Agriculture and fertilizer industry in Eastern Europe and Central Asia: Overview of recent developments and a short-term forecast

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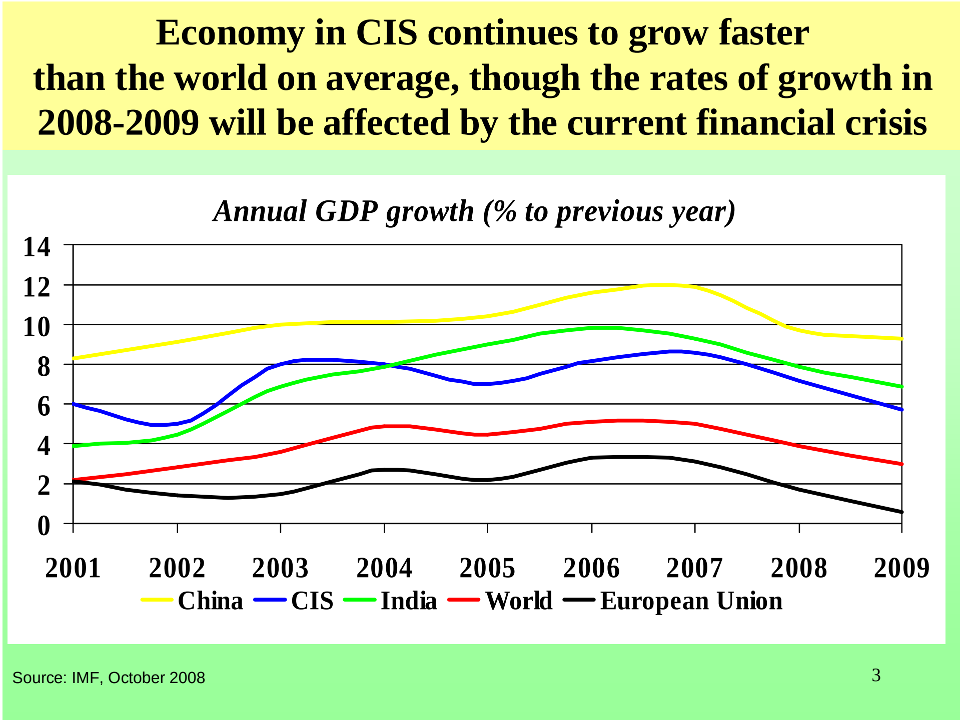
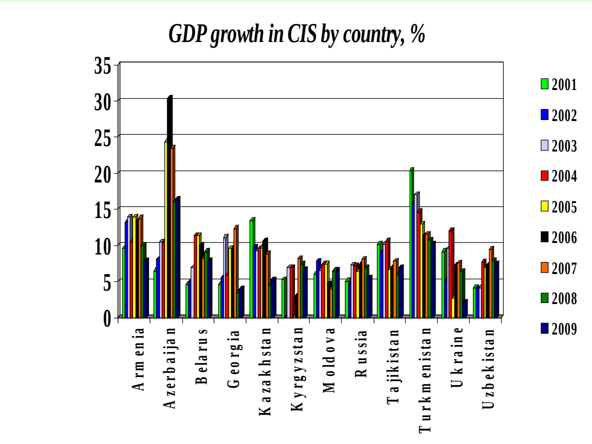
Dear Ladies and Gentlemen,

In my presentation I am going to look at recent and expected future developments in the agriculture and fertilizer industry of Eastern Europe and Central Asia which is also known as the Commonwealth of Independent States. This is a large region that covers about 15% of the global land territory. From north to south it spreads from the Arctic Ocean in Russia to the Karakum desert in Turkmenistan.(Slide 2) That means the region covers various time and climatic zones, landscapes and natural resources base. So depending on geography as well as cultural traditions the countries of the region have a different economic, industrial and agricultural potential.



If we take a look at macroeconomics the region has shown a strong growth of output over the last couple of years. It is well above the level of advanced economies and the world on average. In 2007 the economy grew by 8.6% that is much higher than 3% demonstrated by the EU and 5% seen in the world on average. (Slide 3) The region is recovering from the critical period that, you very well know, followed the collapse of the USSR. The major factor behind the GDP growth was buoyant domestic demand which was helped by favourable terms of trade gains and expansionary government macroeconomic policies. According to the October 2008 forecast, IMF expects strong economic performance in 2008 and 2009 with the GDP growth rate being 7% and almost 6% respectively. So we see that the pace of growth will slow down to a certain extent as a result of the current financial crisis and lower world demand. It is evident that fewer credits and credits given at higher interest rates will not favour local demand for finances and expansion of output.

