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FOOD PROBLEM IN JAPAN: REASONS OF APPEARANCE AND THE WAYS OF SOLVING

Stezhko N.V., PhD in Economics
E-mail: nadija_s80@mail.ru
Kirovohrad National Technical University

The article discloses the peculiarities of solving food problem in Japan. The problem of food self-sufficiency in this country is very important as the coefficient of food self-sufficiency which reflects the share of domestic products is decreasing. It has been established that the country does not have enough agrarian potential for the full self-sufficiency of food for population but it takes measures for maximum possible reduction of the import dependence. The main direction of the development of the Japanese's agriculture has protectionist character.The objective of the article is to investigate the forms and methods of state regulation of food safety supply in Japan and to formulate recommendations to solve food problems of the country in the conditions of globalization. In the process of research we used a complex approach which provides systematization of the results which lets disclosing the peculiarities of aggravation of the food problem in Japan. Generalization of facts and links was made with the help of interpretation of methods such as dialectic and structural, historical and logical. The research lets to define that despite certain reduction of state support, the government as earlier regulates domestic prices on food, limits the import of food products with the help of customs and tariff regulation, executes direct payments to farmers in form of various subsidies. But these measures are not the only way to save Japanese agriculture. Another important trend in agricultural development is an in-depth raise of production efficiency and product competitiveness. This is supported by the state funding of scientific and research activity in the agricultural sphere and introduction of latest achievements into production.

Keywords: food safety, agrarian policy, agricultural reform, agricultural production, protectionism

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ПРОДОВОЛЬЧА ПРОБЛЕМА В ЯПОНІЇ: ПРИЧИНИ ВИНИКНЕННЯ ТА ШЛЯХИ ВИРІШЕННЯ

Стежко Н.В., к.е.н.
E-mail: nadija_s80@mail.ru
Кіровоградський національний технічний університет

У статті досліджено особливості вирішення продовольчої проблеми в Японії. Проблема самозабезпеченості продовольством в цій країні стоїть

досить гостро, оскільки коефіцієнт самозабезпечення продовольством, що відбиває частку вітчизняних продуктів у загальному споживанні, знижується. Встановлено, що країна не володіє достатнім аграрним потенціалом для повного самозабезпечення населення продовольством, однак вживає заходів для максимально можливого зменшення залежності від імпорту. Основний курс розвитку сільського господарства Японії має протекціоністський характер. Мета статті полягала в дослідженні форм і методів державного регулювання забезпечення продовольчої безпеки в Японії та сформулюванні рекомендацій щодо вирішення продовольчої проблеми країни в умовах глобалізації. В процесі дослідження було використано комплексний підхід, який передбачає при єдиному об'єкті дослідження певний розподіл функцій по його вивченню, систематизацію результатів, що дозволяє розкрити особливості загострення продовольчої проблеми в Японії. Узагальнення фактів і зв'язків здійснювалося за допомогою інтерпретації методів - діалектичного та структурного, а також історико – логічного. Проведене дослідження дало змогу визначити, що незважаючи на певне зниження держпідтримки, держава, як і раніше, регулює внутрішні ціни на продовольство, істотно обмежує імпорт продуктів харчування шляхом митно-тарифного регулювання, здійснює прямі виплати фермерам у вигляді різних субсидій. Однак не тільки ці заходи дозволяють зберегти сільське господарство Японії. Ще один важливий напрям у розвитку АПК – всебічне підвищення ефективності виробництва, конкурентоспроможності продукції. Цьому сприяє значне державне фінансування науково-дослідних робіт у сфері сільського господарства, а також впровадження передових досягнень у виробництво.

