

Use of Marketing Methods in the Development of Strategies for Diversification of Agricultural Production in the Republic of Karakalpakstan

Nurimbetov Timur Uzakbergenovich¹, Bayjanov Sarsengaliy Xalmuratovich², Ismailov
Kuatbay Sarsenbaevich³ and Bekbosinov Kuralbay Kdirbaevich⁴

¹ Karakalpak State University,

Received: 9 December 2019 Accepted: 5 January 2020 Published: 15 January 2020

Abstract

The strategic management of agricultural enterprises is to create conditions and develop mechanisms for the sustainable development of the enterprise, providing employment and income for the rural population. Diversification strategies are an integral part of the enterprise's corporate strategies, namely, growth strategies that allow, firstly, to determine the direction of development of the enterprise in accordance with market requirements, and secondly, the availability of its own resources and the appropriateness of external acquisitions. The article analyzes the regional features of agricultural production in the Republic of Karakalpakstan. The Republic of Karakalpakstan is divided into 4 conditional zones and the current market conditions for agricultural products and food are also analyzed. The degree of saturation of regional markets with agricultural products was studied. The country's self-sufficiency in main agricultural products are determined. Based on the analysis, proposals and recommendations for the development of each zone were developed. Scientific conclusions and practical recommendations on the cultivation of agricultural products in the region, the provision of food to the population, increasing the income of the rural population are given.

Index terms—

1 Introduction

iversification strategies of the agricultural enterprise -a set of management decisions for the development of an agricultural enterprise fundamentally new areas of activity, allowing to meet the needs of the market, while achieving certain advantages aimed at improving the financial stability of the enterprise, creating new jobs and stabilizing the socioeconomic situation in rural areas. Studies from the developing world show that agricultural growth has a larger effect on poverty reduction, compared to the growth of non-farm sectors [1]. The development of agricultural enterprises and the strategic planning of diversification is based on an analysis of the marketing opportunities not only of the enterprise itself, but also of the rural administrative district, since significant areas of activity of agricultural enterprises cannot be developed independently, therefore, it is necessary to identify potential partners among entrepreneurs in this territory, to study the labor potential of the region or agricultural zone as a whole. The socio-political consequences of persistent agrarian distress could be disastrous, and call for pre-emptive strategic interventions in both farm and non-farm sectors to re-invigorate agricultural growth and enhance farmers' income. Within the farm sector, diversification towards high value crops (HVCs), including vegetables, condiments spices, fruits and plantations, is claimed to be an important means of securing agriculture-based livelihoods, accelerating growth and reducing rural poverty [2]. Higher levels of diversification reflect a wider availability of productive capabilities, implying-under the assumption that capabilities are complementary-a positive effect diversification on income and subsequent growth [3]. A somewhat related idea -connected

43 with urbanization economies, in particular those operating through increased flows of knowledge-goes under the
44 name of Jacobs externalities: diversity can foster technological dynamism, i.e. innovation and adoption of new
45 technologies [4].

46 2 II.

47 3 Materials and Methods

48 When developing diversification strategies, it is necessary to take into account the large differentiation of the
49 natural, economic and social conditions of rural administrative regions of the Republic of Karakalpakstan. The
50 Republic of Karakalpakstan is located in the northwestern part of Uzbekistan on an area of about 166,600 km².
51 The overwhelming part of the territory of Karakalpakstan is lowlands (from 50,200 m above sea level), and
52 flatness is its most noticeable feature. Most of the population lives and works on irrigated river plains in the
53 Amu Darya River Delta. It is bordered by Kazakhstan to the north and west, the Republic of Turkmenistan to
54 the south, the Navoi region of Uzbekistan to the east, and the Khorezm region to the southeast. The arable land
55 of the republic is relatively limited.

56 The area of irrigated land is 510.4 thousand hectares, or 3.1% of the total land area.

57 The arable land in 2018 was 231.1 thousand hectares, or 45.3% of irrigated land.

58 This situation indicates that Karakalpakstan cannot use its potential land due to a lack of water supply for
59 irrigation.

60 The criterion of economic efficiency of the placement and development of a particular industry andD Volume
61 XX Issue VIII Version I 11 (E)

62 the determination of promising areas of diversification of agricultural enterprises is the saturation of the market
63 with products that agricultural producers can produce in a specific rural administrative region.