GDP growth rates will continue to vary significantly from country to country with net energy exporters expected to be better positioned than net energy importers according to IMF



Net energy exporters	*Net energy importers*
Azerbaijan	**Armenia**
Kazakhstan	**Belarus**
Russia	**Georgia**
Turkmenistan	**Kyrgyz Republic**
Uzbekistan	**Moldova**
	Tajikistan
	Ukraine

Source: IMF, October 2008

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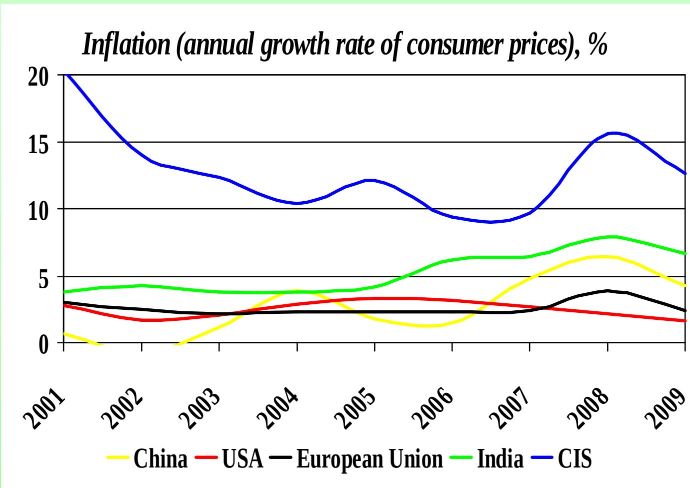
According to IMF, in 2009 net energy exporters are expected to enjoy more favourable conditions than net energy importers despite recent oil declines. (Slide 4)

Due to higher food and energy prices inflation in CIS is projected to be in double-digit figures – far above other regions/countries both developed and developing ones



Factors behind inflation in CIS (2008):

- *Higher global food and fuel prices*
- *Strong consumer demand*
- *Higher public utility and transport tariffs*
- *Higher wages*

Source: IMF, October 2008

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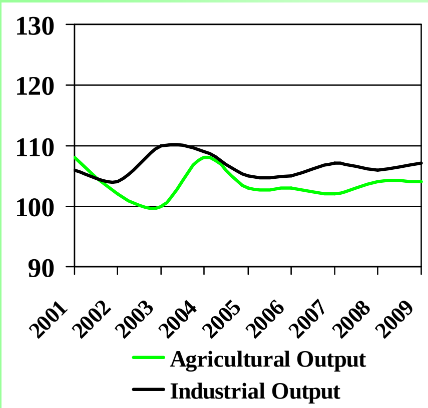
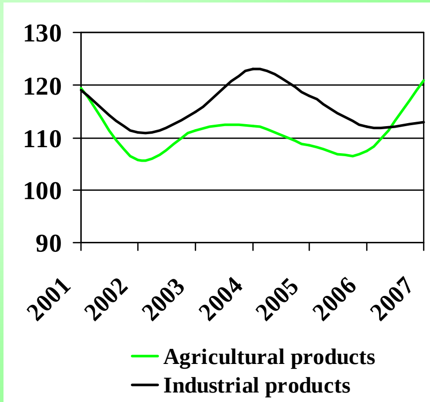
Inflation remains a challenge for most CIS countries. (Slide 5) In 2007 consumer prices were up by almost 10% and in 2008-2009 inflation will hit double-digit level of close to 16% and 13% respectively which is higher than in other regions of the world. The major driving forces of inflation are higher prices for food and fuel in 1h 2008, higher consumer demand, wages and utility and transport tariffs. Higher input prices become a limiting factor in its turn for higher production.

- **Industrial output continues to expand faster than agricultural output**
- **In 2007 due to the higher global food prices and costs of production, prices of agricultural products in CIS increased by far more than prices of industrial products**

CIS indices of industrial and agricultural output (constant prices, % to prev.year)



CIS price indices of industrial and agricultural products (producer`s level, % to prev.year)



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Source: CIS StatCommittee

On production, it should be noted that industrial output keeps increasing at a more rapid pace – at 7%- than agricultural output – at 2% in 2007. In 2008-2009 the rates of growth in agriculture and industry are projected at the level of 4% and 6-7% respectively. Producer prices in agriculture rose in 2007 by 21% which was a result of higher global food prices as well as higher costs of production. (Slide 6)

- **Agriculture plays is an important element of the economy in CIS. In 4 countries out of 12 in CIS (Central Asia) it accounts for over 1/5 of domestic GDP**
- **Almost 60% of agricultural products in CIS are produced in Russia**

Country	***Agriculture share in GDP, %***	***Agricultural output, bln USD, 2007***	***% in CIS total agricultural output***
Armenia	18	1.9	1
Azerbaijan	5.5	3.2	2
Belarus	7.4	8.4	6
Georgia	9.3	***no data***	***no data***
Kazakhstan	5.6	9.2	7
Kyrgyz Republic	***28.9***	2.4	2
Moldova	9.9	1	1
Russia	***3.9***	***78.9***	***58***
Tajikistan	24	1.3	1
Turkmenistan	26	***no data***	***no data***
Ukraine	6.6	21.8	16
Uzbekistan	28	7.1	5

