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Vouchers Turn Farmers Into Market Participants

Voucher programs can help smallholder farmers access and buy affordable fertilizer and other inputs in sufficient quantities while strengthening the role of rural agro-dealers. IFDC has used vouchers in successful technology transfer programs in Malawi, Afghanistan, Kyrgyzstan, and Nigeria and is currently helping the governments of Mozambique and Nigeria implement voucher programs.

“Vouchers are coupons that farmers use to buy agricultural inputs at subsidized prices while maintaining or strengthen-

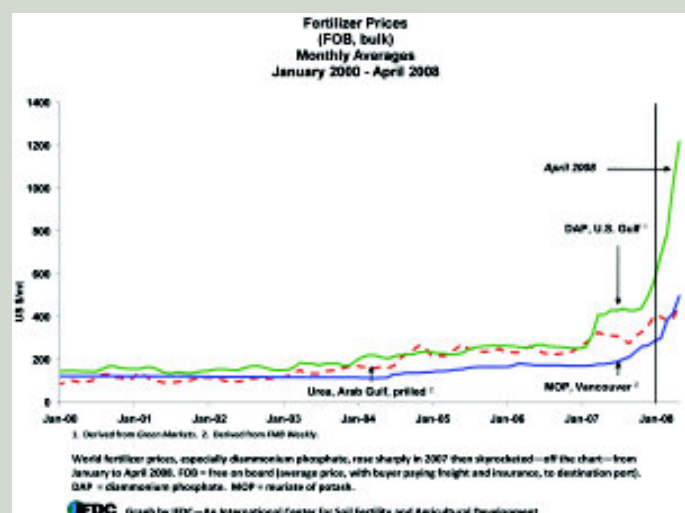


Afghan farmers exchanging vouchers for fertilizer.

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World Fertilizer Prices Continue to Soar as Scientists Stress Need to Increase Fertilizer Efficiency

World fertilizer prices doubled in 2007—but the price of phosphate fertilizers then doubled again, and all fertilizer prices rose, in the 3 months from February through April 2008. The effects on global fertilizer prices of the devastating May 12 earthquake in Sichuan Province, China—a major production area for nitrogen and phosphorus fertilizers—are yet to be determined.



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IFDC Launches New Communication Initiative: Focus on Fertilizers and Food Security

IFDC has launched a new feature on the IFDC Web site: *IFDC Focus on Fertilizers and Food Security*. A link is at the bottom of the home page (www.ifdc.org).

IFDC Focus will identify fertilizer issues, especially as they relate to the rapidly changing world food situation, including: trends in fertilizer prices and production, announcements of new plants, availability of fertilizer raw materials, and the influence of energy issues on fertilizer availability. Related items such as improved methods of fertilizer use, need for research on fertilizer efficiency and the development of new products, infrastructure improvements, and agricultural policies will also be addressed.

Focus will also include analyses of the implications and possible impacts of such issues on world fertilizer production and use and food availability.

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Vouchers Turn Farmers Into Market Participants

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ing the private sector,” says Dr. Amit Roy, IFDC President and Chief Executive Officer.

Organizers of programs to intensify agricultural production provide vouchers to targeted farmers. The farmers then redeem vouchers for products through private agro-dealers who in turn collect payment from the program organizers or financial institutions.

Vouchers can also be used as a form of crop credit, in which farmers pay back the value of the voucher at harvest.

“Vouchers are called ‘smart subsidies’ because they supply inputs to selected farmers without disrupting the commercial market,” Roy says. “In fact, vouchers can *build* both local markets and purchasing power for poor farmers.

“Voucher programs must be designed specifically for a particular country. One thing to look out for is fraud. We must use security measures such as watermarks, expiration dates, and serial numbers to ensure that the farmers who need vouchers most are the ones who receive them.”

Scott Wallace, IFDC Country Representative for Nigeria, says, “The beauty of voucher programs is that they tackle both the immediate need of helping targeted farmers and the long-term need of building the private sector.”

Ian Gregory, IFDC Agribusiness Specialist, says, “Technical assistance and training are integral to voucher programs. Agro-dealers are trained to introduce new technologies and teach their farmer customers how to correctly use inputs. This sets farmers on the road to increased productivity—the route out of the poverty trap.”

IFDC implemented a pilot voucher program in Nigeria in 2004 and has initiated a follow-up program in 2008.

“The federal government of Nigeria subsidizes fertilizer by 25%,” Gregory says.

“IFDC is working with the government to provide an alternate delivery plan that provides improved access to the subsidized fertilizer for smallholder farmers. We’re



Scott Wallace, IFDC Country Representative for Nigeria, center, discussing the importance of fertilizer with villagers in northern Nigeria.

trying to show that vouchers are a means to directly target small farmers.”

Wallace has helped introduce the new voucher program to rural farming communities in northern Nigeria. “A typical complaint among farmers was the limited quantity of subsidized fertilizer made available to rural smallholders,” Wallace says. “For example, one farmer told us that last year their village received only 100 bags of fertilizer through the government subsidy. Thus, farmers received only about 4 to 5 kg each, but they need at least 100 to 150 kg/ha to apply to crops. In many Nigerian states, 75% or more of the subsidized fertilizer goes to large farms or political patrons, leaving very little for smallholder farmers who need it most.

