PARADIGM SHIFT IN AGRI-INDUSTRY

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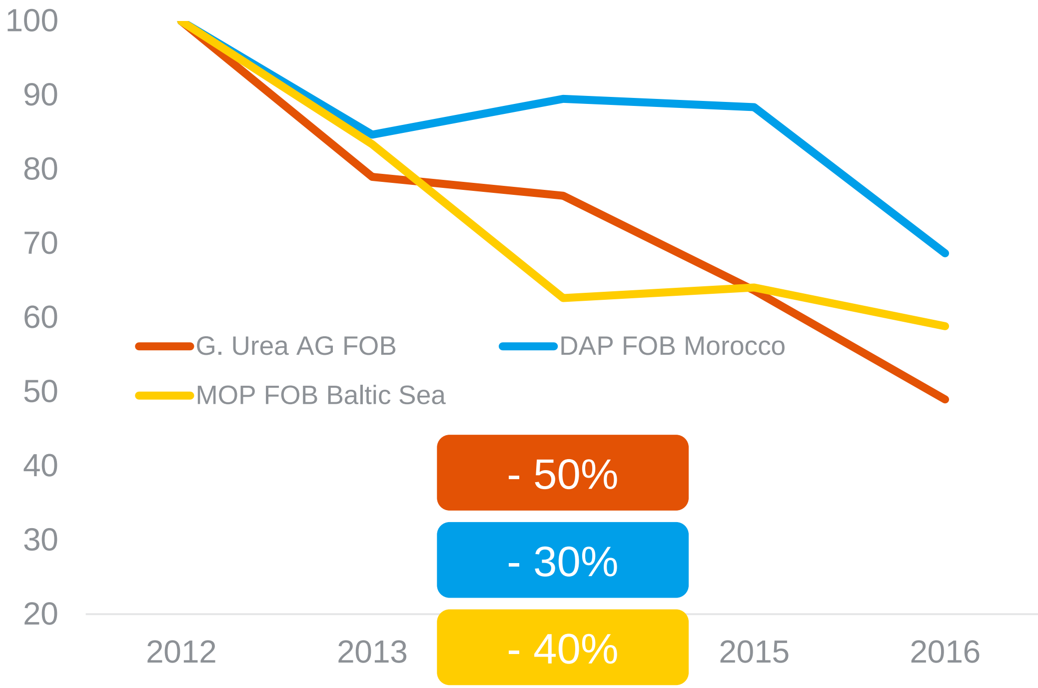
CHEMISTRY THAT MATTERS™

RECENT CHANGES

PRICES OF KEY FERTILIZERS DECLINED SHARPLY

Price development 2012 – 2016 FC
Indexed (2012 =100)



Oversupply
- Urea: 77% Util. Rate
- DAP: 67% Util. Rate

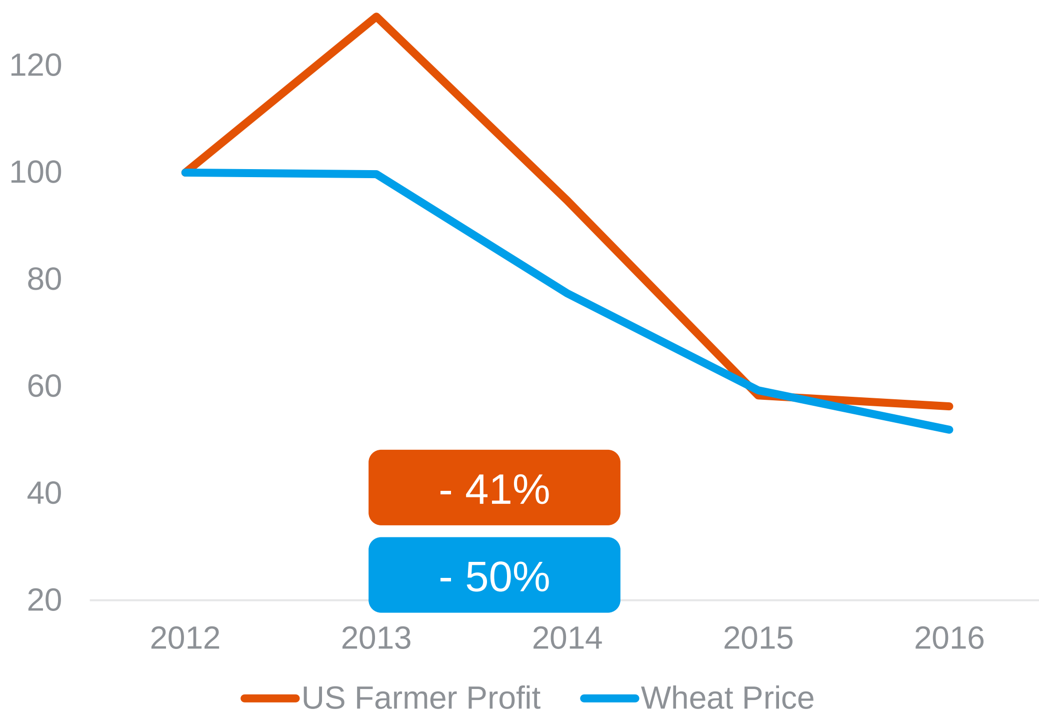
China export in Urea
- 2012: 7 mmt
- 2015: 15 mmt

