

## **Structural modeling of assortment portfolio of enterprises in meat processing industry in accordance with the principles of food security**

**Sakhnenko A.S.**

Assistant Lecturer at Department of Management and Administration  
National University of Food Technologies

Food security includes measures for formation of the necessary reserves of food products, maintaining the stability of the food products market, guarantees of the physical and economic availability of food for all the population.

One feature of the current state of food security system is that in the absence of deficit due to falling purchasing power, low wages and high prices, the level of food products consumption decreases, especially in the meat producing industry.

Food enterprises meet the question of forming an assortment portfolio in the context of food security, namely structural modelling assortment portfolio in accordance with the principles of food security. Structural modelling of assortment portfolio in accordance with the principles of food security will allow for enterprises of food industry to become more profitable by selling required ecological and affordable goods and in turn to improve the state of food security in the country. The author proposes to consider rational assortment portfolio with this position: if we accept that the assortment port-

folio is a portfolio which contains the maximum number of proportions or values that are equal to the «golden section», it allows us to consider an assortment list as the best in terms of minimize costs and maximize benefits.

The author developed a process of structural modelling assortment portfolio on the criteria of food security, taking into account the volume of production assortment groups of studied enterprises of meat processing industry derived from the solutions of the problem of maximizing profits at the condition of entropy values falling in the range of 0.57-0.76.

Speaking about the formation of assortment portfolio of enterprises of the meat processing industry for ensuring food security author considered it appropriate to look on the criteria of assortment portfolio that are interconnected with the principles of food security and that after calculation of integrated indicators provide functional components of food security, in the future will serve as constraints for the optimization problem in the studied enterprises.