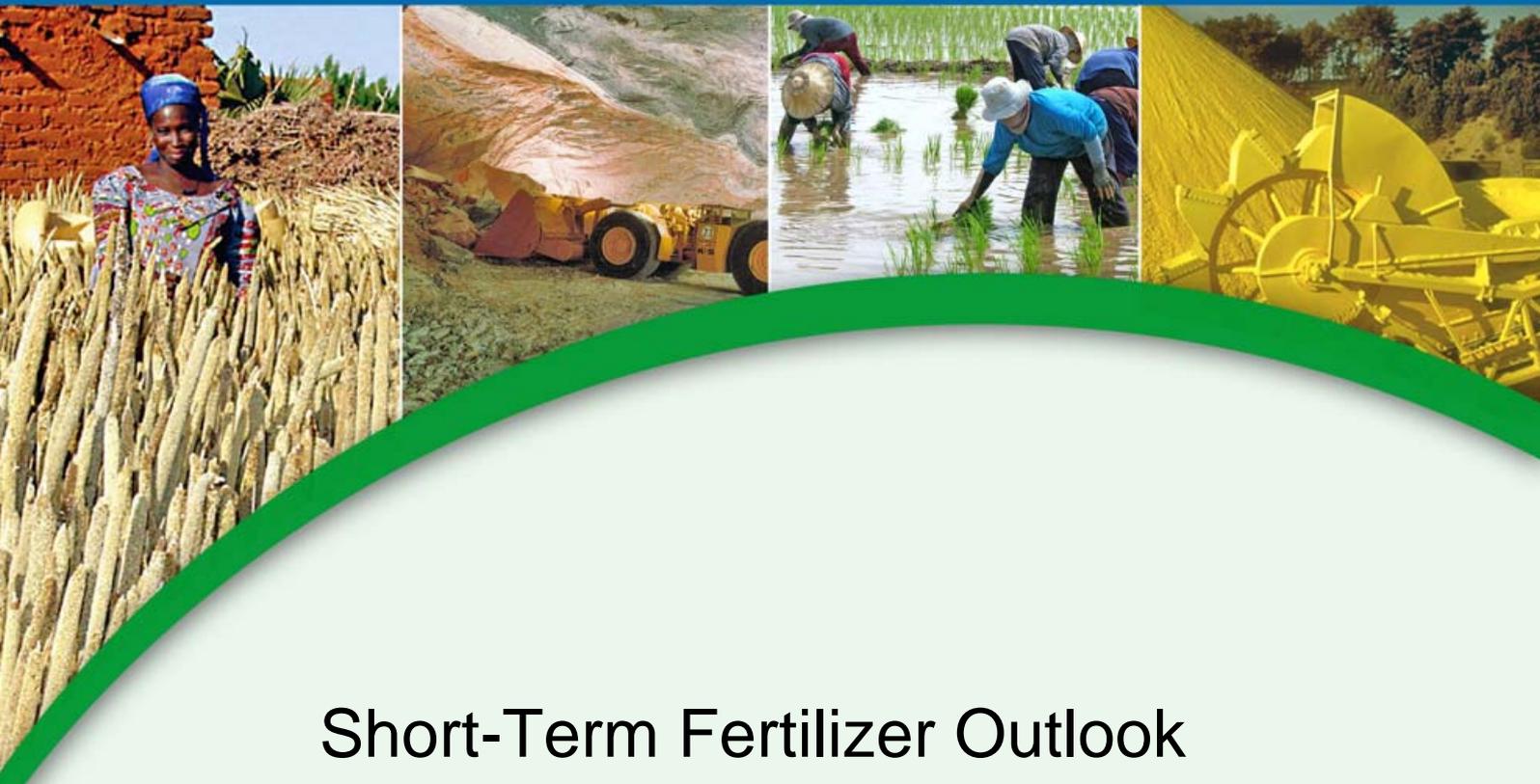


**39<sup>th</sup> IFA Enlarged Council Meeting  
Paris (France), 4-5 December 2013**



# Short-Term Fertilizer Outlook 2013 – 2014

**Patrick Heffer and Michel Prud'homme  
International Fertilizer Industry Association (IFA)**

International Fertilizer Industry Association (IFA) – 28, rue Marbeuf – 75008 Paris – France  
Tel. +33 1 53 93 05 00 – Fax +33 1 53 93 05 45/47 – ifa@fertilizer.org – www.fertilizer.org

This Short-Term Fertilizer Outlook was prepared by Patrick Heffer, Director of the IFA Agriculture Service, and Michel Prud'homme, Director of the IFA Production and International Trade Service. It presents an overview of short-term prospects for world agriculture and fertilizer demand, as well as the global fertilizer supply and trade situation in 2013 and 2014.

