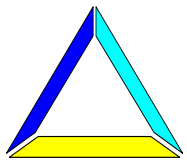
INSTITUTE FOR ECONOMIC RESEARCH AND POLICY CONSULTING IN UKRAINE
GERMAN ADVISORY GROUP ON ECONOMIC REFORM

Reytarska 8/5-A, 01034 Kyiv, Tel. (+38044) 228-6342, 228-6360, Fax 228-6336
E-mail: institute@ier.kiev.ua, http://www.ier.kiev.ua



T6

Shifting agricultural policy towards measures envisaged by the Green Box

Executive Summary

Many policy-makers are concerned that Ukraine's accession to the WTO will restrain its possibilities to support the agricultural sector. This is not true for the following reasons:

- The WTO restricts measures that distort production and/or trade, while measures attributed to the Green Box are not subject to reduction commitments.
- Even though green box measures put a severe restriction on the role of the government, they are productivity-enhancing and are much more efficient than market and price support tools. Thus, committing itself to the green box measures the government can still play an active role in helping the farming sector by undertaking productivity-enhancing investments in rural areas.
- Taking into account that Ukraine spends on the green box measures only about 907 mUAH (or 25% of the total agricultural support) it has a great potential to support its agriculture via expansion of these measures, thus contributing to the long term and sustainable agricultural growth.
- Furthermore, a lion share of the green box measures go to education, followed by inspection services and research, while the development of infrastructure and extension services have been ignored. Investments into the later should be increased if Ukraine really wants to sustain and strengthen the competitive advantage of its agricultural sector.

1. Introduction

Opponents of accession to the WTO in Ukraine sometimes argue that Ukraine would surrender too much sovereignty in the area of agricultural policy by joining. In this paper we argue that this is not the case. Even as a WTO member, Ukraine would still enjoy a great deal of freedom to support its agricultural sector. WTO regulations limit the use of certain types of support that are wasteful and trade distorting. But at the same time they stipulate that members can provide support to agriculture within the framework of so called Green Box measures. Green box measures are exempted from reduction commitments, so WTO members are completely free to apply them.. They are also efficient measures that are particularly well suited to fostering sustainable agricultural growth. Thus, by joining the WTO and emphasizing Green Box measures, Ukraine could make a step towards establishing favorable conditions for long-term, steady and sustainable agricultural development, the improvement of rural welfare,

and the development of market and social infrastructure. Accession to the WTO would improve the prospects for agricultural growth in Ukraine by reducing the temptation to implement inefficient market and price support policies, and by focusing attention on Green Box measures that minimize distortions and maximize long run policy benefits for agriculture.

The goal of this paper is to outline the potential for applying Green Box measures to support Ukrainian agricultural producers. The paper is structured as follows. Section 2 describes Green Box measures that can be implemented through publicly-funded state programs or can be financed by the state budget. Section 3 discusses the importance of Green Box measures for the sustainable development of Ukrainian agriculture and their applicability in Ukraine. In the concluding section we provide recommendations for the future development of a 'WTO-compatible' agricultural policy in Ukraine.

2. What is the Green Box?

As a result of previous rounds of WTO negotiations, it was agreed to classify agricultural support measures into three categories according to whether they distort agricultural production and trade. Using the metaphor of a traffic light, these categories were labeled the Red Box (measures which are forbidden), the Yellow Box (measures which are tolerated but are to be phased out over time via reduction commitments) and the Green Box (measures which are not subject to reduction commitments).[1] To qualify for the Green Box, measures must meet the following criteria:

- They shall have no or at most minimal trade-distorting effect or effects on production;
- The support should be provided through a publicly-funded government programs not involving transfers from consumers.

Major Green Box measures included in general services are the following:

1. Research, including general research and research related to particular products, research connected with environmental programs.
2. Pest and disease control such as early-warning systems, quarantine and eradication.
3. General and specialist training.
4. Extension and advisory services, including transferring information and the results of research to producers and consumers.
5. Inspection services for health, safety and standardization purposes.
6. Marketing and promotion services. Expenditures for purposes that could be used by sellers to reduce their selling price or confer a direct economic benefit to consumers are excluded.

[1] As a result of a compromise between the EU and the US reached during the Uruguay Round of WTO negotiations, a fourth category, the Blue Box, was created. The Blue Box essentially contains Yellow Box measures that are temporarily exempted from reduction commitments. There are many indications that the Blue Box will be sharply curtailed and perhaps even eliminated, as a result of the current Doha Round of WTO negotiations.

