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ECONOMIC AND POLICY CONTEXT

Global growth in 2018-19 is forecast to remain stable, although the rate of growth will be slower than projected during the first half of 2018. Downside risks to global growth have become more prominent in the past six months, and hopes that growth would occur at a more rapid pace have been disappointed. Global growth in 2018-19 is forecast at 3.7%, according to the International Monetary Fund (IMF), driven by the emerging markets and developing economies, while growth in the advanced economies seems to have reached a plateau in 2018 previous to contracting in 2019.

Although oil prices have been on an uptrend, they fell in November 2018 to around US$ 60 per barrel (Brent crude).

Some currencies have depreciated against the US dollar beyond what is generally observed. For example, the Argentine peso and Turkish lira have lost more than 50% and 40% of their value, respectively, since the beginning of 2018.

During the second half of 2018, few agricultural and environmental policy developments affected fertilizer demand. In the short term, policies impacting fertilizer use are expected to become more stringent throughout the world to meet environmental and sustainability targets.

WORLD AGRICULTURE

After setting a record in 2016/17, boosted by favorable weather, global cereal production fell slightly in 2017/18. The decline was driven by coarse grains, while wheat and rice production reached new highs. Global cereals use has continued to grow, and global stocks stabilized after five years of buildup. Global cereal output is forecast to be down slightly again in 2018/19. This decline would be driven by wheat, whereas production of coarse grain is forecast to increase and rice output could remain steady.

As demand is seen as continuing to increase, global stocks could contract more significantly than in the previous season. Responding to a larger than expected global cereal crop, cereal prices have been under downward pressure in 2018/19. Preliminary 2019/20 forecasts indicate an expansion of wheat plantings in the northern hemisphere.

Soybean prices have weakened considerably since late 2017 due to a strong increase in production and expected stock expansion in 2018/19, as well as the 25% tariff on soybeans exported from the US to China which came into effect in July 2018. This tariff will likely impact US soybean plantings in 2019 to the benefit of maize. However, it will encourage farmers in Brazil and Argentina to expand their soybean area.

Rapeseed prices have trended higher since June 2018, supported by a drop in production in 2018/19. Preliminary forecasts suggest a reduction in rapeseed area in 2019/20 owing to difficult weather at planting time. Palm oil prices have continued to weaken in 2018 due to increased production accompanied by less dynamic demand. Sugar prices have also fallen significantly in 2018, as production continues to exceed consumption and stocks are accumulating rapidly. The cotton market has fared better, with higher prices in 2018 due to a decline in output, while demand has been relatively dynamic, partly supported by sales in China from the government reserve.

FERTILIZER DEMAND

After a marginal increase in 2015/16, world fertilizer demand has increased at a pace consistent with the medium-term trend: +1.2% to 184.6 Mt nutrients in 2016/17 and +1.3% to 187.0 Mt in 2017/18.

Prospects for 2018/19 are more bearish (+0.7% to 188.3 Mt), reflecting unfavourable weather in some countries (e.g. in eastern Australia and north-west Europe); currency depreciation impacting return on investment in some large fertilizer-consuming markets (e.g. Turkey, India and Pakistan); geoplolitical tensions (e.g. sanctions against Iran); and continuous gains in fertilizer use efficiency in developed countries and China.

Consistent with the medium-term trend, world demand is forecast to grow faster for potassium (K) (+1.8%), followed by phosphorus (P) (+0.8%) and nitrogen (N) (+0.3%), because of the need to rebalance fertilization in many regions and reduce N and P losses to the environment.

Regionally, the strongest year-on-year changes in relative terms are expected in Africa (+3.9%) and Eastern Europe & Central Asia (EECA) (+3.7%), while the greatest increase in volume is forecast in Latin America (+0.6 Mt).

Global Fertilizer Demand (Mt nutrients)				
	N	P_2O_5	K_2O	Total
2015/16	104.0	43.5	34.9	182.4
2016/17	104.7	44.2	35.7	184.6
2017/18 (e)	105.6	45.1	36.3	187.0
Change	***+0.8%***	***+2.0%***	***+1.7%***	***+1.3%***
2018/19 (f)	105.9	45.4	36.9	188.3
Change	***+0.3%***	***+0.8%***	***+1.8%***	***+0.7%***
2019/20 (f)	107.4	46.3	37.7	191.4
Change	***+1.4%***	***+1.8%***	***+2.1%***	***+1.6%***

World fertilizer demand in 2019/20 is seen as rebounding firmly, with a growth rate above the medium-term trend, owing to prospects for improving grain prices and a larger area planted to cereals vs. soybean. This positive context is partly offset by growing expectations of greater use efficiency and recycling of plant nutrient sources. Global demand is anticipated to increase by 1.6% to 191.4 Mt.

