more efficient and more accurate in the end and reduces the stone of waste of money.

In light of the acceleration in the pace of time development, many countries of the world are applying new budgeting methods, especially balancing programs and performance.

After the world's view has focused on the budget as a financial management only to determine the public expenditures and revenues of the state, now the budget is an essential tool for planning, coordinating, motivating, preparing and implementing programs, and measuring performance and controlling them.

The program and performance budget is in its style of linking between state programs, plans and objectives, as the method of this budget aims at a link between accreditation and the planned goals and decision-making. The trade-off between alternatives to achieve certain goals, as it gives priority to the planning function over the exchange control function and the activity management function. government through the programme.

Therefore, it combines the three dimensions of the budget, which are planning, implementation and performance control. Budgeting programs and performance is an important tool for improving spending priorities, effectiveness and efficiency. In view of the development that has taken place, this development claims to think in a new way in preparing the budget from the previous time, due to financial distress and scarcity of existing resources, whether material or human, and directives to achieve the desired goals, and in order for the plans, programs and goals that the state and its institutions seek to achieve more clearly and transparently to the public It is necessary to rely on transparent scientific methods to stop the wastage of resources. Expenditure rates in previous years' budgets doubled from year to year.

The political and economic developments that have occurred in Iraq in the past forty years and the waste of money and resources and the failure to direct them in the right direction, especially in the electric power production sector, the lack of nine leaders for development in the field of budget preparation and the weakness or absence of studies in this field, due to the weakness or lack of resource allocation Orienting it optimally, although in the previous two years, Iraq directed the transition from balancing items to balancing programs and performance through meetings between the relevant financial committees in the Ministry of Finance, the Ministry of Planning and the Finance Committee in the Iraqi Parliament, and its repeated meetings with the United Nations Development Program (UNDP) at the end July of 2019 and the holding and attendance of practical workshops to move to this budget and apply it at the beginning of 2020, which was supervised by the (USAID) integration project in cooperation with the United Nations Development Program (UNDP), but I am what happened from the repercussions of the political situation in Iraq at the end of 2019 The spread of the Corona pandemic at the beginning of the year 2020, and it stood in preventing this.

From the foregoing, this study aims to demonstrate the effectiveness of balancing programs and performance in determining resources and using them in an optimal way to reduce waste in the electric power production sector. Therefore, this study was divided to reach its objectives into two sections.

The first topic: balancing programs and performance

The second topic: a proposed model for the application of the program and performance budget in (Hilla gas station)

Research problem

The research problem follows the preparation of the general budget of the Iraqi state from its foundation to the present time depends on the budget of traditional items and it does not perform or meet the requirements of the global development that took place at the end of the twentieth century and the beginning of the twenty-first century, which is clear from its weak performance in the allocation of resources and the inflation of expenses from year to year and weakness Oversight by the competent authorities and their failure to adopt the scientific bases in the preparation, including cutting off electricity, especially the electric power production sector in Iraq, which suffers from many problems in inflated expenses and the lack of optimal allocation of resources, whether they are material or human resources.

The research problem can be summarized in the following questions:

- 1- Does the budget of the current approved items meet the requirements of the current situation and are able to provide data in directing resources and allocating them in an optimal manner in the production of electric power?
- 2- Is the budget for programs and performance appropriate for preparing plans in the short and medium term better than budgeting for items?
- 3- Is it important to determine the results and plans of the General Company for the Production of Electric Energy in the Middle Euphrates / Hilla Second Gas Station and draw up its programs in advance of the importance of advancing the current and future reality, and does the budget of programs and performance take that into consideration?

The importance of research

The importance of this research comes from the important and main position occupied by the state's general budget in general, which is the main tool for translating state policies and implementing its declared goals.

The purpose of the research

The research aims to apply the program and performance balancing method to the budget of the second Hilla gas station in order to avoid shortcomings in the (traditional) items budget currently applied in Iraqi government institutions.

Research Hypothesis

The use of program and performance budgeting leads to increased monitoring of performance, improvement of the planning process, performance measurement and optimal use of resources.

Research sample

The second Al-Hilla gas station was chosen because it follows the traditional budget in estimating the allocations for the year The future and the possibility of applying the program and performance budget in that department.

The first topic

Budgeting programs and performance

This topic deals with the definition of the state's general budget, budgets and their types, and details of program and performance budgets.

1 - The state budget :-

There are many definitions of the state's general budget that differ from one country to another according to the political, legal and financial legislation in that country, and through these definitions it becomes clear to us that the state's general budget has financial, economic, political and social importance, and it is a financial management used by states, and it has great goals in Redistribution of income through the imposition of progressive taxes, to cover the expenses of the poor classes. As for the financial characteristic of the budget, it is the disclosure of the international financial center if it has a deficit or a surplus (Alawi, 2009: 2).

Al-Akkam definition: A financial plan issued annually by a legislative instrument by the legislative authority in the state that estimates and compels public expenditures and revenues to achieve the state's goals (Al-Akkam, 2018: 273).

Definition of the Iraqi Accounting Law No. (28 of 1940, amended): In paragraph (1) of Article II (the tables containing estimates of state expenditures and revenues for one fiscal year are specified in the budget law.

