- 5. India's R&D investment lags behind global peers, private sector involvement low: Economic Survey. The Economic Times. URL: https://economictimes.indiatimes.com/news/science/indias-rd-investment-lags-behind-global-peers-private-sector-involvement-low-economic-survey/articleshow/111927926.cms?utm\_source=chatgpt.com (date of access: 08.04.2025).
- 6. India's R&D Investment: Challenges and Opportunities Rau's IAS. Compass by Rau's IAS. URL: https://compass.rauias.com/current-affairs/india-investment-opportunities/?utm\_source=chatgpt.com (date of access: 08.04.2025).

# NAIONAL AGRICULTURAL EFFICIENCY EVALUATION INDICATOR SYSTEM

#### Xie Zhanlei

Sukhoi State Technical University of Gomel, the Republic of Belarus Scientific supervisor M. N. Andrianchikova

This paper constructs a scientific and reasonable indicator system for assessing national agricultural efficiency, covering indicators such as land productivity, agricultural labor productivity, capital return, product cost profitability and return on investment, following the principles of scientificity, systematicity, comparability, accessibility and simplicity. The article proposes strategies to improve China's agricultural efficiency, including promoting scientific and technological innovation, strengthening infrastructure construction, optimizing industrial structure, cultivating new types of farmers and improving policy support, while drawing on international experience to promote agricultural modernization and sustainable development.

**Keywords:** agriculture, efficiency assessment, indicator system, land output rate, agricultural labor productivity.

**Introduction.** Agriculture is the basic industry of the national economy, and its efficiency and competitiveness are of great significance to the economic development of the country and the sustainable development of social stability. In order to evaluate the national agricultural efficiency scientifically and comprehensively, this paper constructs a multi-dimensional evaluation index system. In the context of global economic integration, agriculture faces many challenges and opportunities. Improving agricultural efficiency can not only guarantee national food security and promote farmers' income, but also enhance the country's competitiveness in the international market. Therefore, it is particularly important to establish a set of scientific and reasonable agricultural efficiency evaluation index system.

The construction of agricultural efficiency evaluation index system. According to the authors, the system should be based on the following principles:

- 1. Scientific: the selection of indicators should be in line with the theoretical basis of agricultural efficiency evaluation, and can accurately reflect the input-output relationship of agricultural production.
- 2. *Systematic*: covering all aspects of agricultural production, forming an organic whole, and comprehensively reflecting agricultural efficiency.
- 3. *Comparability*: the indicator data should be comparable, so that it is easy to compare and analyze between different regions and countries.
- 4. *Accessibility*: the indicator data should be relatively easy to obtain to ensure the feasibility of the evaluation work.
- 5. *Simplicity*: on the premise of ensuring comprehensiveness, the number of indicators should be streamlined as much as possible to highlight the key points.

Among the main specific indicators, it should be noted:

## 1. Land output rate

Definition: gross agricultural product per unit of land area, often expressed as "million yuan/ha".

Meaning: measure the efficiency of land resource utilization and reflect the economic efficiency of agricultural production.

## 2. Agricultural Labor Productivity

Definition: the quantity of agricultural products or net output value created per unit of agricultural labor time, often expressed as "10,000 US dollars/person".

Meaning: reflecting the efficiency of labor in agricultural production, it is an important indicator to measure the degree of agricultural modernization.

## 3. Return on capital

Definition: the ratio between the production capital occupied by the operating unit and the net income received, expressed as "the amount of net income per unit amount of production capital".

Meaning: reflecting the efficiency of agricultural capital utilization, reflecting the level of profitability of agricultural production.

## 4. Product cost yield

Definition: the ratio of cost and profit, reflecting the economic efficiency of unit capital cost.

Meaning: measure the cost control and profitability of the agricultural production process.

#### 5. Return on Investment

Definition: the amount of net income or profit gained in a certain period of time by the unit investment used for the expansion of agricultural reproduction.

Meaning: to assess the rate of return of agricultural investment, to provide a basis for agricultural investment decision-making.

The analysis of China's agricultural efficiency. (I) The current situation of China's agricultural efficiency

In recent years, with the progress of agricultural science and technology, the improvement of agricultural infrastructure and the deepening of rural reform, China's agricultural efficiency has been significantly improved. The land output rate and agricultural labor productivity have been increasing, and the gross agricultural product has continued to grow. However, compared with the world's agricultural powerhouses, there are still some gaps in China's agriculture in terms of land output rate and labor productivity.

Trends in China's agricultural cinciency indicators (2010–2020)			
Year	Land output rate, million yuan/ha	Agricultural labor productivity, \$ million/person	Return on capital, %
2010	0.98	0.18	4.2
2015	1.15	0.22	4.8
2020	1.32	0.29	5.6

Trends in China's agricultural efficiency indicators (2010–2020)

From the above table, it can be seen that China has improved all indicators of agricultural efficiency between 2010 and 2020. For example, the land output rate increases from 0.98 million yuan per hectare in 2010 to 13.2 million yuan per hectare in 2020, an increase of 34.7 %, and the agricultural labor productivity increases from 0.18 million yuan per per-

son in 2010 to 0.29 million yuan per person in 2020, an increase of 61.1 %. This shows that China has made remarkable progress in agricultural efficiency.

# (II) Strategies for improving China's agricultural efficiency

1. Promote agricultural science and technology innovation

Increase investment in agricultural science and technology research and development, cultivate excellent varieties, popularize advanced planting and breeding techniques, and improve the technical content and scientific and technological level of agricultural production.