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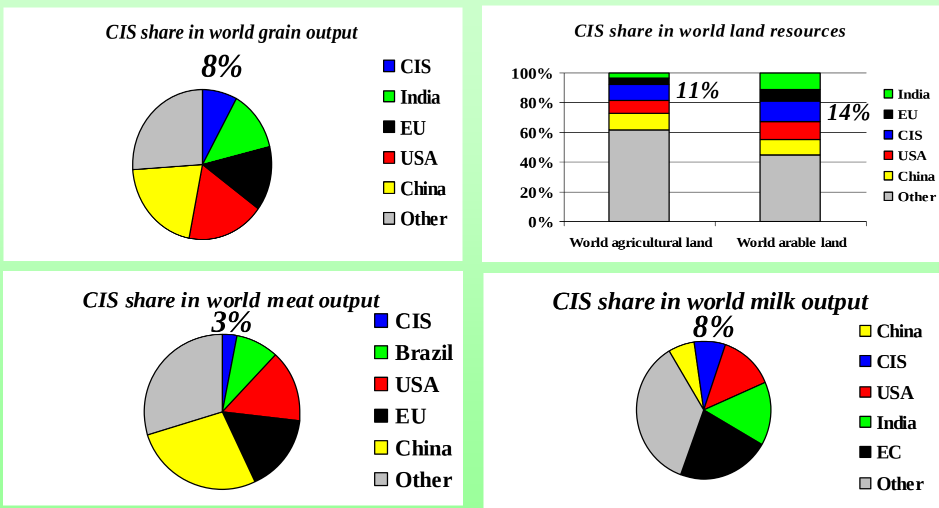
Source: CIS StatCommittee, EastAgri

As for agriculture, it is a strategic economic sector for 1/3 of the region`s countries, where it contributes more than 1/5 of the domestic GDP. (Slide 7) These are Central Asian countries - the Kyrgyz Republic, Tajikistan, Turkmenistan and Uzbekistan. Nevertheless, the bulk of agricultural product in the region is produced in Russia – almost 60%, though agriculture share in the country`s GDP is around 4%.

CIS is a major agricultural region in the world with a vast potential for production expansion



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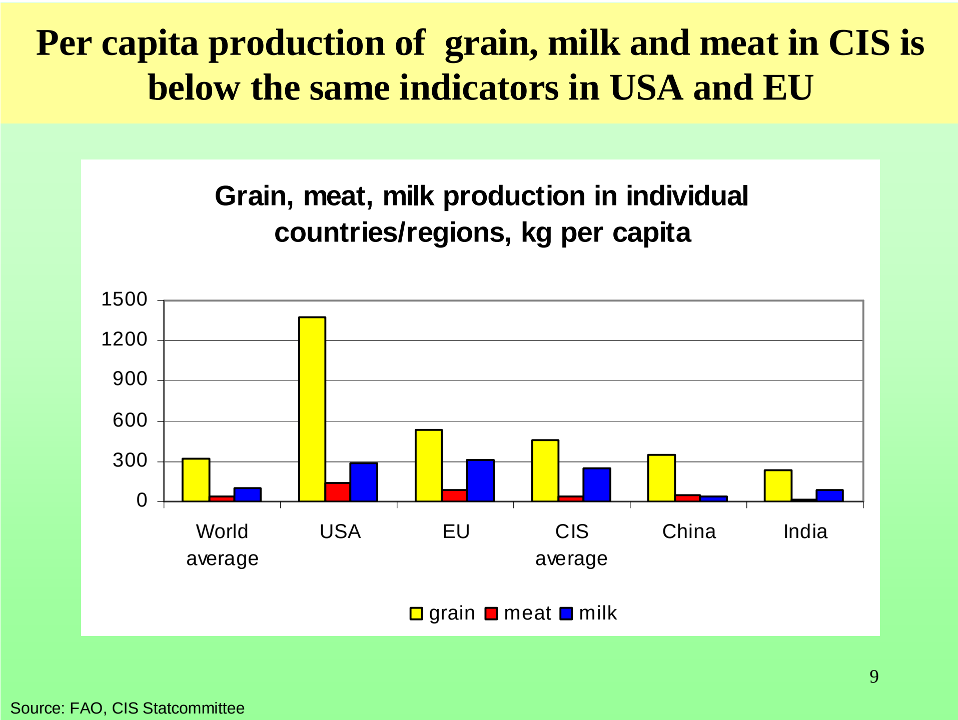
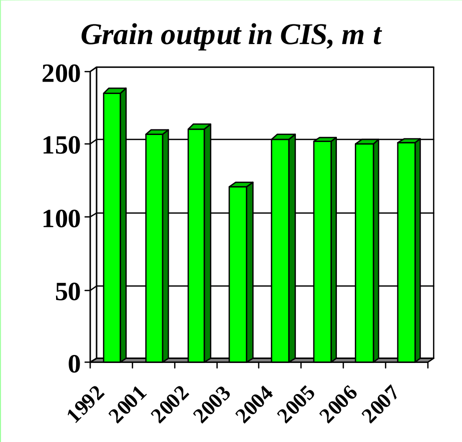
Source: CIS StatCommittee, FAO