From the foregoing, the researcher sees that the state's general budget can be defined: It is a plan developed by the state to estimate its expenditures and revenues from its resources, and the executive authority prepares it because it has the competence to estimate expenditures and revenues, and that the legislative authority has begun in the general budget law to the next fiscal year. Achieving financial, economic, social and political goals according to what the society needs and the political authority aims for.

2 - Types of budgets

The budgets vary according to the nature of the funds used in them, say that each type of money used is the budget specifically in it, and from the total of the budgets, the general budget of the state, and also the various types of budgets are based on the approved basis for classification (Saleh, 2014: 16-17).

2,1 - Balancing items:

The line budget is called by many names, including the traditional budget, the supervisory budget, as the first to apply this type of budget is England and it took its final form in 1921 AD and then moved to the United States of America to become a comprehensive implementation budget. The division of expenditures into current And capitalism, as expenditures are divided according to their type and not their goal. This means dividing expenditures into groups of the same nature, regardless of the administration of the state that spent them and then allocates them by dividing them into chapters (Al-Karkhi, 2015: 51)

2,2 - Budgeting Programs and Performance:

This type of budget is nothing but a modern tab to the budget that cares and focus on government programs and their programs and where they work, not what you buy of goods and services, that is, it focuses on the goal itself and not the means to achieve the goal because in the educational materials it appears what was purchased Before the state, not the program for which the purchase was made, nor the goal of that was achieved (Al-Shamrani 2010: 6).

2,3 - Zero budget:

Zero materials are based on the basis of starting from scratch, and it is defined as a system that assumes that the absence of any services or expenses at the beginning in order to obtain results or any outputs after taking into account the minimum cost and providing the effectiveness of spending for this consideration, is that type From the budgets that the previous programs are closed at the beginning of the fiscal year until all the programs are reviewed from the ground up, i.e. from scratch, a new plan is developed for each program without consideration. and its activities and comparing the realized benefit with the realized costs (Alawi, 2009: 6).

2,4 - Contractual budget:

The concept of this budget is represented by the relationship in the government and executive agencies, a contractual relationship, in which they keep the implementation of the tasks of a quantitative judge in exchange for sums that the state pays before him, during and after the implementation of the works that have been agreed upon, that is, it represents a deal between the executor and the government, according to this concept the government offers its projects and programs for contracting to win Contractors to implement these projects and plans at the lowest possible cost in a timely manner in return for achieving the objective of the program presented for contracting, and the first to implement this type of budget was the New Zealand Ministry of Finance in 1996 AD (Salman 2016: 12).

2,5 - Budgeting based on activities:

The objective of the budget is to continuously improve the objectives of the activities and the process of that activity, and the activity-based budget (ABB) works to synchronize activities and then continuously improve them, a department that works for the overall performance of the facility, which requires a great effort from employees to coordinate and remove barriers between departments and coordination between them. sweet,2017: 43).

The researcher believes that through the development in the methods of budgets over the passage of time and the evolution of what is happening in social, economic and political life and the systems of countries, it is necessary to move to a newer budget in application than the budget of items that seem unable to achieve the goals due to the development of life, the expansion of the interests of the state and the reduction of financial

and administrative corruption Through the application of a newer method in preparing budgets and adapting laws to serve the new method of preparing budgets and not conflict with it.

3 - Budgeting programs and performance

3,1 - A: History and development of the program and performance budget:

Budgeting programs and performance is the first attempt at reform in preparing traditional budgets, and the United States of America is the first to make that attempt in developing budgets, reducing waste in financial resources and reducing expenditures.

The first attempts in the United States of America were in the state of New York at the beginning of the twentieth century, the period between 1913-1915, and it was just an experiment in setting a budget for costs in that city, and the Municipal Research Office in New York State contributed to the development of this type of budgets. Three main functions are

- 1- Streets cleaning
- 2- Street maintenance
- 3- sewers

These jobs were divided into several divisions, in which 10 activities were calculated, the work was calculated and equations were set to measure performance in the budget, the number of miles to clean the streets, then the activity bank costs were estimated to implement and complete the unit and the total costs of doing the work, and this division was strengthened after it. Expenditures do not direct activities, and these tables were presented in the budget to the Municipal Council in New York State, so this did not last long, and it was suspended in 1915 AD, and this was attributed to the large number of details and attachments (Asfour, 2012: 204).

3,2 - The concept of balancing programs and performance:

There are many definitions that define this type of budgets, the definition of the US Budget Office ((that budget that shows the goals for which the financial appropriations (allocations) and the costs of the proposed programs to reach those goals, data and quantitative information (statistical) that measure achievements and all that has been accomplished Works included under each program)). (Asfour: 2012, 207)

It is a method of linking accreditation with programs, according to which senior management sets a line, a long-term line, long-term goals, and then divides them into short-term goals. Strategy Performance Evaluation (zinyam & Nhema; 2016, 34)

That budget that shows the goal or purpose of divorce financial credit, those proposed programs and activities to reach the goal, financial and statistical data and information that measure all the accomplished works and listed programs (Shah, 2007, 154)

It has been defined (Young, 2003): a comprehensive definition, it is a tool for distributing funds, and allocating programs to achieve goals, from which performance, effectiveness and efficiency can be measured, and from its structure it is possible to link inputs i.e. expenditures with program activities and goals, and the structure of the program budget and performance must be taken into account, then Defining the sub-programs, then defining the activities, saying a program, and the performance is measured and the cost of the activity is measured (Abdul Karim, 2016: 6)

