

# 6<sup>th</sup> International Nitrogen Conference (N2013)

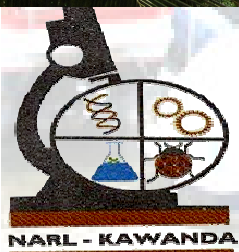


**CONFERENCE THEME:**  
**Just Enough N:  
Perspectives on how  
to get there for  
“too much” and “too  
little” Regions**

**Venue:**

**Speke Resort and Conference Centre, Kampala, Uganda**

**18-22 November 2013**

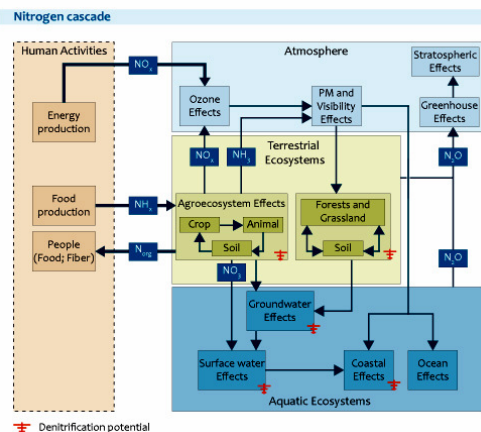




The International Nitrogen Initiative (INI), African Nitrogen Centre and the National Agricultural Research Laboratories of Uganda's National Agricultural Research Organisation welcome scientists, agriculturalists, environmentalists, industrialists, economists, policy implementers and other practitioners to the 6th International Nitrogen Conference (N2013) to be held in Kampala, Uganda in November 2013. This is the 6th international conference after the successful and influential conferences in the Netherlands, USA, China, Brazil and India (see [www.initrogen.org](http://www.initrogen.org)). The common objective of these conferences is the design of more productive, economic, and sustainable food and energy production systems to meet the challenges of the growing global population in a changing environment.

### N2013 rationale

Global nitrogen (N) fertilizer use increased from about 10 million tons of N in 1960 to 100 million tons in 2009, and is projected to increase to about 112 by the year 2015. The increased use of N and other nutrient fertilizers allowed production of food and energy to keep pace with the population growth and growing demand for more fertilizer-intensive food products. In some regions of the world, increases in the amount of reactive nitrogen (Nr) have been excessive, resulting in numerous ecological consequences that are magnified through the nitrogen cascade: the greenhouse effect; atmospheric smog; the production of tropospheric ozone; the depletion of stratospheric ozone; acid deposition;



nutrient loading and eutrophication processes in fresh water and coastal ecosystems. These effects seriously threaten biodiversity through changes in the productivity and species composition of ecosystems, ecosystem services, climate and human health

effects due to nitrate intake through food and water and to increases in respiratory related illnesses as a result of ozone and particulate matter inhalation. The challenge here is to identify integrated and implementable approaches to Nr use that would provide basis for more effective and efficient management policy measures to keep the benefits while decreasing the negative consequences.

Meanwhile, inadequate access of Nr as a productive resource consigns those regions that have a low share of Nr use to unsustainable agricultural production resulting in nutrient mining, land degradation, decreased crop yields,



and consequent food and nutritional insecurity. These regions also produce atmospheric trace gases from large scale biomass burning, and from biogenic emissions from soil and vegetation. Eutrophication is caused by excessive inputs of Nr largely through runoff from areas of human habitation (sewage) and low agricultural crop cover. To overcome these challenges, fertilizers have been

identified as one of the critical elements of the agricultural sector where application rates and use efficiency must be increased in order to restore soil fertility and preserve the fragile ecosystems, together with improved sanitation in human settlements.



The contrasting interests above guided development of the theme for N2013. Over time, scientific and socio-economic activities have been, and continue to be conducted in both regions so as to identify reactive nitrogen issues and solutions, novel approaches and policy support for implementation of the solutions, and priorities for further research and development. During N2013, the state of knowledge on the impact of too much or too little use of Nr on the nitrogen



cycle, human health and ecosystems in the different regions of the world will be shared and a synthesis of potential societal responses for implementation generated. In particular, the conference will declare its position on the use of external N sources in stimulating increase in food production and rural development, while taking into account prevention of its negative impacts for “too little” regions.

### Themes

The conference targets addressing the theme -Just Enough N: Perspectives on how to get there for “too much” and “too little” Regions – through oral and poster sessions, and special-interest symposia that will address different sub-themes. Invited papers, plenary lectures and field visits will augment this approach. Tentative sub-themes are as follows:

1. Nr intensification in low input systems
2. N connections between Africa and the World
3. Interaction with other nutrients and water
4. Projections of improved N management on climate change
5. Nitrogen and Food Security
6. Implementing Nr management policies

### Exhibitions

Exhibitions will be organized at the conference venue. Details of space and fees will be announced in subsequent circulars and on the conference website.



### Venue

The venue of the conference is Uganda, one of the economies that are planning to emerge out of poverty and food insecurity by increasing use of external inputs in smallholder agricultural systems, but also in managing the present too little nitrogen situations.



by increasing use of external inputs in smallholder agricultural systems, but also in managing the present too little nitrogen situations. The agricultural sector is the mainstay and driver of growth for the economy, but is characterized by smallholder production. The crops subsector dominates the agricultural production, followed by livestock, fisheries and for-



estry. Uganda, therefore, provides a special environment to explore potential for applying lessons from economies managing too much and too little nitrogen.



Uganda is gifted by nature. It lies astride the equator, 1000 masl and with lakes and mountains that mildly influence the spatial but comfortable climate. Speke Resort and Conference Centre is on the outskirts of Kampala City, on the shores of lake Victoria the second widest fresh water body in the world, which also is the source of the world's longest river, the Nile.



**Further Conference Information:**

This circular and all updates on the Conference will be available on the Conference Website [www.N2013.org](http://www.N2013.org)

**N2013 Conference Convener:**

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