EXPRO
هيئة كفاءة الإنفاق والمشروعات الحكومية
Expenditure & Projects Efficiency Authority

Expenditure Efficiency Concept in the Kingdom of Saudi Arabia

Key Concepts and Takeaways

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1.0 Introduction

The Kingdom of Saudi Arabia is currently undertaking a series of mega projects to realize Saudi Vision 2030 goals. Simultaneously, it remains committed to addressing the evolving requirements of these projects, underscoring the necessity of the allocation and utilization of public financial resources efficiently and effectively.

Expenditure efficiency concept is of great importance in this context, as it enables the government to achieve better outcomes in public expenditure and realize Fiscal Sustainability Program goals. This program aims to enhance financial discipline, increase public financial resources, and implement key financial reform initiatives.

Expenditure efficiency, broadly defined, aims to maximize the benefit from limited resources, which include financial assets (such as: securities, cash, deposits, debt bonds) and non -financial assets (for example, but not limited to buildings, machines, lands), as well as labor – to deliver goods and services that best serve the population's needs. This is a critical concern for all countries, given the significant economic and social impacts that can arise from government expenditures, considering several factors, including:

01

Government expenditure in the Kingdom of Saudi Arabia ranks among the highest, amounting to 32% of GDP (IMF[1]), while the average government spending among OECD countries is 41% of GDP[2].

02

Allocating expenditure to priority areas is essential: Allocating expenditure to areas such as education, health, defense, or social development can have broad and significant impacts on a nation's economic performance, competitiveness, quality of life standards and overall well-being, and the ability to realize strategic goals.

[1] International Monetary Fund (IMF)

[2] The Organization for Economic Co-operation and Development 2021

1.0 Introduction

03

The Government Sector is responsible for overseeing public resources and ensuring their allocation and utilization in an effective manner that contributes to achieving positive outcomes while minimizing waste. This aligns with the principles of Islamic Sharia, which emphasize the importance of resource rationalization and avoiding extravagance, as highlighted in the Holy Qur'an and the sayings of the Prophet in the Noble Sunnah. Allah Almighty said: {They are those who spend neither wastefully nor stingily, but moderately in between.} (Al-Furqan: 67). This principle is also reflected in the dedication of the prophets to safeguarding the interests and resources of their nations, ensuring their proper management and preservation. An example of this is found in the words of Prophet Yusuf (peace be upon him) when he sought to serve the public interest, as Allah Almighty said: {Yusuf proposed, "Put me in charge of the storehouses of the land, for I am truly reliable and adept."} (Yusuf: 55).

His Royal Highness Crown Prince Mohammed bin Salman bin Abdulaziz Al Saud has also underscored the vital importance of elevating the government expenditure efficiency. He reaffirmed this commitment by stating, "We commit ourselves to providing world class government services which effectively and efficiently meet the needs of our citizens."[3] He further stated, "We are committed to making our public spending radically more efficient, using our resources more effectively, and limiting waste."[4]

In light of the foregoing, this research paper primarily aims to explore expenditure efficiency concept. It begins by defining the term and then examines analyses conducted by international institutions on methodologies for measuring and evaluating expenditure efficiency. Additionally, it identifies the underlying causes of efficiency gaps and highlights EXPRO's efforts to address these gaps.

In addition, this paper outlines the efforts undertaken by EXPRO in collaboration with various government entities to enhance expenditure efficiency. It also provides a forward-looking perspective on the goals aimed at achieving financial sustainability.

[3] Al Riyadh Newspaper
[4] El Watan Newspaper

2.0 Core Concepts of Government Expenditure Efficiency

Definition of Expenditure Efficiency

Expenditure efficiency refers to achieving the highest possible impact relative to spending through the optimal utilization of available resources and the remediation of diverse forms of waste without detriment to the quality of service rendered.

Enhancing the government expenditure efficiency plays a key role in improving economic performance and driving sustainable growth. This is particularly true for Saudi Arabia, where government expenditure reached 30% of GDP in 2023[5].

In addition, enhancing the government expenditure efficiency is represented in maximizing the outputs of government expenditure by rationalizing the use of available inputs or resources to produce effective outputs or goods and services. (The expenditure impact model is presented in Figure 1).