7. Infrastructural services, including: electricity, roads and other transportation means, market and port facilities, water supply facilities, dams and drainage schemes and infrastructural works associated with environmental programs. In all cases expenditures should be directed to the provision or construction of capital works only and should exclude the subsidized provision of on-farm facilities.

Besides these support measure, governments may also provide services to agricultural producers through other public programs. However, all these measures should meet the two main criteria mentioned above. Such measures and programs include:

- Accumulation and holding of stocks of agricultural and food products which form an integral part of a food security program identified in national legislation. Purchases to and sales from food security stocks should be transparent and made at current market prices.
- Support of low-income population through subsidized prices or food stamps. Such aid should be direct targeted payments. Food purchases by the government should be made at current market prices.
- Direct payments (both in cash and in kind) to producers to support their incomes. These payments should have no or minimal trade- or production-distorting effect, they should be made through publicly funded government program and they should not be in connection with price support.
- Indirect income support that is not related to production or prices;
- Government financial participation in income insurance and income safety-net programs. These programs should not be related to production or prices.
- Government participation in crop insurance schemes for relief from natural disasters.
- Structural adjustment assistance provided through producer retirement programs.
- Structural adjustment assistance provided through resource retirement programs.
- Payments under environmental programs.
- Payments related to assistance programs for farms located in regions with unfavorable weather conditions. These programs are not related to production or prices.

Thus, a wide variety of agricultural support measures are in line with WTO requirements. Slowly but surely, the trend in agricultural policy in most WTO member countries is to emphasize the use of these green box measures and reduce the use of 'traditional' market and price support (MPS) tools such as intervention systems and various input and output subsidies. In the EU, for example, MPS accounted for 91% of all support to agriculture in 1986-88, but this share fell to 61% in 2000-02. The 'Fischler Reform' of the EU's agricultural policy that was adopted in June 2003 will reduce the share of MPS significantly further, by 'decoupling' payments to farmers, i.e. making them independent of production.

Why are countries such as the EU moving away from MPS and towards the green box? Three main reasons play a role, and both are very pertinent to the situation in Ukraine today. First, agricultural MPS distorts production and trade. This unfairly damages the interests of trading partners and leads to trade disputes that threaten to spill over to other sectors of the economy. Hence, disciplining agricultural policy is necessary as a means of stabilizing and improving international trade relations. In the case of Ukraine, some members of the farm lobby seem prepared to sacrifice WTO membership to defend Ukraine's 'right' to freely implement MPS policies in agriculture, without considering the potentially catastrophic impact that this would have on Ukraine's trade relations as a whole and, hence, its overall prospects for continued economic growth.

Second, it is well documented that agricultural MPS is a highly inefficient way to help agricultural producers. The OECD has recently published detailed analysis that demonstrates just how inefficient MPS can be. For example, using price support measures such as an intervention price system (something that many agricultural policy makers in Ukraine advocate) it is typically necessary to take 3 to 4 Hryvnia away from consumers and taxpayers in order to increase farm incomes by one Hryvnia. Income support payments that are not linked to prices or production (a Green Box measure) are much more efficient, with roughly 90% of each Hryvnia that is taken away from consumers and taxpayers ending up in the pockets of agricultural producers. In other words, even if it did not threaten to damage international trade relations and compromise Ukraine's bid to join the WTO, Ukrainian policy makers would be well-advised to eschew MSP simply because it is 'bad' policy.

Third, and finally, it is increasingly recognized that Green Box measures are the best way to help agriculture grow in a sustainable manner. MPS generally aims at boosting agricultural incomes, but this does not necessarily help create a robust, competitive agricultural sector in the long run. The EU is an excellent example: After decades of exceedingly expensive MPS, much of the EU's agriculture remains inefficient and dependent on continued support. The difference between MPS and Green Box measures is perhaps best described as the difference between spending money on consumption (i.e. for short term pleasure) and spending on investment (i.e. for long term gain). Green Box measures – especially those related to education, training, research and extension – are investments, and this is, in our opinion, what responsible policy makers should focus on.