3,3 - Program and performance budgeting objectives:

In the traditional budget, it focuses on the control function in addition to the planning function, while in the budget of programs and performance, it focuses on the administrative function in the main, in addition to the other two functions of control and planning. On the other hand, it is characterized as a tool for categorizing the budget through what the state does and not what it does. It includes purchases of goods and services that you receive, and in this sense the budget of programs and performance is based on attention to business and programs and not to what you receive from goods and services (Al-Douri and Al-Janabi, 2012: 189)

- 1- Determining the objectives of each governmental unit according to its specializations
- 2- Analyzing each program, determining its cost elements, and indicating the bodies responsible for implementation

- 3- Setting criteria for measuring the work of each program during implementation
- 4- Evaluation of mental performance in light of approved measurement standards
- 5- Determining the necessary methods to achieve each goal i.e. program proposals

Ali (Al-Luzi and Murar, 1997: 55)

3,4 - Advantages of balancing programs and performance:

There are many advantages of this budget, and they can be summarized as follows:

- 1- Increasing the ability to provide performance.
- 2- Optimal use of the available material and human resources by dividing the resources into programs and activities.
- 3- The possibility of expressing state policy through programs because it focuses on programs and activities that must be accomplished.
- 4- Distribution of activity costs to achieve the planned level of achievement.
- 5- Being a factor and incentive that raises the morale of workers in economic units because they are participants in preparing programs and budget items.
- 6- It is a good tool for public sector strategic planning, defining the general objectives of the state in advance.

(Hammad and Al-Bahr, 1995: 119) (Al-Baghdadi, 1998: 52) (Al-Hour, 1998: 39) (Al-Khatib and Al-Mahaini, 2008: 292).

3,5 - Disadvantages of criticism balancing programs and performance:

Although there are advantages to this budget, it is also tainted by many negatives and criticisms:

- 1- There is a lack of planning, i.e. focusing on programs and activities as goals and not the means to achieve that goal
- 2- It is concerned with planning in the short term, while many programs extend for a time longer than a year.
- 3- There is a difficulty in quantifying some projects due to the difficulty in measuring and verifying performance.
- 4- A rise in the costs of implementing this budget in small government and private agencies.
- 5- It requires in its preparation a large amount of information that may disrupt the public policy in the country
- 6- In preparing it, it requires professional persons and professional bodies with a high level of knowledge, awareness and training. (Hamma, 2012: 49)

3,6 - Justifications for moving to balancing programs and performance:

There are many justifications that allow moving and thinking about balancing programs and performance as alternatives to the traditional budget, balancing items, and they can be summarized as follows:

- 1- The introduction of modern methods of financial management, which enhanced the possibility of applying this budget in the governmental field.
- 2- The expansion of the state's activity, as the expansion of the state's activity necessitated the search for an objective means to be presented to the legislative and executive authorities on the efficiency and ability of the administration executing government work, so reform advocates move to budget programs and performance.
- 3- The inability of the traditional budget to provide specific measures and criteria for the efficiency of government administration, through which it is possible to rise to the level of performance of government administrations and define responsibilities in order to focus on the input aspect only.
- 4- One of the features of the program and performance budget is that it provides adequate information to the citizen about the government services provided by the state administration. It represents a comprehensive description of the activities and programs provided by the state in terms of services, and it shows the objectives for which this budget was set for this program.

- 5- Neglecting planning, weakness of plans based on the traditional budget, balancing items.
- 6- Sometimes the objectives for which financial allocations are requested are not clear
- 7- The budget items focus on the inputs and not on the outputs, so the political dimensions were not clear.

(Matrood, Iyad Sheehan, 2009: 67) (Al-Arnaouti, 2015: 14) (Robinson, 2005; 5)

The researcher sees from the above justifications and advantages the transition to the method of balancing programs and performance to overcome the criticisms made in balancing items, taking into account planning in the medium term, and attention to inputs and outputs together, and this transition helps in finding solutions to many problems that were not addressed by balancing items and finding performance indicators, reducing of spending, and the optimal use of resources.

3,7 - Limitations that hinder the implementation of program and performance budgeting:

Despite the importance mentioned earlier in the transition to the program and performance budget, this method is not considered sufficient because the reality indicates that this budget may raise a new problem or may exacerbate it, which could constitute a major obstacle to the successful modernization of the government sector, if it is prepared and operated Not strictly.

Whereas, the budget of programs and performance in the public government sector assumes clear performance goals that can be measured clearly and objectively. However, many studies indicate that the goals in the public sector are not clear in many areas. (Shin, 2013; 31-33)

Weakness of the criterion used to measure performance leads to an administrative and legal problem that causes lack of cooperation between government agencies and the Ministry of Finance and lack of knowledge of sufficient information by those working on this budget (Hama, 2012: 60).

There is a problem in preparing this budget, and it is the problem of human resources, most government departments in the public sector, that is, the numbers are very few for those who have knowledge and ability to prepare this type of budgets and have the ability, knowledge, capabilities and professionalism. (Al-Shamrani, 2010: 26)

The most important economic problems facing this budget is the instability of material materials, depending on one resource that changes price or fluctuates in price, which is oil. (Hamma, 2012: 60).

