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an update on
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From Thousands to Millions, or 1000s+: Progress in the First Year

From Thousands to Millions, or 1000s+, is an IFDC project to increase agricultural productivity and economic growth for 1 million farm families (10 million people) in West Africa. 1000s+ links farmers to markets through expansion of the Competitive Agricultural Systems and Enterprises (CASE) approach.

The CASE approach increases agricultural productivity by improving soil fertility and increasing farmers' access to input and output markets, says Dr. Arnoldus J. Maatman, Chief of Party of the IFDC Strategic Alliance for Agricultural Development in Africa. Maatman is based in Mali.

Crop yields, agricultural revenues, and farm incomes have increased dramatically, benefiting 150,000 farmers in areas where CASE has been used. 1000s+ will not only reach 1 million more farm families, it will also strengthen the capacity of 2,000 agribusiness enterprises.

1000s+ started more than a year ago and targets Benin, Burkina Faso, Ghana, Mali, Niger, Nigeria, and Togo.

"Despite the short time that 1000s+ has been in effect, we've been able to develop action plans for 30 agribusiness clusters together with local producer organizations and business support services," Maatman says. Examples of the agribusiness clusters include maize farmers in southern Mali and soybean producers in northern Nigeria.

"CASE was developed from real field- and enterprise-level learning experiences," Maatman says. "It is based on the recognition that smallholder farmers, local processors, input dealers, and warehouse managers don't know each other well. Often, they even distrust each other. That limits their potential to link to remunerative markets.

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Dr. Arno Maatman (right) meeting with representatives of a farmers' cotton association in Banikoara, Northern Benin.

Photo by Mariëtte Gross

Women in southern Niger receive an IFDC team with a song about Integrated Soil Fertility Management.

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IFDC is a public international organization (PIO), governed by an international board of directors with representation from developed and developing countries. The nonprofit Center is supported by various bilateral and multilateral aid agencies, private foundations, and national governments. IFDC focuses on increasing and sustaining food and agricultural productivity in developing countries through the development and transfer of effective and environmentally sound plant nutrient technology and agribusiness expertise.

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"The CASE approach isn't a miracle solution, but it brings participants together, develops cluster-level action plans, and progressively promotes a collective understanding of potential competitive advantages."

In 2007, 1000s+ activities will expand to cover 60 to 70 CASE agribusiness clusters. Expected 1000s+ outputs are:

- A 50% increase in agricultural productivity and 30% income growth for 1 million rural farm households.
- A measurable increase in environmentally sustainable production on another 2 million ha of farmland.
- Improved food security through an increase in aggregated agricultural productivity of 500,000 tons of cereal equivalents.
- An increase in private sector services to farmers.
- An increase in institutional capacities of producer organizations, agro-entrepreneurs, credit and business service providers, trade associations, and national agricultural research and extension systems.

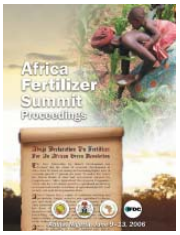
"We've given ourselves 5 years to arrive at those targets, but this will vary from cluster to cluster," Maatman says. "The main difficulty is to facilitate sustainable linkages to markets."

The 12 staff members of 1000s+ include an agribusiness team leader, cluster advisers, and regional specialists.

"In principle, all field-level activities are implemented through sub-contractors, local producer organizations, and business support services," Maatman says. "This, and a low budget approach, helps ensure an ongoing process of rural innovation after the project ends".

"Circumstances in West Africa are difficult, but we have opportunities to accelerate change, target the poorest consumers, and develop new products and markets by substituting or complementing imports," Maatman adds.

1000s+ is sponsored by the Directorate General for Development Cooperation in the Netherlands and IFDC.



Africa Fertilizer Summit Proceedings in Print

The Proceedings of the Africa Fertilizer Summit, held in June 2006 in Abuja, Nigeria, is now available in paperback. The 182-page document includes summaries of presentations, background papers, and discussions on topics that relate to initiation of an African Green Revolution. Presenters include African heads of state, ministers of agriculture, and international agricultural leaders such as Nobel Laureate Dr. Norman Borlaug and former U.S. President Jimmy Carter. The Proceedings can be ordered on the IFDC web site http://www.ifdc.org. Each copy includes a CD of background papers.

IFDC Helps Build Agricultural Markets in Afghanistan

IFDC is helping Afghanistan develop its input marketing system through the Accelerated Sustainable Agriculture Program (ASAP) in partnership with Chemonics International, Inc. ASAP builds on the success of the Rebuilding Agricultural Markets Program (RAMP), a program to improve Afghanistan's food security that began in 2003 and ended in June 2006. The U.S. Agency for International Development (USAID) funded both RAMP and ASAP, with Chemonics as the lead implementing agency.

