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BACK TO THE LAND: GROWING THE SOLUTION TO RISING FOOD PRICES

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MODERATOR:

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MODERATOR: I welcome the Panel. I promise that we shall give you a lot of food for thought. We also welcome your active participation in the discussion and to that end the last 30 minutes will be dedicated to questions and answers.

You are all familiar with the recent World Bank report on the food crisis in the world. Consumers in the so-called transition countries and developing countries face higher prices for basic foodstuffs. Experts predict more imbalances and even catastrophes if those countries who could help to avoid the crisis because they possess the necessary goods continue to ignore the global challenges. The countries of the post-Soviet states could generate an extra 150 million metric tonnes of wheat a year, 20 per cent of the world's current production. Russia, Ukraine and Kazakhstan have substantial amounts of fertile yet untilled land. We are meeting today in Ukraine, where the land is uniquely rich in humus. The Soviet Union depended on Ukraine for 40 per cent of its total agricultural output. Today, Ukraine, now a member of the WTO and an ally of the West, could boost global food supply.

As we all know, countries in transition like Ukraine have problems themselves. Ukraine's agriculture faces a fundamental lack of investment in the agricultural sector. It also faces legal problems. Agricultural land cannot be sold in Ukraine as in other countries. The Ukrainian Government has also moved to restrict price increases by price controls and export tariffs, which had negative impacts on agricultural entrepreneurs and farmers inside the country.

The EBRD has brought together in this Panel the best specialists in this area to discuss this hot issue. Let us hear the Panel try to develop some recommendations, for example on investment priorities, to tackle the problem in the future. I hope that Minister Yuriy Melnyk will be able to join us later and that we shall be able to ask him some questions. Let us hear first from Professor Louise Fresco from the University of Amsterdam and the holder of other professorships, visiting and honorary, at other world-famous universities. She is one of the best experts on global agricultural issues. Professor Fresco, what can the private sector do to tackle escalating food prices around the world, probably in partnership with governments?

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PROFESSOR LOUISE FRESCO (Member of the Supervisory Board, Rabobank): Let me say first that this price crisis, which we should look at in a truly objective way without creating unnecessary panic, has many causes. The private sector can only do a couple of things, which I shall outline to you. I should like to say from the outset that it is, in a way, a blessing in disguise that the renewed attention to the agriculture sector is coming back on to the political agenda and I think we can be very pleased with the timely report of the IMF, the World Bank and a couple of other institutions to bring back to the centre of our political attentions the importance of agriculture. This also, by the way, brings the issue of agriculture, which has been neglected for so long, to the attention of consumers and makes them realise that food is not a commodity that is produced easily or something to be taken for granted.

What can the private sector do? The private sector and government should work together on this. Of course, in agriculture, by definition, every farmer is a private entrepreneur. One of the major points is to stimulate entrepreneurship in the agricultural sector. The private sector, more specifically, needs to make sure that all is in place to increase productivity per unit of land and per unit of time, i.e. to obtain higher yields per hectare and per year or per season, but higher yields that are not to the detriment of the environment. I think this is very much about the importance of creating efficiency and intensifying production without damaging the environment. We are much better today than we were 20 years ago at putting on exactly the right amount of fertiliser and not wasting water or chemicals. The private sector can help.

The banking sector, which I also represent here, can help mainly by providing secure and safe financial services to farmers, by which I mean the possibility to obtain credit and possibilities for traders to ensure that the products are marketed properly, that there are stores and adequate storage conditions, giving farmers, especially small farmers, an opportunity to save their money and to be sure that their money is safe in the bank. I think the lack of financial services that has been shown to exist very often is a real detriment to farmers being able to move into a market economy. Rabobank, which I represent, is a cooperative bank, in many ways a bank of farmers and for farmers. It is that model of collaborating together, of carrying risk together, that we have successfully exported to many other countries, particularly countries in Africa and developing countries but also increasingly to eastern Europe.

I want to emphasise the idea of working together, bearing the risks together. If there is one thing we need to manage today, it is the volatility of prices and of markets, the risks that we do not know about. Agriculture will always be about risk: risk of the weather and risk of unknown situations that can arise. It is most important to ensure that farmers have the incentive to produce, that they do so in a safe environment, that governments do not put impediments in their way and that the private sector helps them to invest. Only then, in that mode of collaboration, can we ensure that we shall have a future that will provide safe and healthy food for all of us.

It is very important that consumers are aware of the unique opportunity that we have today. In other words, the food crisis represents a glass either half-full or half-empty. I tend to say that it is a glass half-full. If we manage this crisis well, the agricultural sector and consumers will fare better.

MODERATOR: Thank you, Professor Fresco, for your short and precise comments.

Let us move to Miodrag Kostic, President of MK Group. He represents a typical private entrepreneur in agriculture. Mr Kostic moved part of his successful business from Serbia to Ukraine. My question to him is the following. How would you recommend governments such as that of Ukraine to proceed in future? For example, should the Ukrainian government proceed with a more liberal policy with regard to land ownership in a radical way? What would that mean for the investment policy?

MR MIODRAG KOSTIC (President, MK Group): We have been here for almost two years. After a record year in Serbia in most of our agricultural company, we felt it was right to implement the same technology here in Ukraine. We are so far more than satisfied with the quality of the land; what we are not satisfied with is precisely what you have asked me about. We wait from year to year to see what will happen with regard to the moratorium on selling land. We lease all our land in Ukraine for between five and 15 years. If the government expects further investment in agriculture we shall definitely be looking for some kind of ownership and longer leasing. That is one of the main questions today in Ukraine.

Of course, there are some export bans, which does not help international companies to export their products. With today's high level of prices we do not expect too much subsidising because agriculture is sufficiently profitable.