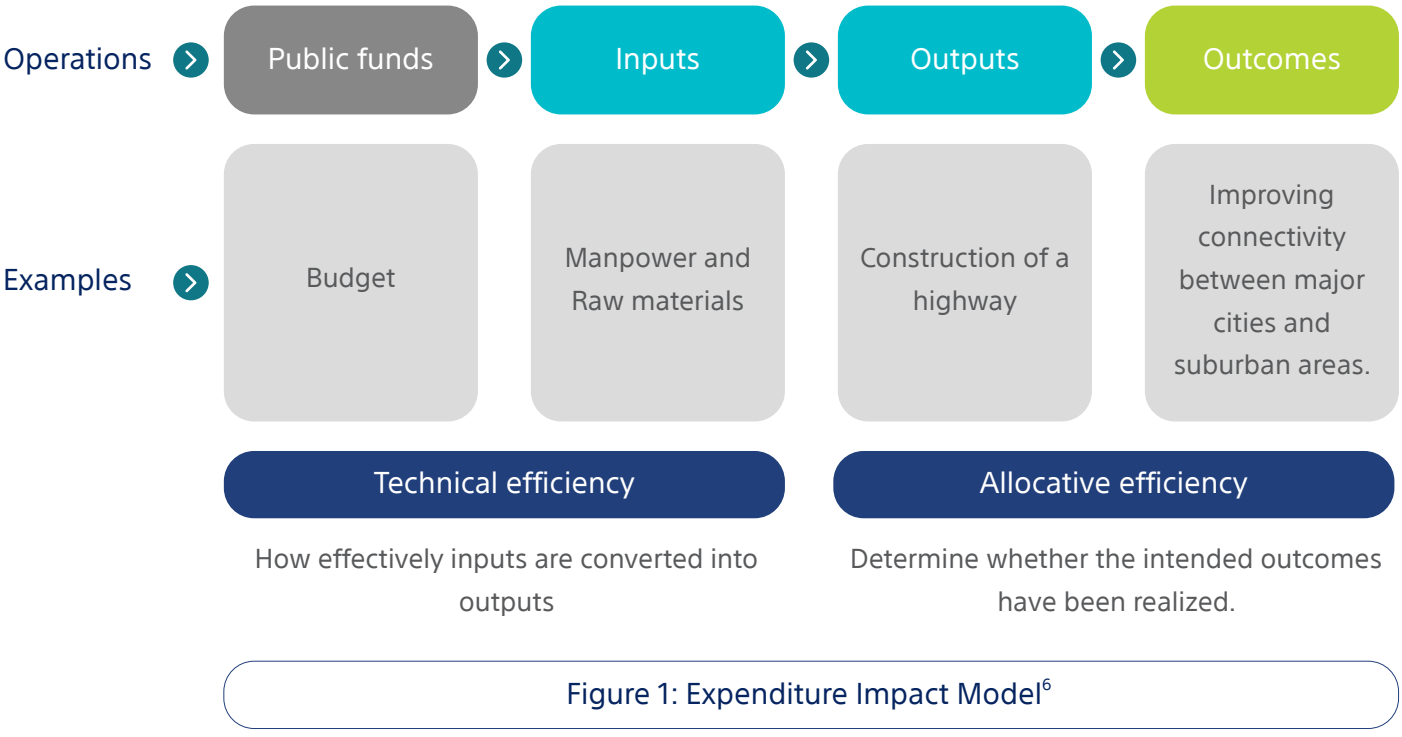

Figure 1: Expenditure Impact Model[6]

[5] International Monetary Fund (IMF)

[6] Definitions of inputs, outcomes and outputs are given in the Annex section

There are two main types of efficiency

1. Technical efficiency: producing the same level of output while using fewer inputs or generating a higher level of output with the same amount of inputs, without compromising quality in either case.

2. Allocative efficiency: The allocation of resources in a way that maximizes economic and social gains.

Despite the significance of both concepts in evaluating expenditure efficiency, measuring allocative efficiency is more challenging. This is because obtaining data on both inputs and outputs is easier than obtaining data on outcomes."

For example, data on road construction costs (an input measure) and road length (an output measure) are relatively easy to obtain. However, measuring the efficiency of resource allocation involves more complex factors, such as assessing improvements in access to major cities. Determining the extent to which a highway directly enhances access requires the use of sophisticated economic models and long-term monitoring of outcomes over several years.

In this context, establishing a causal relationship between specific outcomes and their contribution to achieving certain outcomes may take several years to measure accurately. This process also requires the development of complex models and the alignment of outcomes with strategic priorities.

