

## Impact Factor:

ISRA (India) = 1.344	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 0.829	PIHHI (Russia) = 0.207	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 3.860	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 2.031	

SOI: [1.1/TAS](#) DOI: [10.15863/TAS](#)

## International Scientific Journal Theoretical & Applied Science

p-ISSN: 2308-4944 (print) e-ISSN: 2409-0085 (online)

Year: 2017 Issue: 10 Volume: 54

Published: 27.10.2017 <http://T-Science.org>



**Timur Uzakbergenovich Nurimbetov**  
PhD student of economics department,  
Karakalpak State University named  
after Berdakh,  
Republic of Uzbekistan, Nukus city  
+ 99890-592-77-36

**SECTION 31. Economic research, finance,  
innovation, risk management.**

## DIVERSIFICATION OF THE MANUFACTURING ACTIVITY AT AGRICULTURAL SECTOR AND METHODOLOGICAL APPROACHES TO EVALUATE ITS LEVEL

**Abstract:** This article is devoted to the issues of the efficient organization of diversification processes at the agricultural enterprises and implementation of the methodological approaches to evaluate its level. The results of the research facilitate the search of reserves to enhance their efficiency and use, formation of the diversification potential of the activities of the enterprises aimed at raising their competitiveness, as well as making decisions on the innovation development of this branch.

**Key words:** diversification, production diversification, evaluating diversification level, efficiency, agricultural products.

**Language:** English

**Citation:** Nurimbetov TU (2017) DIVERSIFICATION OF THE MANUFACTURING ACTIVITY AT AGRICULTURAL SECTOR AND METHODOLOGICAL APPROACHES TO EVALUATE ITS LEVEL. ISJ Theoretical & Applied Science, 10 (54): 77-82.

**Soi:** <http://s-o-i.org/1.1/TAS-10-54-17> **Doi:**  <https://dx.doi.org/10.15863/TAS.2017.10.54.17>

**UDC: 631(575.1)**

### INTRODUCTION

Under current market conditions implementation of radical structural changes, ensuring financial recovery of manufacturing and services enterprises, innovation and investment policy, set of technique used for assessing the quality of production and its level of diversification play a crucial role. Nowadays we are witnessing insufficient provision of organization and management of the manufacturing activity, research and evaluation of the diversification level with the methodological basis. Therefore it is considered impossible to achieve the goal without establishing relevant diversification policy and using the methodology of its evaluation at agricultural enterprises producing competitive production.

### URGENCY

The main aim of the agricultural sector is to ensure food safety, economic and social stability and it can be achieved through high confidence of internal and external consumers with provided agricultural products and improvement of the quality of these products. In general, the market of agricultural products which performs its activity

efficiently can ensure the society development through satisfying the demand of people for such production.

In the Decree of the President of the Republic of Uzbekistan № 4947 “On Action strategy for further development of the Republic of Uzbekistan” dated from February 7, 2017, a number of tasks aimed at deepening structural changes, enhancing the competitiveness of the national economy through modernization and diversification of the main branches of the national economy have been set up[1].

Currently in developing the activity of the agricultural enterprises a particular attention is paid not to the increase of the export volume of the crops and raw materials but to their processing and achieving high added value, ensuring their compliance with the quality and ecological standards, development of capacities involved in producing the goods with high liquidity, as well as enhancing competitiveness of this branch in the market.

In the global economy urgent delivery of new types of the products to the general public leads to the tight competition due to the diversification policy of production. Experience of the countries with advanced economies illustrate that achieving



## Impact Factor:

ISRA (India) = 1.344	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 0.829	PIHHI (Russia) = 0.207	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 3.860	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 2.031	

competitiveness and entering into the global market can be implemented, first of all, through changes of the manufacturing from the structural sphere, putting into operation modern enterprises based on high technologies, manufacturing of new and competitive production on the basis of the innovation technologies. Herein agricultural enterprises must pay attention to provision of manufacturing of the production with high added value due to the reasonable use of land, water, mineral and labour resources. Therefore, evaluation of the diversification process of manufacturing at the agricultural enterprises is considered to be an urgent issue.