Another suggestion I would make to the government is to try not to create conflict between small farmers and big agricultural companies. Over the last 10 years in Serbia I saw a very similar development. Some politicians tried to create conflict between the big companies with big complexes and the small farmers but I do not see the need for conflict because there is room for both. Small farmers, with family businesses, need the support of government and financial institutions. They need investment in more interesting products, fruit and vineyards, et cetera. Big companies need more efficiency and technology, they are looking at big complexes and much more investment – we are talking in billions – and they need to be partly vertically integrated. Big companies invest heavily in infrastructure, silo complexes, transportation and so on. I think that Ukraine, with 42 per cent of the black soil in all of Europe, is probably almost the most important country in the world today.

In the previous session a speaker talked about metal complexes, about other industry, but we did not hear anything about agriculture. In the current crisis Ukraine is the country richest in agriculture. The future of Ukraine is high in agriculture. If prices continue as they are, if the price of crude oil is increasing the price of renewable energy, and if agriculture is becoming more and more important, in the future agriculture will be like diamonds. I do not believe that the Government of Ukraine has the same opinion about it.

MODERATOR: Perhaps you can convince them of it.

Charles Riemenschneider is the Director of the Investment Centre Division of the Food and Agriculture Organization of the United Nations. Previously he worked for the US Senate on agricultural issues. Mr Riemenschneider, as we have heard from the previous speakers, it is obvious that we need a broader dialogue between state and private investors. The UN helps where it can. What are the major obstacles to this fruitful cooperation or partnership?

MR CHARLES RIEMENSCHNEIDER (Director, Investment Centre Division, Food and Agriculture Organization of the United Nations): I think we need to understand why this current spike in prices is both similar to and different from those in the past. It is similar in the sense that it is very much supply-driven. In the past two years cereal production in the world has gone down by 4 per cent and 7 per cent. Stocks of cereals have declined by 3.4 per cent on average every year since 1995. Fuel prices have doubled, which obviously has a big impact on the ability of Mr Kostic's firm and of all farmers to produce. Machinery fuel prices are up; fertiliser prices have more than doubled; and transportation costs, both for inputs and for outputs, have increased. That makes it very much like previous price spikes in agricultural commodities.

This spike is different because a number of structural changes are taking place that mean that the price trend is higher than in the past. We are not likely to go back to where we were in the late 1990s. There are higher oil prices, which push up the production costs, but this time we have the competition of food crops with biofuels. There is much more demand for biofuels than in the past.

We also have higher income and urbanisation in many of the developing countries, particularly India and China. To give an example, meat and dairy consumption per capita in China has gone up by 250 to 300 per cent since 1990. That is a lot of people eating meat and dairy products, which take more grain to produce than if people just ate rice. It also means that the commodity markets in total are much more closely linked. The meat, the grains, the oil seeds are likely to be moving together more in the future than they have in the past.

One of the reasons for the structural change is that there has been a serious under-investment in agriculture since the 1980s. World Bank lending for agriculture in 1980 was 30 per cent of their portfolio; by 2005 it had dropped to 7 per cent. It has come up since then. Productivity growth, yield growth per year, averaged 3 to 4 per cent during the 1970s; it is now down to 1 to 1.5 per cent. It is difficult to keep yield growth up with production.

One of the major changes this time compared with the past is that there is much higher volatility. Climate change is leading to more frequent and extreme weather, which will affect agricultural production. There are many more financial funds investing in the agro-commodity markets, which many studies say has led to more volatility in the markets. We also have more exchange rate volatility than in the past, which has shifted trade patterns. The US dollar being weak, markets have much more interest in exporting compared to other exporters. An important change is that, as a result of the Uruguay Round trade negotiations, the major exporting countries are holding less stocks, so there is less of a buffer for when there is a supply shock, which means there is much more likely to be higher volatility. The bottom line is that prices are likely to fall from where they are now but not to the levels of the past and are likely to be a lot more volatile.

Countries in eastern Europe and central Asia are not immune from this. Price rises here have been largely in line with what has occurred in the rest of Europe, but, importantly, in Europe and central Asia consumers spend 30 to 50 per cent of their income on food as compared to western Europe, where it tends to be 10 to 20 per cent. That means that these higher food prices have more of an impact on both poverty and inflation. The worst affected countries are those that are net fuel importers as well as net food importers. In a country like Tajikistan which imports 99 per cent of its petroleum and 44 per cent of its cereals you can see what has happened to those markets in the past two years and what the impact is there.

As Louise says, this crisis also presents an opportunity for farmers in these countries. A study we carried out earlier this year for the EBRD jointly with FAO shows that there are perhaps 11 million to 13 million hectares of land in Russia, Kazakhstan and Ukraine that could be brought into production without very much impact on the environment. During the transition period about 23 million hectares of land went out of production. Productivity yields in Ukraine were higher in 1993 by almost one tonne per hectare than they are today. There are opportunities for productivity growth.

As many people before me have said, in order to realise that potential we need more investor-friendly policies. We need to avoid the short-term export bans and taxes that

deter domestic producers from meeting the market demand. There are export bans in Kazakhstan, while countries in central Asia, such as Tajikistan and Kyrgyzstan, are major net food importers and have virtually no other source than Kazakhstan, given their transportation links, and so on. There can be very serious impacts on these countries.

Clearly there has been some progress on land policy in the region, but a lot more needs to be done on land property rights, which often remain unclear, and transaction costs are very high.

Importantly, there needs to be more investment in education and training for managers and labourers throughout the agriculture value chain, from agricultural production up through processing and distribution. Included in that would be better research and development on productivity, as well.