Ключові слова: продовольча безпека, аграрна політика, сільськогосподарська реформа, сільськогосподарське виробництво, протекціонізм

Topicality of the problem and its correlation with important scientific and practical tasks. Japan shows one of the highest negative indicators of consumers' support in the world which is in 2009 was 54164 US Dollars. But because of the high level of income the share of spending on food in general costs of customers is only 14,4 %. The problem of food self-sufficiency in Japan is getting worse. The coefficient of food self-sufficiency which shows the share of domestic products in general consumption lowers. By 2000, according to the

Ministry of agriculture, forestry and fishery of Japan it was about 40%. The maximum quantity fixed for this coefficient in the country was 73% in 1963. Modern level of food self-sufficiency in Japan is the lowest among developed countries. At present the level of food self-sufficiency by the state reduced to 39% and the government is especially worried by the situation. In 2008 the government formed a strategic target to increase the level of food self-sufficiency to 45% and to 50% by 2020 [1].

Analysis of recent scientific research. The study of development of the agrarian sector in the world economy, liberalization of agricultural markets, international regional associations in agrarian sphere were described in the works of V.K. Berehovyy, O.H. Bilorus, V.I. Vlasov, Y.A. Zhalilo, I.M. Mytsenko, V.M. Rusan, P.T. Sabluk, O.V. Sobkevych, A.D. Yurchenko and others [2-7]. But there is still not enough research have been done on the problem of food supply for the population in Japan.

The objective of the article is to study forms and methods of the state regulation of food safety in Japan and formulate recommendations for solving food problem of the country in the conditions of globalization.

Main material of the research. Main reasons of the decrease of food independence of Japan are limited agricultural territory, increasing food demand, the change of structure of food consumption, prevalence of small farms in agricultural production.

It is important to state that the problem of food independence of this country became worse due to the change of the structure of food consumption. The traditional nutrition of the Japanese has changed dramatically for the last fifty years. Consumption of meat increased in 9 times and fats consumption became higher in 5 times. Also the consumption of dairy products, bread and bakery products, sugar and overseas fruits (as a result the level of food self-sufficiency by these products is low) increased considerably. But the consumption of rice which has always played the leading role in food self-sufficiency decreased twice: from 126 to 67 kilos per person a year [1]. The Japanese consume less fish products now which were main source of animal protein. But at average a Japanese consumes less calories a day than an American or a European (approximately 3 thousand kilocalories

versus 3,5-4 thousand kilocalories). This is conditioned by the fact that the basis of the ration in Japan as before is low calories food. For example, compared to Americans, the Japanese consume meat and dairy products 2,8 times less [8].

The present level of food independence in Japan is a great achievement of the country. If Japanese farmers did not get a considerable state support for the last decades, the level of food independence could be times worse. The retrospective analysis shows that in 1950s of the XX century the agriculture of Japan was noticeably lagging behind agricultural economies of many developed countries by a number of indicators. That was connected with a big share of hand labour and small sizes of farms which influence the cost of agricultural products and their competitiveness. At the beginning of 1960s the state policy was changed towards strengthening food independence and modernization of agriculture. The policy of protectionism and regulation in the agrarian sector was supported by considerable financial investments in this sphere. The state financed the development of agricultural infrastructure and land reclamation. In 1970-1980s the state paid up to 80% of all costs connected with improvement of village infrastructure. The financial corporation for preferential crediting of the agrarian sector was created. The corporation provided long-term loans at a low interest rate. Nearly 30% of the cost of agricultural machines that were purchased by cooperatives was paid by the government. The state also took financial responsibility in case of payment delays for the loans.

In order to increase the scale of production and its profitability a special attention was paid to the optimization of production, creation larger farms of intensive type as the achievements of scientific and technical progress give better results at larger farms. In 1963 there was 0,6Ha of agricultural land per one farmer in Japan and in the USA this indicator was 91Ha, in Canada – 96Ha, Brazil – 13Ha, Australia – 1112Ha, Germany – 5,3Ha, France – 9,3Ha. By 1975 the territory of agricultural lands per one farmer increased to 0,9Ha, and by 1985 this indicator was 1,2Ha, which is twice higher than in 1963 [9].