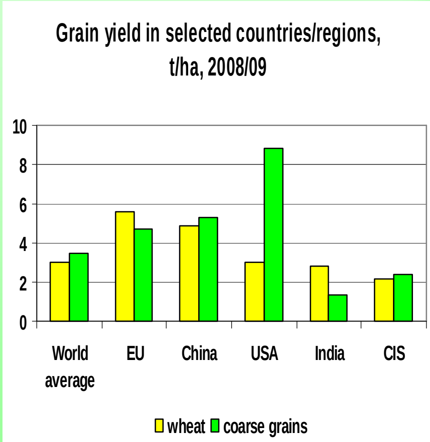
On the whole, CIS is an major agricultural region with a vast production potential.(Slide 8) It has roughly 11 % of world agricultural land and 14% of the world arable acreage resources. After the collapse of the USSR millions of hectares were left uncultivated. If required this land can be brought back into cultivation which is helpful in view of limited spare agricultural land resources in the world and higher food demand. In Russia, planted area is less that 70% of the 1992 level. So potentially planted area can be increased by 30% or around 37 m ha. In terms of grain and milk production CIS has approximately a 8% share in global output, with meat production being behind - 3%.



These shares can be further expanded as per capita production of agricultural products falls short of the similar indicators in the US and EU. (Slide 9)

- Total grain output in the region has been stable over the last 4 years.
- Countrywise output varies considerably. More than 50% of CIS grain is produced in Russia.
- In 2008 bumper grain harvest is expected in European CIS (Russia, Ukraine, Belarus, Moldova). Unfavourable weather conditions have hit grain crops in Central Asia as in 2007. Good harvests are expected in the Caucasus.
- Grain yield is still below the level of other major grain producing and consuming countries.





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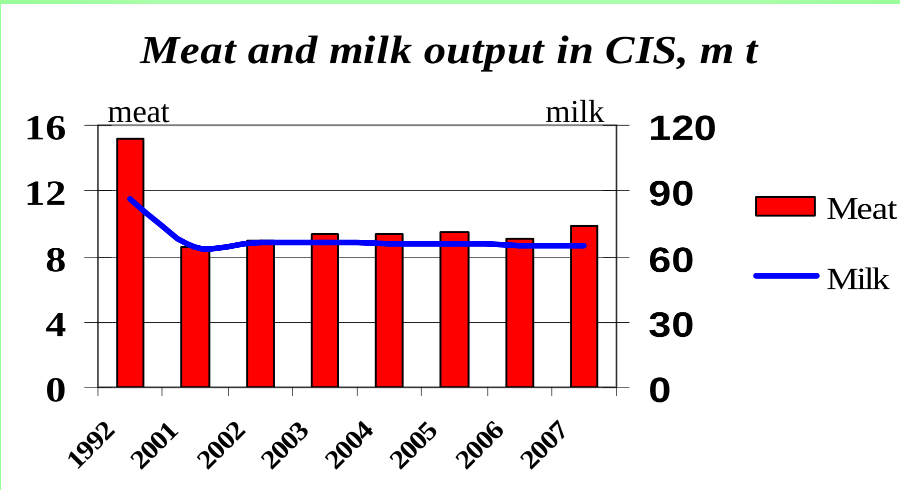
Source: FAO, CIS Statcommittee, USDA

In 2007 grain output has been stable for the 4th year in succession.(Slide 10) This is largely due to higher production in Russia (above 50% of CIS grain output) which offset lower harvests in Central Asia, Moldova hit by severe cold and drought. In 2008 Central Asian grain harvest has been affected again by bitterly cold winter and well as shortages of irrigation. However, European CIS are projected to see bumper crops this year (over 100 m t in Russia, 47 m t in Ukraine, 8.3 in Belarus). Satisfactory crops are expected in the Caucasus (30 m t).

Meat and milk output

•has not yet recovered to pre-transition levels

•has been stable over the last 7 years



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Source: FAO, CIS Statcommittee

Meat and milk production is still below the pre-transition level. (Slide 11) In 2007 higher milk output in Russia, Uzbekistan, Kazakhstan compensated for lower production seen in Ukraine.

