## **Project number 9. JSC "Science Foundation".**

Topic: «Production of innovative pasta "Ai-Kun" from multi-cereal raw materials».

Project manager – Zhalelov D.B.

The amount of funding for 2024-2026 is 695,810,637.08 tenge.

The research on the project involved: Zhalelov D.B., Ospanov A.A., Timurbekova A.K.

Pasta made from non-traditional multi-cereal flour raw materials, in comparison with other types of flour products, has a number of advantages: high digestibility of essential nutrients, high consumer properties (each category of people can satisfy their taste needs), relatively long shelf life and availability for the majority of the population. However, such products are not produced in our country, manufacturers have to use bread flour from soft wheat, the protein of which has a "deficiency" of the most important essential amino acids.

Therefore, expanding the range and giving the best consumer properties to pasta based on non-traditional multi-cereal raw materials is an urgent task.

This Project has been prepared in order to commercialize the previously obtained results of scientific and scientific and technical activities (2018-2020) by introducing an innovative method into the production of functional pasta from multi-cereal raw materials. In the Project, «Bal Halal» LLP acts as a private partner and Grant Recipient. On December 15, 2023, this company made a proposal to «Almaty Industrial Zone» LLP, located in the Alatau district of Almaty, to organize on their territory the production of innovative pasta with high nutritional and biological value. Modern technologies make it possible to produce products of any type and shape, as well as a variety of methods of consumption using food colorings and additives. In the future, the project provides for the introduction into phased production of the following types (short-cut and long-cut) pasta: Multi-colored pasta; Spaghetti; Horns; Vermicelli; Shells; Noodles and Zhaima. It is planned to produce pasta using new recipes, by mastering the production of innovative pasta from non-traditional multi-grain flour raw materials, such as: Barley flour; Corn flour; Oat flour; Buckwheat flour; Pea flour; Rice flour; Soy flour; Millet flour; Lentil flour; Chickpea flour; Flaxseed flour; Bean flour; Triticale flour and Wheat flour.

The cost of the Project is 704 101 865 tenge, including grant funding of 347 953 929 tenge and co-financing of 356 147 935 tenge. All calculations based on the financial model demonstrate the effectiveness of the investments made – grant funding and co-financing from the private partner «Bal Halal» LLP.

Thanks to the phased growth in sales, the internal rate of return (IRR) will be 8,0 %, the payback period of the project is 5 years. The accumulated net profit on the project for 7 years will be 871 663 700 tenge. The profitability ratio of sales of ROS after the 4th year of the Project implementation exceeds 20 %, which corresponds to the industry average values in the manufacturing industry (from 15 % and above).

The overall profitability ratio also exceeds 19,9 %. Thus, this investment Project is economically profitable, therefore, the Initiators made a strategic decision to start implementing this Commercialization Project.