64 The provision of food itself means satisfying the need for it, first of all, through domestic supplies with
65 minimal dependence on foreign trade. To achieve the country's self-sufficiency in food, it is necessary to produce
66 high-quality products in volumes that can satisfy the population's need for it at a threshold level at prices that
67 guarantee the availability of most products for all social groups throughout the country. Broad changes are taking
68 place in agrifood systems worldwide. These changes are driven by economic development, increase in per caput
69 incomes, changing technology and urbanization. Consumers are changing their dietary preferences and shopping
70 habits, resulting in substantial organizational and institutional changes throughout the food marketing chain.
71 Growing concentration at all levels is taking place, particularly in the retail sector, and private sector standards
72 for food quality and safety are proliferating [5].

73 Initially, we should analyze the current market conditions for agricultural products and food to determine the
74 country's self-sufficiency in food.

75 For this, the potential market capacity is determined for each of the types of produced products, then the
76 characteristics of the consumption of the main groups of food products and the structure of agricultural production
77 are investigated, which allows to determine the prospects for the development of the sector. When determining
78 the level of self-sufficiency republic's main types of food the author used the following formula: 1. The potential
79 capacity (P c) of the food market is determined on the basis of standards for the consumption of food products
80 (S C)and the size of population (S P). $P c = S C * S P$ 2. We introduce the Degree of saturation (D S)
81 of the food market: $DS = \frac{A_p}{P_c} * 100\%$ where P C -potential capacity of the food market S C -standards for the
82 consumption of food products S P -size of population D S -degree of saturation of the food market, A p -actual
83 food production III.

84 4 Discussion

85 The analysis of the saturation of the product market allows you to determine product groups for which customer
86 demand is not fully satisfied. Using these formulas, we can determine the potential capacity of the regional
87 product market and the degree of saturation of the market with the main agricultural products. The data in
88 the table 1 indicates that the republic reached its self-sufficiency only in vegetables and milk. The situation
89 with other agricultural products is still far from satisfying. Grape growing in the country does not exceed 28%
90 of the market potential, fruits and berries -39%, and egg products -55%, potatoes -66%. This, in turn, once
91 again justifies the need to increase the volume of these products as a priority in the diversification of agricultural
92 production.

93 In 2019, the sown area of Karakalpakstan amounted to 232.1 thousand ha, accounting for 7% of the total
94 sown area of Uzbekistan. In Karakalpakstan, cotton has the largest sowing area of 88 560 ha which is 38.1%
95 of the total sown area. Second place by sown area is wheat. It occupied 85 767 ha., which equals 36.9% of
96 the total sown area. 75% of the total arable land is allocated for cotton and wheat (fig 1). South-eastern and
97 Central zones: Currently, relatively favorable conditions for the development of agricultural production exist in
98 the South-eastern and Cenral zones. Despite the fact that the total land area of South-eastern region is 10.7%,
99 43.2% of the planted land of the Republic is located in this area and 40 % of the population of Karakalpakstan
100 lives in this area. The share of the region in agricultural production is 52.9%. This means that the use of
101 available resources and opportunities in the region is well established. It is expedient to strengthen the system of
102 processing of agricultural products in this region, to strengthen services in the sale of products, to organize the

103 sale of surplus products to other regions. The level of water supply in this area is relatively stable. The degree of
 104 the saturation of the local market with the main agricultural products is higher than in other zones. The early
 105 arrival of spring is favorable for the cultivation of the main types of agricultural products in the region, including:
 106 cotton, wheat, melons, fruits and vegetables [7]. The data of table 2 indicates that the planted area of Central
 107 zone account for 21.4% of the total sown area, the share of gross agricultural output is 17.9%. Due to the fact
 108 that the capital is located in this area, this area is convenient for the processing and storage of the main types
 109 of agricultural products [7].

110 5 Northern and North-western zones:

111 The degree of the saturation of the local market with the main agricultural products is lower in these zones. The
 112 main reasons for the relatively low indicators are the low level of water supply in the region, the quality of land
 113 and low crop yields and high salinity of lands. There are favorable conditions for the development of animal
 114 husbandry in these zones. Despite the fact that 52.1% of the republic's hayfields and pastures are located in this
 115 region, only 14% of cattle, 26.3% of sheep and goats, 31.3% of horses and camels account for this region. Due
 116 to the availability of pastures and fodder base for livestock in Northern zone, it is possible to start processing of
 117 livestock products, including dairy products, leather products in this zone.

