



**THE INTERNATIONAL FERTILIZER DEVELOPMENT CENTER  
ANNOUNCES AN INTERNATIONAL TRAINING PROGRAM**

# **Improving Fertilizer Quality for Highly Productive Agriculture and Balanced Nutrition**

*Arusha, Tanzania, March 19-23, 2018*



# BACKGROUND

For highly productive agriculture and balanced nutrition, it is imperative that fertilizers meet quality standards and that there are effective and efficient quality control systems that ensure delivery of good quality fertilizers to farmers.

Through enabling fertilizer laws and regulations, countries in North America, Europe, and Australia solved the problems associated with fertilizer quality in the mid-20th century. Ensuring fertilizer quality in these countries was an important factor for the development of strong agriculture sectors that provided the food, prime materials, and capital needed for industrialization and further strengthening of economies.

Despite numerous initiatives taken to improve fertilizer regulations, fertilizer quality issues remain a challenge in most of the developing countries in Africa, Asia, and Latin America. Recent studies conducted in the fertilizer markets of West African countries found numerous products with nitrogen, phosphorus, and potassium contents with 50 percent or higher shortages relative to the label specification.

The use of substandard or low-quality fertilizers has several potential consequences for the agriculture sector as a whole and to the economy. Because such products cannot bring the required nutrients to the soil, they affect crop growth and development and decrease agricultural productivity. This affects the finances of individual farmers and the economies of entire regions and countries – especially in countries where the agriculture sector dominates the economy, such as most of Africa, Central and South Asia, and several countries in Latin America. Low fertilizer quality in these regions is an important obstacle that not only undermines trust in fertilizer quality – discouraging farmers from using fertilizer at all – but that also curtails the efforts of governments and private organizations to pursue food security, reduce of poverty, and spur national economic growth.

Many countries with serious fertilizer quality problems should put in place laws and regulations to ensure efficient and effective quality control systems to take care of the problem. It is crucial to have a fertilizer regulatory system that not only properly regulates the type and quality of fertilizer that is sold in markets but that also ensures all participants in the fertilizer supply chain can make informed decisions in the production or blending of the product, as well as in its purchase and sale. Establishment of regional fertilizer quality regulatory systems (within existing regional economic communities) and implementation of the quality rules along the fertilizer distribution chains are key solutions. Implementation of regulatory systems demands knowledge about fertilizer markets, chemical and physical properties of fertilizers, identification and quantification of quality problems, and identification and quantification of factors with the potential to affect fertilizer quality.

To improve the knowledge, understanding, and skills of those involved in fertilizer manufacturing, procurement, distribution, usage, and legislation, IFDC will conduct an international training program entitled “Improving Fertilizer Quality for Highly Productive Agriculture and Balanced Nutrition.” The program will be held in Arusha, Tanzania, March 19-23, 2018. This training program, which will draw on lessons learned and best practices from IFDC and its partner organizations, targets all key players in the fertilizer value chain in developing countries.



## OBJECTIVES

As a result of the five-day training program, participants will be able to:

- Identify chemical and physical properties or fertilizers and fertilizer management factors that determine fertilizer quality.
- Identify external factors (not fertilizer properties) related to fertilizer quality.
- Apply methodologies to assess fertilizer quality at company, regional, or national levels.
- Contribute to the design and implementation of national or regional regulations that should be in place to ensure quality in the fertilizer markets.

## WHO SHOULD ATTEND

The five-day training program is designed for:

- Policymakers, and government officials in the Ministries in charge of establishing and implementing fertilizer regulations and quality control systems.
- Leaders of the private sector such as representatives of agro-dealer associations and regional farmers' organizations that have an economic interest in these policies and regulations.
- Executives, scientists, technicians, and administrators from the fertilizer manufacturing industry.
- Executives, managers, and researchers of agro-industry.
- Representatives of regional economic communities charged with harmonizing such regulations and removing barriers to regional trade.
- Donors and financial institutions working in the field of agro-input market development.
- Academics interested in bolstering their knowledge of fertilizer quality procedures.



# CONTENT

IFDC offers a training program that covers all the scientific aspects needed for conducting fertilizer quality assessments, including:

- Chemical and physical properties of fertilizers.
- Explanation of fertilizer container labels.
- Fertilizer specifications and labeling requirements.
- Characterization of fertilizer quality problems (nutrient deficiency, adulteration, physical property degradation, misbranding, etc.).
- Fertilizer quality and balanced nutrition.
- Statistical concepts for developing samples of fertilizer distributors (dealers of different types) and sampling fertilizers in dealers' shops/warehouses.
- Techniques for sampling of solid and liquid fertilizers in dealers' shops/warehouses.
- Evaluation of fertilizer physical properties in dealers' shops/warehouses.
- Identification and characterization of factors that affect fertilizer quality:
  - Direct factors: Fertilizer properties, management of fertilizers, conditions of storage.
  - Indirect factors: Characteristics of markets, dealers, and other distribution chain characteristics.
- Techniques for data collection.
- Extensive practice of fertilizer sampling and data collection.
- Evaluation of labs for chemical analysis.
- Statistical analysis of data.
- Concepts about fertilizer quality policy and regulatory systems.