"Decades of turmoil have left Afghanistan with almost no industry, little trade, and little infrastructure for agricultural development," says Dr. Har Bhajan Singh, IFDC Senior Marketing Specialist.

Agriculture accounts for more than 50% of Afghanistan's gross domestic product; 80% of its population is rural.

IFDC developed a curriculum of business classes through RAMP to train about 1,700 agri-input dealers. Trainees received free agribusiness literature and were taught to develop business linkages.

"We'll train 300 to 400 more dealers through ASAP," Singh says.

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A trained agri-input dealer sells fertilizer to farmers.

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Like RAMP, ASAP will develop agri-input dealer associations in Afghanistan. IFDC helped local agri-input dealers establish one national and seven regional trade associations through RAMP. Trainees met with agricultural associations and companies and learned about regional marketing during study tours to Pakistan and India. Today, several trainees are doing business with contacts made on the study tours.

"The volume of trade in agri-inputs has increased more than 100% through better business practices introduced through RAMP," Singh says.

ASAP will expand on these accomplishments by developing market-led value chains and improving fertilizer quality control.

IFDC will link agri-input dealers and farmers to increase the production and value of grapes, raisins, apricots, pomegranates, almonds, walnuts, pistachios, sheep for wool, and goats for cashmere.

"ASAP will add value to raw fruits by processing them into industrial products," Singh says. "For example, tomato juice brings more profit than tomatoes."

IFDC will also facilitate two fertilizer testing laboratories and train lab technicians and inspectors in quality control.

"Afghanistan's government does not currently have fertilizer testing facilities," Singh says. "Farmers have been complaining about poor quality products. We're building the government's capacity to ensure high-quality fertilizer."

IFDC will continue work through ASAP until 2010.

IFDC Monetizes Commodities To Improve Afghanistan's Crop Production

IFDC "monetized," or sold, more than 15,000 tons of agricultural commodities to entrepreneurs in the private sector and used the earnings to stimulate local farm production in Afghanistan. About 5,150 tons of soybean oil were sold in Afghanistan and 10,000 tons of soybeans in Pakistan from December 2005 to May 2006 through a grant from the U.S. Department of Agriculture's Food For Progress program. IFDC used all proceeds to implement the Food for Agricultural Revitalization and Market Systems (FARMS) project in Afghanistan.

"IFDC introduces technologies and nutrient management practices through FARMS to improve crop production for staple crops such as wheat and maize, and higher value crops such as oilseed and vegetables," says Dr. Deborah Hellums, IFDC Coordinator of Field Projects. "We also plan to work with Afghanistan's milling industry to improve the quality of milled wheat and identify new markets.

"Wheat trials have been established to demonstrate improved varieties, proper fertilizer use, and insect and disease control on 5 research stations and 120 farms."

FARMS is collaborating with Afghanistan's Ministry of Agriculture, Irrigation, and Livestock (MAIL) to determine best practices to increase crop production. Local IFDC and

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Inspecting a wheat trial near Kunduz, Afghanistan, are Mir Hassamuddin Hashmi (left), IFDC's Liaison to Afghanistan's Ministry of Agriculture, and Dr. Paul Wilkens, IFDC Scientist—Programmer.

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MAIL staff gather information on crop growth to test crop simulation models.

"Linking those models to geographic information systems will help us develop decision-support tools, such as land suitability maps, to spread knowledge," Hellums says.

The late David Rutland of IFDC sparked FARMS' success by taking a business-like approach to the commodity-monetizing phase of the project, Hellums adds.

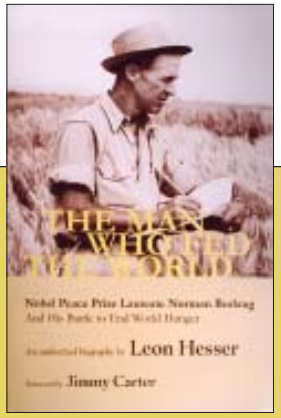
"David researched the markets, advertised the sales, and tracked the commodities," Hellums says. "His detailed assessment of the oil market helped us maximize the commodity proceeds."

FARMS continues to use the proceeds to develop Afghanistan's agricultural economy.

A worker with MAIL preparing vegetables for transplanting.

An Afghan man inspects grapes at a research station near Kabul, Afghanistan.