118 IV.

119 6 Conclusion

120 There are many approaches to using the potential to diversify regional agricultural production on the basis of
 121 marketing tools: one of them is development of a diversification program by regional public administration bodies,
 122 where the main focus is on the social significance of the issue and ensuring food security for the population of
 123 the region. The other is a diversification approach by direct agricultural producers, focusing on the production
 of highly value crops or economic activities. ^{1 2}

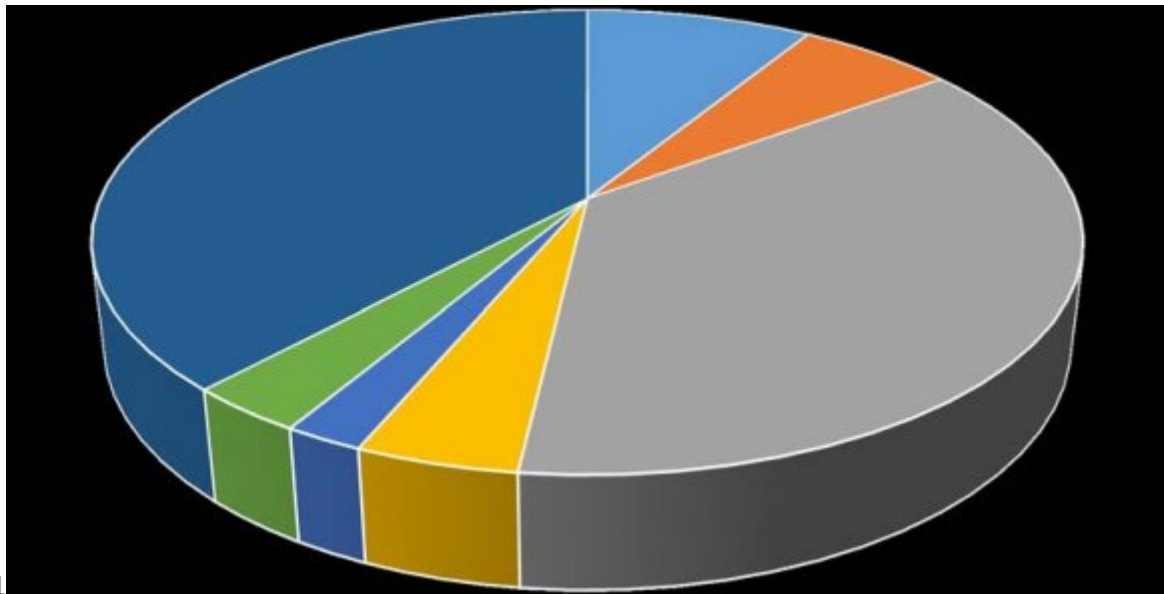


Figure 1: Figure 1 :

124

¹(E)
²(E)