# METHODOLOGY

The program will include formal instruction covering theoretical and practical aspects of fertilizer quality and hands-on practice of methodologies in commercial fertilizer warehouses. Interactive discussion involving the technical leaders and participants from diverse backgrounds (e.g., agricultural researchers, fertilizer manufacturers, agricultural producers, government officials, etc.) will be integral parts of the program to ensure that specific interests of the participants are covered.





## FACULTY

The program faculty will include subject matter experts from IFDC and partner organizations.

## VENUE

The workshop will take place at the Naura Springs Hotel, which is located on East Africa Community Road just off the Nairobi Road in the heart of Arusha, Tanzania. Naura Springs is close to the Arusha International Conference Center (AICC) and overlooks magnificent Mount Meru and Mount Kilimanjaro. The hotel is easily accessible – just 45 minutes from Kilimanjaro International Airport (JRO), 1.5 hours from the Namanga border and five minutes from the city center. Transportation from the airport to the hotel can be arranged for a fee by contacting the hotel.



Naura Springs Hotel has agreed to offer IFDC registered participants the exceptional rate of U.S. \$55 per room/per night for reservations made no later than **February 19, 2018**. This rate is for standard single rooms and inclusive of breakfast and all taxes. All rooms have digital satellite TVs, internet connection, direct dial-out facilities, mini-bars, safety deposit boxes, tea- or coffee-making facilities, as well as spacious bathrooms with jacuzzis and showers. All rooms face magnificent Mount Meru and Mount Kilimanjaro. Participants should plan to arrive in Arusha, Tanzania, on **Sunday, February 18, 2018**.

Please fill out the attached room reservation form and return via e-mail to [jthigpen@ifdc.org](mailto:jthigpen@ifdc.org) NO LATER THAN February 19, 2018, in order to reserve your room!

### NAURA SPRINGS HOTEL

East Africa Community/Nairobi Rd.  
 P.O. Box 7302, Arusha, Tanzania  
 Contact: Beatrice Dallaris  
 Phone: +255-27-2050001/8  
 Fax: +255-27-2050009/10  
 Mobile: +255-754 318076  
 E-Mail: [naura@nauraspringshotel.com](mailto:naura@nauraspringshotel.com)  
 Website: [www.nauraspringshotel.com](http://www.nauraspringshotel.com)

## COST AND ENROLLMENT

The program fee for this training course is US \$1,650 per participant (inclusive of a US \$250 non-refundable deposit) and should reach IFDC no later than February 19, 2018, four weeks before the program is scheduled. Those received thereafter will be accepted at IFDC's discretion and incur a late fee. Participants will be given the opportunity to take advantage of an early bird rate if registration and payment is received by IFDC prior to January 19, 2018. Please refer to the table below for pricing:

Early Bird: Registration and Payment by January 19, 2018	Regular: Registration and Payment by February 19, 2018	Late: After February 19, 2018
\$1,500	\$1,650	\$1,800

The program fee, less the non-refundable deposit, will be refunded for cancellations made two weeks before the commencement of the program. Ninety percent of the paid fee will be returned and 10 percent, in addition to the deposit, will be charged to cover administrative costs for cancellations made between two weeks and one week before the commencement of the program. Cancellations made less than one week before the commencement of the program will receive no refund.

Registration will be on a first-come, first-served basis. Paid participants will receive priority. An organization wishing to enroll more than one participant should supply information and payment for each participant.

Payment of the program fee can be made by: (1) check or draft payable to IFDC; (2) wire transfer to IFDC's account in the U.S.A. through First Metro Bank, 406 West Avalon Avenue, Muscle Shoals, Alabama, U.S.A., ABA number 062203955 for credit to IFDC account number 55281; or (3) major credit card – MasterCard, Visa, or American Express. The program fee covers registration, training and reference material, coffee/tea breaks, all lunches, and surface transportation on field trips. The fee does not include air travel, lodging, and dinner expenses or medical and communication expenses.

## ABOUT IFDC

IFDC is a nonprofit, public international organization (PIO) dedicated to increasing agricultural productivity and food production through the development and use of plant nutrients in sustainable crop production systems. Headquartered in Muscle Shoals, Alabama, U.S.A., IFDC is involved in human resource development, research and technical assistance in collaboration with public, private, national, and international organizations throughout the world. IFDC has conducted more than 700 formal workshops, study tours and training programs for over 11,000 participants from over 150 countries since 1974. The programs have covered a wide range of subjects including integrated soil fertility management and fertilizer use efficiency, fertilizer production technology, agro-input dealership management, competitive marketing, supply chain management, investment analysis, policy reforms, and numerous specialized topics.



# FOR MORE INFORMATION

Director, Training and Workshop Coordination Unit  
IFDC

P.O. Box 2040

Muscle Shoals, Alabama 35662, U.S.A.

Telephone: +1 (256) 381-6600

Fax: +1 (256) 381-7408

E-Mail: [training@ifdc.org](mailto:training@ifdc.org) Website: [www.ifdc.org](http://www.ifdc.org)

NOTE: As a nonprofit organization, IFDC does not finance or sponsor any participant.

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