Led by Brazil, India and Indonesia, world K demand is forecast to be up by 2.1%. India and Brazil are also seen as the leading countries boosting P demand (+1.8%). N demand growth (+1.4%) is anticipated to be driven by a large number of countries in South Asia, Latin America, EECA and North America.

Africa is expected to be the fastest growing market (+4.4%), followed by EECA (+3.5%), Latin America (+3.3%) and South Asia (+3.1%). The largest increase in volume is anticipated in South Asia (+1.1 Mt), followed by Latin America (+0.8 Mt).

FERTILIZER SUPPLY

World fertilizer demand remained relatively subdued in 2018. Global fertilizer markets faced depressed or near stagnant crop prices and rising energy prices in a global context of escalating trade tensions and weakening currencies in some large fertilizer consuming countries. These conditions impacted fertilizer affordability and nutrient demand prospects throughout the year.

Prices of nitrogen feedstock (coal and natural gas) rose throughout 2018; these increases were driven by firming energy demand and some supply restrictions. Several countries announced new initiatives to mitigate greenhouse gas (GHG) emissions by implementing carbon taxes or ETS (emission trading schemes).

Despite a subdued fertilizer market in 2018, the main fertilizer raw materials (ammonia, phosphate rock and primary potash) registered record production levels. Downstream production of urea and MAP (monoammonium phosphate) expanded, while that of DAP (diammonium phosphate) and TSP (triple superphosphate) declined.

World sales of nutrient raw materials in 2018 are estimated at 251 Mt *nutrients*, an increase of 1.2% over 2017. Exports were relatively firm (+2% to 59 Mt) while domestic deliveries rose modestly (+1% to 192 Mt *nutrients*).

Capacity expanded in all nutrient segments, adding close to 4.5 Mt *nutrients* of net capacity and 7.2 Mt *nutrients* of net effective capacity (supply).

Prospects for 2019

World fertilizer demand growth would pick up in 2019, expanding at 1.4%. Global sales of primary raw materials for all uses in 2019 would grow by 1.2% to 254 Mt *nutrients.*

Additional capacity will be commissioned in 2019 in all three market segments, but with significant completion for a few nitrogen and potash projects. Worldwide, 60 new facilities were expected to start production in 2018 and 2019, adding 10 Mt *nutrients* of incremental capacity for primary products (ammonia, phosphoric acid and potash).

Nitrogen Outlook

Global ammonia production in 2018 grew moderately by 1.5% to 175 Mt NH3, driven by higher production in Russia, Africa, the US and South-east Asia. China's ammonia production dropped by 4% compared with 2017, due to tighter environmental controls, feesdstock supply shortfalls, higher coal prices and lower urea exports.

Global ammonia trade in 2018 was dynamic, growing by 5% to 19.7 Mt. Greater ammonia imports were seen in Morocco, India, China, Mexico and Ukraine, but declining in the US. Global seaborne ammonia sales remained static at 16.1 Mt, accounting for 82% of global ammonia trade.

Global ammonia capacity is projected to be 188 Mt *N* in 2019 compared with 184 Mt *N* in 2017. Large ammonia capacity will be commissioned in 2018-2019 in EECA, India, Indonesia, Mexico and the US. In China only marginal ammonia capacity changes will take place in the short term.

The global nitrogen balance in 2018 showed a large increase in the potential surplus due to a substantial supply increment and modest demand growth. In 2019 the global nitrogen imbalance is expected to shrink moderately, reaching 14 Mt *N* of potential surplus.

This pending imbalance, equating to 9% of potential supply in 2019, will put pressure on high-cost producers or those with chronic shortfalls of feedstock supply.

World Nitrogen Supply/Demand (*Mt N*)			
	2017	**2018**	**2019**
Supply	154.8	158.3	159.9
Demand	143.0	144.1	145.8
Balance	***11.8***	***14.2***	***14.1***

Urea outlook

World urea production in 2018 was static at 169 Mt. On average, the world urea industry operated at 79% of nameplate capacity. Excluding China, which accounted for 30% of global production, world urea output rose 4% to 120 Mt.

Global domestic deliveries of urea production were stable at 122 Mt, representing 72% of global urea sales; however, global urea exports softened, decreasing by 1% to 47.7 Mt.

The main trade feature in 2018 was the virtual collapse of China's urea exports, down to 2 Mt, which would account for 4% of global exports in 2018 compared with 10% and 28% in 2017 and 2015, respectively, at their peak levels.

Global urea capacity is projected at 214 Mt in 2018 and 220 Mt in 2019, growing by an overall 3% from 2017 to 2019; the bulk of the net 6 Mt of incremental urea capacity will occur in 2019. Large capacity additions are seen in India, EECA, Nigeria and Mexico.