The process of farms' integration led to a considerable reduction of employment in the agrarian sector (approximately 5 million people). The problem of employment of the redundant people was solved with the

help of quick development of industry and the system of service. The integration of agricultural production stimulated increase in the demand of agricultural machines and equipment which became additional stimulus for industrial development. At present the agriculture of Japan holds one of the leading places in the world by the level of mechanization.

The process of optimization of farms sizes in Japan is held at present. In March 2005 a New Basic Plan for Food, Agriculture and Rural Areas [10] was formulated and according to the Plan they started reorientation of the state support concentrating on more effective and stable producers.

Since April 1st, 2007 the law of stabilization of farmers' income came into force. In the frames of the law there were three new types of direct payments to farmers introduced. One of the trends of direct payments was payments to farmers that grow wheat, barley, soya, sugar beetroot and potato for the production of starch. A new kind of support was aimed at neutralizing the absence of natural advantages of the Japanese farmers compared to farmers of other countries. Second kind of direct payments was directed to encourage the quality improvement of the above-enumerated products. The third kind of payments had to compensate part of income losses compared with the average level of income during the previous years. That allowed farmers to decrease the instability of their incomes. This kind of payments was assigned for the producers of six crops such as rice, wheat, barley, soya, sugar beetroot and potato for starch production. The new kinds of direct payments were given to farmers who had minimum 4 Ha of agricultural land (on the island of Hokkaido where the size of farms larger than in other parts of Japan and the minimum size of a farm which can have state support should be 10 Ha). According to certain data a present day Japanese farm has only 1,6 Ha of land (in the USA this indicator is 123 times higher and in the EU it is 12 times higher) [11], so not many farms get financial support.

The new system of payment is directed onto the optimization of the production structure of agricultural crops, improvement of their quality, increase and stabilization of profitability of farmers and also stimulation of farming [10].

Another important trend of the state policy is financing scientific and research work. The state took responsibility to hold and introduce

scientific research into the agrarian sector, support of research institutes, local scientific centres and agricultural stations, financing training and retraining of farmers. There is also Assistance Centre for amateur farmers who want to farm. Selection stations were created to breed new sorts taking into account soil and climatic conditions of the Japanese regions. The Kiharu National Institute for Environmental Studies was founded and it is considered to be the biggest institution of the type in the world. Japan was the first to master the problem of getting wheat with double protein content. The state really needs land resources and because of this, high productivity of agricultural crops was achieved. At the end of 1990s the crop capacity of wheat was 6 times higher than in Russia and nearly twice higher than in Canada. The crop capacity in Japan was 1,3 higher than in the USA [12]. Japanese farmers apply progressive methods of agricultural production and achievements of scientific and technical progress that increase the efficiency in many times. Part of farms and companies are oriented on growing agricultural products in vitro using methods of hydroponics and other approaches. The production process in agro-industrial complex of the country is equipped with hi-tech equipment and appliances.

The level of the state support of the Japanese agriculture is one of the highest in the world. But after the Uruguay round of negotiations Japanese government had to ease administrative methods of regulation in the agrarian sector and transform to the market levers of influence. The measures taken by the state were targeted on the indulgence of protectionism in the agrarian policy and introduction of rigid course on the increase of production efficiency.

In relation to the volume of GDP the support of farms from 1986-1988 reduced from 2,4% of the total GDP of the country to 1,1% of country's GDP in 2009-2011 [13]. The Consumer Subsidy Equivalent (CSE) is an indicator of the level of state support of consumers which originates from the policy of support of agriculture; it is calculated as a proportion of cash equivalent of consumer help to the volume of domestic consumption in national prices of a producer [14], in 1986-1988 it was 64%, and by 2009-2011 it decreased to 47% [13].

The Producer Subsidy Equivalent (PSE) in Japan, in percentage according to the estimates of OECD in 2011 was 45% which is 25% less

than in 2000 and nearly 30% less than in 1986-88. But its level as before is still high which 4,5 times higher than in the USA США and in 1,7 times higher than in the UE countries on average.