### MAIN PART OF THE RESEARCH

Implementation of the organization of diversification activity at the agricultural sector requiring innovation development of the economy, as well as enhancing the volume of the agricultural production, its types and quality in compliance with general economic benefits is considered to be a complicated scientific-practical issue.

In modern economic literature [2;3;4] the term “diversification” can be defined as an economic category and implies the process connected with expanding the activity of the enterprise and realization of the new types of activities aimed at raising the competitiveness of the enterprise.

In our opinion, in the diversification of the enterprise activity, the scope of the activity, its character and directions, organizational-legal framework of the legal entity and the management system of the enterprise appear as a significant factor. In the process of our research the term “diversification” was defined in appropriate scientific literary sources as it follows:

- diversification of the manufacturing of agricultural enterprises complies with the peculiarities of these characteristics of other categories;

- essence of diversification according to the aim and objectives set up by the researcher, as well as the scope of the activity (region, branch, production, market segments) doesn't possess a strict hierarchy system for researching;

- methods for evaluation of the diversification level and the indicators used do not enable to compare them in the interrelation at the different units of the economic system of various districts.

It should be noted that in the researches devoted to the peculiarities of the organization of the agricultural economy, considering agrotechnic, technological, and commercial features separately at the branch enterprises, systematic researches aimed at studying this branch as a whole with the account

of its peculiarities, haven't been at the sufficient level.

Raising the volume and consumption of agricultural production, strengthening of the competition justify the necessity of working out development strategy, accepting managerial decisions on the basis of the implementation of the diversification principles in the activity of the agricultural entities to acquire a certain share of the market. The term “diversification” implies a complex of measures aimed at, first of all, ensuring the priority of the competition of agricultural enterprises and achieving competitiveness due to the maximum use of available economic-financial and mechanization capacities.

In modern literature the diversification activity can be studied on the basis of dividing recommended competitiveness into different levels. Herein the diversification activity will look like the following hierarchic system[5;6;7]:

- 1) at the macrolevel this term is applied to the diversification activity at the national, regional or branch level;

- 2) at the mezzo level this term includes diversification at the level of the agricultural enterprises or organizations, goods and services, the scope of mechanization facilities;

- 3) at the microlevel it means diversification processes related to organization of the manufacturing, its management, introduction of new technologies and human resources activities.

