



# zinc nutrient initiative

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**Zinc**  
...essential for life

## 4th Phase of Zn Fertilizer Project to Accelerate Zinc Fertilizer Use in China Launched

IZA, The National Agricultural Technology Extension Service Center of the Ministry of Agriculture of China (NATESC), and Teck Resources Limited have signed a new agreement to further the cooperative project demonstrating and promoting the benefits of using zinc fertilizers in China.

The two-year program (2015-2016) builds on the success of the previous three-year program among IZA, NATESC, and Teck during which nearly 120 field trials and 140 demonstration plots were conducted in 12 provinces in China. This field work showed that zinc fertilizer application increased crop yields from 8 to 20%, increased zinc content in grains by 20 to 40%, improved nitrogen fertilizer uptake, and increased economic returns. The challenge now is to communicate these results to the extensive network of agricultural workers and farmers across China to maximize awareness and use of zinc fertilizer.



1st row: Don Lindsay, Teck Resources; Chen Shengdou, NATESC; Dr. Fan Mingxian, IZA  
2nd row: Zhang Geng, NATESC; Helen Yuan, Teck; Ralph Lutes, Teck; Dr. Xie JianHua, NATESC; Du Sen, NATESC; Wu Yong, NATESC; Zhong Yonghong, NATESC

"We are delighted to be able to carry on this important work with IZA and Teck," said Mr. Chen Shengdou, Director General of NATESC. "We will make a greater effort this year to educate farmers on the importance of Zn in agriculture and human health with a view to increasing Zn fertilizer use in agriculture. Higher yields, improved crop quality and better economic return are all key benefits for the farmer. We will also encourage fertilizer producers to increase Zn containing fertilizers."

Dr. Ming Xian Fan, Director of ZNI China, said, “IZA is very pleased to work together with NATESC and Teck to continue this program to accelerate zinc fertilizer use and production. The success of the project will lead to significant increases of Zn fertilizer use in China, contributing to the improvements of both crop production and human nutrition.” For more information, contact [Dr. Ming Fan](#).

## ZNI China Activities

In addition to continued work on the cooperative project with NATESC, eight training classes on zinc deficiencies and micronutrient fertilizer technologies were held at various fertilizer companies. Each training class was attended by about 30-100 fertilizer technicians and production managers.

ZNI China also co-organized a workshop with NATESC on Zinc Fertilizer and Fertigation and presented at four other key events: *Yara Asia Fertilizer Workshop on New Fertilizer Technologies*, *Argus FMB Asia Fertilizer Conference*, *China Plant Nutrition Society Workshop on New Efficiency Fertilizer*, and *China Phosphate & Compound Fertilizer Association Annual Meeting*. For more information on ZNI's activities in China, please contact [Dr. Ming Fan](#).

## ZNI India participates in FAI Advisory Committee Meeting

IZA attended the annual meeting of the Fertilizer Association of India (FAI) Advisory Committee on Agricultural Sciences in New Delhi, along with about 30 participants representing the fertilizer industry, academia and international organizations.

The zincated urea policy was discussed at length. Zincated urea was approved by the Government of India and included in the Fertilizer Control Order in the 1990s; however, two decades later, it is not being produced, mainly because of economics. The zinc subsidy of INR 500 per tonne of fortification under the Nutrient Based Subsidy Scheme since April 2010 is not sufficient to meet the cost of zinc fortification with urea, and the additional cost of producing zincated urea cannot be passed along to the customer.

The unanimous view of the Indian fertilizer industry is either to increase the subsidy amount or allow producers to realize the additional cost from the market. FAI, with input from IZA and the fertilizer industry, prepared and delivered a proposal to the Ministry of Chemicals & Fertilizers. The proposal is presently with Projects & Development India Limited for formulating the price and is expected to be finalized within a couple of months. If approved, this will mean an increase of 20,000 to >100,000 tonnes of zinc units annually, depending on the percent of zinc included with the urea (e.g. 0.5-3%). For more information, contact [Dr. Soumitra Das](#).

## IZA participates in IFA Working Group meeting

IZA attended the IFA Working Group meeting on Special Products in New Delhi. The key objective was to develop a strategy to generate aggregate statistics on special products and to create a database for specialty crops.

