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# Summary Report

## Global Agricultural Situation and Fertilizer Demand: 2001/02 – 2002/03

IFA Secretariat – Agriculture Committee

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This summary report was prepared by Michel Prud'homme, Executive Secretary of the IFA Agriculture Committee in order to provide an overview of the world agricultural situation and fertilizer demand by major regions and countries for 2001/02 and the short-term prospects for 2002/03.

This summary draws from the revised final version of a report presented at the 70<sup>th</sup> IFA Annual Conference held in Lisbon, May 2002: IFA report A/02/55: *Global Agricultural Situation and Fertilizer Demand*.

2001/02 refers to the fertilizer year from July 2001 to June 2002. All data are expressed in million metric tonnes (Mt) on a nutrient basis (N, P<sub>2</sub>O<sub>5</sub>, K<sub>2</sub>O).

The medium-term forecast is prepared annually by the IFA Secretariat with the assistance of the Fertilizer Demand Working Group of the IFA Agriculture Committee.



## **A Summary of the Global Agricultural Situation and Fertilizer Demand: 2001/02 and 2002/03**

### **Introduction**

After the challenging year of 2000/01, the fertilizer industry was hoping for a quick recovery in fertilizer consumption. The global economic slowdown, combined with weak agricultural commodity prices and unfavorable weather dampened these expectations. These conditions, associated with uncertainties and changes regarding agricultural and fertilizer policies impacted on the sales and utilization of fertilizers in 2001/02.

The global economic recovery in 2002 and beyond, as forecast by the International Monetary Fund in April 2002, would provide a foundation for stronger trade and increased use of agricultural products. A quick recovery would be a turning point for offering improved prospects for both the agricultural and fertilizer sectors.

### **Global Agricultural Situation**

According to the FAO's Food Outlook report of May 2002, world cereal production in 2001/02 rose by 1.3% over 2000/01 and is forecast to increase by 1% in 2002/03 for reaching 1 905 million tonnes (Mt). Two-thirds of the growth will come from developed countries. Output of wheat in 2002/03 is forecast to increase by 3.7% from 2001/02, reflecting a strong recovery in the main producing countries. Coarse grains production is projected by the FAO at 910 Mt, a slight 0.4% increase from last year's level, while rice output is projected to decrease by 1.1 %.

Global cereal utilization continues to grow. The FAO estimates total cereal utilization in 2002/03 at 1 954 Mt, a 0.7% increase over last year. At this projected level, it would be the fourth consecutive year that utilization exceeds consumption. The ratio of production over use has been diminishing during these four years, from 99% to 97%, pointing to an accelerating gap between supply and demand that has resulted in heavy stock withdrawals since 1998. Utilization has sustained a firm 1% annual growth rate for the past five years, while production has increased at less than 0.5% per annum.

In May 2002, the FAO projected that world cereal stocks in 2002 will decline by 50 Mt to reach 515 Mt, a 9% drop from last year's level. Since 1998, global stocks were reduced by an overall 162 Mt or by one-fourth. The average withdrawal of 50 Mt was mostly drawn from Chinese inventories, thus the impacts on the global market have been relatively limited. China has accounted for 50-70% of the global stock withdrawals.

## World Fertilizer Consumption

### Projections for 2001/02

For 2001/02, the recovery in fertilizer demand was short of the expectations, especially in major consuming markets. Fertilizer use rose by 2.0% to reach 138 Mt, a 2.6 Mt increase mostly led by improved demand in South Asia and North America.

However, consumption was slow to recover in 2001/02 from the depressed level of 2000/01. In West Europe and North America, fertilizer consumption rose by 3-4% from the previous year. Fertilizer use in India increased by 9% due to firmer demand in the Rabi season; however, this level was lower than forecast. Fertilizer use registered a strong increase in the CIS and a sustained growth in Oceania and Latin America. Modest increases occurred in South-east Asia while declines were observed in North-east Asia and Near East Asia (mostly caused by a sharp drop in Turkey). Fertilizer use in China was subdued, as nitrogen consumption remained weak for the second consecutive year.