This report is available to the general public on the IFA web site, or by request to the IFA Secretariat.

The Short-Term Fertilizer Outlook draws on the final versions of two IFA reports presented at the 39<sup>th</sup> IFA Enlarged Council Meeting held in Paris in December 2013: *Short-Term Prospects for World Agriculture and Fertilizer Demand 2012/13-2014/15 (A/13/155)* and *Global Fertilizer Supply and Trade 2013-2014 (A/13/153b)*. These two comprehensive reports are restricted to IFA members only.

The first part of the Short-Term Fertilizer Outlook looks at the global economic context and agricultural situation. The second part provides updated fertilizer consumption estimates for 2012/13 and demand forecasts for 2013/14 and 2014/15. The third part presents IFA's perspective on fertilizer supply and trade prospects for 2013 and 2014.

*Copyright © 2013 International Fertilizer Industry Association - All Rights Reserved*

#### **Disclaimer of Liability for IFA Reports/Presentations**

IFA endeavours to base its reports and presentations on accurate information, to the extent reasonably possible under the circumstances. However, neither IFA nor its members warrant or guarantee any information IFA publishes or presents, and they disclaim any liability for any consequences, direct or indirect, arising from the use of or reliance upon IFA publications or presentations by any person at any time.

## **PART 1 – GLOBAL ECONOMIC CONTEXT AND AGRICULTURAL SITUATION**

### **1.1. Global Context**

#### ***Growth of world economic activity is seen as recovering in 2014***

Global economic growth in 2013 has been disappointing. World gross domestic product (GDP) is seen as rising by only 2.9%, according to the International Monetary Fund (IMF), compared to 3.9% in 2011 and 3.2% in 2012. Economic activity is seen as gaining momentum in 2014 and 2015, driven by a projected rebound in developed economies. Both IMF and the Organisation for Economic Co-operation and Development (OECD) anticipate a 3.6% increase in global output in 2014, and economic expansion close to 4% a year from 2015.

Growth in China is slowing towards 7%. This slowdown will affect many other countries, especially commodity exporters. Activity in the United States (US) is seen as picking up again in 2014 while, in the Euro area, it seems to be recovering in the core economies and stabilizing in the peripheral ones. The highest growth rates in 2014-15 are anticipated in the emerging economies, especially China, Indonesia and India.

Risks to the economic outlook have decreased compared to a year ago. However, they remain oriented to the downside because high public debt, high unemployment, low consumer confidence and geopolitical instability could impact recovery, which is still fragile.

Anaemic economic activity impacts commodity prices. Oil prices have remained almost unchanged in 2013. IMF's projections to 2014 show modest price declines for both oil and non-fuel commodities. Geopolitical tensions could, however, strongly affect the outlook.

In the current febrile economic context, currencies are subject to significant exchange rate fluctuations. Over the past six months the Indian and Pakistani rupees, the Indonesian rupiah and the Brazilian real have significantly depreciated vis-à-vis the US dollar, while the Chinese yuan has appreciated.

#### ***Amendments to fertilizer subsidy regimes in Asia constitute the main risk to the short-term outlook***

On the policy side, food security remains high on the agenda of most developing countries, especially those with a high population density. An increasing number of Sub-Saharan African countries are taking action against hunger, allocating at least 10% of their national budget to agriculture. In its latest report on the State of Food Insecurity in the World, the Food and Agriculture Organization of the United Nations (FAO) estimates that the number of chronically undernourished people dropped from 852 million during the 2010-12 period to 827 million in 2011-13.

Biofuel production has been a major driver of world agriculture over the past decade. Output expanded much more moderately in 2010, before slightly contracting in 2011 and stagnating in 2012. Biofuel production in the US and the European Union (EU) should evolve marginally in 2013 and 2014. In contrast, ethanol output should rise in Brazil in response to an increase in the blending mandate from 20 to 25% in May 2013.