Overall milk output grew marginally – by 0.3% against 2006, whereas meat production increased by 9% as compared to 2006. Food security is quite an issue for some countries of the region, especially in Central Asia. Lower yields and higher global fuel and food prices hit most vulnerable low–income population. According to USDA in Georgia, Kyrgyz Republic and Turkmenistan food consumption in 2007 fell below nutritious targets with Tajikistan being in a more complicated condition. Improvements in food production, including primary agriculture, are being currently hampered by the presence of some key unresolved problems in many countries of the region which are well known:

- high unemployment
- incomplete land and institutional reform
- unstable macro-economic environment and high inflation
- inadequate infrastructure
- low availability of credit
- outdated equipment

Russia is a dominant agricultural producer in CIS

Russia`s share	%
in CIS GDP	**77**
in CIS agricultural output	**58**
in CIS grain production	**54**
in CIS meat production	**58**
in CIS milk production	**50**

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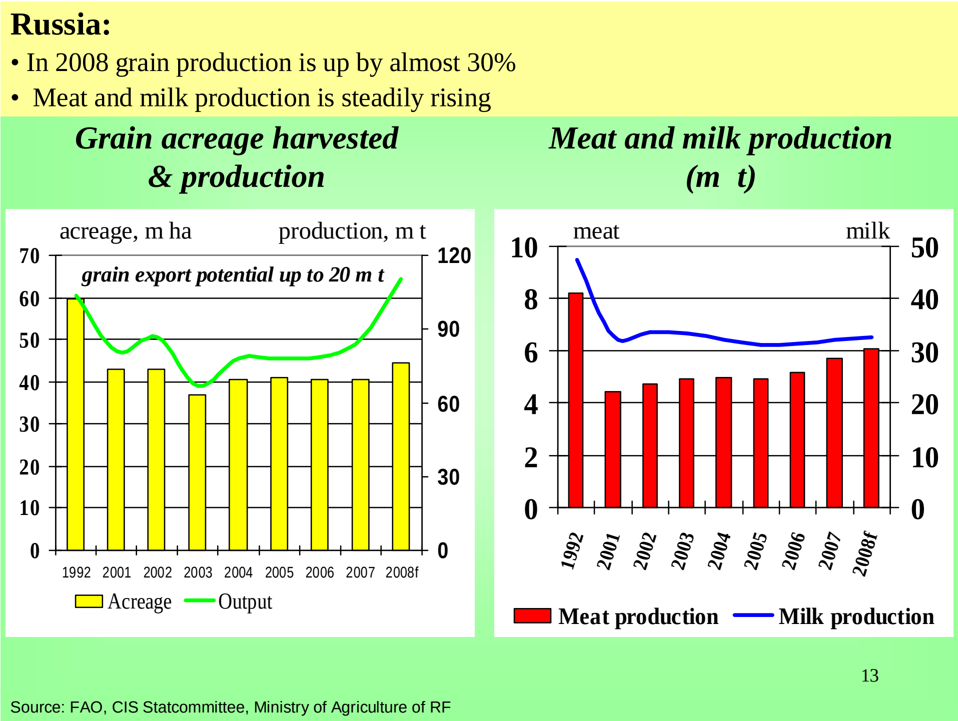
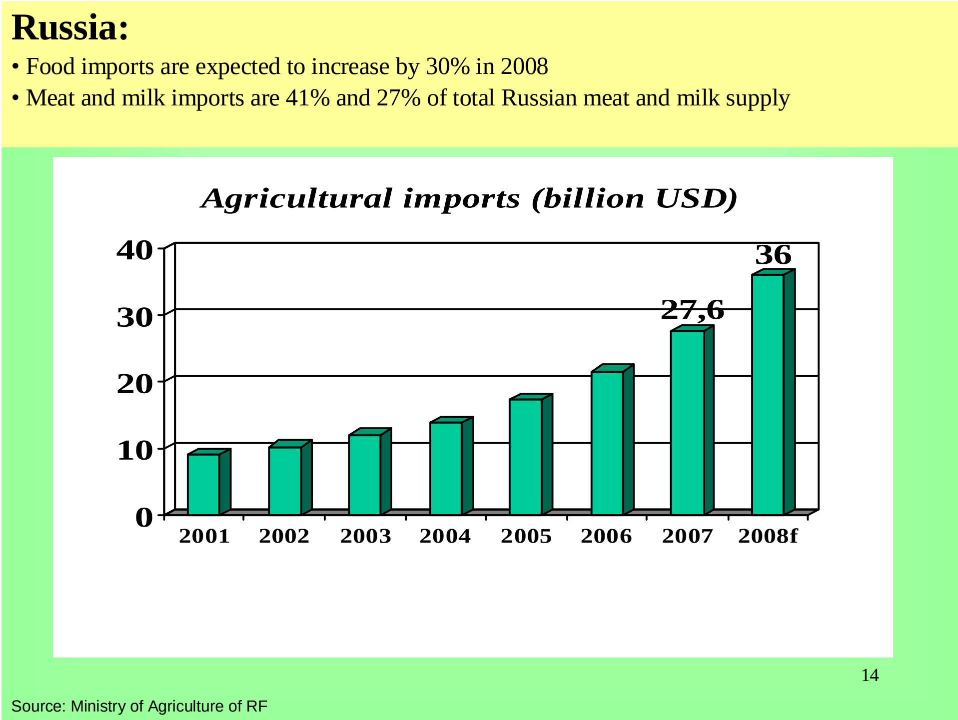
Source: CIS Statcommittee