Global urea supply (effective capacity) is estimated at 188 Mt in 2018 and 189 Mt in 2019. Global demand for urea for all uses would be static in 2018 (169 Mt), growing moderately in 2019 (to 171 Mt).

In 2019 production ramp-up from newly commissioned capacity and the late start of new capacity in 2019 will generate only a marginal increase in supply (+0.6%), whereas demand growth would exceed 1% compared with 2018.

The derived balance shows a steady potential surplus of around 18 Mt in both 2018 and 2019, equating to 10% of potential supply.

Potential regional surpluses would expand in Africa and EECA, while regional deficits would grow in Latin America and Central Europe. Global urea imports are projected to decrease modestly by 1% to 45.2 Mt.

World Urea Supply/Demand (*Mt urea*)	2017	2018	2019
Supply	185.0	188.1	189.2
Demand	168.6	169.1	170.9
Balance	***16.4***	***19.0***	***18.3***

Phosphate Outlook

Global phosphate markets in 2018 have been characterized by firm demand for phosphate rock, while production and domestic deliveries of processed phosphates (MAP, DAP, TSP) showed some weakness.

Global production of processed phosphates (MAP, DAP and TSP) in 2018 slighty declined to 33.9 Mt P_2O_5 (70.7 Mt products), driven by lower output of MAP (and MAP+) and DAP.

However, global sales of processed phosphate fertilizers fell in 2018 due to lower domestic deliveries (-5%) despite higher exports (+4%). There were lower domestic deliveries in the US and China.

Global phosphoric acid capacity would expand in 2018-2019 by an overall 2.5% over 2017, to reach 61.4 Mt P_2O_5 in 2019.

Incremental processed phosphate capacity in 2018-2019 will mainly occur in Morocco, Saudi Arabia and Egypt. Some expansions are also seen in Russia, Kazakhstan, Brazil, India and Turkey. No changes in capacity are expected in China in 2018 and 2019.

Global processed phosphates capacity is projected at 48.6 Mt P_2O_5 in 2018 and 50.3 Mt P_2O_5 2019. DAP will account for more than 78% of the increment, although new large plants have flexibility to shift production mix.

Global phosphoric acid supply in 2019 was estimated at 49.2 Mt P_2O_5, growing 2% over 2017, while phosphoric acid demand for all uses is estimated at 47.2 Mt P_2O_5 in 2019.

The potential supply/demand imbalance would marginally decrease between 2017 and 2019.

Potential regional surpluses would grow in Africa and West Asia, while declining in North America. Potential regional P_2O_5 deficits are projected to expand in South Asia and Latin America.

Global DAP export sales may grow by 1-2%, to 18-19 Mt, with higher imports in South Asia and South-east Asia.

World Phosphoric Acid Supply/Demand (*Mt P_2O_5*)	2017	2018	2019
Supply	48.3	48.6	49.2
Demand	45.7	46.4	47.2
Balance	***2.6***	***2.2***	***2.0***

Potash Outlook

Supported by relatively firm nutrient demand, world sales of primary potassium products in 2018 grew by 2% over 2017, to reach 72 Mt MOP equivalent (MOP_{eq}).

Home deliveries of potash (MOP only) rose by 3% to 15 Mt, but exports were static at 54 Mt. Higher MOP imports were reported in South-east Asia, Brazil and Africa, while remaining steady in China and India and decreasing in the USA.

In 2019 global potash capacity is projected to reach 61 Mt K_2O, compared with 59.7 Mt K_2O in 2017. New capacity would occur in Canada, Russia, China, and Bolivia.

Global potash supply would increase by 10% over 2017 to reach 51 Mt K_2O by year-end 2019, while demand would expand by an overall 4%, to 43.3 Mt K_2O.

The derived potassium supply/demand imbalance shows larger potential surpluses developing in 2018 and 2019. However, due to technical and commercial considerations, potash supply in 2018 was tighter.

On a regional basis, potential surpluses would expand in Canada and Russia, and potential deficits would grow in Latin America, South Asia, East Asia and, to a lesser extent, Africa.

The global potash market will likely remain supply-driven in the near term since new capacity projects in EECA would provide substantial additional potential export-oriented supply. Potential demand growth in the future may come from the industrial sectors, as seen in the urea segment.

Global MOP trade in 2019 is projected to grow by 2%, at around 55 Mt MOP.

World Potassium Supply/Demand (*Mt K_2O*)	2017	2018	2019
Supply	46.3	48.8	51.1
Demand	41.5	42.5	43.3
Balance	**4.8**	**6.3**	**7.8**

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