The EU has recently revised its Common Agricultural Policy (CAP). In September 2013, after two years of negotiations, EU institutions finalized the policy that will be in effect from 2014 to 2020. In November, the European Parliament approved the new CAP. The EU Member States are expected to approve it in December 2013. The new CAP is anticipated to impact fertilizer use in West Europe. In the US, negotiations on the new Farm Bill are still going on. The Senate and House of Representatives are unlikely to reach a compromise before the end of the year.

Fertilizer subsidies are a key driver of world fertilizer consumption. It is estimated that countries subsidizing fertilizers account for about 55% of world demand. Most countries in developing Asia subsidize fertilizers. Moreover, an increasing number of countries in Sub-Saharan Africa have established fertilizer subsidization schemes. Fertilizer subsidies improve the affordability of fertilizers to smallholder farmers but, if not properly managed, they may have negative collateral effects. In recent years, India has seen a surge in its fertilizer subsidy budget and the latest subsidy revision has triggered a trend towards unbalanced fertilization. In this context, the Indian subsidy regime is likely to be revised in the years to come. Bangladesh also amended its subsidy scheme in recent years, which boosted consumption of potash.

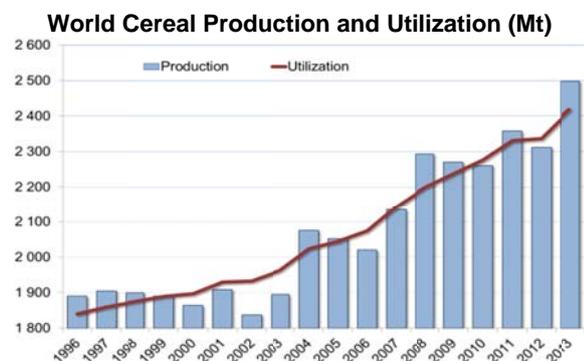
Among the range of fertilizer-related policies, fertilizer subsidies have the greatest impact on fertilizer demand. However, changes to subsidy schemes are hard to predict.

Environmental policies have an increasing influence on nutrient management and fertilizer consumption in developed countries. In recent years, acknowledgement of the importance of environmental objectives has also gained momentum in some emerging economies such as China.

## 1.2. Agricultural Situation

### ***Favourable weather in the main agricultural regions has lifted world inventories, putting prices under downward pressure***

Unlike in 2012, favourable weather conditions have prevailed in the main agricultural regions during most of 2013. In response to attractive grain prices and the favourable weather, the 2013 world cereal output is seen as reaching a new record. FAO's forecasts point to an 8% year-on-year increase and a bumper crop of 2.50 billion metric tonnes. Production in 2013 is estimated to be 6% above the previous record, and 9% above the average of the previous five years. Record outputs are expected for all cereal categories. The 2013 wheat crop would sharply rebound (+7%), following a 6% contraction in 2012 driven by a drought-affected crop in the Commonwealth of Independent States (CIS). The coarse grain output is seen as surging (+11%) in response to a large planted area and a return to average yields in the US and the CIS. The 2013 harvest would surpass the previous record by more than 100 million metric tonnes (Mt). The 2013/14 world oilseed output is forecast to expand by 5% year-on-year, supported by prospects for a record soybean crop in South America and a large harvest in the US. Soybean would account for at least two thirds of the global output gain.



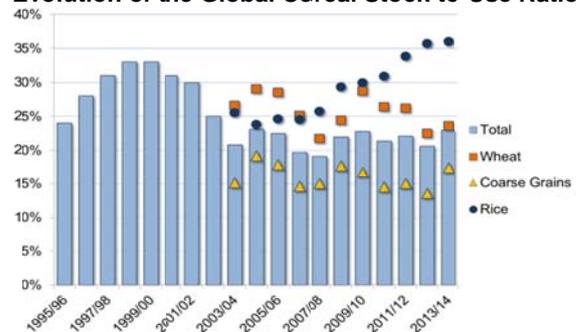
Source: FAO, Nov 2013

Winter wheat plantings for the 2014 harvest are well underway in the northern hemisphere, under generally favourable conditions.

According to the International Grains Council (IGC), the total wheat harvested area would rise by 2% compared to the previous year. In addition, the area to be planted to maize in the US in 2014 would remain very high. With larger availabilities and resulting declining prices, cereal consumption is seen as sharply rebounding in 2013/14, reaching a new record. Stagnating demand from the ethanol industry is seen as boosting feed uses. The strong increase in coarse grain uses would account for three fourths of the aggregate expansion. World oilseed utilization is seen as rising firmly, by 4%, with China alone accounting for at least four fifths of the increase in global imports. A sizable cereal surplus is anticipated at the end of the 2013/14 marketing campaign. There are, however, uncertainties about the size of the surplus, which is forecast at 36 Mt by the United States Department of Agriculture (USDA) and 80 Mt by FAO.