Traditionally I would like to focus on developments in Russian agriculture as it accounts for almost 60% of the region`s agricultural and meat production and 50% or above of the grain and milk output. (Slide 12)

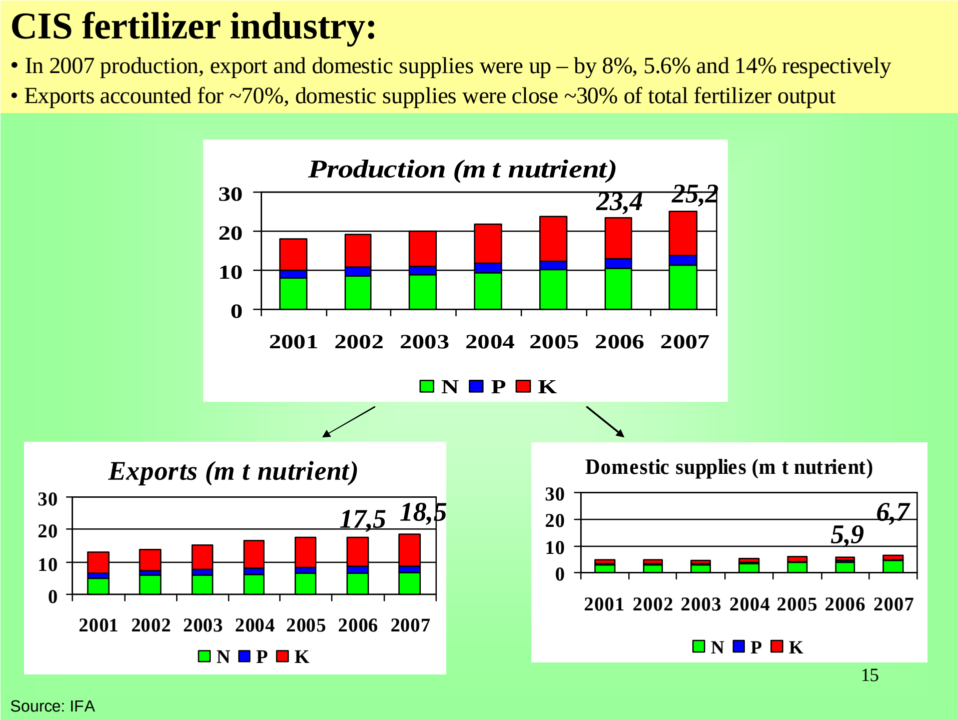


This year`s grain output of above 110 m t has exceeded all expectations. This is up by almost 30% year on year. (Slide 13) The result is attributed to an increased planted and harvested area (up by 9%) as well as application of improved agricultural technologies. Average grain yield has increased to 2,5 t/ha from the level of less than 2 t/ha seen during the whole transition period. But this indicator is still lower than the figures demonstrated by farmers in the US, EU, China where the yield is around or above 5 t/ha. Nevertheless, according to estimates of the Ministry of Agriculture of RF the bumper crop this year will cover domestic needs for food and feed grain as well as expand the country`s export potential up to 20 m t. Meat and milk production is also steadily rising. Meat output increases at a faster pace than milk output. In 2008 meat production is expected to be up by almost 7%, whereas milk –just by 1.6%. However, milk production per cow on large farms will be around 4 t which is above the most successful indicator of the Soviet times of 2.8 t.