Despite these measurement challenges, government entities must have a clear understanding of their performance in achieving efficient resource allocation. Evaluating the effectiveness of government expenditure requires a comprehensive knowledge of resource allocation methods to ensure they are optimized in alignment with strategic priorities.

While government entities may be capable of producing goods and services effectively, this alone is not sufficient if these goods and services do not align with broader strategic objectives. Therefore, expenditure efficiency should consider both technical efficiency and resource allocation efficiency. Section 3 explains how to achieve this[7].

[7] Aldridge et al, 2020

3.0 Measuring Government Expenditure Efficiency

Methodological Approaches Currently in Use

Expenditure efficiency is a relative concept, as it is assessed based on various criteria. In the case of government sector efficiency, it is often evaluated through benchmarking with other countries.

Here, the concept of "efficiency limits," also known as "efficiency frontiers," emerges as a method for evaluating the outputs of public expenditure. This approach identifies the highest level of outcomes and outputs at each input stage by comparing them across a broad set of countries[8]. The concept of expenditure efficiency frontiers can be applied to assess both technical efficiency and allocative efficiency, as discussed in the previous section. Figure 2 presents a simplified example of an efficiency frontier involving one input (public capital) and one output (infrastructure output).[9]

This frontier evaluates efficiency by identifying the highest-performing countries based on output performance at each level of input.

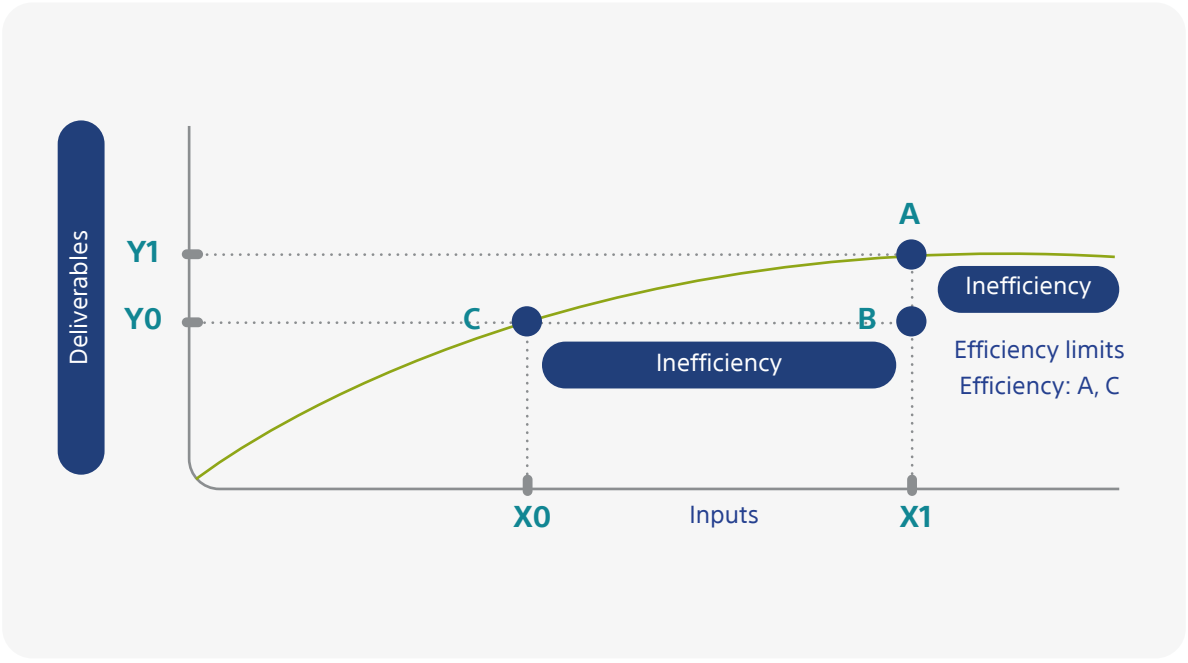

Figure 2: Illustrative Example of Efficiency Frontiers

[8] The efficiency frontier method utilizes a set of outcomes and outputs to assess the efficiency of expenditure. For simplicity, the two terms will be used interchangeably when discussing efficiency frontiers.

[9] In practice, empirical estimates of efficiency frontiers allow for the inclusion of multiple inputs and outcomes.