Given the increased volatility, we need better risk management tools for farmers in the region. This means futures markets, warehouse receipts, modern insurance and access to credit. All of these need an appropriate regulatory environment and policy environment from the government to make that happen. They will be provided by the private sector but without a good government policy they will not start.

There is also a need for more public and private investment in handling storage, transport, better port capacity, railroads, and the like. All of these require both public and private investment to make them work.

MODERATOR: Thank you, Mr Riemenschneider, for broadening the debate and pointing to the essentials of the problems.

Our final speaker is Dmitri Gorshunov, Managing Director of Bunge Ukraine, a very experienced manager in the food industry. I ask the same question of you: should the private sector be consulted more often by policy-makers, perhaps especially in Ukraine, or is the private sector perhaps not approaching the state bureaucrats as it should?

MR DMITRI GORSHUNOV (Managing Director, Bunge Ukraine) Interpretation): I should like to start by saying that to be able to withstand this spike in prices one needs to understand properly the reasons for the spike, many of which have been enumerated today. I should like to bring to your attention the main reason for high prices, which is the price of energy and fuel. Costs in agriculture depend greatly on power. In our labour-intensive agriculture 50 per cent of all costs are for manual labour. Agri-business, food processing and farmers are not the ones who are causing the problem. Nevertheless we can conclude that if the tendency to higher fuel prices continues it will not be cost-effective for a Ukrainian farmer, whatever high yield he produces towards the end of this year, and whatever state regulations there are, to sell wheat at less than 280 equivalent. I am talking here about the Black Sea area.

What can we do in terms of the private sector in partnership with the state? How can we overcome this situation? First of all, we should bring about the implementation of agricultural potential in our region. I should like to quote some examples of this potential. The average yield in Ukraine and Russia until today has been many times smaller than the yields in western Europe. The average value of a hectare is tens of times lower than in Germany. I am talking about a long-term lease in Ukraine or a purchase of land in Russia.

Intensification of agri-production can, with huge initial start-up expenditures, increase the overall agricultural yield in the long term and over a long time it will decrease the cost price per tonne of produce. This will mean intensification and high yields over a long period and thus this will bring about lower prices for agricultural produce.

Of course we can do it in partnership or cooperation between private and state agencies but this should be done throughout the whole production chain. The majority of these efforts have been enumerated by the speakers and I shall permit myself to recall them to your memory. As far as the input sector for agricultural business is concerned, we need to invest more in the development of intensive biotechnologies, new adapted crops or seeds for the area, and the development of new methods of application of fertilisers. The introduction of irrigation is especially important for the south of Ukraine. We need to train agricultural experts. In terms of trade we need to cut logistic costs where possible and do away with the huge number

of middle men between local and foreign markets. It should be borne in mind that quality and seed and food safety are very important. You may remember the crisis when sunflower seed oil was exported from Ukraine. This is now well known in Europe. It will affect the entire seed oil and vegetable oil industry in Ukraine.

As far as the financial sector is concerned, we are talking here about accessible funding which is needed for agri-producers in Ukraine.

As far as state participation is concerned, here we primarily look to doing away with rigorous over-regulation of the market.

We also need to look at rearranging our taxes. Export taxes are very important for our agriculture. We have already made enormous progress in fiscal policy, and I should like to thank our Minister for that.

When we talk about what we call a civilised market, we would certainly look forward to a market where information will be provided for all participants. We should also have exchange centres for agricultural producers.

In conclusion, an aggressive impact of government measures can produce short-term results but that would not resolve the issue of rising prices in the long term. Further, such measures could slow down agricultural production and the tapping of the huge potential in agriculture in our region.

MODERATOR (Interpretation): Thank you, Mr Gorshunov. We shall certainly address some of the issues that you have raised at a later stage.

Ukraine, for example, must also spend billions of dollars to modernise this sector. As Kiev Professor Yuvchin recently said, if no investment is made in agriculture, Ukraine could become a rural cemetery. The situation in countries like Russia and other rural areas is similar to that. Where should the private sector act immediately, without delay, with top priority projects, in Ukraine but also elsewhere, and how would you advise managers like Dmitri and others to start to change the mentality not only of the bureaucrats but also of the Ukrainian elite to see that agriculture really

matters for the future? What would your answer be to a government official in Ukraine who said that Ukrainian agriculture should focus only on biofuel production because that is what the world needs today from Ukraine?

PROFESSOR FRESCO: That is a lot of questions. Let me first say that my recommendation to Ukraine and other countries in the region would be to raise the issue of agriculture high on the political agenda. One way to do that would be to have a national round table on agricultural policy which would combine the private sector, the producers themselves and the different ministries involved, and discuss an overall long-term strategy. On the part of the government, we are not talking about massive investment so much as policies that will provide incentives.

The main points that have been raised here are, of course, the problems of having an export levy, which is a disincentive to farmers, and of access to land. The government's role in this is to provide the conditions for adequate production for the entire food chain. That means infrastructure, security of tenure, fiscal measures that encourage production, controls in terms of food safety and food security and having an agricultural policy rather than something vague that says "Yes, we want to stimulate production". In that sense I would recommend, if it has not already been done in some of the countries, having a national round table on agriculture involving all the parties involved.

What should the private sector do? There are different types of private sector here. We have a massive need for a private sector that provides the inputs to production, the fertiliser industry, the seed industry, the irrigation equipment, and let us not forget mechanisation because in these countries that is the key factor to enable production to be increased. We cannot go back to some kind of nostalgic past where small farmers produced food with their own hands. We have to modernise agriculture. These inputs need either to be produced locally or imported under reasonable conditions and they need to be up to standard in terms of sustainability. Let us be very careful about the kinds of chemicals and fertilisers that we input and make sure that they really match Ukraine's conditions.