Lower coal and gas prices have pulled down the floor price for N

Source: CRU, Ferticon, SABIC

WHEAT AND FARMER INCOME DECLINED

Wheat price development and Farmer Income USA 2012 – 2016 FC
Indexed (2012 =100)



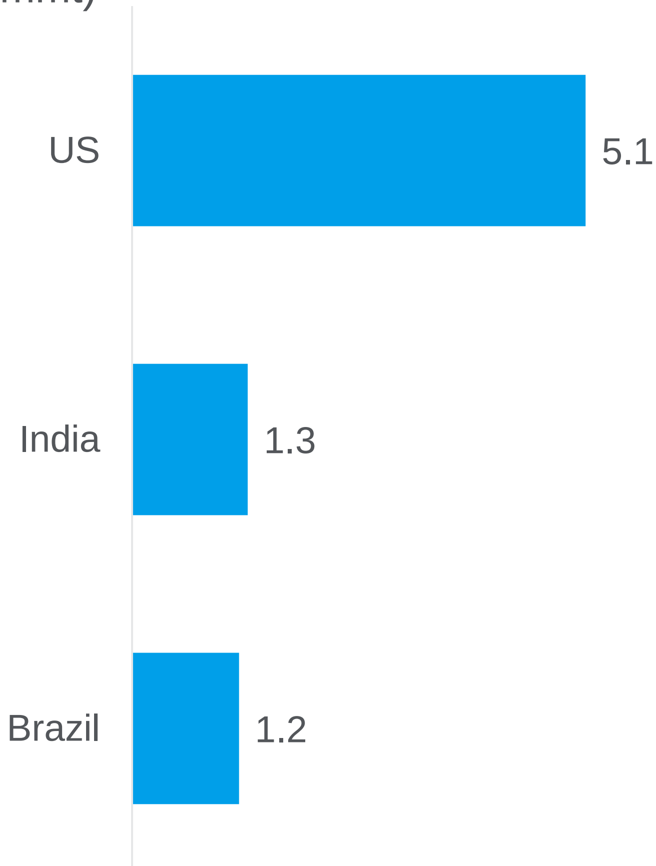
Fertilizer make up to 20% of the total farmers `s costs in field crops

