



### Megatrends as Disrupters

- Megatrends defined:
  - Social, economic and political developments that slowly, steadily and permanently impact our markets and industries over the long run.



#### Megatrends: Potential Disrupters to Fertilizer Industry





Agricultural commodity price volatility



Precision agriculture, smart devices and robots



Water scarcity and pricing



Availability of arable land



Energy supply, demand and prices



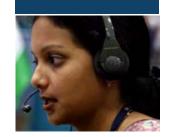
Mineral scarcity



Development of next generation biofuels



Increasing value of agricultural services



Population and income growth in rapidly developing economies (RDE)



Africa enters the global economy



Agricultural innovation and technical change



Closing the yield gap in developing countries



GMO crops with innovative input and output traits





## Megatrends Driving Food and Energy Demand













## Megatrends with Potential to Boost Food Production

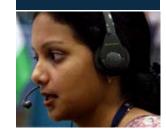
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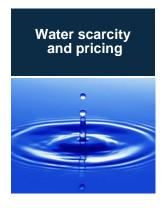


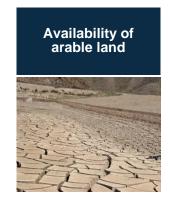
Precision agriculture, smart devices and robots





# Megatrends Pose Challenges to Feeding the World













## Biotech: Achieving Promises of the Technology

GMO crops with innovative input and output traits





#### Megatrends Drive Mosaic's Strategy