In this model, countries positioned on the "frontier" are considered efficient, while those below the line are classified as inefficient. For example, country A achieves y1 outcomes using x1 inputs (point A) and is therefore deemed more efficient than country B, which produces y0 outcomes with the same level of inputs (point B).

As described above, expenditure levels vary across countries; however, they may still maintain efficiency. The key factor is not merely the amount a country spends, but rather the outputs it generates and its effectiveness in achieving outcomes using available resources while ensuring alignment with strategic objectives.

Empirical Efficiency Analyses

Many empirical studies[10] use the concept of efficiency frontiers to evaluate performance across countries. This approach enables researchers to identify efficiency gaps, which are defined as the difference in efficiency levels between high-performing and medium-performing countries within a group classified based on specific criteria, such as income level, region, or other relevant categories.

Empirical analyses of expenditure efficiency have highlighted significant opportunities to enhance the efficiency of government expenditure worldwide, particularly in capital expenditures. This is due to several factors, including the long-term impact of capital projects compared to operational expenditures. For example, government expenditure efficiency would be more adversely affected by the improper construction of a road (Capital Project) than by an increase in labor wages (OPEX). Additionally, the availability of data and research on CAPEX facilitates analysis. In Saudi Arabia, CAPEX accounted for 11.8% of total expenditures in 2024.

Estimates developed by IMF in 2020 for 164 countries indicated that the average efficiency gap is significantly high, with countries losing more than two-thirds of government resources in the public expenditure process.

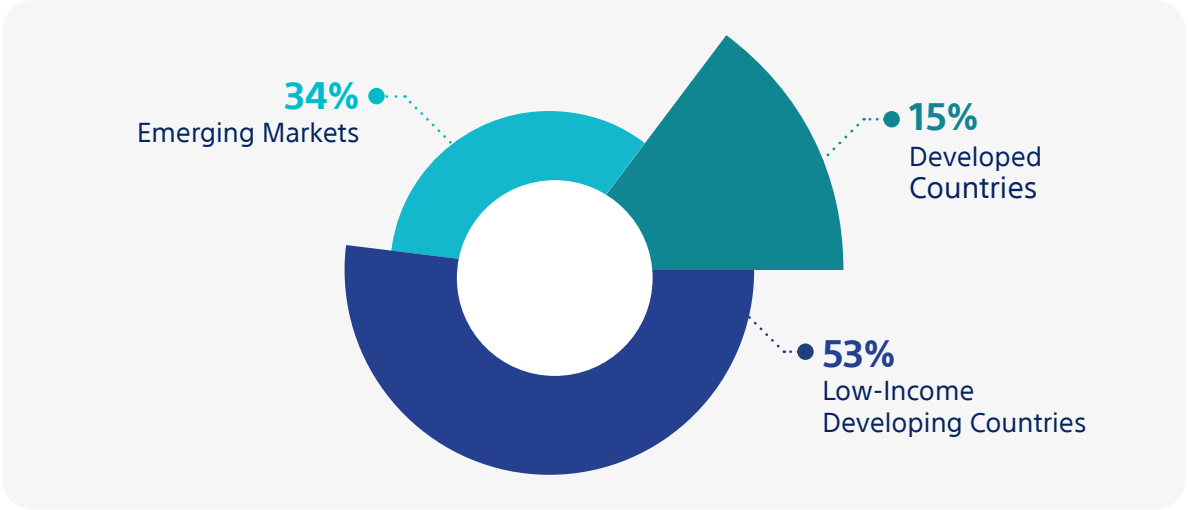

Figure 3: Average Efficiency Gap for Countries Classified by Income (%)

[10] As noted by Baum et al. (2020), Herrera and Pang (2005), Grigoli and Capsole (2013), among others.

Empirical analyses also reveal a significant disparity in expenditure efficiency among countries classified by income levels, as shown in Figure 3[11]. The estimated efficiency gap for developed countries is 15%, which is considerably lower than the gap observed in low-income developing countries, where it reaches 53%.

Similarly, the analysis reveals variations in efficiency levels across different geographical regions (see Figure 4).