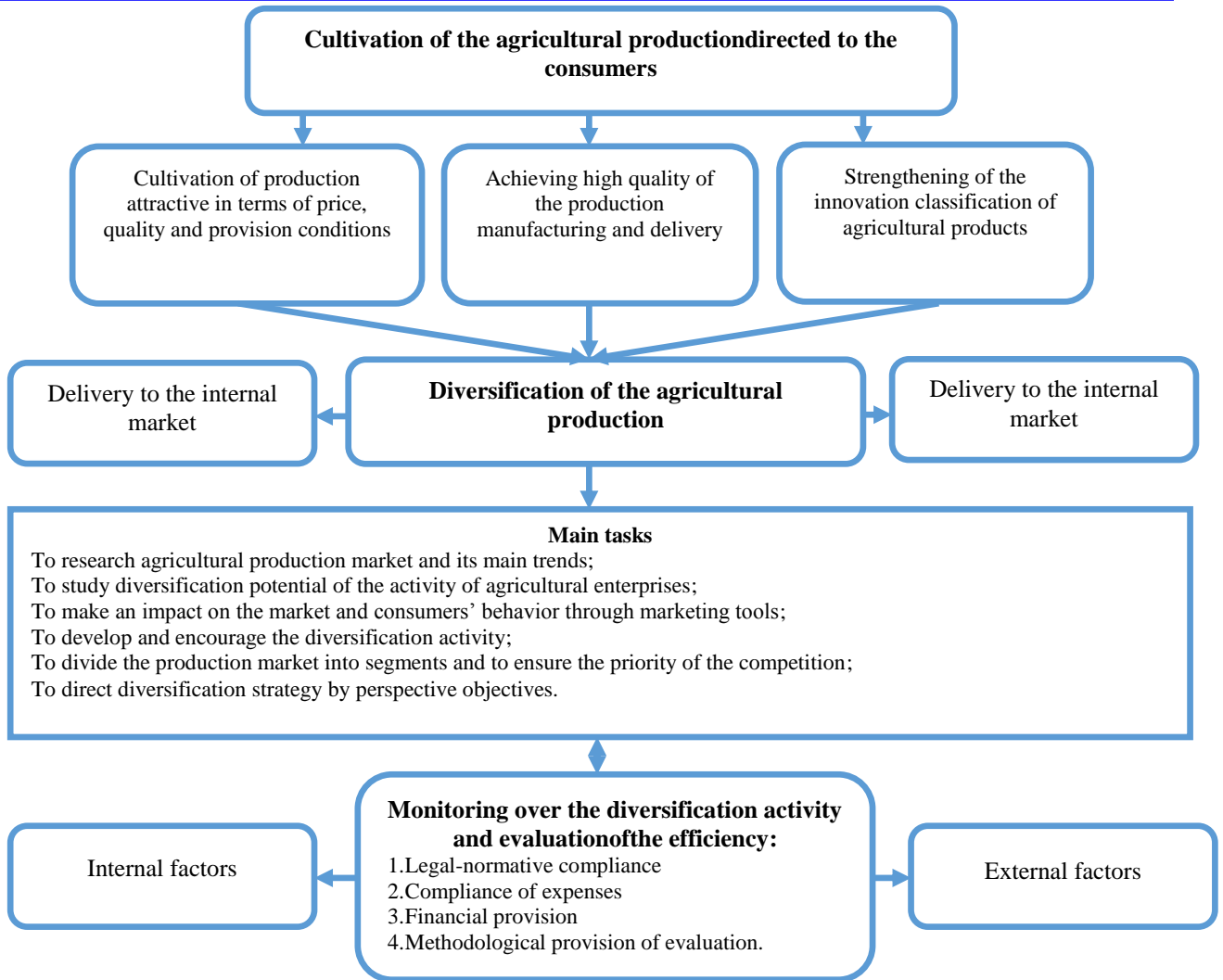
Ensuring of the national economy diversification is provided from micro level to macro level.

Raising efficiency of the use of natural, material, financial and labour resources attracted to the agricultural manufacturing is considered to be an important issue in the diversification and its implementation is determined by increasing demand for the quality of the branch activity.

Organization of the diversification activity in agriculture is a complicated process due to the presence of a numerous elements with various peculiarities in the structure of the branch; complicated aspect of their mutual impact by material, service, financial and information flows; disorder of the majority of factors and parameters; impact of the subjective factors and others. Nowadays even though each diversification idea is formulated as a certain concept directed to the consumers in the market for any branch, it is still being improved. The general mechanism to organize the diversification activity in the agricultural system is proposed within the framework of this research (Figure 1).

**Impact Factor:**

ISRA (India) = 1.344	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 0.829	PIHHI (Russia) = 0.207	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 3.860	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 2.031	



**Figure 1 - General mechanism of the diversification of the agricultural production.**  
Source: developed by the author.

Efficient implementation of the diversification activity requires branch enterprises to possess the following peculiarities:

- Production capacities comprised of natural resources, mechanization tools, technologic equipment and machinery which enable to execute the obligations within the commercial demands at the markets of industrial production;
- System providing continuous improvement of the production capacities;
- High quality of the machinery, equipment and technical tools used in agriculture;
- High level of the productivity and labour efficiency;
- Sufficient level of efficiency of the production capacities.