Of course, MPS is addictive. Countries such as the EU cannot eliminate these policies overnight, because farmers have become accustomed to them and the artificial economic 'success' that they create. So the process of reform – turning away from MPS and towards the Green Box – is slow. Some rich countries with little comparative advantage in agriculture (Japan, Norway and Switzerland, for example) insist on their need to continue with agricultural policies based on MPS. But in the major agricultural exporting nations of the world (for example, Australia, Canada, the EU and the USA), the move towards Green Box measures is clear and irreversible, encouraged by the need to reduce budget spending on agriculture and the WTO process. Ukrainian agricultural policy makers still have the historic opportunity to avoid the addiction of MPS and embark today on the sort of agricultural policy path that many of its important competitors on world markets are struggling to regain.

3. Application of Green Box measures in Ukraine

What is the current status of Green Box measures in Ukrainian agricultural policy today? Public investment into Ukrainian agricultural sector and rural areas in general has been diminishing over the last few years due to severe fiscal constraints faced by the government. It is unlikely that government spending on agriculture can be increased in the near future, which underlines the need for a better and more efficient allocation of the limited available resources. It is vital that the government identify policy measures that will strengthen the responsiveness of the agricultural sector to market signals, maximize sustainable growth and minimize trade distortions.

According to the agreements between Ukraine and the WTO a number of measures are attributed to the Green Box[2]. In the following we discuss the importance of these measures in contributing to the long-term, steady and sustainable development of Ukrainian agriculture and review the trends in government spending on these measures over the last few years.

General research and research programs related to particular products. In order to not only maintain but also strengthen competitive advantage farmers have to continuously strive to reduce production costs by improving their production methods. This is especially true in Ukraine, where production technology often lags behind international standards and many technologies that are successful in other countries have not yet been fully adapted to Ukrainian conditions (e.g. rapeseed and soybean production). Agricultural research plays an important role in driving cost-reducing technological change and in providing high-yield and disease-resistant crop varieties that will lead to increased food supplies, and, consequently, lower food prices for consumers.

Budget expenditures on research include expenditures on exploratory development and applied research, scientific works of state and inter-sectoral programs, general basic research by scientific institutions and research related to particular products. The Ukrainian budget for 2002 envisaged appropriation of 291,2 million UAH (mUAH) to finance agricultural research, however only 176,4 mUAH were actually spent. This is about 8% of total agricultural support. In 2003 budget the planned expenditures on research were actually reduced to 269,6 mUAH.

Extension and advisory services. In Ukraine many farmers are highly inefficient and there is a wide gap between the actual productivity on farms and what could be produced with better know-how. This productivity differential is not – despite what some farm lobbyists would like us to believe – simply a question of supplying farms with capital so that they are free to invest. Instead, it arises due to unawareness by many farmer managers of the latest scientific progress in crop and animal selection, cost-reducing technologies ('technology gap') and employment of old management practices ('management gap'). As a result, many farms in Ukraine produce far less with the inputs that they do have than they could.[3]

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[2] Kobuta, I., Shvetsov, O. "Domestic support of agriculture in the context of Ukraine's accession to the WTO", Agricultural Policy in Ukraine:Analysis and Research, 1999-2002", Agricultural Policy for Human Development Project, K., 2002, c.334-335.

[3] This has been clearly demonstrated in studies of farm efficiency in Ukraine such as that prepared by the German Advisory Group in Paper T4, July 2003, "Efficiency and Productivity Growth in Ukrainian agriculture." This is not to say that farms in Ukraine could not use much more capital than they presently have. But lenders will be not eager to provide capital (i.e.

Extension plays an important role in transferring knowledge about improved seeds and other inputs, as well as about improved technologies from researchers to farmers, in giving advice to farmers in their decision-making and in educating farmers on how to make better decisions. Extension is an important tool in helping farmers to reduce differential between potential and actual yields by accelerating technology transfer, thus reducing technological gap, and by helping farmers to become better farm managers, thus reducing management gap. Public spending on extension and advisory services includes expenditures on maintenance of research laboratories, crop protection stations that provide consulting services to farmers and disseminate information. However, despite the importance of extension services fiscal restraints has led to a financial crisis in agricultural extension in Ukraine. Indeed, expenditure on extension and advisory services accounted for only 0.04% of total agricultural support in 2002 (1,5 mUAH), and no money has been allotted for this purpose in 2003!