I think that if we do those two things and, as I argued before, provide a framework for secure financial services for the agriculture sector then we are already one step ahead.

One of the key issues today is that the private sector and the public sector must make the rural areas attractive to live in. There is a whole young generation out there which is not interested in farming because going into business in the cities carries far more status and is far more exciting. Providing incentives and making the elite aware of the importance of the rural sector is very important to encourage young people to choose a career in agriculture.

Let me come on to biofuels. I want to sound a note of caution here. There is a tendency, particularly in the media, to suggest that biofuels are everywhere competing directly with food crops. That is not the case. Globally no more than 1.5 per cent of the total land area is currently under biofuel cultivation. The effect on the global market price is not very high. However, there are areas where there is a direct effect of substitution. That effect is caused by what I would call short-term and sometimes ill thought-through government policies that go for the substitution of fossil fuels by biofuels in the short term without really thinking about the energy and economic efficiency of biofuels. I think most of us will agree that "biofuels" means either ethanol, a type of alcohol, or biodiesel, a type of oil. Both now come mainly from things that we can also eat.

Of course, the longer-term future that we are well aware of, at least technically, will be to go for things that humans cannot eat, all kinds of fibres, such as woody fibres, lignins, and so on. That is where the future is. The future is in what we would call dual-purpose crops. Maize is a good example. Potentially maize produces grains and an entire plant and we can use that plant and transform it into ethanol or into something else. The future will be to look at biofuels creatively. It is true that in this part of the world there is a large area that we can still use. That is a fantastic opportunity but that opportunity should be used widely, and that suggests very strongly to me that if we have a national policy on agriculture, a national round table, we can decide which are the best areas for food and which are the best areas for biofuels and for other purposes. That is where I believe the government should take an initiative.

MODERATOR: On the other hand, we have a signal from countries such as Germany where it has been officially stated that in 10 or 15 years they want to have 20 per cent of their energy from new energy resources.

PROFESSOR FRESCO: The EU as a whole has put in place a policy for 2020 for a 20 per cent substitution of fossil energy by alternative forms of energy, mainly biofuel. In fact there is a policy for 2010 of 5.75 per cent substitution. The US has something similar. To be frank with you, I think these policies have been defined without consulting the technical experts on what is actually feasible. To give you just one figure, if you were to transform the entire US maize yield production for one year into ethanol for cars, you would provide only 15 per cent of the fuel needs of cars in the US. That will give you a sense of perspective. You cannot today go massively and rapidly for biofuels. Biofuels are a niche market, a niche opportunity, and they should be part of a larger agricultural and energy diversification policy.

MODERATOR: Thank you for that clarification.

Mr Kostic, let us continue to look at the broader global picture. If land were able to be freely sold in countries like Ukraine, Russia and Kazakhstan, would companies make the necessary investments successfully and deliver modern agri-technology to reverse the rise in world food prices? I wanted to ask you about dealing with the mentality. Private ownership is also a mentality problem. Maybe you can share with us your experience as a Serb in your country and compare it with the mentality of private ownership further east.

MR KOSTIC: I was born 50 years ago in a Communist country and I very well understand the mentality in Ukraine and Russia. I am not so happy with the history of Communism in that country. It was one of the richest countries of Russia but it did not have enough food in the '80s. Ukraine, the breadbasket of Europe, had the same problem because it did not produce enough food. Something we have from Communist times is the agricultural *kombinats* and cooperatives with large amounts of land, which do not exist anywhere [else] in the world today except perhaps in Argentina. My message for the Ukrainian Government is that they should not destroy

those. Ukraine has this advantage today compared to most of Europe where there are small parcels of land and it is almost impossible, from a legal point of view, to form large parcels of smaller parcels of land in order to be able to implement the latest technology. In industrial agricultural production, size is very important. If you want to implement the latest technology, it is important to have a big plot of land such as you will find only in Russia, especially in Ukraine and maybe in Kazakhstan.

I need to go back to biofuels to say something about how I see this. If you tell me what the price of crude oil will be, I will tell you what the price of grain will be, but probably no-one knows. If you tell me what the industrial development of India and China will be like, I will tell you what the price of crude oil will be. It is very simple. There are limited resources of crude oil in the world and, according to our knowledge today, we think that we shall have oil reserves for about 30 years. If that is the case, we have no right not to give thought to what successive generations will do after that time. If we want to use grain to produce renewable energy, we need to think today about how we will increase production to meet the big demand driven by renewable energy. Based on the results of MK Group after having been in Ukraine for two years, in terms of wheat, barley and maize, on 17 million hectares, which is about 55 per cent of the total arable land here, Ukraine will have 61 million tonnes more grain than today. Anyway, they are a net exporter, which means that all 61 million tonnes will go on to the world market. According to the price today, the GDP will be higher by €1.1 billion. That is after only two years, with no GMO; I do not want to open a discussion on GMO here.

MODERATOR: Maybe later.

MR KOSTIC: But this is not the final result. I am not taking into account the results from Serbia. I am not taking our benchmark on each; I just take the average of what we have after two years in Ukraine, which is only one country. The story about renewables is always "Tell me what the price of grain is, I will tell you how much goes to renewables". Look at America today: they have the Bush order for increasing ethanol production in 2009 to a particular level, I think, but private entrepreneurs are going much faster and are increasing production much more than they expected. What has happened? The price of corn has gone up like a rocket.

PROFESSOR FRESCO: But they were subsidised, were they not?

MR KOSTIC: Yes, but I am one of the investors in the number one company in the world today in ethanol. Do you know what the price of the shares is? It has gone from 3.1 billion to 550 million today. No corn because it is not economic at \$5.9 per bushel. When they started the factory corn was \$2; now it is \$5.9.