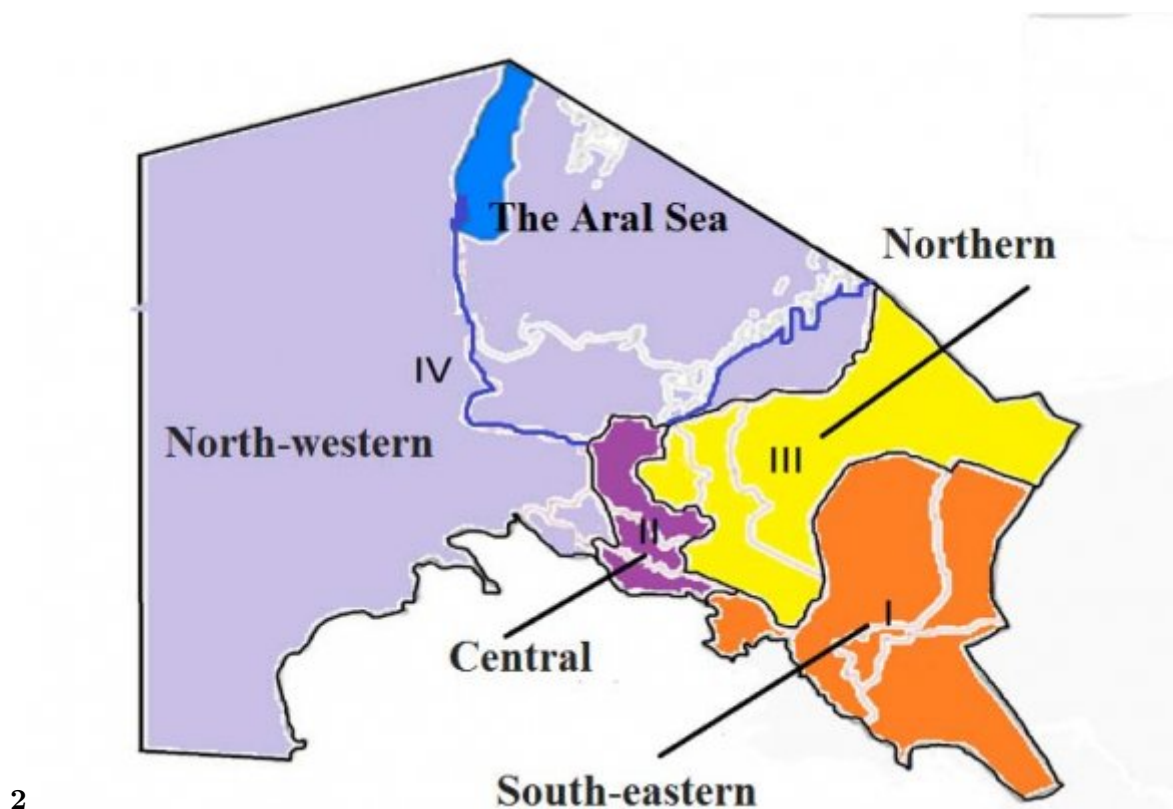


Figure 2: Figure 2 :

1

The main types of agricultural products	Standards for the consumption of food products per capita (kg)	Size of population (01.01.2019)	Potential capacity of the food market (tons) (2*3=4)	Actual food production (thousand ton)	Degree of saturation of the food market (%) (5:4*100=6)	Actual consumption of population per capita (kg) (5:2=7)
1	2	3	4	5	6	7
Potato	54,6		102085,6	67736	66,4	36,2
Vegetables	116		216885,2	247319	114	132,3
Fruits	68		127139,6	49750	39,1	26,6
Grapes	13,9		25988,8	7323	28,2	3,9
Meat	60	18697341	12182	106514	95	56,9
Milk	140		261758	376486	143,8	201,4
Eggs	295		551561,5	303195	55	162,1
Honey	2,4		4487,3	596,1	13,3	0,3
Fish	13,4		25054	9626,2	38,4	5,1

Figure 3: Table 1 :

2

Conditional zones	Total land area (%)	Irrigated land (%)	Planted land (%)	Percentage of population living in the area	Share in gross agricultural output
South-eastern	10.7	27,1	43,2	40,1	52,9
Central	2.5	22,8	21,4	34,6	17,9
Northern	17.5	24,2	17,5	11,1	15,1
North-western	69.3	25,9	17,8	14,2	14,1

Figure 4: Table 2 :

3

Conditional zones	Potatoes	Vegetables	Fruit	Grape	Meat	Milk	Egg	Honey	fish		
South-eastern	96,9		160,7	71,8	42,5	116	193,2	76,9	17,2	18,8	
Central	33		63,53	13,8	15,9	50,7	79,9		24,57,9	8,0	
Northern	97,5		131,7	33,7	27,5	143	162,3	62,5	19,1	43,1	
North-western	37,1		91,65	13,2	18,1	105	146,1	61,3	10,7	164,3	
Republic of Karakalpakstan	66,4		114	39,1	28,2	94,9	143,8	55,0	13,3	38,4	

Figure 5: Table 3 :

4

Conditional zones	Pastures	Cattle	Sheep and goats	Horses	Camels	Poultry
South-eastern	19,8		49,8	40,5	24,2	25,2 56,9
Central	5,7		19	11,7	24,8	15 13,7
Northern	52,1		14	26,3	31,3	30 17,4
North-western	22,4		17,2	21,5	19,7	29,8 12
Republic of Karakalpakstan	100		100	100	100	100 100

Figure 6: Table 4 :

-
- 125 [Pingali et al.] *Commercializing small farms: Reducing transaction cost -2005 -agecon search*, P Pingali , M
126 Khwaja , Meijer . (umn.edu)
- 127 [Nurimbetov] *Directions of diversification of agricultural production (on the example of the Republic of*
128 *Karakalpakstan) // Dissertation abstract of the doctor of philosophy (PhD) in economic sciences*, T
129 Nurimbetov . <http://library.ziynet.uz/ru/book/download/108262>
- 130 [Paci and Usai ()] 'Externalities, knowledge spillovers and the spatial distribution of innovation'. R Paci , S Usai
131 . *GeoJournal* 1999. 49 (4) p. .
- 132 [Ravallion and Datt ()] 'How important to India's is the sectoral composition of growth in India'. M Ravallion ,
133 G Datt . *World Bank Econ. Rev* 1996. 10 p. .
- 134 [Bigsten and Tengstam ()] 'Smallholder diversification and income growth in Zambia'. A Bigsten , S Tengstam .
135 *J. Afr. Econ* 2011. 20 (5) p. .
- 136 [Hausmann and Hidalgo ()] 'The network structure of economic output'. R Hausmann , C A Hidalgo . *Journal*
137 *of Economic Growth* 2011. 16 (4) p. .