World wheat and coarse grains inventories dropped to very low levels at the end of the 2012/13 campaign. FAO estimates that the stock-to-use ratio for coarse grains contracted to an estimated 13.5% in 2012/13, its lowest level since the first records in 1980. The wheat ratio declined for the third consecutive year, to 22.5%, its lowest level since 2007/08. Closing stocks are forecast to firmly rebound in 2013/14, by 8% according to USDA and by 13% according to FAO. Rebuilding of world coarse grain stocks, driven by a sharp rebound in US maize inventories, would account for at least three fourths of the increase in global cereal stocks. FAO anticipates that the ratio would jump from 13.5% to more than 17% for coarse grains, while the ratio for wheat would increase marginally, reflecting persistent tight market conditions in 2013/14. World soybean inventories are anticipated to rise by 17%, and the stock-to-use ratio would increase to 26%.

### **Evolution of the Global Cereal Stock-to-Use Ratio**



Source: FAO, Nov 2013

With the progressive confirmation of record harvests in 2013, prices of the main agricultural commodities have contracted over the past 12 months (maize, wheat, rice, soybean, palm oil, sugar) or have remained low (cotton). Maize and wheat prices have registered the largest contractions. With the exception of wheat, prices of most commodities are expected to remain under downward pressure in the coming months.

### **Crop prices and fertilizer subsidies greatly influence fertilizer demand**

Declining crop prices will negatively affect the income of cereal and oilseed growers in 2013 compared to last year. However, they should benefit livestock farmers, especially poultry, pig and dairy producers.

Since the beginning of the year, international fertilizer prices have also declined. The ratio between international prices of urea, DAP, MOP and grain have remained relatively stable. Current ratios are in the range observed before and after the food and economic crises. In the current context of declining crop prices, commercial farmers are cautious about their fertilizer investments despite relatively favourable fertilizer-to-crop price ratios.

In contrast, smallholders' purchasing decisions are greatly influenced by the evolution of fertilizer subsidies, especially in developing Asia and Sub-Saharan Africa. Recent examples in India, Bangladesh and Malawi clearly illustrate the major impact of fertilizer subsidy policies on national, regional and global fertilizer demand.

## **PART 2 – GLOBAL FERTILIZER DEMAND**

### **Following a pause in 2012/13, world fertilizer demand is seen as rising firmly, to reach 18 Mt nutrients in 2014/15**

World fertilizer demand is estimated to have stagnated at 176 Mt nutrients in 2012/13. The campaign was strongly hit by a 7.4% contraction of regional demand in South Asia due to the impact of a late southwest monsoon, depreciation of regional currencies, and revision of the fertilizer subsidy rates in India.

The drop in South Asia, as well as smaller declines in North America and Oceania, offset demand expansion in the rest of the world.

P demand was most heavily impacted, with a 0.5% year-on-year contraction. N demand declined by 0.2%, while K demand rose by 1.2%.

### **Global Fertilizer Consumption (Mt nutrients)**

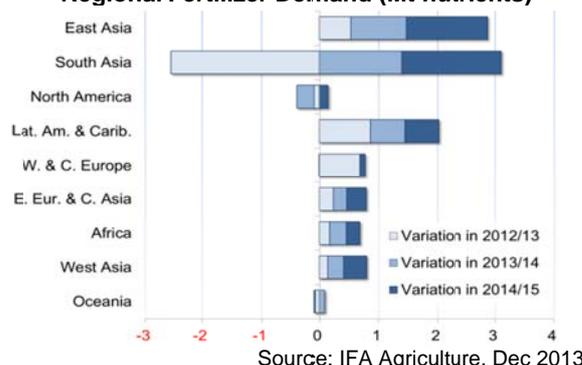
	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	Total
2007/08	100.8	38.5	29.1	168.4
2008/09	98.3	33.9	23.1	155.3
2009/10	102.2	37.6	23.6	163.5
2010/11	104.2	40.6	27.5	172.2
2011/12	107.8	40.6	27.7	176.1
2012/13 (e)	107.6	40.4	28.0	176.0
<i>Change</i>	<i>-0.2%</i>	<i>-0.5%</i>	<i>+1.2%</i>	<i>0.0%</i>
2013/14 (f)	109.6	41.1	28.7	179.5
<i>Change</i>	<i>+1.8%</i>	<i>+1.8%</i>	<i>+2.6%</i>	<i>+2.0%</i>
2014/15 (f)	111.9	42.3	30.1	184.3
<i>Change</i>	<i>+2.1%</i>	<i>+2.7%</i>	<i>+4.9%</i>	<i>+2.7%</i>