Decline in Farmers' profit is not supportive of fertilizer prices

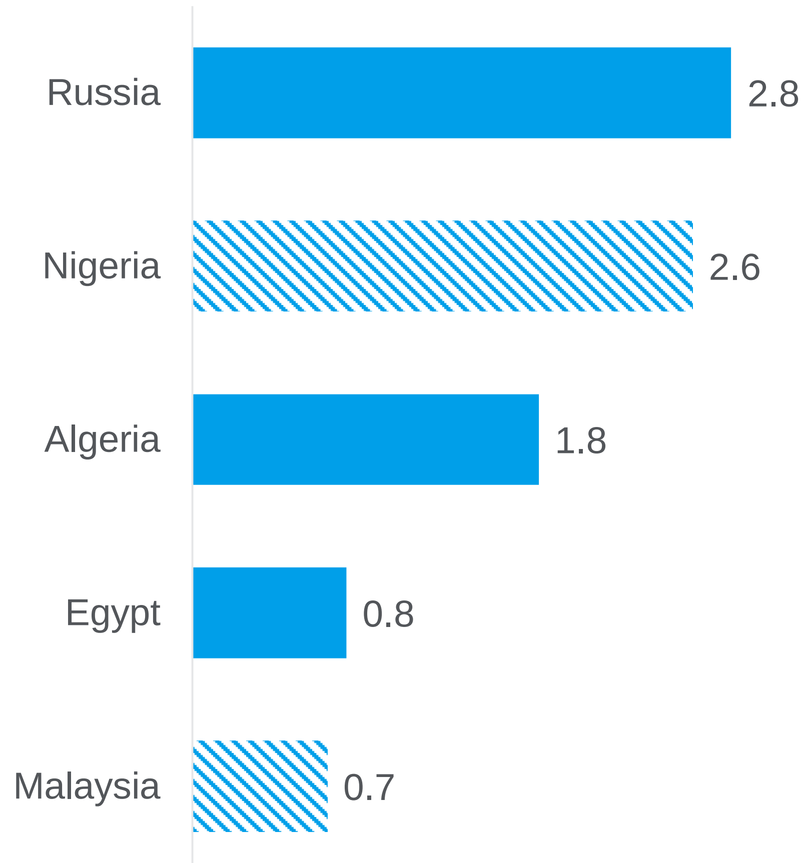
Source: CRU, Ferticon, SABIC

KEY N IMPORTERS ARE TARGETING SELF RELIANCE

New Capacities by 2020
(in mmt)



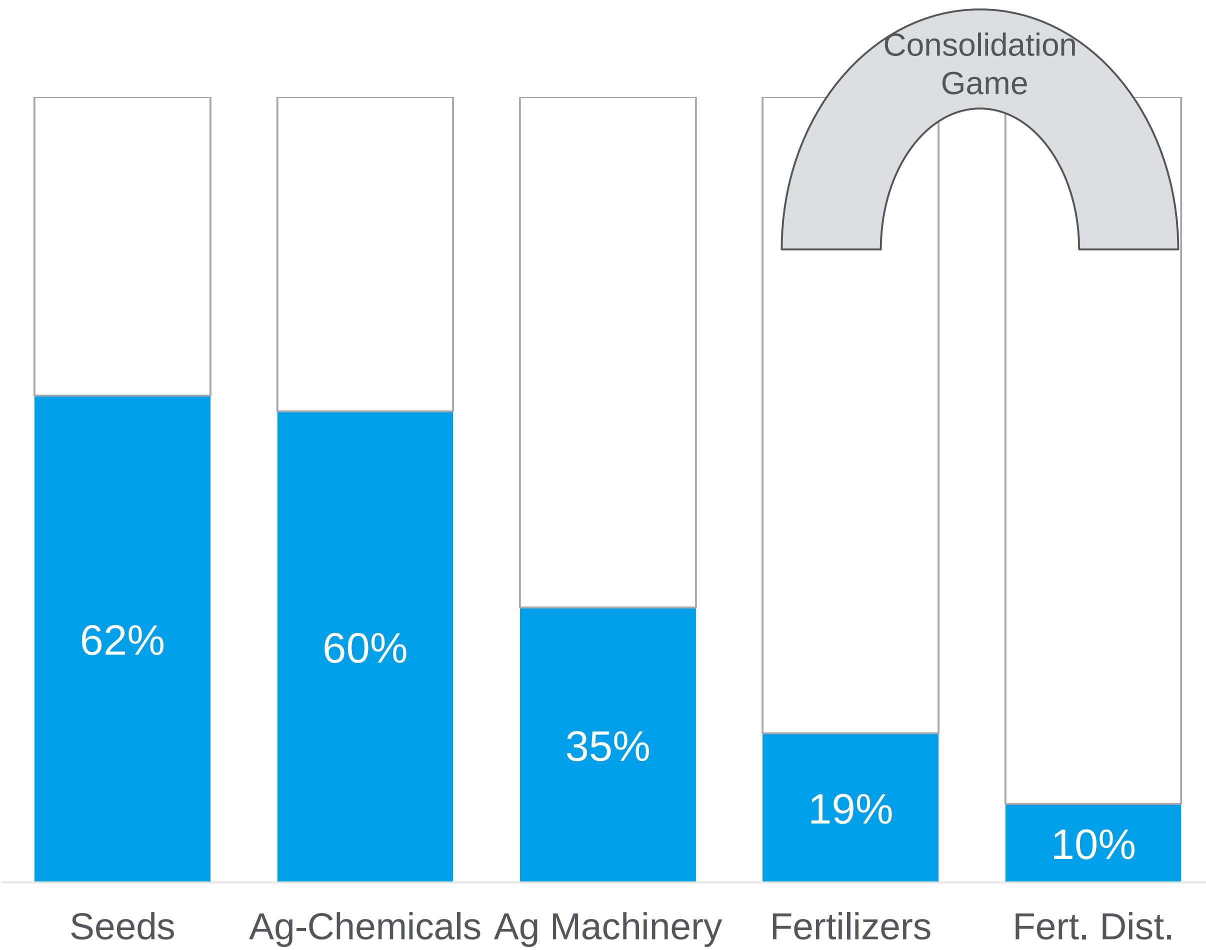
Exports from selected countries
(in mmt)