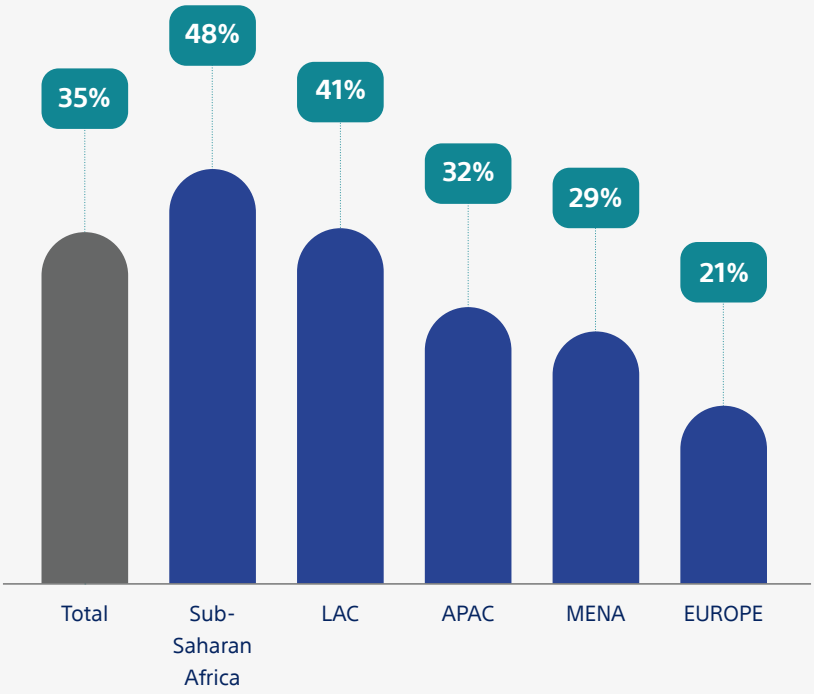

Figure 4: Average Efficiency Gap by Region (%)[12]

Across different regions, Europe had the highest efficiency score, with an efficiency gap of 21%, followed by MENA at 29%. In contrast, Sub-Saharan Africa recorded the lowest efficiency score, with a gap of 48%[13].

11 Various estimation methods and methodologies, such as Stochastic Frontier Analysis (SFA), can be employed to estimate the efficiency gap. For simplicity, the figure presents outcomes derived using the Data Envelopment Analysis (DEA) method, without adjustments for deviations.

12 The Middle East and North Africa (MENA) region also includes Afghanistan and Pakistan. North America was excluded due to the limited number of countries in the sample but is still accounted for in the "Total" column.

13 Baum et al., 2020

4.0 Identifying Root Causes of Expenditure Efficiency Gaps

The significance of efficiency frontiers lies in their ability to highlight poor performance; however, they do not explain the underlying causes of efficiency gaps. This means that efficiency frontiers are defined based on the inputs and outcomes of the highest-performing countries. Countries positioned on the frontier have achieved the highest observed level of efficiency, though they may still have the potential to be even more efficient in absolute terms.

Therefore, understanding the root causes of poor performance is crucial. Published reports often[14] cite weak expenditure governance and management as common reasons for public sector inefficiency across different countries, including middle- and high-income countries[15].

Expenditure management consists of three key processes: planning, resource allocation, and implementation. These processes are essential for achieving government goals and priorities[16]. In the context of government projects, IMF has identified 15 essential elements within the three main stages of the project management framework: planning, resource allocation, and implementation. These elements play a crucial role in determining efficiency levels[17], as illustrated in Figure 5.