Biography of Norman Borlaug Published



The Man Who Fed The World, a new biography of Dr. Norman Borlaug, was published in September 2006 by Durban House Publishing Co., in Dallas, Texas, U.S.A. The book documents scientific and humanitarian achievements of the 1970 Nobel Peace Prize laureate. The author, Leon Hesser, is a former U.S. Foreign Service Officer who worked with Borlaug to increase wheat production in Pakistan in the 1960s.

"Reading *The Man Who Fed the World* is a chance for you to listen to Dr. Borlaug and see his career unfold," wrote Dr. Ed Runge of Texas A&M University in a book review published in *Crops, Soils, Agronomy News*. "It is a must read for everyone in agriculture, particularly agronomists, plant breeders, and soil scientists." Runge serves on the IFDC Board of Directors.

Hesser writes how Borlaug's childhood on an Iowa farm led to his career as an agricultural scientist focusing on global food crises. Borlaug, 93, is known as the "Father of the Green Revolution" for his development of the high-yielding wheat varieties that increased production dramatically in Asia and Latin America.

Former U.S. President Jimmy Carter wrote in the book's foreword, "My good friend Norman Borlaug has accomplished more than any other one individual in history in the battle to end world hunger."

In 2006, Borlaug was awarded the Congressional Gold Medal—the highest civilian honor in the United States. He is Distinguished Professor of International Agriculture at Texas A&M. Borlaug served on the IFDC Board from 1994 to 2003.

Announcements

Mr. David E. Benafel accepted employment with IFDC effective March 5, 2007, to serve as Program Administrator for the West Africa Cotton Improvement Program (WACIP), with posting to Bamako, Mali. Mr. Benafel received his B.S. in Political Science from Willamette University, Salem, Oregon. His professional experience includes the following assignments: Chief of Party, ACDI/VOCA, Cabinda, Angola; Country Representative, Opportunities Industrialization Centers International, Guinea; Assistant Director for Programs, Bureau de Nutrition et Developpement (BND), Port au Prince, Haiti; Regional Director, Catholic Relief Services, Les Cayes, Haiti; Project Coordinator, Africare, Inc., Guinea-Bissau; Cooperatives/Credit Manager, Africare, Inc., Mali; Project Manager, Cooperative for American Relief Everywhere (CARE), Inc., Mali; Volunteer, Peace Corps, Mali. Mr. Benafel's e-mail address is dbenafel@ifdc.org.

Mr. Omprakash Choudhury joined IFDC as Specialist – Engineering in the Research and Market Development Division (RMDD) on June 1, 2007. Mr. Choudhury earned a bachelor of technology, chemical engineering, from the University of Calcutta, India, and an M.S. degree in environmental engineering from the South Dakota School of Mines and Technology. Mr. Choudhury's previous employment experience includes service as process engineer in DAP, Oswal Chemicals and Fertilizers Limited, Paradeep, Orissa, India, and chemical engineer for Hindustan Petroleum Corporation Limited, Tamilnadu, India. Mr. Choudhury's contact information is: Office – Pilot Plant, e-mail ochoudhury@ifdc.org, telephone extension 328.

Mr. Robert P. (Bob) Gray joined IFDC as Specialist – Engineering in the Research and Market Development Division (RMDD) on May 15. Mr. Gray earned a B.S. degree in chemical engineering from the University of South Florida. His previous experience includes employment with HiTech Solutions, Inc., Lakeland, Florida, where he served as process engineer/coordinator with Litwin Italia in Milan, Italy, on the Ma'aden phosphate project, and project engineer of the design group for field work at PCS White Springs, Florida; Aurora, North Carolina; and Oswal, Paradeep, India. Mr. Gray was also employed by Integrated Environmental Solutions, Inc, Winter Haven, Florida, as staff engineer. Mr. Gray's contact information is: Office – Pilot Plant, e-mail bgray@ifdc.org, telephone extension 318.

Dr. Joaquin Sanabria joined IFDC as Scientist – Biometrician in the Research and Market Development Division (RMDD) on May 7, 2007. Dr. Sanabria earned a Ph.D. in Soil Science (Specialty areas: soil physics, evapotranspiration, and statistics) from Oklahoma State University. Dr. Sanabria has acquired more than 15 years of experience applying basic and advanced experimental designs, generalized linear models, mixed models, categorical methods, non-parametric methods, survival analysis, multivariate analysis, time series, probability theory and simulation models in agricultural, soil science, environmental, life sciences, and chemical research. His previous research experience includes employment with Texas A&M University System - Texas Agricultural Experiment Station, Blackland Research and Extension Center, Temple TX; Oklahoma State University, Department of Agronomy; Colombian Institute of Agricultural Research (ICA). Statistics and Biometry Department. Bogotá, Colombia; La Salle University. Department of Food Science. Bogotá, Colombia; and National University of Colombia, Agronomy Department. Dr. Sanabria's contact information is: Office 147, e-mail jsanabria@ifdc.org, telephone extension 322.