Pest and disease control. Animal disease control measures are crucial for ensuring animal health and, therefore, for protecting people from dangerous diseases, and in particular, those that are common for humans and animals. It is well known that medicine cures people, while veterinary medicine heals mankind. Under-investment into the development of early-warning systems can result in huge losses for society as a whole. For example, losses in England due to the recent outbreak of foot-and-mouth and mad cow disease amounted to roughly 32 and 12 billion US$ (bUS$) respectively; and hog cholera in Holland accounted for 4,5 bUS$.[4] Pest control measures are crucial in ensuring high yields of agricultural crops, and, consequently, higher farmers' incomes. Almost every year the grain harvest in the Southern regions of Ukraine is damaged by locusts, as a result of which farmers suffer significant losses. Nevertheless, on the part of the government no steps have been undertaken to develop early-warning systems in order to avoid locust invasion and only eradication measures are financed.

In the 2002 state budget 60,5 mUAH were appropriated for pest and disease control measures, of which only 37,2 mUAH were actually allocated for this purpose. The 2003 budget includes provisions for 57,5 mUAH of spending, which is somewhat lower than in the previous year. For pest control specifically, 2 mUAH are allocated each year, while the need is estimated at 64.7 mUAH.[5]

General inspection services and inspection services related to particular products for health, safety and standardization purposes. In Ukraine the issue of food safety and standards should receive special attention as Ukraine is becoming an important exporter of agricultural and food products. Unfortunately, in the eyes of many foreign consumers, Ukraine is associated with the Chernobyl catastrophe and possible food safety deficits. For this reason, maintaining and strengthening Ukraine's reputation as a reliable supplier of safe food is vital to Ukraine's interests.[6]

Government spending on inspection services includes expenditures on the maintenance of state veterinary institutions, state seed inspections, state selection

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more inputs) to farms that cannot demonstrate that they are able to make the most efficient use of the inputs that they already have.

[4] Source: The Ministry of Agrarian Policy.

[5] Source: the Ministry of Agrarian Policy.

[6] See German Advisory Group Paper S2: "*Germany's Nitrofen Scandal and Food Safety in Ukraine*", July 2002.

stations and state bread inspections. In 2002 it was planned to spend 293,8 mUAH on these measures, however only 265,4 mUAH were actually allotted for these measures. In 2003 government spending is planned to increase to 312,4 mUAH.

Training facilities. Educating good specialists and managers for the agricultural sector is vital for boosting agricultural growth. Experience shows that farmers with higher education achieve higher yields by employing more appropriate production methods. Furthermore, education contributes to rural poverty alleviation, since it gives rural residents improved opportunities for off-farm employment.

Expenditures on training services in Ukraine include expenditures for the maintenance of higher schools of the 1st, 2nd, 3rd and 4th accreditation level, and graduate schools of the 2nd and 3rd accreditation levels (Academies, Institutes, re-training centers, etc.). In 2002, 446,7 mUAH were slated to be spent on training services, however only 393,9 mUAH were actually allocated. Budget spending in 2003 is planned to be increased to 496,7 mUAH.

Land reform. The under-developed land market in Ukraine hampers efficient agricultural production. Unresolved land issues also cut farmers off external financing (for example, banks are reluctant to provide credits to farmers because very often land is the only tangible asset but it has no market value and cannot be used as a collateral), slowing technological progress in the agricultural sector.

Expenditures on land reform include expenditures on implementing the new land Law, implementation of land registration procedures, cadastral examinations, determination of soil quality and agrochemical land certification. In 2002, the share of these expenditures in total agricultural support was tiny (0.17% or 6 mUAH). Furthermore, in 2002 only 0,2 mUAH (or 3% of the plan) were actually spent! The 2003 budget envisages government spending of 5,7 mUAH.

Rural infrastructure. For Ukrainian agriculture to be sustainable in the long run it is necessary to improve farmers' access to markets, both domestic and international. While Ukrainian trade policy has gradually been liberalized, the effect of trade liberalization can be enhanced if it is complemented by increased investment in rural infrastructure. "Infrastructure, and transportation and communication, in particular, is important to lubricate the wheels of trade and allow the benefits of these economic gains to be distributed across those living in the nations involved in the integration process".[7]

Investment in infrastructure would enable farmers to increase returns to agricultural production by lowering the transaction costs, and to increase productivity due to better access to and availability of inputs. Rural infrastructure also has a poverty-alleviation effect, which occurs due to improved non-farm employment opportunities. Poorly developed infrastructure contributes to greater price fluctuations when a country switches from an export to an import situation and *vice versa*. The consequent grain market destabilization observed this year can serve as an illustrative example of the affect of under-investments into infrastructure development.