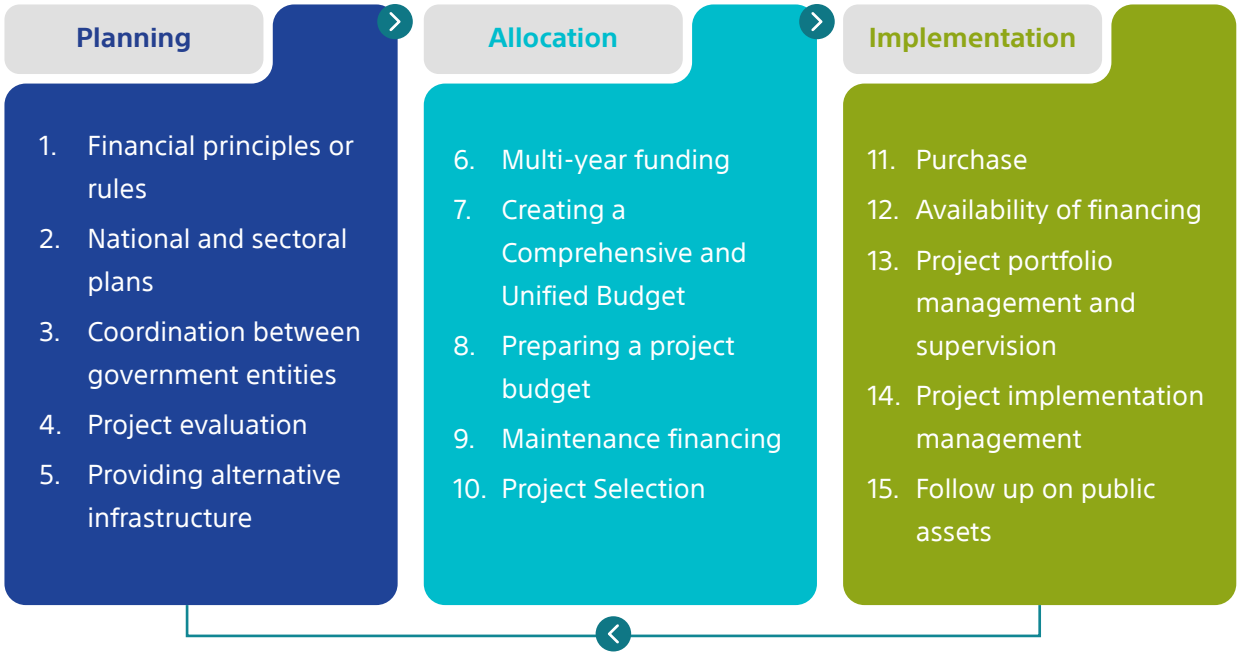

Figure 5: The three stages of Public Investment Management Assessment (PIMA) framework

[14] Such as reports by Baum et al. (2020), Fourie and Poggenpoel (2017), and Zeti and Cristea (2020).

[15] Some research also highlights other reasons for inefficient expenditure such as corruption, excessive red tape, underutilization of technology, and limited scope of operations. This research paper examines the challenges of weak governance and ineffective expenditure management.

[16] Morel, 2017

[17] For more information, refer to IMF's Public Investment Management Assessment, including the 2015, 2018, and 2022 editions, as well as Shabunda et al. (2020).

The IMF framework indicates that the highest-performing countries have adopted well-designed practices across these 15 elements. It suggests that the efficiency of public expenditure and government project management depends on the effectiveness of the most efficient entities. For instance, strong planning institutions can drive successful outcomes only if resource allocation and implementation institutions are equally effective. However, if implementation bodies operate less efficiently than planning bodies, the overall efficiency may decline due to challenges in delivering outputs and achieving outcomes.

Several empirical studies have assessed the impact of enhancing public administration practices across these 15 elements. For instance, in the context of public infrastructure, these studies have shown a strong correlation between the quality of government expenditure management institutions and estimated measures of public expenditure efficiency.

Overall, IMF analyses suggest that strengthening public expenditure management institutions could reduce the efficiency gap in expenditure by half. More specifically, a country with a moderate efficiency gap could close more than half of it by adopting the public expenditure management practices of the highest-performing countries[18].To identify and address inefficiencies in the sector, various concepts are used to describe inefficiencies in resource allocation that impact the effective delivery of goods and services. The definitions of these concepts are provided in Figure 6[19].

Concept 1	Concept 2	Concept 3
Inefficiency arises when resources are consumed without adding value to the final product or service.	The inability to adapt to varying levels of demand for public goods and services.	The unbalanced distribution of available resources, such as work crews, tools, and budget, in line with the objectives of the government entity.
Examples		
Wastage during resource transfers, accumulation of surplus stock, delays in operational processes, excessive processing, overproduction, inefficiencies in construction activities, and mismanagement of resource utilization.	Wastage resulting from poor planning, misalignment between projected needs and actual demand, leading to inefficiencies in resource allocation and utilization.	Budget waste due to the ineffective distribution of available resources, including work crews, tools, and budget, hindering the achievement of the entity's objectives.

Figure 6: concepts of inefficiencies in resource allocation

Adopting a framework based on inefficiency concepts for resource allocation enables government entities to identify inefficiencies in their activities, address root causes, and enhance efficiency. This approach helps reduce costs and support sustainable practices within the broader context of public expenditure management.

18 Baum et al., 2020

19 Shedge et al., 2022

5.0 The Role of EXPRO and Other Government Entities

Entities in Enhancing Expenditure Efficiency

Enhancing efficiency requires a comprehensive approach at the public sector level, supported by structured and transparent governance. This has led to the establishment of government entities dedicated to improving public sector efficiency and expenditure, particularly in capital projects. The structure and focus of these entities vary across countries. Below are some examples:

- Development authorities that play a key role in planning, developing, and managing infrastructure projects and urban areas within a country, such as Infrastructure and Projects Authority (IPA) in the United Kingdom.