3,8 - The role and stages of implementing the program and performance budget:

The role of budgeting programs and performance is not different from what it is the role of budgeting items, the preparation and preparation stage by the executive authority with jurisdiction, and then the legislation of the budget law by the legislative authority, and therefore it will be enforced by the executive authority and its application by government agencies and this stage is followed by oversight on Implementation of Budget Items (Al-Mahmoud, 2005: 15)

All budgets go through three stages:

3,8,1 -The stage of preparing and preparing the program and performance budget:

At this stage, the administrations determine the goals that they expect to achieve in the next fiscal year, whether they are related to the performance of a service or the completion of a project, within the limits of the performance of the public service, and these goals are measured in scales that fit these projects (Ghannam, 2006: 66)

The programs or projects must be emanating from the unit that performs that project, implement the general plan of the state and the ministry, and be prepared in a scientific and technical way. Budgeting programs and performance at a high level of accuracy and realism. The selection of this committee must be made by the competent minister or his representative.

Each entity shall include the following in its draft budget:

- 1- The laws and decisions on which the economic unit depends.
- 2- The organizational structure of the economic unit and the amendments that have taken place thereto since its establishment.

- 3- Programs required to be implemented and approved by each operational, investment, and financing ministry.
- 4- The size of the functional strength and the specialization of the economic unit.
- 5 Determining the target work volume and determining the unit of work measurement, unit costs distributed over the expenditures and achievement rates for the elements of the activity. (Al-Husseini, 2003: 62).

3,8,2 - The stage of approving the budget by the legislative authority and approving the general budget law:

After the Ministry of Finance prepares the budget, that is, prepares the budget program and not only the allocations, then this project is paid to the Council of Ministers for approval, and then it is deposited to the legislative authority to legislate it in a law according to the system of government in each country. (Al-Khatib and Shamiya, 2007: 306).

3,8,3 - The implementation phase of the program and performance budget:

The implementation of the budget is a technical part in which the programs that were approved in the draft budget are implemented, and a second part is financial, which means that the department obtains its financial allocation in the percentage of its implementation of the program from what has been approved in the budget law, and the implementation plan of the program must be accompanied by the planned cash audit plan Its expenditure and revenue flow to secure liquidity for this, and this relationship is justified by the existence of expenditures in one of the departments that are not matched by an achievement in that program, with the existence of expenditures and the completion of one of the programs at a time and the absence of a cash flow to cover that expenditure, which calls for an objective and reliable accounting basis to show this relationship. Between technical achievement and necessary cash flow. (Al-Zamili, 2014: 50)

The researcher believes that it is necessary to take into account the identification of activities within each program, and also to take into account the participation of more than one administration in preparing the program from the budget preparation stage, preventing overlap between programs and knowing each unit's responsibilities in the preparation and then in the budget implementation process, as well as benefiting from the evaluation of the current budget to produce future budgets.

3,9 - The elements of the budget tab, programs and performance:

The program and performance budget differs in its components from the traditional budget, the item budget, as the program and performance budget is concerned with the goal and not the means of achieving the goal, while the item budget gives its importance to the spending materials and their types. The program, rather, they all appear in the list of purchases or the cost of completing the project. It is clear from this that the programs and performance budget tab link between the goals that the state seeks to achieve and the total costs that must be provided to achieve that goal. (Al-Karkhi, 2009: 641-642)

From the foregoing, the program and performance budget can be directed as follows:

3,9,1 - Sort by programs:

This type of classification is related to jobs or job classification, where expenditures are linked to programs through which the service is provided according to the main program. A particular sector may serve the community, which in turn means that the program is an essential part of the job and is linked to the final output of the service (Matrood, 2009: 74).

3,9,2 - Sort by projects and activities:

Where this training depends on dividing the program into several activities or a number of projects, and each project or activity is part of the program's work. (Al-Karkhi, 1999: 643)

The method of displaying the program and performance budget according to the tab shown previously is as follows:

- 1- The total estimates for each ministry that cover all the activities of the departments that fall under the responsibility of that ministry
- 2- Estimates of all departments within the ministry

- 3 Estimates of the expenditures of each of the programs that the administration undertakes to implement.
- 4- Sub-estimates for each activity and project included in the program.

(Al-Karkhi, 1999: 651).

3,10 - Principles underlying program and performance budgeting:

Because of the development of the preparation of the general budget and its objectives and the trend towards the application of program and performance budgets, a set of concepts and principles have been used to ensure application and objectivity, the most important of which are:

1- The principle of setting goals and achieving the possibility:

This principle is intended to determine the administrations' goals that they should achieve, while studying the material, economic and technical possibilities to achieve these goals.

2- The principle of participation:

This principle is intended to take advantage of the capabilities available at all administrative levels when preparing the budget.

3- The principle of inclusion:

This principle is intended to include all levels of responsibility and all programmes, activities and projects, and to represent all resources and uses.

4- The principle of flexibility:

The necessity to observe this principle and to include in the budget a sufficient amount of flexibility to face the changes and events that occur to the events during the implementation of the budget and which were not expected when it was prepared so that the budget is not a goal in itself, and that it is not an obstacle in dealing with changes and situations.

The principle of realism:

That is, the preparation of the programs, their events and their objectives should be realistic and not difficult to obtain.

6- The principle of predicting the future period:

It is intended to build the budget on estimates for the next year based on correct and realistic information and on a clear scientific, technical and objective basis.