“The state governments sell subsidized fertilizer for as low as 1,000 naira [US \$8.55] per bag—a price that the private sector can’t compete with. Because the rural input dealer network is extremely weak, farmers who want more fertilizer must travel long distances to buy from government warehouses.

“To complement the voucher program, the Agro-Dealer Network Development (AND) project will work to train about 900 agro-dealers across 9 Nigerian states in product knowledge, input safety and handling, business management, and new input technologies.” AND is co-funded by the National Programme for Food Security (NPFS) and the National Food Reserve Agency (under the Federal Ministry of Agriculture and Water Resources).

IFDC introduced vouchers in Afghanistan in 2002 to provide post-conflict emergency

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Vouchers Turn Farmers Into Market Participants

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assistance to about 200,000 farmers, who repaid for inputs provided through the vouchers to their local villages at harvest. The villages then spent the money on infrastructure investments such as improved irrigation systems, feeder roads, and market stands. IFDC trained more than 800 fertilizer traders in input handling and use, agronomy, and marketing. IFDC expanded the voucher program in Afghanistan for the 2005/06 season, issuing about 600,000 vouchers.

World Fertilizer Prices Continue to Soar

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China had already imposed dramatic new export duties on fertilizer, to keep it in the country, effective April 20. New tariffs on nitrogen fertilizers are 130% through September. Tariffs on diammonium phosphate (DAP) and other phosphorus fertilizers are now 135% and will continue through December.

“Soaring fertilizer prices affect the rural poor the most, especially in Sub-Saharan Africa, the world’s poorest region,” says Dr. Amit Roy, IFDC President and CEO.

“High commodity prices allow commercial farmers in developed countries to cope with high fertilizer prices. But rising food prices generally hurt subsistence farmers, particularly in Africa. Those farmers consume most—or all—of their meager harvests.

“Those farmers desperately need fertilizers not only to feed their families but also to replenish their nutrient-depleted soils. The current fertilizer situation emphasizes that we need more research to increase fertilizer efficiency.”

Soaring Prices

The price of DAP increased by five times over the past 15 months. DAP sold for about US \$252 per metric ton (mt) in January 2007, then almost tripled to \$688 by January 2008—and doubled again, to about \$1,230/mt over the past 3 months.

The price of muriate of potash (MOP), the most common source of potassium,

In 2003, IFDC gave vouchers to 100,000 subsistence farmers in Malawi in exchange for 1 month of labor each on village feeder roads. Farmers used the vouchers for improved seeds and fertilizer for growing maize.

“The Malawi program worked well,” Gregory says. “Roads were improved, giving better access to markets. Agro-dealers earned more income and reinvested in more stock for the next year.”

Dr. Balu Bumb, leader of the IFDC Policy, Trade, and Markets Program, says, “More significantly, it reduced the hungry period from 4 months to 1

month in a year for participating households.” (The hungry period is the time families had to rely on food aid.)

Gregory says, “Voucher programs bring farmers and dealers together. We’re trying to make smallholder farmers active market participants.”

Bumb says, “During this period of soaring fertilizer prices, smallholder farmers need support. The targeted voucher system provides the most viable instrument to help the poor without distorting the market, because it kills two birds with one stone: poverty alleviation and market development.”

rose from \$172 to \$288/mt in 2007. By late April 2008, MOP sold for \$500/mt.

The price of urea, the world’s most common nitrogen fertilizer, rose from about \$277 to \$405/mt in 2007 and is now about \$672.50/mt.

Raw Materials for Fertilizer Production

Fertilizers are combinations of the nutrients that plants must have to grow. The most essential elements are nitrogen, phosphorus, and potassium.

Prices of phosphate and potash fertilizers are rising more steeply than the price of nitrogen-based urea because production sources are more limited, Roy explains. Most of the world’s phosphate for fertilizer is mined and thus, an unrenewable resource.

Phosphate fertilizers are manufactured mostly in the United States, Morocco, and along the Baltic Sea. All potash, the source of potassium, is mined. Canada produces 40% of the world’s annual 44 million tons of potash, followed by Russia and Belarus.

The air around us is 80% nitrogen. Energy, mainly natural gas, is used to convert atmospheric nitrogen to usable

The effect of the earthquake in China on global fertilizer prices is uncertain. Even before the earthquake, China had imposed 130%–135% tariffs on fertilizer exports.



A woman farmer in Togo applies urea fertilizer to her crop. Hardest hit by the current high prices of food and fertilizer are hundreds of millions of small farmers in developing countries who live on less than \$1 a day. Most could not afford fertilizers even before the current price increase.

forms such as ammonia and urea. Natural gas is also the main raw material resource to provide hydrogen needed in urea production. That’s why urea plants are dispersed in oil-producing regions worldwide.

Integrated Soil Fertility Management (ISFM) Offers More Efficient Fertilizer Use in Africa

IFDC is developing and implementing application technologies to increase the efficiency of fertilizers for smallholder farmers.

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