Source: CRU , SABIC analysis

CONSOLIDATION CONTINUES

Global Market Share of top 5 Players per Agro-Industry Segment



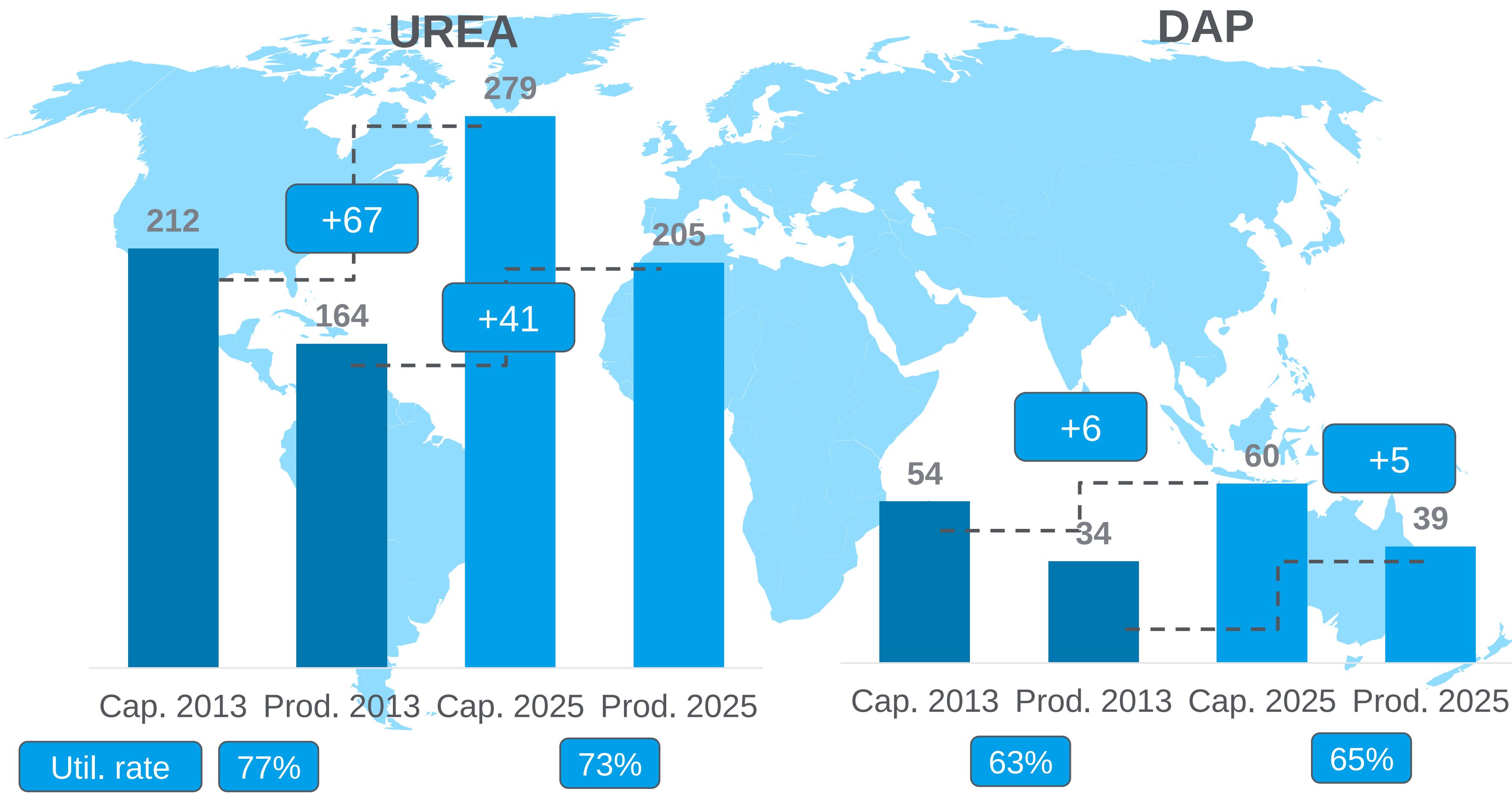
- **Grain traders limiting to core business**
- **Fertilizer companies integrate downstream in distribution**