2. Strengthen the construction of agricultural infrastructure

Improve farmland water conservancy facilities, raise the irrigation guarantee rate and flood-drainage capacity of farmland; strengthen the construction of rural roads and improve the transportation conditions of agricultural products.

3. *Optimize the structure of agricultural industry* 

Promote the industrialization of agriculture, develop the agricultural product processing industry and rural service industry, extend the agricultural industry chain, and increase the added value of agricultural products.

4. Cultivate new types of professional farmers

Strengthen vocational education and skills training for farmers, improve their scientific and technological and cultural qualities and business management capabilities, and cultivate a group of new professional farmers who are educated, technologically literate and capable of running businesses.

5. Improve agricultural support and protection policies

Increase financial investment in agriculture, improve agricultural subsidy policies, increase agricultural insurance coverage and protection levels, and create a favorable policy environment for agricultural development.

International Comparison and Reference. (I) The current situation of international agricultural efficiency

Agricultural powerhouses represented by the United States, the Netherlands and Australia have excelled in agricultural efficiency. There is still a gap between China and the United States, the Netherlands, Australia and other agricultural powerhouses in various indicators of agricultural efficiency. This indicates that China still has much room for improvement in land resource utilization efficiency.

# (II) International Experience

Experience of the United States

- 1. *Large-scale mechanization*: the high degree of mechanization of agriculture in the United States has significantly increased labor productivity and reduced labor costs.
- 2. Agricultural informatization: widely applying modern information technology to realize the precision and intelligence of agricultural production.

Experience of the Netherlands

- 1. Scientific and technological innovation: investing a lot of resources in agricultural technology research and development, especially in greenhouse planting, aquaculture and other fields to achieve remarkable results.
- 2. *Integration of industrial chain*: forming a complete industrial chain from agricultural production to processing and sales, which has enhanced the added value and market competitiveness of agricultural products.

**Conclusion.** Constructing a scientific and reasonable agricultural efficiency evaluation index system is of great significance for accurately assessing the level of national agricultural development and formulating agricultural development strategies. By analyzing the current situation of China's agricultural efficiency and its enhancement strategies.

we should give full play to our own advantages, learn from international experience, continuously promote the process of agricultural modernization, improve agricultural efficiency and competitiveness, and achieve sustainable agricultural development.

#### References

- 1. Ministry of Agriculture and Rural Affairs of the People's Republic of China Agricultural Development Plan for Northwest China 2021–2025), 2023. URL: https://www.moa.gov.cn/ (date of access: 26.02.2024).
- 2. Feng Zhiming.On the efficient use of agricultural data.Academic Annual Report of Chinese Youth Agricultural Sciences. Beijing: China Agricultural Press. 2007(A). P. 767–773.
- 3. Yao Yukang, Wang Xiang, Li Ruiting, & Liu Yuan, Establishment and evaluation of Jiangsu modern and efficient agricultural evaluation index system // Jiangxi Agricultural Journal. 2013. N 25 (9). P. 6.
- 4. Pang Jiaxing, 2016. Measuring Eco-Efficiency of Agriculture in China. 2023. URL: https://www.researchgate.net/publication/301578311\_Measuring\_Eco-Efficiency of Agriculture in China (date of access: 26.02.2024).

# РЕКЛАМА В ЭПОХУ КЛИПОВОГО МЫШЛЕНИЯ: КАК БРЕНДЫ ПРИВЛЕКАЮТ ВНИМАНИЕ

## А. К. Богданов

Учреждение образования «Гомельский государственный технический университет имени П. О. Сухого», Республика Беларусь

Научный руководитель Л. Л. Соловьева

Проанализировано влияние клипового мышления на маркетинг в соцсетях. Рассмотрены особенности восприятия контента в TikTok и Reels, новые форматы коммуникации брендов, включая мемы и «ведение от лица потребителя». Приведены примеры успешных кейсов мировых и белорусских компаний. Сделан вывод о значении коротких видео и визуального юмора в привлечении внимания молодой аудитории.

**Ключевые слова:** клиповое мышление, TikTok, Instagram Reels, цифровая реклама, вирусный контент, бренд-коммуникация, мемы, поколение «Z».

В современном мире объем информации, с которым сталкивается человек, постоянно увеличивается. В связи с этим изменяются и способы ее восприятия. Одним из ключевых феноменов XXI в. стало клиповое мышление – способ обработки информации, при котором внимание сосредотачивается на кратких, разрозненных фрагментах, а способность к глубокому анализу снижается. Это явление формируется под влиянием цифровых технологий, социальных сетей и форматов контента, таких как короткие видео в TikTok и Instagram Reels, где информация подается быстро, динамично и эмоционально.

Согласно исследованиям, клиповое мышление имеет как положительные, так и отрицательные стороны. С одной стороны, оно позволяет быстрее обрабатывать информацию, мгновенно выделять главное и адаптироваться к множеству параллельных задач. Однако при этом снижается концентрация внимания — в среднем человек может удерживать фокус всего 8 секунд. Также уменьшается способность к критическому мышлению: люди схватывают основную суть, но упускают детали и реже подвергают данные критическому анализу. В результате пользователи становятся более восприимчивыми к манипуляциям, что особенно заметно в сфере рекламы. Например, нативная реклама и интеграции с инфлюенсерами воспринимаются