Another objective was to update the HarvestZinc project's agronomic biofortification program, which has entered its third phase. It will be implemented on wheat and rice in six countries: China, Thailand, India, Pakistan, Turkey and Brazil. For more information, contact [Dr. Soumitra Das](#) or [Dr. Andrew Green](#).

**Connect with  
ZNI and join the  
ongoing global  
discussion about  
zinc in fertilizers,  
crops, and  
human health.**



## IFDC Blog Stresses Need to Go “Beyond the Big Three” in Fertilizing Food Crops

A recent post in the popular *IFDC Perspectives* blog explains how fertilizers that only contain three main nutrients—nitrogen, phosphorus, and potassium—yield food crops that are sub-optimal in growth rate and nutritional value. IFDC stresses the need to increase the application of micronutrients in fertilizers in food crops, stating, “adding small amounts of certain secondary and micronutrients intensifies crop growth by up to 50 percent.” The post included a case study of IZA Member Toros Fertilizer and Chemical Industry finding great success with zinc-fortified formulations, with farmers receiving five-fold increase in crop yields, underlining the essentiality of micronutrients in benefitting “both human health and economic prosperity.” To read this post in full, click [here](#).

## ZNI Advisor Receives Prestigious Award



The 2015 IFA Norman Borlaug Award was presented to Prof. Michael McLaughlin from the CSIRO Land and Water/University of Adelaide. Prof. McLaughlin has been an advisor to IZA on the Zinc Nutrient Initiative since its inception. He was nominated for this award by IZA member The Mosaic Company.

The Norman Borlaug Award was created by the International Fertilizer Industry Association in honor of Nobel Laureate Norman Borlaug and is presented to scientists for outstanding contributions to the field of agriculture.

Prof. McLaughlin received the Award in May at the Opening Session of the IFA Annual Conference in Istanbul, Turkey. “It is indeed an honour to receive this Award from IFA and I thank all my staff, students, colleagues and associates, including IZA, who have worked with me over the last 30 years for their contributions to the research with which I have been involved,” said McLaughlin. “Macro- and micronutrient fertilizers are an essential part of our modern food production systems and we need to strive for continued improvement in efficiency of use to meet global food production targets in terms of both quantity and quality.”

For more information, click [here](#).

**4th International Zinc Symposium:**  
Improving Crop Production and Human Health

The 4th International Zinc Symposium will take a global view on zinc deficiency in soil, crops and humans - and on the best practices to mitigate its impact. The conference will provide new and updated information for agronomists, soil scientists, fertilizer companies, research institutions, government agencies and all those involved in optimizing crop yields and human nutrition.

Organized By:



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Sao Paulo, Brazil • October 15-17, 2015 • [www.zinc crops2015.org](http://www.zinc crops2015.org)



## New Member: Anya Polytech

IZA is pleased to welcome new ZNI Affiliate Member **Anya Polytech & Fertilizers Private Limited (APFPL)**, a joint venture company of Kribhco Infrastructure Limited and Anya Agro & Fertilizers Private Limited. The Company's main objective is manufacturing high quality fertilizer packaging bags made from HDPE granules.

Construction is underway for a 16,500 tpy capacity zinc sulphate fertilizer plant with 50% hepta and 50% mono in the state of Uttar Pradesh in northern India. To view their website, click [here](#).



## Membership Privileges

Interested in becoming a Member of IZA's Zinc Nutrient Initiative? For a low annual fee, ZNI Members enjoy a number of exclusive benefits, including:

- Latest results of our ongoing crop trial research
- Access to communications materials such as fact sheets, brochures, and flyers
- Your company logo displayed on our website, in global/local presentations, and in our quarterly newsletter
- Comprehensive zinc fertilizer training program led by IZA's ZNI team with over 50 years of collective technical expertise

To download the full Membership Benefits brochure, click [here](#).

## ZNI Affiliate Members



This newsletter is published by The International Zinc Association (IZA), a non-profit organization headquartered in Brussels, Belgium. IZA launched the Zinc Nutrient Initiative (ZNI) in response to the critical issue of zinc deficiency in soils, crops, and humans. For more information, please visit [www.zinc.org/crops](http://www.zinc.org/crops), or contact [Dr. Andrew Green](#), Director, ZNI or [Teri Kuhn](#), ZNI Program Coordinator. ©2015.