Stability of the activity of the agricultural branch as a system is evaluated, first of all, by a timely satisfaction of the demand for its services by the

economic branches and population, and ability to maintain or recover existing capacities against the impact of internal and external changes in relation to the system. Stability of the branch can be evaluated by its stability ratio and the ratio of the reserves' stability.

$$K_{\sigma} = \frac{(W_{max} - W_{\kappa})}{W_{max}} \quad (1)$$

here:  $W_{max}$ —opportunities of aggregate capacities of manufacturing of all types of agricultural production during the analyzed period, tiynor soum (UZS);

$W_{\kappa}$ — the need of the economy for aggregate consumption of the agricultural production during the analyzed period, tiyn or soum;

$W_{max} - W_{\kappa} = dW$ - reserves of stability, tiyn or soum;

$$K_{\sigma 3} = \frac{W_{max}}{W_{\kappa}} \quad (2)$$

**Impact Factor:**

<b>ISRA (India)</b> = 1.344	<b>SIS (USA)</b> = 0.912	<b>ICV (Poland)</b> = 6.630
<b>ISI (Dubai, UAE)</b> = 0.829	<b>PIHIQ (Russia)</b> = 0.207	<b>PIF (India)</b> = 1.940
<b>GIF (Australia)</b> = 0.564	<b>ESJI (KZ)</b> = 3.860	<b>IBI (India)</b> = 4.260
<b>JIF</b> = 1.500	<b>SJIF (Morocco)</b> = 2.031	

For sure even though this approach seems to be quite simple it enables to evaluate the branch competitiveness at the macro level. If  $K_{63} < 1$ , it justifies that the branch activity is unstable, so it cannot provide required volume of production. If  $K_{63} > 1$ , the branch has additional manufacturing reserves and can be a basis for the development of the export potential.

Enhancing priority of the competition in any economic entity is impossible to achieve without the criteria used to determine its current diversification level and scientifically grounded methods for their evaluation. It is impracticable to evaluate the efficiency of measures on increase of the current diversification level without its determination.

Analysis and evaluation of the diversification level can be used for justification of implementation of the following measures:

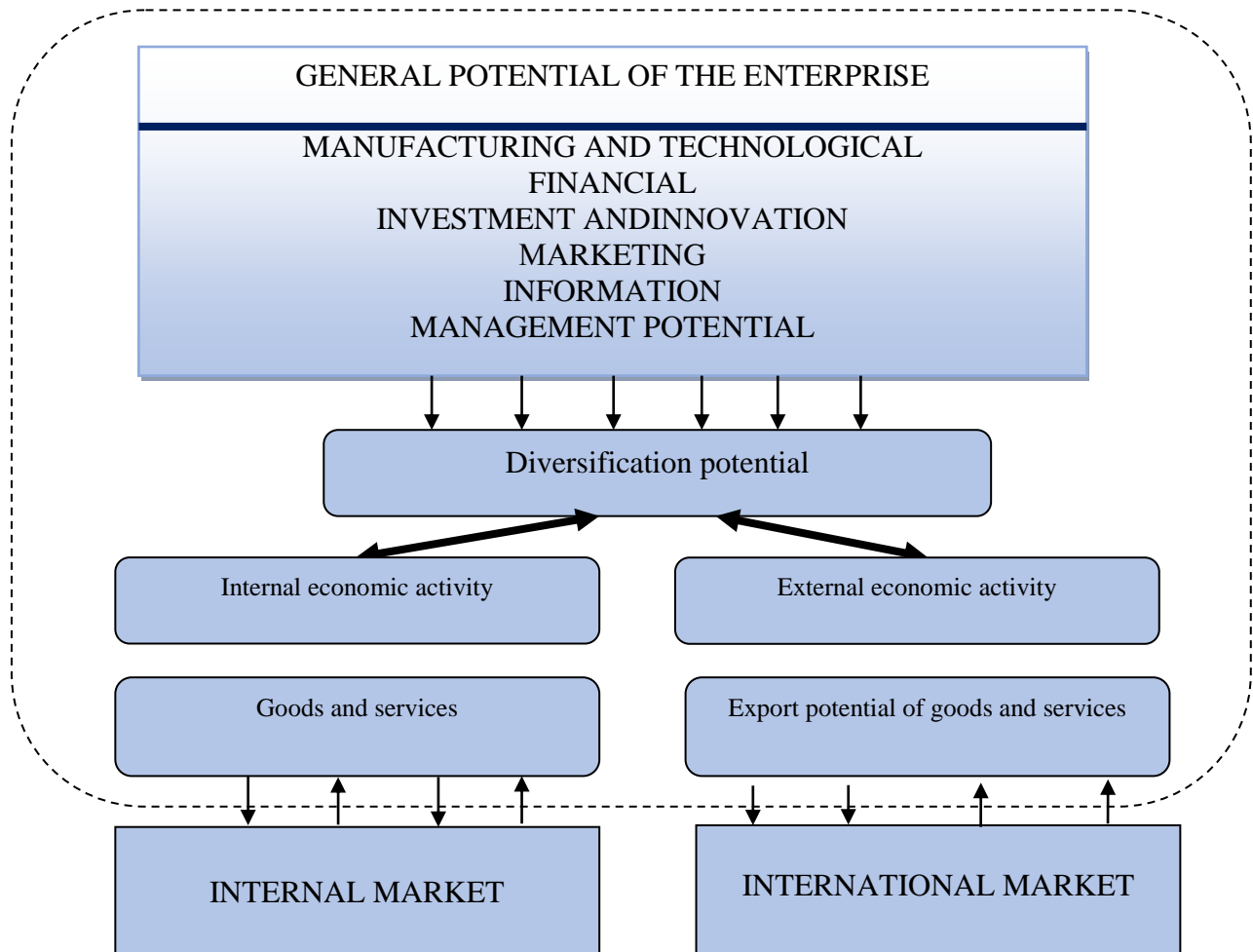
- Working out the measures on enhancing production competitiveness;
- Comprehensive study of the market and determining the directions for the enterprise activity;

- Working out the measures aimed at raising the manufacturing potential;
- Determining acceptable cost of production.

It should be noted that diversification of the enterprise's activity can be implemented in two directions: a) manufacturing of a new product without changing the direction of the activity; b) mastering of the completely new type of the activity or manufacturing of a new type of product[8].

The main aim of the production diversification is appreciating its advantages by consumers as well as enhancing its attractiveness with the account of peculiarities of the separate market or market segments.

While evaluating diversification potential of the agriculture, the stability ratio is considered as a general capacity thus it is recommended to conduct a comprehensive research of the diversification process as its one element. From this point of view we consider the diversification potential as a structural-logistic component of the aggregate economic potential (Figure 2).



**Figure 2 - Diversification potential of the agricultural enterprises**

Source: developed by the author

## Impact Factor:

ISRA (India) = 1.344	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 0.829	PIHHI (Russia) = 0.207	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 3.860	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 2.031	

However, it should be noted, that diversification process is not a static process, but the process of its formation and implementation is considered to be flexible and dynamic. We evaluate diversification potential in the structure of the overall potential of the enterprise and herewith we should take into account that such kind of diversification consists of different aspects. All tangible and intangible, financial and labour resources as structural elements serve for the development of the enterprise's activity.

### RESULT

According to the results of the research the following prior directions of the diversification of the activity of the agricultural enterprises can be demonstrated:

- modernization of existing production capacities and establishing new ones on the basis of wide implementation of the resource economizing technologies;
- increasing the volume of the products with high added value on the basis of processing cultivated crops and expand their types;
- diversification of the export structure through manufacturing various food products;
- creation of new technologies on manufacturing of import replacing and export-oriented production in cooperation with leading international technological companies and others.