Source: IFA Agriculture, Dec 2013

With favourable weather conditions in all the major fertilizer markets, and a progressive rebalancing of fertilization practices in India, world fertilizer demand is forecast to rise by 2.0% in 2013/14, to 179.5 Mt. Declining crop prices and improvements in fertilizer use efficiency are seen as mitigating the potential for a larger increase. Global N demand would rise by 1.8%, to 109.6 Mt. The rebound in South Asia would account for half of the net increase. World demand for P would expand by 1.8%, to 41.1 Mt, and that for K is seen as up by 2.4%, to 28.7 Mt.

Total fertilizer demand is forecast to rise in all the regions but North America and Western and Central Europe. It would rebound in South Asia and Oceania, and would expand in all the other regions.

### **Anticipated Evolution of Aggregate Regional Fertilizer Demand (Mt nutrients)**



Forecasts to 2014/15 are speculative at this stage, in view of the high volatility of agricultural commodity markets and uncertainties about the evolution of fertilizer subsidy schemes in some of the main fertilizer-consuming countries.

Assuming a lack of major changes to agricultural market fundamentals, a progressive change in fertilizer subsidy rates in India, and continuous improvement of fertilizer use efficiency in China, global fertilizer demand is forecast to expand by 2.7%, to 184.3 Mt, in 2014/15. Demand for K would grow firmly (+4.9%), to 30.1 Mt. Demand would rise more moderately for N (+2.1%, to 111.9 Mt) and P (+2.7%, to 42.3 Mt). Demand is forecast to expand in all the regions but Oceania.

The baseline forecast for 2014 and the first half of 2015 is subject to downside and upside risks, especially in relation to the evolution of fertilizer subsidy schemes, weather-related crop shortfalls, and the evolution of world economic activity. For N, risks to the upside and downside are seen to be of relatively similar magnitude. In contrast, risks for P and K demand are seen as higher to the upside, as there is a need to rebalance fertilization in many parts of the world, and demand for P and K may be higher than projected if crop prices rise again in 2014.

### PART 3 – GLOBAL FERTILIZER SUPPLY

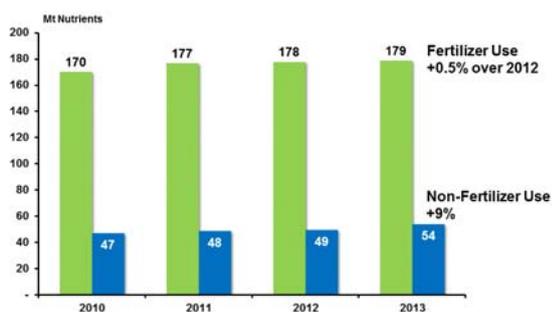
World nutrient demand slowed down in the second half of 2013, due to bearish market conditions prompted by uncertainties, delayed crop harvests and lower agri-commodity prices, affecting fertilizer production and trade levels.

Global fertilizer demand was relatively static in 2013, with depressed consumption in South Asia, while industrial demand continued to expand.

#### Global nutrient sales in 2013

Total nutrient sales in 2013 grew 2% to 232 Mt *nutrients*. Fertilizer sales, which accounted for 78% of total sales, were estimated at 178.5 Mt *nutrients*, growing marginally by 0.5% over 2012. Industrial uses and non-allocated tonnages rose to 53 Mt *nutrients*.