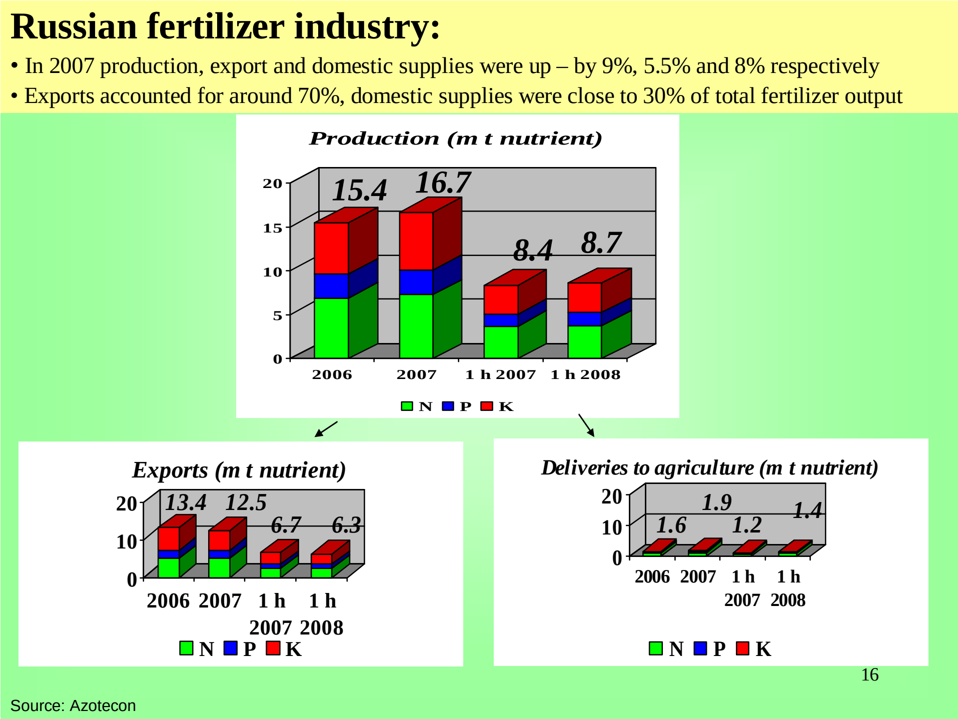
The government is committed to improve the country`s food security. Consumption of some food items still falls short of recommended rates: consumption of grain, milk products is at 80% of recommended ration rates, fish – at 55%, vegetables – at 75%, fruit – at 77%. So clearly there is a potential of higher food consumption in Russia.



Nevertheless at present increasing consumption is met by rising imports in food categories.(Slide 14) In 2008 imports are forecast to go up by 30%. The share of imports in the Russian meat market is 41%, with milk import products having a 27% share. To improve domestic production and competitiveness of domestic products the government has been stepping up its support efforts for agriculture. The federal agricultural budget for 2008 has been increased by 75% or USD 2 billion. The additional funds will finance the Rosselkhozbank (Russian agricultural bank) credit activities, the purchase of fertilizers, feed, diesel fuel. In 2008 around USD 370 m will be directed to the farmers as subsidies for the purchase of fertilizers. As part of the incentive plan in 2009 the government may reduce interest rates on credits for agricultural producers to 11% from the current 14-18% which make credits, to a large extent, unaffordable to some agribusiness. There are a number of federal agricultural programs in place that target development of agricultural territories, improving business environment for farming, development of some agricultural sectors, regulation of markets of agricultural input and output. As a part of measures to increase agricultural production the government is planning to bring back into cultivation around 15 m t ha. Besides, in the medium-term the government has ambitious plans to increase the share of domestic products in total Russian food supplies to 70% and reduce the share of imports to 30% by 2012. This should be achieved through higher meat (by almost 30%) and milk production (by 12%).



Now I would like to go over to developments in the fertilizer industry of the region on the whole and in Russia in particular. (Slide 15) In 2007 fertilizer production in CIS was 8% up and totaled 25 m t nutrient . The increase was seen in production of all nutrients – N – by 7 %, P – by 3%, K – by 10%. Around 73% of production or 18.5 m t nutrient was exported. Fertilizer exports were up by 5,6% mainly due to higher potash exports (up by 9%). Exports of nitrogen and phosphate fertilizers increased marginally. Almost 30% or 6,7 m t nutrient of the regional fertilizer output were delivered to the domestic market - up by 14% against 2006. Home deliveries of nitrogen fertilizers increased by 15.5 %, whereas supplies of phosphate and potash fertilizers were up by more than 8%. On Belarus and Ukraine, in 2008 domestic fertilizer supplies for agriculture are expected to be around 1.4 m t nutrient in each country.



