CSD-16 Intervention Technological and Scientific Community May 05/2008

Thank You Madame Chair

On behalf of the Scientific and Technological Community and specifically the 15 million engineers represented by the World Federation of Engineering Organizations we are pleased to participate in the CSD process.

Everyday these Engineers contribute and are major actors in the agricultural sector through activities in fertilizer production, equipment development, transportation modes, waste management, the bio-fuel industry, and most importantly irrigation and water management.

Our comments today will briefly address four key areas:

- The rapid growth of the demand curve and the need to decouple the debate into short term, mid term, and an endless perspective.
- The future of fertilizer in sustainable agriculture
- The effective and efficient use of water
- The discussion around bio-fuels versus food production

In our view the discussions and debate on agriculture and food production should be considered in 3 parallel streams:

- First to address the urgent needs of the worlds hungry, in essence a reactive phase that has the ability to provide immediate relief and to facilitate short term local and regional needs. Bringing knowledge and engineering to build capacity in the local and small farming communities can effectively and efficiently increase food production.
- Second mid-term stream that addresses the challenges of feeding 9 billion people in 2050. Efficiency and effectiveness are keys to these discussions.
- And lastly to acknowledge that feeding 9 billion people by 2050 is a significant challenge. However we must not loose sight that there is a future beyond 2050 and food production must be sustainable beyond that date.

We are concerned that the depletion of natural resources for fertilizer will significantly impact the worlds' food production capacity. There is a key need to manage these resources to eliminate waste and to look for opportunities to recycle this resource. For example, the new technology of "mining" phosphorus from the worlds wastewater treatment plants for reuse and this would have an additional benefit of reducing environmental impacts on receiving water bodies.

There is a need to recognize that irrigation extractions from water courses must take into account the limits required for environmental sustainability of the water body and the downstream user needs. Irrigation is a consumptive use and if over used, the residual consequences can be serious. Effective irrigation practices minimize transmission losses as well as losses from evapotransporation. Consideration must be given for off – stream storage as this allows for the capture of peak/extreme events for future use.

Our last point is made with emphasis.

The debate on bio-fuels versus food production is a key part of the CSD process and these discussions. We note that other interventions have raised this issue. We in the Scientific and Technological community are keen to participate in these discussions in order to reach a consensus in the CSD-16/17 timeframe.

Thank You

Presented by:

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