#### GLOBAL FERTILIZER CONSUMPTION ESTIMATES 2000 / 01 – 2001 / 02

(Million tonnes nutrients)

	2000 / 01	2001 / 02	% Change
Nitrogen (N)	80.8	82.2	+1.7 %
Phosphate (P <sub>2</sub> O <sub>5</sub> )	32.4	33.2	+2.5 %
Potash (K <sub>2</sub> O)	22.2	22.6	+1.8 %
<b>Total</b>	<b>135.4</b>	<b>138.0</b>	<b>+2.0 %</b>

- World nitrogen demand rose by 1.7% from the weak level of 2000/01. Consumption increased by 1.4 Mt, mostly on the account of higher use in India, the United States and Russia. Lower than expected nitrogen application in West Europe reflected the growing concerns by farmers in regard to environmental and agricultural regulations. Nitrogen use expanded in Central Europe and Oceania, driven by positive grain prospects. Consumption remained flat in China, South-east Asia and Latin America while declines occurred in Near East Asia and North-east Asia.
- Phosphate consumption rose by 0.8 Mt, a 2.5% increase from the previous year. Demand picked up in most major consuming regions, with the exception of Near East Asia. A recovery was reported in South Asia and North America, while sustained demand continued to prevail in Brazil and Oceania.
- Potash sales registered a 1.8% increase over 2000/01. As for phosphates, demand picked up in South Asia, China and North America. Potash consumption in Latin America continued to grow at a steady rate, with firm sales in Brazil.

## **Regional Fertilizer Situation**

In West Europe, fertilizer consumption in 2001/02 is projected to recover only marginally from the depressed level of 2000/01. Despite higher acreage on wheat and other crops, fertilizer deliveries to cereals in the spring season of 2002 were weak due to a relatively high level of residual stocks at the end of fertilizer year 2000/01. The agricultural sector remains affected by weak commodity prices, increased grain imports from Eastern Europe and the food safety crises.

In Central Europe, cereal production in 2001 increased by 30%, reflecting improved weather and larger plantings. Fertilizer use rose by 5% in several countries but consumption in 2002/03 is forecast to be stagnant due to high residual grain inventories. In 2001, Russia and the Ukraine have benefited from relatively strong economic growth. Fertilizer consumption increased by 8%, due to favorable weather conditions, larger acreages to cereals and improved access to farm inputs.

In North America, fertilizer consumption dropped by 5% in 2000/01 due to a reduction in planted acreage, high nitrogen prices, low crop prices and adverse weather conditions. A slight recovery was registered in 2001/02, driven by higher application rates. In 2002/03, nutrient use in the United States is forecast to increase by an additional 1-2% in response to larger acreage in maize, wheat, soybean and cotton, while in Canada fertilizer use may recover if moisture conditions improve.

In Oceania, fertilizer sales in 2001 registered a 6% increase as the agricultural sector experienced good growth, supported by competitive currencies, improved commodity prices and favorable weather. This trend is expected to continue in 2002/03.

In Latin America, the short-term growth has been dampened by the economic slowdown in the United States and the deteriorating socio-economic conditions in Argentina, which faced a severe currency devaluation and a deepening recession. As a result of the lack of adequate financing and a severe reduction in fertilized area and application rates, fertilizer use in Argentina in 2002 is projected to drop by 30-40%. In Brazil, fertilizer consumption in 2001 has remained stable due to a strong demand for commodity exports. In 2002, maize, wheat and soybean acreage is forecast to expand, favouring a sustained demand for fertilizers.

In Africa, fertilizer consumption in 2001 rose by 2%, due to favorable weather conditions prevailing in South and West Africa. Fertilizer use in South Africa is expected to recover by 4% as planted area for maize was expanded. In 2002, fertilizer consumption is projected to increase marginally in North Africa.

In the Near East, the decrease in the use of fertilizers observed in the last three years is mainly due to the persistent and severe drought or rationed water supply allocated to agriculture. Despite firm demand in Iran and Egypt, fertilizer use in the region decreased by 5% mostly due to a sharp 20% drop in Turkey.

Asia accounts for 50% of world fertilizer consumption. Six countries account for 90% of the regional fertilizer use, with China alone accounting for half of Asia's fertilizer demand, followed by India (25%), Indonesia, Pakistan, Viet Nam and Thailand. In Japan, Korea Republic and Taiwan, fertilizer consumption continues to decline as the agricultural sector is affected by reduced crop acreage, environmental concerns and low product prices.