Mr. Manfred Smotzok returned to IFDC effective February 15, 2007, as Chief of Party – Food and Agricultural Revitalization and Markets System (FARMS), with posting to Kabul, Afghanistan. Mr. Smotzok was previously employed by IFDC as Chief of Party, Agri-Input Market Development in Azerbaijan (AMDA), Baku, Azerbaijan. Since that time he has served as Mission Leader for Economic and Rural Development in Selected Regions of Uzbekistan and Management Adviser, Agro-Processing and Promotion of SME in the Fruit and Vegetable Sector, Bosnia-Herzegovina. Mr. Smotzok holds an M.A. in Development Studies (agriculture and rural development) from the Institute of Social Studies, The Hague, Netherlands. Mr. Smotzok's e-mail address is msmotzok@ifdc.org.

Dr. Julio Henao, Senior Scientist – Biometrics, RMDD, retired April 30, 2007.

Dr. Walter T. Bowen completed his assignment as Resident Project Coordinator – ANMAT II effective April 30, 2007.

IFDC's Phosphate Rock Decision Support System is Available on the Web

IFDC scientists, in collaboration with the International Atomic Energy Agency (IAEA), have developed a Phosphate Rock Decision Support System (PRDSS) to predict the feasibility of phosphate rock (PR) for direct application to crops. PRDSS is available on the FAO/IAEA web site http://www-iswam.iaea.org/dapr/srv/en/resources. It is identified as Direct Application of Phosphate Rock.

There is a renewed worldwide interest in PR for direct application because PR is a natural raw material that is a nutrient-rich source for phosphorus, according to Dr. Upendra Singh, IFDC Senior Scientist—Systems Modeling (Soil Fertility). "Interest in PR as a natural source of phosphorus could open future markets to exports from developing countries," Singh says. Africa has abundant PR deposits.

PRDSS results from 25 years of evaluation of PR applied to crops in Latin America, Asia, and Sub-Saharan Africa. The decision support tool functions with minimal input: soil pH, PR source, and crop species. PRDSS can also use farm gate prices to determine if water-soluble phosphate or PR is more economical.

The web-based tool is user-friendly and easy to navigate, says Dr. Henk Breman, IFDC Principal Scientist and Adviser to the project Catalyze Accelerated Agricultural Intensification for Social and Environmental Stability (CATALIST), based in Rwanda. "I have used PRDSS on the web site to compare rock from Burundi and Tanzania. Even as a layman, I was able to obtain answers."

A technical article about the tool, "Development of a Phosphate Rock Decision Support System for Direct Application," by Suzette Smalberger, Upendra Singh, Sen H. Chien, Julio Henao, and Paul W. Wilkens, was published in the May-June 2006 issue of *Agronomy Journal*.

AIMS Project Sponsors Stakeholder Workshop in Mozambique

About 50 agricultural scientists and leaders participated in the National Stakeholders Workshop for Developing Agricultural Input Markets (AIMS) on March 22 in Beira, Mozambique. IFDC organized the workshop in collaboration with the International Institute of Tropical Agriculture (IITA), the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), and the Citizens Network for Foreign Affairs (CFNA). The U.S. Agency for International Development (USAID) funds the AIMS project.

"In Mozambique, the supply of inputs is a critical link to improving crop production," said Dr. Amit Roy, IFDC President and CEO, who spoke at the workshop. AIMS provides training and technical assistance to improve the efficiency and profitability of private enterprises engaged in agricultural input supply. These objectives are in line with the goals of the Abuja Declaration on Fertilizer for an African Green Revolution, adopted at the Africa Fertilizer Summit in June 2006.

The keynote address was delivered by Dr. Calisto Bias, General Director of the Agricultural Research Institute of Mozambique. Strengthening the capabilities of the agri-input distribution system in Mozambique is of utmost importance, Dr. Bias told the participants. The current framework is weak, he said, adding that input costs are high and availability is low.

"A non-conducive policy environment, lack of rural dealer networks and market information, limited access to finance, and poor enforcement of regulatory frameworks are contributing to the under-use of inputs in Mozambique," said Dr. Balu Bumb, IFDC's Program Leader and Principal Scientist—Policy, Trade, and Markets Program. He emphasized the need for public and private partnership in his address.

Dr. Larry Hammond, AIMS Chief of Party/Marketing Specialist, pointed out that dealer development activities will initially focus on the Beira and Nacala Corridors.