- Ministry of Finance responsible for overseeing government finances, enforcing financial regulations, and ensuring fiscal sustainability, such as the HM Treasury in the United Kingdom.

- Audit offices responsible for conducting financial and performance audits, identifying inefficiencies and waste, such as the Australian National Audit Office.

- Government procurement authorities responsible for overseeing all stages of the procurement process, ensuring transparency, and promoting efficiency, such as the Public Procurement Regulatory Authority of Singapore.

EXPRO Role

Aligned with these practices, EXPRO was established to enhance expenditure efficiency in support of the Kingdom's financial sustainability objectives[20]. As the regulatory body overseeing government expenditure efficiency, it is responsible for proposing policies, procedures, and guidelines that enable government entities to optimize spending practices and improve project implementation. These efforts align with the Kingdom's transformation goals and sector-specific strategies.

EXPRO seeks to empower government entities by adopting the best expenditure efficiency practices through its expenditure efficiency teams and the Sustainability Key Elements Program"SKEP", which applies a common framework to evaluate expenditure practices in government entities across 7 main pillars: leadership and strategy, expenditure planning and preparation, capacity building, procurement, projects, assets and facilities, and impact of expenditure. This evaluation allows the Authority to identify areas for improvement and prepare customized capacity building programs for each entity to help it improve its performance.

EXPRO has introduced expenditure review tool aligned with international best practices to facilitate the systematic analysis of government expenditure outputs and outcomes. Expenditure reviews provide a structured methodology for identifying inefficiencies and opportunities for financial impact, enabling the reallocation of resources to priority projects, addressing emerging financial pressures, or managing debt. Additionally, they help improve the quality of expenditure and overall financial outcomes. When integrated into the budget planning process, expenditure reviews ensure that budget decisions are performance-driven, and that expenditure aligns with the evolving priorities of the government and society.

The initiatives led by EXPRO play a crucial role in enhancing the performance of government entities and institutions in optimizing public expenditure. However, the effectiveness of these efforts largely depends on the active participation of government entities and their commitment to implementing expenditure efficiency practices. Additionally, measuring expenditure efficiency in their initiatives by benchmarking performance against similar sectors in other countries is essential. Therefore, close collaboration between EXPRO and government entities is vital, where EXPRO identifies best practices in expenditure efficiency, while government entities commit to applying them within their respective sectors.

[20] Such There are several government entities in Saudi Arabia responsible for regulating public sector expenditure, (including MEP, LCGPA, NCP, MoF, etc). However, EXPRO is the primary authority mandated with overseeing and enhancing expenditure efficiency.

6.0 Conclusion

Enhancing the efficiency of government expenditure brings substantial benefits to the Kingdom of Saudi Arabia by driving better outcomes, fostering economic growth, and optimizing public expenditure while ensuring financial responsibility. Empirical research highlights the significance of strengthening corporate governance and implementing effective expenditure management systems to improve both technical efficiency and resource allocation efficiency.

The Kingdom has made significant progress in adopting best practices for government expenditure by establishing EXPRO and introducing various financial improvement initiatives, such as SKEP Program and expenditure reviews.

By deepening their understanding of expenditure efficiency, EXPRO and government entities aim to advance the Kingdom's financial sustainability goals. This involves identifying efficiency gaps, analyzing their root causes, and implementing best practices in expenditure management. Enhancing expenditure efficiency is a crucial step toward a prosperous future for the Kingdom of Saudi Arabia and its people.

7.0 Annex

Table 1: Definitions of Inputs, Outputs, and Outcomes (Robert M. Pena, 2011; OECD, 2022)

Term	Definition	Example
Inputs	Resources, including funding, time, manpower, materials, and assets, utilized by a government entity to develop and deliver goods or services.	Manpower, raw materials
Outputs	Goods or services provided by government entities.	Construction of a highway
Outcomes	The anticipated societal impact of producing or delivering a good or service. Unlike outputs, outcomes are typically challenging to measure directly due to their complexity and the time required for evaluation. Results pertain to a specific good or service, whereas outcomes reflect the broader value or impact derived from them.	Improving connectivity between major cities and suburban areas

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