The question is always what will be the price of a tonne of corn or wheat or whatever, what will be the yield and what will be the demand at the end? There is a direct relationship. If the price was still \$2 dollar per bushel for corn, and the price of a barrel of crude oil today was \$127, there would be no need for any subsidy or big economic support and there would be a high profit between ethanol and crude oil. Support would not be needed for the production of renewables. However, if the price of corn is \$6 per bushel and the price of crude oil is the same, government support will be needed.

MODERATOR: Thank you.

Mr Riemenschneider, this may be a primitive question but can you tell us if the EU and the United States are affected by the high food prices? Can you compare the tasks of transition countries in coping with the global food crisis with those of the leading industrial nations in the EU and the United States?

MR RIEMENSCHNEIDER: The price increases that we have seen vary considerably by country; countries have very different price transmission depending on whether there are subsidies and taxes, and so on, on food. In general, the prices have moved approximately the same amount in western Europe as they have in eastern Europe and central Asia. More importantly, as I said earlier, the percentage of income that is spent on food in eastern Europe and central Asia is much higher, perhaps double or more, and so it has a much greater impact on people, particularly on poor people who spend an even higher percentage of their income on food. That is why you see food riots around the world, in the Philippines, in west Africa. These are largely urbanbased populations that depend on imported food to cover all their needs. If the price

doubles or triples, it is reflected very quickly. I think that here there are opportunities for governments to make the right kinds of decisions. It is much easier to deal with such situations by targeting social assistance, whether it is food stamps or some sort of neo-cash transfer, to help poor people cover their food costs rather than by putting a ban or increased taxes on exports, which creates the wrong incentives for producers and makes it more of a long-term problem. In addition to its being a short-run problem, you prolong it because you will not get the supply response that you would normally expect from high prices.

MODERATOR: Thank you.

Mr Gorshunov, I shall ask you a political question, if I may. We have barely touched on subsidies. In the US farmers receive 83 per cent of their earnings from subsidies, in Germany 70 per cent, in Japan 84 per cent and in France 36 per cent. One-quarter of Ukraine's population works in the agricultural sector. It may be that Ukraine should not orient itself only towards the EU model but perhaps, as Mr Kostic said, towards an Argentinian model for agricultural production. What has been your company's experience in the EBRD region so far? What changed and what did not change so quickly in the environment?

MR GORSHUNOV: Agriculture in the south of Russia seems to me to be the most profitable agriculture in the world and so it does not need a lot of subsidies; but, in order to increase its efficiency, it needs a certain environment, which the government could create. There have been a number of positive changes in this respect in both Ukraine and Russia in the past years but they are not enough to boost productivity in agriculture to levels which can cope with the current rise in food prices. We have already said today that land reform is needed and also probably some subsidies in respect of financing of bank interest. Freer access to new varieties of seeds, chemicals and fertilisers is needed, et cetera. Despite all these problems, a positive trend is evident.

MODERATOR: We now come to the last round of questions. Professor Fresco, the EBRD is the second largest private investor in agriculture in Russia and is the largest private investor in agriculture in Ukraine. The EBRD's region currently accounts for

around 20 per cent of the world's potential land. How should the private sector convince people like Mr Melnyk of transition countries that private capital should be brought into the development of social infrastructure? I ask the question again and again. We have seen that in Russia, for example, a huge national agricultural project has been under way since 2005, having been launched by Mr Medvedev three years ago. So far little private investment has reached Russian farmers despite this huge national project which is televised every day. What would your general recommendation be at the end of our session? How would you press for these changes?

PROFESSOR FRESCO: I want to emphasise what I said before. It is not just a national policy that is needed but also a commitment from the private sector, which could be obtained by having very clear agreements between the private sector and the government on what needs to be done. As far as I know, that is not the case at the moment in either Russia or Ukraine. No private investor of any worth will invest where the situation is unclear from a land-tenure point of view, a fiscal point of view and an economic-incentives point of view. That is why I emphasise the idea of having a national round table. Let us sit down together to formulate the conditions under which the private sector will be able to invest massively. There is investment, of course, as we have heard, but investment is difficult to bring to fruition because of all the impediments that exist. There is ample evidence from many countries that have developed their agricultural sectors that, when impediments are removed and incentives and security are provided, the private sector can make the agricultural sector flourish very quickly. This is a big advantage. Here is a sector in which even a small amount of investment – for example, in the fertiliser industry and in secure financial services – will really make a difference. As we see here, yields can be increased immediately with the knowledge that we have currently. The government should ensure that, in addition to removing impediments, there is sufficient public funding in agriculture, particularly in agricultural knowledge and modern technology. That is an area in which, in this part of the world, there is still a kind of backlog. There used to be a lot of good work done on agricultural science but that is no longer happening in the same way. There is a lot that can be done. As can be seen from models in the US and western Europe, and Japan for that matter, the countries in which agricultural yields have increased are countries where investment in science

and education has been directly useful to the agricultural sector and has helped young people to motivate and mobilise themselves for this sector.

Let me repeat that we must have a round-table policy with clear demands from the private sector on the table and with a clear government response, not a vague general sort of public-awareness policy but something very specific. What do we do about matters such as biofuels; what do we do about the other services that agriculture provides? Let me be clear that agriculture is not just about production of food; it is about a value chain, about value added, and about managing our water resources, for example. If we have no agriculture, a lot of the work that has been done on water basins may go wrong. We have seen the tragedy of the Aral Sea. The environmental aspect of agriculture is coming much more to the fore. That is why I said before that it is no longer just a matter for the Ministry of Agriculture but for all ministries, from economic affairs, infrastructure and rural development. They should sit down together, make precise recommendations and implement them. I think the private sector has a right to ask this and the government will then have a right to expect socially responsible behaviour from the private sector.