IFDC Assigns Economist to Help NEPAD Implement Abuja Declaration

IFDC has assigned Dr. Maria Wanzala, agricultural economist, to the Secretariat of the New Partnership for Africa's Development (NEPAD) in Johannesburg, South Africa. The 2-year secondment is to facilitate implementation of the Abuja Declaration on Fertilizer for an African Green Revolution. This historic document was the key outcome of the Africa Fertilizer Summit held in Abuja, Nigeria, June 9-13, 2006. The Summit was the first collective step taken by African Heads of State to address Africa's fertilizer crisis.

IFDC has assigned Dr. Maria Wanzala (left), agricultural economist, to the New Partnership for Africa's Development (NEPAD) to help implement the 12 resolutions of the Abuja Declaration on Fertilizer for an African Green Revolution (on wall). To the right is Prof. Richard Mkandawire, NEPAD Agriculture Adviser.

The Abuja Declaration declared fertilizer, both mineral and organic, a "strategic commodity without borders"—meaning that all cross-border taxes and tariffs should be lifted. The Declaration also set a target for average fertilizer use in Africa of 50 kg/ha by 2015. The Declaration gives concrete actions that countries and Regional Economic Communities (RECs) can take to reach this goal.

"Africa faces a soil health crisis due to decades of nutrient mining without replenishment," Wanzala says. "The Declaration's 12 resolutions to increase fertilizer use are ambitious but necessary to reverse Africa's low agricultural productivity and reach the first U.N. Millennium Development Goal of eradicating extreme poverty and hunger in Africa by 2015."

Wanzala, a Ugandan citizen, also works closely with the Alliance for a Green Revolution in Africa (AGRA), based in Nairobi, with funding by The Rockefeller Foundation. She works 50% of the time for NEPAD and 50% for AGRA.

The Summit, implemented by IFDC, was one of the largest and most comprehensive agricultural gatherings ever held in Africa. Its 1,100 participants from 40 countries included Heads of State, ministers of agriculture, and hundreds of leaders of international organizations, agricultural research centers, NGOs, and private sector companies.

"Dr. Wanzala is well-qualified to help implement the Abuja Declaration—she already knows many of Africa's agricultural leaders," says Dr. Amit Roy, IFDC President and CEO. Wanzala represented IFDC as the Africa Fertilizer Summit Adviser to NEPAD from October 2005 to June 2006. She was then Fertilizer Sector Development Adviser to NEPAD until January 2007. She is now Coordinator—Agricultural Input Markets Development Program in NEPAD's Agriculture Unit.

"Improved plant varieties are available to make an African Green Revolution possible," Wanzala says. "But the full yield potential of these improved varieties cannot be realized without significantly increased use of mineral fertilizer." Fertilizer rates range from 100 to 200 kg/ha in the "Green Revolution" countries of Asia.

The resolutions stress the need for capacity-building for farmer organizations, civil society, and the private sector; improved infrastructure; and development of output markets.

The Declaration calls for the African Development Bank (AfDB) to establish an *African Fertilizer Development Financing Mechanism* to develop dealer networks, support regional fertilizer procurement and distribution, provide credit guarantees for fertilizer importers and distributors, and develop local fertilizer manufacture in Africa.

The Declaration calls for the African Union Commission (AUC) and NEPAD to develop a mechanism to monitor and evaluate its implementation and for the AUC to provide a progress report every 6 months to the Heads of State at the African Union General Assembly.

"The African Union Member States face challenges in responding to the Declaration resolutions because of the diversity of economic, cultural, linguistic, and political conditions, and the technical and financial capacity constraints," Amit Roy says.

"Maria has a big job—to follow up with the countries and Regional Economic Communities to see that the measures and actions delineated in the Declaration are implemented."

"NEPAD has declared that the vision of economic development in Africa must be based on raising and sustaining higher rates of economic growth," Wanzala says. To realize this vision, the African Heads of State have adopted the Comprehensive Africa Agriculture Development Program (CAADP) as a framework for the restoration of agriculture growth, food security, and rural development. Wanzala is to attend all of the CAADP Country Roundtables and facilitate the preparation and implementation of the CAADP country plans.

Africa's continuing decline in per capita food production, combined with increasing poverty and hunger, led former U.N. Secretary General Kofi Annan to call for "a uniquely African Green Revolution." He pointed out that food productivity in Asia had tripled, but "Africa has not yet had a Green Revolution of its own."

"I'm honored to be a part of the revitalization of African agriculture by working with NEPAD and AGRA toward a common objective—Africa's *own* Green Revolution," Wanzala says.

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