7- The principle of time distribution and linking to the organizational structure:

This means distributing the operation period and timings over the budget period, and linking estimates when preparing and implementing units and responsibility centers.

9- The principle of distinguishing between current and capital operations:

Differentiate between the operations that need the current available energy and the operations that need to be expanded with energy, which is capitalism.

10- Principle of Performance Measurement:

Where in this principle the budget becomes a specific action plan prepared on a scientific basis, and used as a criterion for control, performance and follow-up of implementation.

And not to neglect the rest of the principles as it is in balancing items from the principle that it expresses the budget in a financial way, the principle of disclosure and the principle of non-allocation of revenues. (Ghannam, 2006: 60-62).

The second topic

A proposed model for implementing the budget, programs and performance in (Hilla gas station II)

1 - The proposed model for the budget, programs and performance of the second Hilla gas station is built through the following steps:

- 1- Defining the vision, mission and goal.
- 2- Determining the main activities of the Directorate and dividing them into programmes.
- 3- Defining goals for each program.
- 4- Estimate the expected costs for each program.
- 5- Defining performance indicators for the purpose of using them in measuring results and outputs

For the purpose of creating the proposed model for the program and performance budget, the researcher relied on the actual and planned financial statements of the station for the fiscal years 2019 and 2020, which include expenditure elements to be used as an indicator for applying the proposed program and performance budget, as follows:

محطة 1,1 - Defining the vision, mission and goal of the second Hilla gas station

The vision, mission and goal of the second Al-Hilla gas station were achieved through a meeting with the station manager and heads of departments at the station, which are as follows:

Vision: To produce electrical energy and equip the General Company for Energy Transmission in the Central Region with the electrical energy it needs with the highest capacities and optimal use of the resources available in the station, taking into account environmental factors and supplying the national grid with electrical energy and achieving profitability in the General Company for the Production of Electrical Energy in the Middle Euphrates.

The message: That the second al-Hilla gas station is among the ranks of the stations producing electrical energy to supplement the national electrical energy network through what this station possesses of cadres, resources, expertise and excellent production capacity, and to win the satisfaction of the General Company for the Production of Electrical Energy in the Middle Euphrates.

Objective: This station aims to produce electrical energy that supplies the national grid with excellent capabilities, and to achieve and increase profitability in the General Company for the Production of Electrical Energy in the Middle Euphrates through the optimal use of the resources available in the station.

1,2 - Determining the main activities of the station and dividing them into main programs and activities for each programme:

The process of defining activities is one of the basic steps for the purpose of preparing a budget for programs and performance. After defining these activities, they are divided into main programmes. These programs are considered as cost centers to which all expenditure components will be directed. Therefore, this step is an important and sensitive step that requires knowledge and awareness of the nature of work. station.

Define the main programs:

The station was divided into a group of programs, and this is the first step in balancing programs and performance. Every step is linked to feasibility studies and other matters through which the costs of each program can be accurately determined. The goal of the program is determined first, as this determination helps in the process of evaluating the program, whether it has achieved the desired goal or not. Through the general objectives of the second Hilla gas station, the researcher proposes the following main programs for the station.

Program No. (1): Maintenance Program.

Define the activities of each program

The researcher divided each main program into a set of activities that achieve the program's goal

And as follows.

• Program No. (1): the maintenance program and includes two sub-programs.

Program Section I Electrical Maintenance This sub-program includes the following activities.

- · Electrical maintenance activity
- Network activity

- Electricity conservation activity
- The second sub-program, mechanical maintenance, and this sub-program includes the following activities.
- Activity of pumps and auxiliary devices.

o turbine activity

o Mechanical maintenance activity.

2 - Estimate the costs for each program

The process of estimating the costs for each of the programs and activities was carried out with the assistance of the staff in the station, including accounting, administrative, technical and engineering cadres, in addition to relying on actual and estimated data for the years 2019 - 2020 and relying on the following:-

- 1 The detailed payroll and wages statements were reviewed in terms of job grades, length of service, allowances, bonuses, contracts, and others.
- 2 The exchange documents for service requirements such as transportation, advertising, printing, hospitality, dispatches and others, as well as the exchange documents for various commodity requirements such as fuel, supplies, errands, stationery, water, electricity and others were reviewed.
- 3- The warehouse exchange record for the equipment and supplies spent on the warehouse was reviewed Various station activities.
- 4 The exchange documents for the various maintenance services for the station's fixed assets, including furniture, equipment, devices, buildings, and others, were reviewed.
- 5- The assets in each of the station's activities were reviewed, and the depreciation rates for these assets were estimated by specialists for the purpose of calculating the depreciation, which is part of the activity costs

2,1 - Maintenance Program No. 100

This program is considered a broad program, accordingly, it is divided into two sub-programs: electrical maintenance and mechanical maintenance, because this program is essential and is considered a pivotal pillar in the station that can never be compromised.