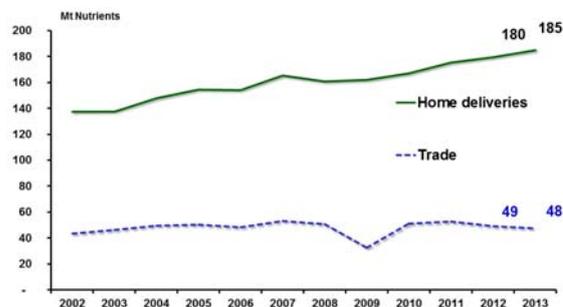
Global Nutrient Uses 2010-2013



Source: IFA Agriculture and Production and International Trade 2013

World nutrient sales were wholly maintained by growing domestic deliveries, as exports dropped by an overall 3%, compared with the previous year. Home deliveries grew 3.4%, to 184 Mt *nutrients*, with an 80% of share of total sales.

Global Nutrient Deliveries 2002-2013



Source: IFA Production and International Trade 2013

The main developments in the international trade of the main nutrients and raw materials in 2013 were firm import demand for urea and sulphur and a recovery in potash trade.

However, nearly all intermediates and raw materials saw lower export levels. Fertilizer demand expanded in North America, Latin America and East Asia. India remained the world's largest importer of urea, DAP, phosphate rock and phosphoric acid. Most of its fertilizer imports expanded, with the exception of DAP. China re-emerged as a prominent importer of potash, while exporting firm DAP levels and record tonnage of urea.

#### Short-term capacity developments

Global nutrient demand was adequately supplied in 2013, with supply covered from production tonnage and important stock carry-overs in a few large consuming countries. Global production of ammonia, phosphate rock and potash totalled 234 Mt *nutrients*, increasing 2% over 2012.

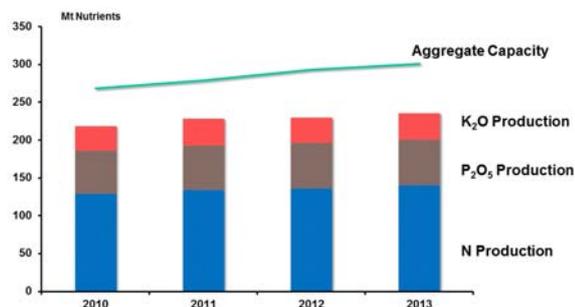
Globally, the fertilizer industry operated at 87% of installed capacity in both 2012 and 2013. There was sufficient spare supply to meet demand in all segments throughout 2013.

However, fertilizer supply has been impacted by a shortfall in the supply of natural gas and by trade measures.

In 2013 global nutrient capacity grew at an aggregate rate of 5% over 2012, adding close to 10 Mt *nutrients*. However, about two thirds of the planned capacity additions in 2012/13 have been postponed to 2013/14 and, in certain cases, to 2015.

In 2014 global nutrient capacity would reach 308.5 Mt *nutrients*, growing 7 Mt nutrient or 3% over 2013.

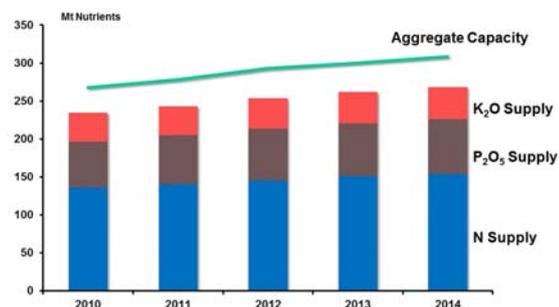
#### Global Capacity and Nutrient Production 2010-2013



Source: IFA Production and International Trade 2013

Since 2008, the fertilizer industry has invested massively to ensure that fertilizer supply adequately meets the growth in global nutrient demand. Several of these projects are now being commissioned. The main greenfield additions to urea capacity in 2013/14 will occur in Abu Dhabi, Algeria, China, India, Indonesia, Saudi Arabia and Venezuela, for a total increment of 17 Mt of urea. New merchant phosphoric acid capacity is seen in Tunisia (2013) and Jordan (2014), while new granulation units for MAP and DAP will mainly be completed in two countries: China and Morocco. Potash incremental capacity will emerge in a few countries: namely Canada, China, and Russia.

#### Global Capacity and Nutrient Supply 2010-2014



Source: IFA Production and International Trade 2013

#### Sales and trade prospects in 2013

Global sales in 2014 would show a worldwide recovery in fertilizer demand and imports. Global nutrient sales may expand by 2.3%, to 237 Mt *nutrients*.

Global trade would increase for nearly all products, with noticeable growth projected for potash, DAP and, to a lesser extent, urea and some feedstock and raw materials, i.e. seaborne ammonia, phosphate rock, phosphoric acid and sulphur.