Source: SABIC analysis

FUTURE CHALLENGES

OVERSUPPLY WILL CONTINUE

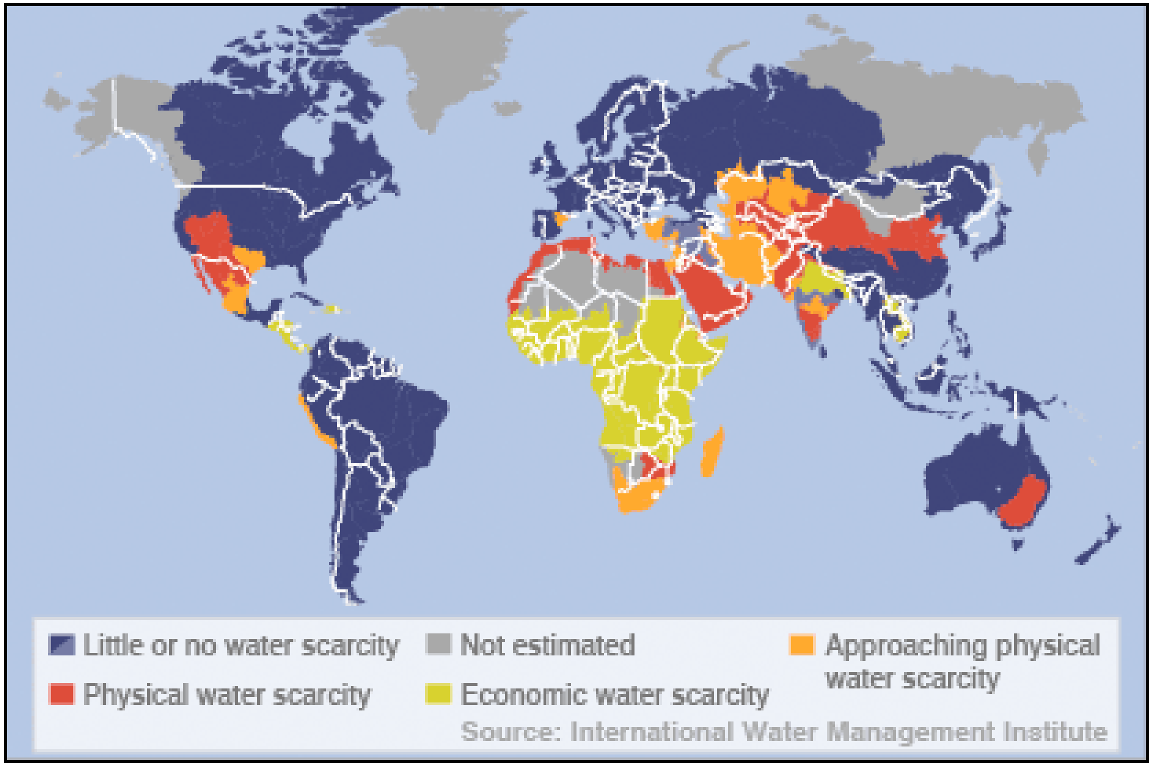
UREA and DAP Global capacity , damand and utilization development (2013 – 2025)
in mmt and %