MODERATOR: Let us now tackle the complaints from the other side. Mr Kostic, can you give Ukraine advice on how to use its WTO accession to boost the agricultural sector? How would you respond to local criticism that membership of the WTO endangers the sugar industry in Ukraine now that its market is open to sugar producers from outside Ukraine? Should Ukraine concentrate on producing completely different agricultural products? We are again in the field of diversification and biofuels.

MR KOSTIC: With regard to sugar, I was in politics for six years and I have a very good answer ... (inaudible) ... The sugar story is very difficult. Look at what they do in Europe. There is the big problem with regard to sugar produced from cane and sugar produced from beet. Sugar produced from cane costs \$120 or \$140 while the cheapest sugar produced from beet today at one of my refineries in Serbia costs €30, equivalent today to \$500. That is the answer to what we can do.

We cannot avoid the fact that we have globalisation, on the one hand, and there is the existing sugar industry producing sugar from beet. How do you put that all together? How will you balance the differences? The answer will be found by politicians in each country separately. Europe reduced its quota and now closes factories. That is the answer to Brazil, Thailand and Australia because they cannot compete. That is the answer with regard to sugar.

As to what will happen in Ukraine, I would say that there will definitely be a big consolidation of the sector. Instead of the 170 factories that existed a few years ago, there were 103 or 109 last year, and this year I think there will be 54 or 55. With the agreement with WTO, I expect there to be in another five years a maximum of 20 factories remaining in Ukraine, but not with the capacity of today and and not with the situation like today, with the highly modernised minimum 10,000 tonnes per day, et cetera.

Regarding the other agricultural part I need to repeat that, if you want to increase agricultural production as soon as possible, there is the size aspect, the time aspect and the long-term money aspect. I have already explained the size aspect. The time aspect means that it is not like in other industries where you push a button, you have very modern factories and you have output. There you need to push a few little buttons and then wait for 12 months, looking at the weather, and so on, and then you see what happens at the end. It does not matter how much money you have; it is a very slow process. If you want to see something in three to five years you need to formulate a strategy and vision today, preparing for what will happen in five years.

Finally, long-term money. There is no long-term money. Even if you have the money, how will the poor farmer know how to borrow money? He is not educated and does not know how to apply for credit. You have to educate them one by one how to come to the bank and ask for money, et cetera.

I have tried to explain that you should keep the cooperatives and try to increase productivity where you already have big companies with all the technology. Using them in this way will bring all the small farmers together and open each of the farms. We have here about 1,000 employees at six or seven locations, they are open, there is

no secret about how you produce 15 tonnes of corn per hectare. There are only the questions of money, implementation and timing. If you implement this year, you cannot jump from 5 tonnes today to 15 tonnes next year, but you can do it step by step. In five years, with all of this, you will definitely have 12 or 13 tonnes, which will increase grain production in Ukraine by two or three times.

MODERATOR: We see that you know the business here very well.

Mr Riemenschneider, this will be the last question before we open the floor. One subject which was not touched on in our discussion was climate change, which affects agricultural production. Seventy-five per cent of the world's poor inhabitants live in rural areas. Agriculture utilises 85 per cent of global water reserves. Is that not the real challenge for the future?

MR RIEMENSCHNEIDER: I think it is one of the major problems facing us. As I pointed out in my opening remarks, I think it is a major concern with regard to volatility in production. A lot of modelling has been done and a lot of analysis, and I think there are winners and losers in climate change. I saw a presentation yesterday which showed that northern Europe would end up wetter and southern Europe would end up drier. What does that mean for agricultural production? If it ends up warmer, southern Canada will be able to compete much better with the United States, and there is a lot of free land there. Importantly, most of the analysis shows that around the equator, which is where most of the poor people in the world live, the situation will be negative for agriculture. If you look at the impact of climate change on poverty and food security in agriculture, the implication is much more negative.

In the EBRD countries, as I pointed out, the volatility question becomes more important, which means that risk management tools are even more important for producers than perhaps they have been able to take advantage of in the past.

MODERATOR: Thank you, Mr Riemenschneider.

We now come to the question and answer session. A microphone is available. Please state your name and organisation.

MR RAYMOND LLOYD (Editor, *The_Parity Democrat*, Westminster): I have a question to Mr Gorshunov and one to Professor Fresco. Seventy-five years ago rural life in eastern Ukraine was practically wiped out when 6 million people were starved or beaten to death, not by the Russians but by the Soviets. One of the legacies of the trans-Atlantic slave trade has been the reluctance of the descendants of plantation slaves to engage in agriculture. Has the attitude to agriculture of the rural population in eastern Ukraine yet recovered from the Holodomor the worst genocide/famine in human history?

My question to Professor Fresco is the following. In his BBC lecture last December Craig Venter, the scientist who, despite peer scepticism, was the first to map the human genome, informed us that he has now devoted pretty well all his financial and intellectual resources to creating new fuels, if not from thin air then from new forms of genetically engineered algae, et cetera. Do you share Dr Venter's optimism? If not, why not?

MODERATOR: Thank you for the questions.

MS ALMIRA CAMMEL (GPW Ltd., London): My question is for Mr Miodrag Kostic and relates to the Ukrainian legislation on agricultural land. Everyone has said that it is impossible to sell or resell agricultural land at the moment. Once the moratorium has ended and it is possible to buy or rent land, how will that affect your current interests here? Obviously, you have huge investments at the moment. Will you move those investments elsewhere, or not? How will this affect the price of agricultural land? On the other hand, quite a lot of agricultural land is owned at the moment by some of the old-fashioned state-owned companies which in the meantime have been privatised, which means that the land that was an asset of those old-fashioned companies is now in the hands of private entrepreneurs. Observers in Britain seem to believe that quite a lot of them will tend to resell this land for property development. Will that have an effect on you?