2,1,1 - Electric Socket No. 101

The tasks of this program follow up the work of electrical devices and equipment in the obstetric units and follow up their examination and maintenance work, participate in planning the annual maintenance work and document technical problems, prepare technical specifications for the required spare materials, follow up the percentages of completion of maintenance work in all sections of the station, study the plans for electrical devices belonging to the obstetric units Working on developing systems and finding solutions

And the reasons for the malfunction, which of the following activities:

2,1,1,1 - Electrical maintenance: This activity is concerned with the technical work of electrical maintenance and electrical equipment, following up and documenting faults and finding ways to solve them, planning the annual programmed periodic maintenance work and working to develop the system and reduce faults. The costs were calculated as follows:

Table No. (1) Costs for Activity No. 1011

Activity name	materials	Salaries and wages	Indirect industrial costs	Total
Electrical maintenance	180049868	325199350	125112011	630361228

Prepared by researchers based on station records in 2020

2,1,1,2 - Networks: This activity aims to follow up the networks, remove their beams, maintain and maintain them in full, closely monitor them, provide them with backup tools, and develop the network that transmits the external and internal voltage in the production units. The costs were calculated as follows:

Table No. (2) Costs for Activity No. 1012

Activity name	materials	Salaries and wages	Indirect i costs	industrial	Total
Networks	84729349	201500125	98113600		384343074

Prepared by researchers based on station records in 2020

2,1,1,3 - **Electrical maintenance:** This activity is concerned with maintaining and following up on electrical capacity, correcting the path, diagnosing obstacles, supervising the repair of faults and errors, and improving the electrical system and the electrical network inside the station. The costs were calculated as follows:

Table No. (3) Costs for Activity No. 1013

Activity name	materials	Salaries and wages	Indirect industrial costs	Total
Electrical maintenance	88259739	88250250	12415200	188925189

Prepared by researchers based on station records in 2020

Through the estimated costs for each of the activities affiliated to the electrical maintenance subprogram, the total cost of this program for the year 2020 is as follows:

Table No. (4) Costs for Activity No. 101

Activity name	materials	Salaries and wages	Indirect industrial costs	Total
Electrical maintenance	180049868	325199350	125112011	630361228
Networks	84729349	201500125	98113600	384343074
Electrical maintenance	88259739	88250250	12415200	188925189
Total	353038956	614949725	235640811	1203629492

Prepared by researchers based on station records in 2020

2,1,2 - Mechanical Maintenance No. 102

This program aims to follow up the maintenance work of turbines, pumps, all devices and equipment for the obstetric units, daily maintenance work, as well as periodic maintenance works. It organizes work requests. Analyze and remove problems and holidays that appear on turbines. Securing spare materials for turbines and auxiliary pumps, whether local or foreign. It is divided into the following activities:

2,1,2,1 - Pumps and auxiliary devices: This activity is concerned with the pumps in the electrical station, the water pump, the pump, the mechanical one, the fuel pumps, the gas pumps, the treated materials, their follow-up, the recording of their malfunctions, their performance improvement and their maintenance for the two days, and their accessories, branches and accessories. The costs for this activity were calculated as follows:

Table No. (5) Costs for Activity No. 1021

Activity name	materials	Salaries and wages	Indirect industrial costs	Total
Pumps and auxiliary devices	30523961	425122350	455125200	910771511

Prepared by researchers based on station records in 2020

2,1,2,2 - Turbine: This activity is a very important and vital activity for the station, as this activity is concerned with maintaining and maintaining the turbine, removing obstacles and mechanical blockages, opening and regulating fuel flow with the fuel needed by the turbine, controlling it, following up on government contracts and tenders for turbine projects and units producing electrical energy. The costs were calculated as follows:

Table No. (6) Costs for Activity No. 1022

Activity name	materials	Salaries and wages	Indirect industrial costs	Total
Turbine	264540997	2655455125	1022121512	3942117634

Prepared by researchers based on station records in 2020

2,1,2,3 - **Mechanical maintenance:** This activity is concerned with the turbine as a basic work and the pumps attached to it. One of its tasks is to open and maintain the turbine, open the combustion chambers, clean them and maintain them, open the fuel flows inside the turbine, maintain and maintain the pumps, and follow up and monitor the turbine mechanically. The costs were calculated as follows:

Table No. (7) Costs for Activity No. 1023

Activity name	materials	Salaries and wages	Indirect industrial costs	Total
Mechanical maintenance	44090166	1415633125	1122655789	2582379080

Prepared by researchers based on station records in 2020

Through the estimated costs for each of the activities affiliated to the mechanical maintenance subprogram, the total cost of this program for the year 2020 is as follows

Table No. (8) Costs for Activity No. 102

Activity name	materials	Salaries and wages	Indirect industrial costs	Total
Pumps and auxiliary devices	30523961	425122350	455125200	910771511
Turbine	264540997	2655455125	1022121512	3942117634
Mechanical maintenance	44090166	1415633125	1122655789	2582379080
Total	339155124	4496210600	2599902501	7435268225

Prepared by researchers based on station records in 2020

Through the estimated costs of each sub-program of the maintenance program, the total cost of this program for the year 2020 is as follows:

Table No. (9) Costs for Activity No. 100

Activity name	materials	Salaries and wages	Indirect industrial costs	Total
Electric Socket	353038956	614949725	235640811	1203629492
Mechanical Maintenance	339155124	4496210600	2599902501	7435268225
Total	692194080	5111160325	2835543312	8638897717

Prepared by researchers based on station records in 2020

Thus, the total estimated cost of the maintenance program for the year 2020 amounted to (8638897717), as the total salaries and wages amounted to (692194080), while the total materials amounted to (5111160325), and the indirect costs amounted to (2835543312).