In India, grain production in 2001/02 recovered from the previous year and reached a record level due to favourable weather conditions. Fertilizer consumption in 2001/02 recovered from the depressed level of 1999/00. In early 2002, the Government of India tabled a series of new agricultural policy proposals to liquidate its high level of rice and wheat stocks. Fertilizer use in 2002/03 is expected to remain firm due to improvements in application rate and larger planted areas.

In China, a combination of reduced plantings and severe drought in the Northern plains in 2001 has led to a further decline in cereal production, which was offset by substantial stock withdrawals. Government agricultural policy continued to limit the production of low-quality crops. Fertilizer consumption in 2001 is estimated to have increased only marginally. In 2002, demand for fertilizers is forecast to recover slightly, supported by a resilient GDP annual growth rate and larger planted areas.

In other Asian countries, the overall fertilizer consumption in 2000/01 dropped by 5% and is projected to remain flat due to depressed commodity prices. In 2001, fertilizer use was strong in Bangladesh, Thailand and the Philippines. Consumption in Malaysia and Indonesia continued to be depressed due to a persistent surplus in palm oil and relatively weak prices; this situation may improve in 2002/03. In Pakistan, shortages of irrigation water and weak prices for rice have constrained plantings and affected overall fertilizer use. In Viet Nam, fertilizer consumption declined by 7% in response to lower planted areas for major crops; however, demand is expected to recover in the coming year.

## Forecast of Global Fertilizer Demand in 2002/03

For 2002/03, the recovery that was initiated in 2001/02 will develop its own course, supported by improving global economic conditions and tightening cereal stocks. World fertilizer consumption is projected to reach 141.2 Mt.

GLOBAL FERTILIZER CONSUMPTION FORECAST  
2001/02 – 2002/03  
(Million tonnes nutrients)

	2001/02	2002/03	% Change
Nitrogen (N)	82.2	84.1	+2.3 %
Phosphate (P <sub>2</sub> O <sub>5</sub> )	33.2	34.0	+2.5 %
Potash (K <sub>2</sub> O)	22.6	23.0	+2.0 %
<b>Total</b>	<b>138.0</b>	<b>141.2</b>	<b>+2.3 %</b>
Sulphur (S)		37.0	

- World nitrogen demand is expected to rise by 2 Mt N; most of this increase is centered in Socialist Asia (China and Vietnam) and South Asia (India, Bangladesh).
- Phosphate consumption is estimated at 34 Mt P<sub>2</sub>O<sub>5</sub>. Improved demand is anticipated in South Asia (India), while a recovery is projected in China and possibly in Viet Nam. Sustained use is forecast in Oceania, Brazil and Russia. A moderate increase is expected in North America and West Europe.
- For potash, world demand is forecast to increase by 2% to reach 23 Mt K<sub>2</sub>O. Firmer sales are expected in India and Brazil while a modest recovery is anticipated in West Europe, North America and China.
- With the assistance of The Sulphur Institute, IFA has estimated that sulphur demand in 2002/03 will be close to 37 Mt S, including 27 Mt for the processing of phosphate fertilizers and 10 Mt for plant nutrition.

## Forecast of Global Fertilizer Demand: 2001/02 to 2006/07

Fertilizer demand is projected to increase moderately in the medium term. Higher fertilizer consumption will be driven by a sustained global economic growth, a relative increase in world population, improvements of disposable income and changes in the daily diet in developing countries, leading to a firm demand for cash crops, feed grains, vegetable and fruit crops.

In the medium term, world fertilizer consumption is projected at 154.5 Mt, equating to an annual growth rate of 2.3%. The forecast is based on the reference year of 2001/02, which can be characterized as a transition year toward a full recovery from the depressed level of 2000/01, which has marked the first contraction in fertilizer use since 1993.

### GLOBAL FERTILIZER CONSUMPTION FORECAST

(Million tonnes nutrients)

	<b>2001/02</b>	<b>2006/07</b>	<b>Annual % Change</b>
Nitrogen (N)	82.2	91.5	+2.2%
Phosphate (P <sub>2</sub> O <sub>5</sub> )	33.2	37.7	+2.6%
Potash (K <sub>2</sub> O)	22.6	25.3	+2.3%
<b>Total</b>	<b>138.0</b>	<b>154.5</b>	<b>+2.3%</b>