Following on from that, Professor Fresco, do you believe that legislation should be put in place to regulate the sale of agricultural land for development?

MR MICHAEL BLEYZER: I am investor and am now considering investing in agriculture. I should like advice from any panel member on this matter. Agriculture is a big area in which to start thinking about where to invest. Let us say hypothetically that I have \$1 billion to invest in agriculture and let us say, for the sake of argument that you made, that it is long-term money. The current strategy I have seen of investing in Ukrainian "agriculture" is what is otherwise known as a land grab. There is a term that has been invented, "land banking", which scares the hell out of me, which means that you buy as much land as possible and split it as soon as the moratorium is lifted. I do not want to do that. If you think about agriculture as a business, in light of all the global trends, then you have to choose between growing cereals, growing oil seeds, going up the value chain into dairy livestock and meat livestock, and perhaps producing or distributing fertilisers. What about producing or distributing agricultural machinery? What about producing or distributing crop protection chemicals? What about genetics, seed plants? What about handling and logistics, storage, movement, grain trading, financial, leasing? Those are all things I could invest in. I would be curious to know, first, what you think about land grab. Is it a good strategy to try to buy as much land as possible and see what happens? Secondly, if that is not a strategy to go with, where would you invest? Which group of those businesses is the most synergistically related so that you would want to invest in it?

MODERATOR: We shall take a last question before we hear answers.

MR ALEX LISSITSA (Ukrainian Agribusiness Club) (Interpretation): This debate can be split into two parts. What does the world expect from Ukraine? Everybody is waiting to see what Ukraine and Russia will do. My question is, how about the world? Does it expect the United States not to use corn for producing ethanol? How about rapeseed to be used only as an industrial crop? Are we expecting world milk quotas? We heard a discussion about agricultural yield and its efficiency. Of course, I can only support Mr Kostic. Agricultural yield is based on three main factors and land is not the decisive factor. This is very fertile land. Ukrainian agricultural land is very good and, even if left as it is, it is profitable. The second thing is human resources. If you invest in human resources, the yield will grow in about five to six

years. The third ingredient is funding and costs and losses. Even if we have this funding, agribusiness around the world was not prepared for the position we have today. If we want to buy a certain brand of combine harvester, it will be a year before we can get it because there is a waiting list. If we want to buy grain seeds, there is again a waiting list. We are talking about yield. This will only change in Ukraine and Russia in five years' time. Does the world expect from Ukraine and Russia what it expects from Europe and America? Are we susceptible to the changes in the economy that are taking place today?

MR GORSHUNOV (Interpretation): First of all, I think we need to concentrate on the last question because it is crucial. I think that serious growth in efficiency or yield in Ukraine and Russia can be expected in five or six years. You know the private sector better, perhaps. I am head of the Ukrainian Agricultural Confederation. To arrive at these yields we need state or public support. We do see some support on the part of the government but in some cases we are lacking support, there are shortfalls and measures taken are sometimes inexplicable. There is no rationale in some of those measures.

As far as other serious players in the agricultural market are concerned, I think the world is expecting a lot from them. I am not a great expert in the agribusiness of the countries that you have enumerated, but in terms of the international division of labour it is quite clear that we should expect from them what we expect from anyone else.

MR RIEMENSCHNEIDER: Let me start with the last question in terms of what is expected here. There are clearly opportunities in Ukraine for increased agricultural production. Yields are lower than average yields in other places in Europe in similar agro-ecological zones, but I think there are a number of constraints that have kept the sector from developing. You are right about seeds, and so on; I think Louse mentioned it, as well. Things like plant breeding have fallen behind in the region and in that regard public-private partnerships make a lot of sense. Where it has been successful, and perhaps most successful in the United States where there has been good, solid university research coupled with government incentives in terms of a legal right to seed and intellectual property rights, they have been able to make tremendous

progress in plant breeding. In countries focusing on an agricultural export industry, which I think Ukraine would have to do, that is clearly an area that can go

A gentleman asked about where to invest. I think it is an appropriate time to invest because I think there is more agreement that, while prices will come down from their present level, the long-term trends are positive. There will be 9 billion people in the world by 2050 and we shall need to feed them. Productivity growth has been declining so we shall need to do that. The one area that he did not mention that I think is perhaps more critical is water. I believe that in the long term water will be the limiting resource with regard to agriculture, more than land, more than other things. Getting water policy right will in many countries in the world be tremendously important to meet the demand by 2050.

MODERATOR: Thank you.

Mr Kostic, you were directly asked to share your experience at a business level.

MR KOSTIC: With regard to the moratorium, MK will immediately start to buy land when it is available. I want to say something about agro-investor companies in Ukraine as compared to other companies. I am afraid I have to say that there are a lot of speculators in the market targeting the difference between the starting price of land and what its price will be later. I know them because some of them have approached our company and asked us to manage land, even their own big pieces of land. They make losses year by year, waiting for an eventual capital gain. We are totally different. Our strategy is long-term investment and our business is agriculture. Buying and selling land is not our priority. Of course, we would like to buy land because after the initial level of investments, such as implementation, new technology, buying equipment, et cetera, there is the second level, but that level cannot be undertaken if we do not own the land. I refer to irrigation, for example, and other long-term investment in technology. I hope that that answers your question.