This program has been divided into two sub-programs for its importance and facilitating its management, direction and completion of its work. The cost of the electrical maintenance program amounted to (1203629492), while the mechanical maintenance program amounted to (7435268225). Electrical maintenance by 600% due to the importance of maintaining turbines and their accessories.

Thus, the estimated total cost of the operating program for the year 2020 amounted to (27029292975), as the total salaries and wages amounted to (1297183788), while the total materials amounted to (13536026650) and the indirect costs amounted to (12196082537).

It is noted that this program is the highest program in terms of cost and at the same time includes two activities. This increase in costs is due to the number of employees in this program 109 employees with different specializations, and the cost of fuel and improved materials for fuel.

Table No. (10) shows the proposed performance indicators

1011	Electrical maintenance	 1- Number of scheduled maintenance times 2- The number of times of emergency maintenance and repair internally 3- The number of researches and working papers submitted to improve the performance of the system 4- The time between detecting a defect, speed of response, and accuracy of completion
1012	Networks	1- Number of networks maintained 2- The number of scheduled maintenance times for the electrical network 3- The speed and accuracy of responding to emergency malfunctions and controlling them
1013	Electrical maintenance	1- Number of faults detected2- The speed of reporting problems
1021	Pumps and auxiliary devices	 1- Number of pumps that have been maintained internally and on site 2- The period of time during which the pumps were maintained without problems 3- The number of times of periodic maintenance
1022	Turbine	1- The number of operating hours of the turbine 2- Amount of equipped capacity القدرة 3- The recorded readings and the number of times to improve their survival when the anomaly
1023	Mechanical maintenance	1- Number of scheduled maintenance times 2- The speed of opening the fuel flow 3- The time required to open the combustion chambers, clean them and return them to work

Conclusions and recommendations

Conclusions:

- 1- The preparation of the general budget in Iraq is carried out according to the item-balancing method, as government units are monitored not to exceed the allocations assigned to them and to be spent on the purposes allocated to them regardless of the extent to which the objectives for which the allocations were spent are achieved. Therefore, it is preferable to apply the program and performance budget method in Preparing the budget because it increases the effectiveness of planning, formulating the objectives of each administrative unit in the form of programs and activities, and because it is an effective control tool that contributes to rationalizing public spending and reducing costs through the optimal use of resources.
- 2- The unified accounting system applied in the General Company for Electricity Production in the Middle Euphrates, especially the second Hilla gas station, which is based on the application of the traditional method

in preparing the budget, and the application of the monetary basis in accounting measurement, does not provide information and financial and administrative data that help government units to tasks and achieve its goals, so this system needs to be developed to be the best effective.

- 3- Budgeting programs and performance leads to rationalizing and compressing costs through careful planning of the costs of each activity and then estimating the costs of each program. Therefore, these estimated costs will be somewhat close to the actual costs, which leads to a reduction in the waste of available resources and Use it as best you can.
- 4- The division followed by the budget of programs and performance, which requires dividing the unit into programs and then activities for each program and defining the objectives related to each program and activity leads to the achievement of effective control over these programs by following up on the extent to which the programs achieve their specific and previously drawn goals
- 5- The application of the program and performance budget method requires a change in the method used to classify expenditures as it is in the traditional budget in a manner consistent with the new budget.
- 6- The application of the program and performance budget method requires the provision of a qualified, efficient and trained accounting, administrative and engineering staff for the station for the purpose of applying the mentioned budget in the station, as well as making a fundamental change in the methods of administrative and accounting work, and preparing and training workers and specialists in the field of cost accounting and financial measurement sciences.
- 7- The possibility of applying the proposed model for balancing programs and performance for the second Hilla gas station on The rest of the units belonging to the public companies for the production of electric power in Iraq after making the above-mentioned changes.

References:

1 - The necessity of shifting from the traditional method of preparing the general budget to the method of program budgeting

and performance because it provides decision makers with financial and administrative information and data that help government units carry out the tasks entrusted to them and achieve their goals. As well as the necessity of the Iraqi Ministry of Finance to adopt the method of balancing programs and performance when preparing the budget.

- 2- The Ministry of Finance, units, departments and public companies must shift from the cash basis used in the traditional budget to the accrual basis as it is one of the requirements that must be met in the implementation of the program and performance budget.
- 3- Setting performance indicators for each of the program activities, through which the efficiency and effectiveness of program performance are measured.
- 4- Developing the unified accounting system in a way that is compatible with the method of balancing programs and performance so that it is able to provide the information and statistics required for preparing this type of budgets.
- 5- The necessity of shifting from the cash basis used in balancing items to the accrual basis, which is one of the requirements for implementing program and performance budgeting.
- 6- Providing a scientifically and practically trained accounting cadre to implement this type of budgets, in addition to setting up training courses to raise the skills of the personnel working in the station.
- 7- A set of performance indicators should be developed through which efficiency is recognized and efficiency and quality in the performance of the station.
- 8- The possibility of applying this proposed model in the second Al-Hilla gas station in the governmental units inside Iraq through the application of the suggestions and changes mentioned.