Expenditures on infrastructure include public investment in the construction of health-care institutions, water pipelines, sewage systems, gas supply networks, roads, sea ports, etc. Despite the importance of rural infrastructure, public spending has

[7] Button., K. "*Effective infrastructure policies to foster integrated economic development*", George Mason University, March 2002

remained at an extremely low level (less than 0.5% of total agricultural support). Since 1995 no money has been appropriated for the construction and improvement of rural roads. The 2002 budget envisaged an allocation of 20,1 mUAH for rural municipal economic development, but only 5,3 mUAH were actually spent. The planned spending has been increased to 21 mUAH in 2003.

Environmental protection. Spending on environment protection is precisely determined within the framework of the state programs. The share of public spending in total agricultural support is less than 1%. In 2002 42,4 mUAH were planned to be spent on environmental protection measures, however only 27,2 mUAH were actually spent. The 2003 budget envisages 44,8 mUAH to be appropriated for this purpose.

Summary. In Table 1 we provide an overview of government spending on Green Box measures in Ukrainian agriculture in 2002 and 2003.

Table 1. Spending on Green Box measures in Ukrainian agriculture (2002-2003, in million UAH)

	2002			Executed to planned, %	2003 (planned)	
	Planned	Executed				
	mUAH	mUAH	% of TAS*		mUAH	% of TAS*
Total agricultural support	3517,6	3517,8	100,0	100,0	4061,5	100,0
Of which Green Box measures	1162,2	907,0	25,8	78	1207,6	29,7
Of which -agricultural research	291,2	176,4	5,0	61	269,6	6,6
-pest and disease control	60,5	37,2	1,1	61	57,5	1,4
-extension & advisory services	1,5	1,3	0,04	87	0,0	0,0
-inspection services	293,8	265,4	7,6	90	312,4	7,7
-agricultural training & education	446,7	393,9	11,2	88	496,7	12,2
-land reform implementation	6,0	0,2	0,01	3	5,7	0,1
-rural infrastructure development	20,1	5,3	0,2	26	21,0	0,5
-environment protection	42,4	27,2	0,8	64	44,8	1,1

* TAS – total agricultural support
Source: Own calculations on the basis of the State Budget data and data provided by the Institute of Agrarian Economy

The share of public spending on Green Box measures in total agricultural support in Ukraine was 25,8% in 2002. So there is considerable scope for increasing Green Box spending for agriculture in Ukraine, even within the current constrained fiscal environment. Most of these Green Box expenditures were allotted to agricultural education followed by inspection services and agricultural research. However, crucial investments in extension and advisory services, infrastructure and the implementation of land reform have been ignored. Furthermore, actual spending consistently lags behind appropriations.

4. Conclusions and recommendations

Accession to the WTO would not reduce Ukraine's ability to support its agricultural sector. As a WTO member, Ukraine would still be free to implement the entire range of Green Box measures, as these are exempted from reduction commitments under the WTO. Green Box measures provide policy makers with a means of providing lasting support to agriculture and agricultural growth in a way that does not distort trade and generate conflicts with trade partners.

The world-wide trend in agricultural policy is towards the increasing use of Green Box measures, as the cost and difficulties associated with market and price support become clear. Ukrainian policy makers should be aware of these difficulties and not take an idealized view of market and price support in countries such as the EU. Scarce fiscal resources should be invested in the future of agriculture, not spent propping up the past, and Green Box measures provide an ideal vehicle for investments in the know-how, technology, management skills and infrastructure that Ukrainian agriculture will need to be competitive in the coming decades.

[8] Zhao Yumin, Wang Hongxia, Linxuegui Mayu "Green Box Support Measures Under the WTO Agreement on Agriculture and Chinese Agricultural Sustainable Development. – Winnipeg, Manitoba, International Institute for Sustainable Development, 2003, p.4.

The amount of money spent on Green Box measures in 2002 was 907 mUAH or roughly 170 mUS$. Compared to total agricultural spending in Ukraine (3,5 billion UAH in 2002), and compared to the huge need for investment in Ukrainian agriculture, this is a relatively small amount. It should be increased, and the corresponding measures should be executed in full. In particular increased emphasis should be given to extension services, rural infrastructure and the implementation of land reform.

S.D., V.G., Lector S.v.C.-T.
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