Conducting efficient diversification technology is connected with how effectively factors are implemented at the practical activity of the enterprise. However, all these factors cannot be evaluated in terms of quantity and this makes calculation of their total value complicated. This, in turn, under current conditions leads to the necessity of applying modern manufacturing methods.

Diversification of manufacturing activity by its nature is classified into two factors: technical and technological peculiarities of the production and demand for production. These very factors determine stimulation of the diversification process, its directions and scope.

While evaluating diversification opportunities of the activity of agricultural enterprises it is possible to use (D) indicator which determined the level of diversification:

$$D = 1 - \frac{100}{\sum_{i=1}^n M(2i-1)} \quad (3)$$

Here: M—the share of a certain product in the total volume of production, %; i – the serial number of a certain product in the descending order; n— number of products.

The level of the enterprise diversification illustrates how specific is the product in relation to the manufacturing. If this indicator equals to 0, an enterprise is specialized in manufacturing one type of production, the closer it approaches to 1, the higher diversification level it has.

Determining indicators in the diversification facilitates evaluation of the results achieved during its current activity, search for reserves enhancing efficiency and development of measures on their use. In turn, results of analysis can serve as a basis for development of the diversification potential to raise competitiveness of the enterprise and working out general strategy for the management.

### CONCLUSION

Diversification process cannot be stopped by the presence of risks thus each enterprise is trying to organize profitable production at each stage of its development. Therefore it is important to compare existing risks and income gained from the production and to make a choice on the basis of relevant conclusions.

Herein it is significantly important to select targeted market segments and to place products in several market segments. If we consider specifics of the products according to a certain market, it is necessary to satisfy various needs of the group of consumers selected by the enterprise. Herewith an enterprise will be able to take an adequate place in the market and will turn into the provider of the consumers with required products.

### References:

1. (2017) Decree of the President of the Republic of Uzbekistan № 4649 “On Action strategy for further development of the Republic of Uzbekistan in 2017-2021” dated from February 7, 2017.
2. Makhnushina V.N., Shinkevich A.N. (2014) Evolution of the “diversification” concept in the economic thought // Periodical of Voronej State University. Series: Economics and management. – 2014. – № 3. – p. 5-9.
3. Tanchik A.Yu., Shinkevich A.N. (2006) Production diversification – one of the directions for the effective development of enterprises // Economic journal of YUFO. – 2006. – № 2. – p. 145 -148.



**Impact Factor:**

<b>ISRA (India)</b>	<b>= 1.344</b>	<b>SIS (USA)</b>	<b>= 0.912</b>	<b>ICV (Poland)</b>	<b>= 6.630</b>
<b>ISI (Dubai, UAE)</b>	<b>= 0.829</b>	<b>PIHHI (Russia)</b>	<b>= 0.207</b>	<b>PIF (India)</b>	<b>= 1.940</b>
<b>GIF (Australia)</b>	<b>= 0.564</b>	<b>ESJI (KZ)</b>	<b>= 3.860</b>	<b>IBI (India)</b>	<b>= 4.260</b>
<b>JIF</b>	<b>= 1.500</b>	<b>SJIF (Morocco)</b>	<b>= 2.031</b>		

4. Semenova V.A. (2014) Diversification of the activity of multiprofile companies: its motives, types and forms/ Topical issues of the economy and management.2014–№3. – p. 105 -112.
5. Fakhrutdinov R.A. (2009) Global competitiveness. M.: RIA «Standards and quality», 2009. – p. 396.
6. Metelev I.S. (2011) Competitiveness of the subject of the entrepreneurship activity: essence, factors and criteris of evaluation // Modern economy problems. №1, 2011.
7. KutsV.I., Vasilyeva Z.A. (2006) Hierarchyofthe concepts of competitiveness of the subjects of the market // Journal :Marketing in Russia and overseas». №2, 2006.
8. Porter M.Ye. (2006) Competitive strategy. Technique of analysis of branches and competitors, translation from English, 2-nd edition. M.: Alpina Business Books, 2006. p. 452.