Sources and references:

1- Aliwi, Najm Abd, study and analysis of the structure of the general budget in the state of Iraq 2003-2007, www.docudesk.com

- 2- Ghannam, Farid Ahmed Abdel Hafez, A Proposed Framework for Preparing and Applying Program and Performance Budgeting in Palestine, Master Thesis in Accounting and Finance, Faculty of Commerce, Gaza Islamic University, 2006
- 3- Abdel Karim, Nasr, Evaluation of the Palestinian National Authority's Efforts to Transition to Budget Programs, Palestinian Economic Policy Research Institute (MAS), Palestine, 2016
- 4- Al-Douri, Muayad Abdul-Rahman, Al-Janabi, Taher Musa, Department of Public Budgets, Zahran Publishing and Distribution House, Amman Jordan, 2012.
- 5- Al-Lozi, Suleiman Ahmed, Murar, Faisal, The Department of General Budgets between Theory and Practice, Dar Al-Masirah, Amman Jordan, 1999
- 6- Hammad, Ahmad Hani, Al-Bahr, Hessa Muhammad Ahmad, The Origins of Government Accounting with a Special Study of the State of Kuwait, That Al-Silsil, Kuwait, 1990
- 7- Al-Baghdadi, Salah Sahib Shaker, the budget and the foundations of its planning in the economic service units, an applied study in the Ministry of Interior, the General Traffic Directorate, PhD thesis in accounting, College of Administration and Economics, University of Baghdad, 1998
- 8- Al-Hour, Muhammad Al-Hour, Fundamentals of Government Accounting, Wael Publishing House, Amman, 1998
- 17- Al-Khatib, Khaled Shehadeh, Shamiya, Ahmed Zuhair, Foundations of Public Finance, Wael Publishing House, 2007.
- 9- Hama, Zara Latif Kaka, Budgeting Programs and Performance and Its Role in Reducing and Controlling State Public Expenditures, Arab Institute of Certified Public Accountants, 2012
- 10- Matroud, Iyad Sheehan, Program and Performance Balance and the Possibility of Their Application in State Departments, An Applied Study in the Ministry of Science and Technology, Department of Chemistry Research, Arab Institute of Certified Accountants, Baghdad, 2009
- 11- Al-Janabi, Taher, The Science of Public Finance and Financial Legislation, Al-Sahuri Library, Beirut, 2015
- 12- Al-Anawati, Raya Saad Hassobi, Requirements for the shift towards budgeting programs and performance How to prepare the annual budget / case study in the Ministry of Culture, University of Baghdad, College of Administration and Economics, 2015
- 13- Al-Mahmoud, Abdel Moneim Saleh Mustafa, Business Strategies in Facing the Challenges of Globalization, Faculty of Administrative and Financial Sciences, Philadelphia University, Jordan, 2005
- 14- Al-Husseini, Muhammad Hussein Ahmed, Using the Program and Performance Budgeting Method in Preparing the State's General Budget by Application in the Republic of Yemen, Master's Thesis, College of Administration and Economics, University of Baghdad, 2003
- 15- Al-Khatib, Khaled Shehadeh, Shamiya, Ahmed Zuhair, Foundations of Public Finance, Wael Publishing House, 2007
- 16- Al-Zamili, Bahaa Al-Din Farid Madi, The Possibility of Using Program Budgeting and Performance in Investment Projects for the Accounting Government in Basra Governorate, Master Thesis, College of Administration and Economics, University of Basra, 2014
- 17- Al-Karkhi, Majid Abdel Jaafar, The State's General Budget: Its Concept, Preparation Methods and Modern Attitudes, 1999
- 18-Zinyama Tawanda &G. Nhema Alfred Zimbabwe ,)2016) "Performanc- Based Budgeting: Concepts and Success Factors" Published by American Research Institute for Policy Development, Public Policy and Administration Review June 2016, Vol. 4, No. 1, pp. 33-60
- 19-Shah, Anwar, ed.(2007), "Local budgeting, World Bank Publications
- 20-Robinson ,Marc and Brumby, Jim (2005) , " Does Performance Budgeting Work? An Analytical Review of the Empirical Literature " International Monetary Fund, Author(s) E-Mail Address: mrobinson@imf.org; jbrumby@imf.org

- 21-Shin, Sang Hoon, (2013), "Dysfunctional consequences of the Korean performance budgeting system and their policy implications" Diss. University of Birmingham.
- 22- Al-Akkam, Muhammad Khair, Public Finance 1, Revenues and Expenditures, Syria, Syrian Virtual University Publications, 2018
- 23- Saleh, Taha Mohsen Abdullah, The Role of Oversight on Budget Stages and Its Impact on Strengthening Accountability Measures According to Performance Indicators, Higher Institute for Accounting and Financial Studies, University of Baghdad, 2014
- 24- Al-Karkhi, Majid, Performance budgeting and the mechanisms of its use in setting and evaluating the state budget, first edition, Dar Al-Manhaj for Publishing and Distribution, 2015
- 25- Al-Shamrani, Sawsan, Program and Performance Balance, Concepts and Application, King Saud University, Saudi Arabia, 2010
- 26- Salman, Siham Muhammad, Using the Program and Performance Budget to Develop the Budget of Investment Projects, Higher Diploma in Strategic Planning, College of Administration and Economics, University of Baghdad, 2016
- 27- Al-Helou, Alaa Al-Din Ghazi Muhammad, the availability of the components of the implementation of program budgeting and performance in public universities in Palestine The Islamic University, Gaza, 2017.
- 28- Asfour, Muhammad Shaker, The Origins of the General Budget, Dar Al Masirah for Publishing and Distribution, Amman Jordan, 2012