Russia accounts for over 60% of fertilizer production in Eastern Europe and Central Asia. In Russia fertilizer production in 2007 increased by almost 8% against 2006 to 16.7 m t nutrient. (Slide 16) The highest growth rate was demonstrated by the potash producers – 13%, followed by the nitrogen and phosphate industries with 5.5% and 2.4% respectively. Fertilizer consumption last year increased by 16.7% to 1.9 m t nutrient largely due to higher supplies of nitrogen (up by 22%). Home supplies of phosphate and potash fertilizers were up by 10% and 8.4% accordingly. Exports rose by 8% to 13.4 m t nutrient. The major increase came from potash (up by 17.9%). The reason for higher exports was increased import demand in 2007 due to lower purchases in 2006. Exports of nitrogen fertilizers were on the level of 2006, growth of phosphate fertilizer exports was at 3%. In the 1st half 2008 fertilizer production rose by 2.2% as compared to the 1st half 2007. Exports were down by almost 7% because of lower potash and nitrogen shipments. Phosphate fertilizer exports were up by 6%. Home deliveries expanded by around 20%. Domestic supplies of fertilizers to farmers are projected to total 2.1-2.3 m t nutrient this year. Recently the fertilizer industry has been expanding activities on the domestic market to boost fertilizer consumption in the internal market. In October 2008 Russian Fertilizer Producers Association (RFPA) entered into an agreement with the Agroindustrial Union of Russia on fertilizer supplies in the period of 2009-2012. The members of the Association, which are major fertilizer producers, account for over 90% of fertilizer domestic supplies. According to the agreement, fertilizer deliveries to the domestic market will be increased from 2.2 m t in 2009 to 3 (possibly 4.5) m t nutrient in 2012.

Nutrient	Country	Announced CIS projects
N	Belarus	Grodnoazot: Proposed project by the government. Urea (500-600,000 t)
	Kazakhstan	Eurochem: Nitrogen fertilizers (800,000 t, 2015)
	Russia	Capacity expansion through revamping (a number of plants)+ a new plant at Novgorod (2011)
	Russia/Kalmykia	JV (Kalmyk government- Petrovietnam): NH3 (750,000 t), fertilizers (800,000 t)
	Russia/Tatarstan	Mendeleevsk: Urea (717,000 t), NH3 (717,000 t), AN (380,000 t)
	Turkmenistan	Tedzhenkarbamid: Proposed project by the government. Urea (640,000 t), NH3 (400,000 t)
	Uzbekistan	Ferganaazot: Capacity expansion through revamping to 450,000 t NH3
P	Russia	Expansion of capacity to 2.3 m t P2O5 (2008-2010)
	Kazakhstan	Eurochem: Phosphate fertilizers (1 m t, 2015), NPK (500,000 t, 2015)
K	Belarus	Belaruskali: Capacity expansion to 9.650 m MOP (2 new shafts, 2015)
	Russia	Silvinit: Capacity expansion to 6 m t MOP ("Plus 1Mt", by 2009) Polovodovsky area - MOP (2.5 m t)
		Eurochem: Gremyachenskoye deposit – MOP (2.3 m t, 2012) Palashersky –Balakhontsevsky area- MOP (1.7 m t, 2014)
		Uralkali: Capacity expansion by 3.7 m t to 11 m t MOP (2015)
		Acron: Talitsky area (2014)
	Turkmenistan	Garlyk deposit: Proposed project by the government. MOP (1 m t), SOP (200,000 t)
	Uzbekistan	Dekhanabad: MOP (200,000 t, 2010)

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Rising world demand for food and higher global fuel prices have recently given rise to a number of large-scale investment projects on capacity expansion and modernization in the region which are being implemented or are planned for implementation.(Slide 17) The peak of the current year can be considered the auction that was held on 12 March at which licenses to develop 3 plots of the Verkhnekamskoye potassium-magnesium deposit were sold. JSC Silvinit has acquired rights to develop the Polovodovsky area with reserves of 3 billion t sylvinite ore (1/4 of total reserves of the deposit). The enterprise intends to build a processing plant with the capacity of 2.5 m t MOP. The other 2 lots have been acquired by Eurochem (Palashersky-Balakhontsevsky area) and Acron (Talitsky area). There are a number of other potash projects which are being studied and implemented at present. Uralkali is planning to increase its capacity to 11 m t due to the launch of a new shaft, Belaruskali is expanding mining capacity by building 2 new shafts. Another project is being implemented in Russia by Eurochem on the Gremyachenskoye deposit. A new plant is expected to come on-stream in Uzbekistan. Besides, there are a number of nitrogen and phosphate projects which are being discussed and realized in the region. Time will tell what projects will be successfully completed, as many of these are very capital-intensive with possible investments of USD 1.5-2 billion. The new and expanded production capacities in the short-, medium- and long-term will, no doubt, make a strong contribution to the fertilizer supply potential. Increased output will be able to serve both the steadily increasing domestic and external markets given higher global demand for food.

At the end of my presentation I would like to add that Eastern Europe and Central Asia is a region with a substantial production potential in terms of agricultural and fertilizer output. These

2 sectors are closely linked and interdependent. Today governments of the region take measures to boost agricultural output by subsidizing agricultural produces, giving tax benefits, cutting interest rates on credits. However, the fertilizer industry is also expanding its role beyond production by setting up centers for agricultural inputs, rendering extension services to farmers thus improving access of farmers to fertilizers and encouraging efficient fertilizer use in the region.

Thank you for your attention!