ANALYSIS OF INDICATORS OF THE EFFICIENCY OF THE USE OF MATERIAL RESOURCES

N.R. Samadova, lecturer
I.F. Umarbekova, lecturer
Tashkent financial institute
(Uzbekistan, Tashkent)

Abstract. The production of any kind of products (works, services) is associated with the use of material resources. Material resources of a certain range and quality are the basis and necessary condition for the implementation of the program for the production and sale of products (works, services), reducing production costs.

Keywords: production, material resources, analysis, resource efficiency, natural resources, waste.

A necessary condition for the organization of production is the provision of its material resources: raw materials, materials, fuel, energy, semi-finished products, etc. In the process of consumption of material resources in production, their transformation into material costs, so the level of their expenditure is determined through the figures calculated on the basis of the amount of material costs.

The renewal of the assortment, the expansion of production opportunities, causes an increase in the need for material resources. Economic entities consume a huge amount of material resources, different in types, brands, grades, sizes.

The nomenclature and assortment of consumed material resources depend on the nomenclature and complexity of the products produced.

Material resources are various types of raw materials, fuels, energy, components and semi-finished products that the business entity buys for use in economic activities for the purpose of producing products, providing services and performing work.

Material resources pass into material costs, which are a collection of material resources used in the production process. In the total aggregate of production costs, they make up about 70%, which is evidence of high material consumption of products. Reducing the material consumption of products is an important direction for improving work, since the economical expenditure of all types of resources ensures production growth and a reduction in production costs.

The tasks of analyzing the use of material resources are:[1]

– determination of the level of the economic entity's provision with the necessary material resources by types, grades, brands, quality and delivery terms;
– analysis of the level of material consumption of products in dynamics;
– study of the effect of individual factors on the change in the level of material consumption of products;
– identification of losses due to forced substitution of materials, as well as equipment and worker outages due to lack of materials;
– an assessment of the impact of the organization of material and technical supply and the use of material resources on the volume of output and the cost of production;

The purpose of analyzing material resources is to increase production efficiency through the rational use of resources. The growth of the need for material resources can be met with an extensive and intensive way.

An extensive way to meet the need for material resources involves the acquisition or production of more materials, which leads to an increase in specific material costs. However, the cost of production can decrease if production is increased or fixed costs are reduced.

An intensive way to meet the needs for material resources involves the acquisition of new production of more materials, which leads to an increase in specific material costs. However, the cost of production can decrease if production is increased or fixed costs are reduced.

An extensive way to meet the needs for material resources involves the acquisition or production of more materials, which leads to an increase in specific material costs. However, the cost of production can decrease if production is increased or fixed costs are reduced.

An intensive way to meet the needs for material resources involves the acquisition or production of more materials, which leads to an increase in specific material costs. However, the cost of production can decrease if production is increased or fixed costs are reduced.

Resource efficiency means using the Earth's limited resources in a sustainable manner while minimising impacts on the en-
environment. It allows us to create more with less and to deliver greater value with less input. These resources include raw materials such as fuels, minerals and metals but also food, soil, water, air, biomass and ecosystems. Growing global demand is increasing pressure on the environment, and competition for many resources is increasing.

![Figure 1. Resource efficiency](Image)

Using natural resources more efficiently has clear economic benefits for companies: it improves productivity, reduces costs and enhances competitiveness, creating employment opportunities. It also provides a more attractive and healthier living environment for regions and municipalities.

Beside higher profitability, resource efficiency can also unlock large potential for innovation and growth, encouraging the emergence of new technologies and driving job creation. This relates to the optimisation of value generation across the full life-cycle, design of eco-efficient products and recycling and reuse of waste streams.

The growth in output and quality improvement depends to a large extent on the availability of material resources and the effectiveness of their use.

The relationship between the indicators can be reflected in the formula:

\[ V = M_3 \times Mo \text{ or } V = M_3 \times \left(1 / Me\right) \]  

where: 
- \( V \) - volume of production;  
- \( M_3 \) - the amount of material costs;  
- \( Mo \) - material output of products;  
- \( Me \) - material consumption of products.

Timely receipt and efficient use of material resources ensures uninterrupted, rhythmic work, fulfillment of the business plan and increase in profits. An unjustified surplus can lead to a slowdown in the turnover of current assets, which worsens the financial condition.

A feature of Russian economic practice is that many economic entities create reserves in the form of highly liquid assets (gasoline, alcohol, etc.). Hence it follows that the economic entity should have an optimal reserve of material resources in terms of quantity, quality, and range.

In modern conditions, economic entities independently determine, based on the release program:
- the amount of resources consumed;  
- their quality;  
- suppliers and main bases;  
- terms of admission.

Analysis of the use of materials in production is the most important area of analytical work, since during this analysis it is possible to determine the quantitative influence of var-
ious factors of the use of materials on the change in output.

Analyzing the impact on output, it is first of all necessary to identify what types of materials limit the output of this type of product, how the plan for the receipt of these resources was fulfilled in the reporting period and how the norms of their consumption for production were complied with, whether there were superplan wastes of production.

The change in output is influenced by factors characterizing the use of material resources in production:

– change in the receipt of material resources (the amount of material resources procured),

– change in the rate of consumption of materials (material consumption for the production of a unit of production),

– change in the balance of material resources in the warehouse in the form of reserves at the beginning and end of the year.

In order to determine the impact of the above factors on the change in output, it is necessary: determine the change in the volume of output - the object of analysis; determine the absolute deviation for all factors; Calculate the quantitative impact of indicators-factors on the change in output. Calculation of quantitative influence of factors is carried out by dividing the absolute deviation by factor-factors by the planned rate of consumption.

In conclusion, the influence of the change in the amount of waste on the change in output is determined. To do this, it is necessary to divide the amount of waste into planned material consumption.

In the presence of oversized waste, output is reduced, and vice versa.

Based on the calculations carried out, it is necessary to draw a conclusion and determine measures to reduce the material consumption and the amount of planned waste in the manufacture of products.

References

АНАЛИЗ ПОКАЗАТЕЛЕЙ ЭФФЕКТИВНОСТИ ИСПОЛЬЗОВАНИЯ МАТЕРИАЛЬНЫХ РЕСУРСОВ

Н.Р. Самадова, преподаватель
И.Ф. Умарбекова, преподаватель
Ташкентский финансовый институт
(Узбекистан, г. Ташкент)

Аннотация. Производство любых видов продукции (работ, услуг) связано с использованием материальных ресурсов. Материальные ресурсы определенного диапазона и качества являются основой и необходимым условием для реализации программы по производству и реализации продукции (работ, услуг), снижая издержки производства.

Ключевые слова: производство, материальные ресурсы, анализ, ресурсоэффективность, природные ресурсы, отходы.