The second question concerned where to invest. Welcome, you are exactly the kind of investor we are looking for. We are preparing our company for an IPO in six months or a year, I hope. You are absolutely right: there is the full range of the

sector. If Ukraine has productivity like we have here, 61 million tonnes more production at this time, no transportation, no railway, no port, no silo complex, no logistics for new 61 million tonnes, if you invest your money in any part of the sector, you will definitely not lose it.

MR BLEYZER: (No microphone)

MR KOSTIC: Invest in agriculture, invest in Ukraine, definitely. For the long term, definitely invest money in agriculture. We can discuss it afterwards.

If I understand correctly, you asked whether land was not the only factor, if there were not other factors, such as human resources. Definitely, yes. The number-one problem which my company has today, even with 7,000 employees, is that of human resources. Finding a good agricultural engineer between the ages of 23 and 28 with an education and who speaks English is the biggest problem. I agree with you. It is not only here that it is a problem, it is a problem everywhere. For the past 25 years agriculture has been more like a social category, particularly here. Ninety-five per cent of the agricultural business of the world is farming. Today my company is managing the land. There is a difference between farming and managing. In farming they try to reduce the cost of a tonne of commodity. If I produce 3 tonnes of corn, that costs me \$70. We do something different; we manage the land. We invest as much as possible to maximise the profit per hectare, because a hectare is limited, especially today – and, by the way, it is very expensive and becoming more expensive. That is the difference between the management and the farming. In the management of the land human resources is one of the most important factors.

THE MODERATOR: Professor Fresco, perhaps you will answer the rest of the questions. If we have time at the end, we shall take another question. We have six more minutes and then we shall have to finish.

PROFESSOR FRESCO: I shall be brief. To answer the question on algae, indeed, I think there is a great potential for non-land-based sources of energy of a biological nature. However, there is still a long way between the research being undertaken and its application. I cannot reiterate strongly enough that the issue is diversification of

energy supply, as it is diversification of agricultural supplies. We shall not put all our investor eggs into the algae basket, in the same way as we shall not put everything into maize.

Where do we invest? One of the laws of agricultural science is that when incomes rise, when people have more to spend in terms of food, they will spend more on animal proteins, meat, fish and dairy products. It is in fact the dairy sector that is currently being most squeezed, where we expect prices to remain high because there is a real shortage of supplies and moving that up is even more difficult than moving up the agricultural supply of crops because you have to invest in the animals, and so on. There is also a lack of veterinary expertise in many of the countries. If you can get the dairy sector moving, you will make money, in my view.

I agree with other speakers that you must also invest in inputs, namely fertilisers, mechanisation and particularly seeds. One of the keys in the past to increased agricultural productivity has been to use the right types of seeds. There is a lot that can be done. If you have to wait for six months or a year before you get the seeds, that is an obvious problem. As to whether it is best to produce the seeds ourselves or import them, I will leave that aside for the moment. I fully agree that, above all, we must invest in people. We must invest in training people, in motivating young people to go into the agricultural sector. That is probably the most important thing that politics can do. I would suggest that we should not ask for major government intervention in the agricultural sector. A long history of quotas on milk, for example, or subsidising agricultural production has in the end led to higher prices instead of lower prices. We need to ask government to invest in an adequate business environment where the agricultural sector and its entrepreneurs can flourish and where at the same time we can protect those who have to spend too much of their income on food. The best way to protect the poor is to raise production.

THE MODERATOR: Someone wishes to ask a question.

MR DANIEL BILAK: I am a lawyer with Cameron McKenna here in Ukraine. Waiting for a government-private sector dialogue has been mentioned. A dialogue has been taking place in Ukraine for many years now between business interests and

the government. Most of the land banking and land grabbing took place a long time ago. We are now into the secondary market, where the corporatised state-owned enterprises are being bought up in many respects by large funds coming from the West. We have a number of clients who are looking at a minimum of \$250 million to \$300 million funds that are investing in the agriculture sector to provide many of the inputs that you have been talking about.

The question I have for Professor Fresco is the following. On what basis are you prepared to finance some of these enterprises? We are looking at farms accumulating farm properties anywhere between 150,000 and 200,000 hectares of land.

THE MODERATOR: Professor Fresco, you will have the last word.

PROFESSOR FRESCO: A very good rule in business is that you always invest on a case-by-case basis. I think that that is what we need to do. Let me say that the major profitability in the agricultural sector is in the value added in the food chain or in the production chain. I think you should look at productivity increases and value added increases. The countries that are the poorest in this region are the ones that have no value added in their production chain. I think that that would be a *sine qua non*, a real condition on which you have to invest. I think all investors are interested in investing in a business environment that allows them to get that value added out into production. Although I know that that dialogue is taking place, I think there is a difference between true commitment and a dialogue. I am talking about a true commitment from all partners involved for sustainable agricultural development in the Ukraine and the EBRD region.

THE MODERATOR: Thank you. Allow me to make a 20-second final statement. I think it was very important for us to hold this Panel. The world food crisis will be a major subject for the G8, perhaps at its next meeting in Japan or at its following meeting. We should prepare an agenda for that. We have heard that Russia and Ukraine have potential to raise production to the levels of countries like Canada and France in the next 10 years. It would be an interesting development and might indeed lead to some kind of stability on the world markets if it happened. We need solidarity between the former three worlds, the industrial, the post-Communist and the

developing countries, as we heard here. On achieving the goals, we should climb on the roof of the WTO. The modern forms of state-private cooperation seem to be extremely important, especially for this area. A lot still has to be done in this field. Agriculture is not only business, it is not only food production, it is also the culture of the country. I hear it very often in Ukraine. We cannot build golf clubs throughout the continent of Europe, we must also invest in the core rural cultures which unite our continent.

Thank you for your attention. I hope you have enjoyed it. A transcript of this Panel will be posted on the EBRD website following the Annual Meeting.