Another element of protectionist policy is the limitation of food import which saves low competitive Japanese agriculture from ruination. For instance, the cost of Japanese rice is twice higher than American and 6 times more expensive than the Thai. Cancellation of price support and authorization of import of cheap products will lead to a complete loss of food safety and ruination of agro-industrial complex of the country.

Budget support at present stage of agricultural development of Japan is also directed on the support of agricultural infrastructure and the environment at the appropriate level. In Japan leading farmers from mountainous and hilly regions get direct payments so that they will not refuse farming under such conditions and to support multifunctional character of agriculture [10].

Conclusions. The country does not possess a sufficient agrarian potential for the complete food self-sufficiency but takes measures to reduce the dependence on import at maximum.

The basic course of the development of Japanese agriculture has a protectionist character. Despite certain decrease of state support the government as before regulates domestic prices on food and considerably limits the import of food products with the help of customs and tariff regulation. It carries out direct payments to farmers in the form of different subsidies. But these are not the only measures that help to save Japanese agriculture. Another important direction in the development of agriculture is a total increase of production efficiency and product competitiveness. This is stimulated by a considerable state financing of science and research in the sphere of agriculture and introduction of advanced technologies into production process. And another important constituent part of the Japanese policy is the stimulation of integration of agricultural production in order to more effectively apply the achievements of scientific and technological progress.

REFERENCES:

1. Ovchynnykov V. Chy ne rysom yedynym. Yaponiiu zabuttia problema prodovolchoi bezpeky. - [Elektronnyi resurs] - Rezhym dostupu: http://www.rg.ru/2008/1 l/06/prod-iap.html
2. Bilorus O.H. Ekonomichna systema hlobalizmu. - K., 2003. - 390 s.
3. Berehovyi V.K. Problemy prodovolchoi bezpeky Ukrainy // Ekonomika APK. – 2011. - №5. – S. 71-78
4. Vlasov V.I. Tendentsii ta problemy hlobalnykh protsesiv u svitovii prodovolchii sferi // Ekonomika Ukrainy. – 2006. - №3 (532). – S. 75-80
5. Zhalilo Ya.A., Sobkevych O.V., Resan V.M., Yurchenko A.D. Svitova prodovolcha kryza ta vyklyky dlia Ukrainy // Ekonomika APK, 2011. - №8. – S. 135-144
6. Mytsenko I.M. Prodovolcha bezpeka Ukrainy: otsinka stanu ta svitovyi dosvid vyrishennia problemy. – Kirovohrad: Tsentralno-Ukrainske vydavnytstvo, 2001. – 204 s.
7. Sabluk P.T. Ekonomichni osnovy prodovolchoi bezpeky krain svitu // Ekonomika APK. - 2008. №8. - S. 21-25
8. Aleksieiev V.V. Ekonomika Yaponii. M .: MHYMO - Universytet, 2006. - S. 110.
9. Cornelis L.J.Van der Meer, Saburo Yamada. Japanese Agriculture. Comparative economic analysis. Routledge,London and New York, 1990. - P.53.
10. Agricultural Policies in OECD Countries. Monitoring and evaluation 2007. - France: OECD, 2007. - P.242, 243.
11. Ofitsiinyi sait Prodovolchoi i silskohospodarskoi orhanizatsii OON. - [Elektronnyi resurs]. – Rezhym dostupu: http://www.fao.org
12. Balabanov B.C. Prodovolcha bezpeka. Mizhnarodni ta vnutrishni aspekty, - M .: - 2002. - s.366.
13. Agricultural Policies in OECD Countries. At a glance 2008. - France:OECD, 2008
14. Ofitsiinyi sait Asotsiatsii silskoho hospodarstva Yaponii. - [Elektronnyi resurs] - Rezhym dostupu: http://hojin.or.jp/