Source: SABIC, Fertecon

WATER SCARCITY AND SOIL DEGRADATION WOULD NEED DIFFERENT SOLUTIONS

Water scarcity and Micronutrients Deficit



20% of total arable land suffer from water scarcity

25 % of the earth's lands are degraded

41% of earth surface consists of high salinity soils

20% of North American soils have a S- deficit

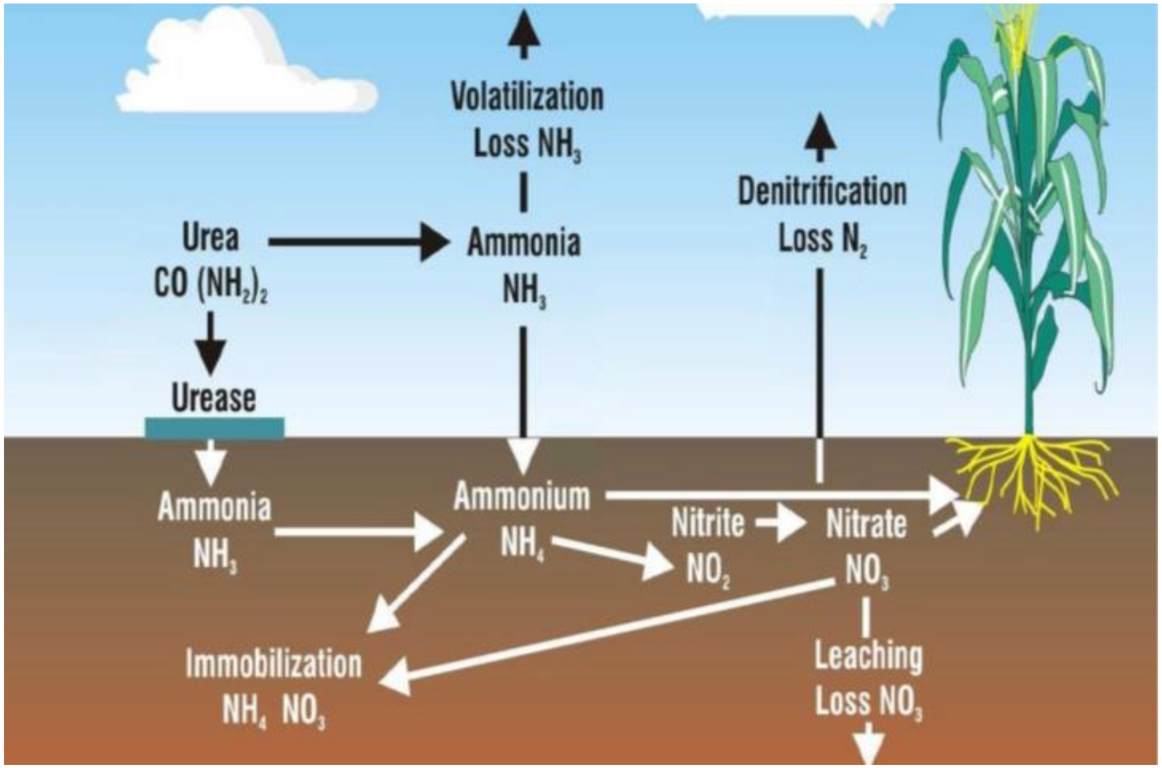
85% of the cereal growing area is affected by low Zn in India

More water soluble fertilizers and micronutrients enhanced base fertilizers

Source: SABIC, FAO

SUSTAINABILITY – ADDRESS ENVIRONMENTAL AND HUMAN HEALTH CONCERNS

Sustainability



More than 30% of applied nitrogen can be lost due to ammonia volatilization, nitrate leaching and denitrification

Retaining nitrogen in the soil to nourish the crop

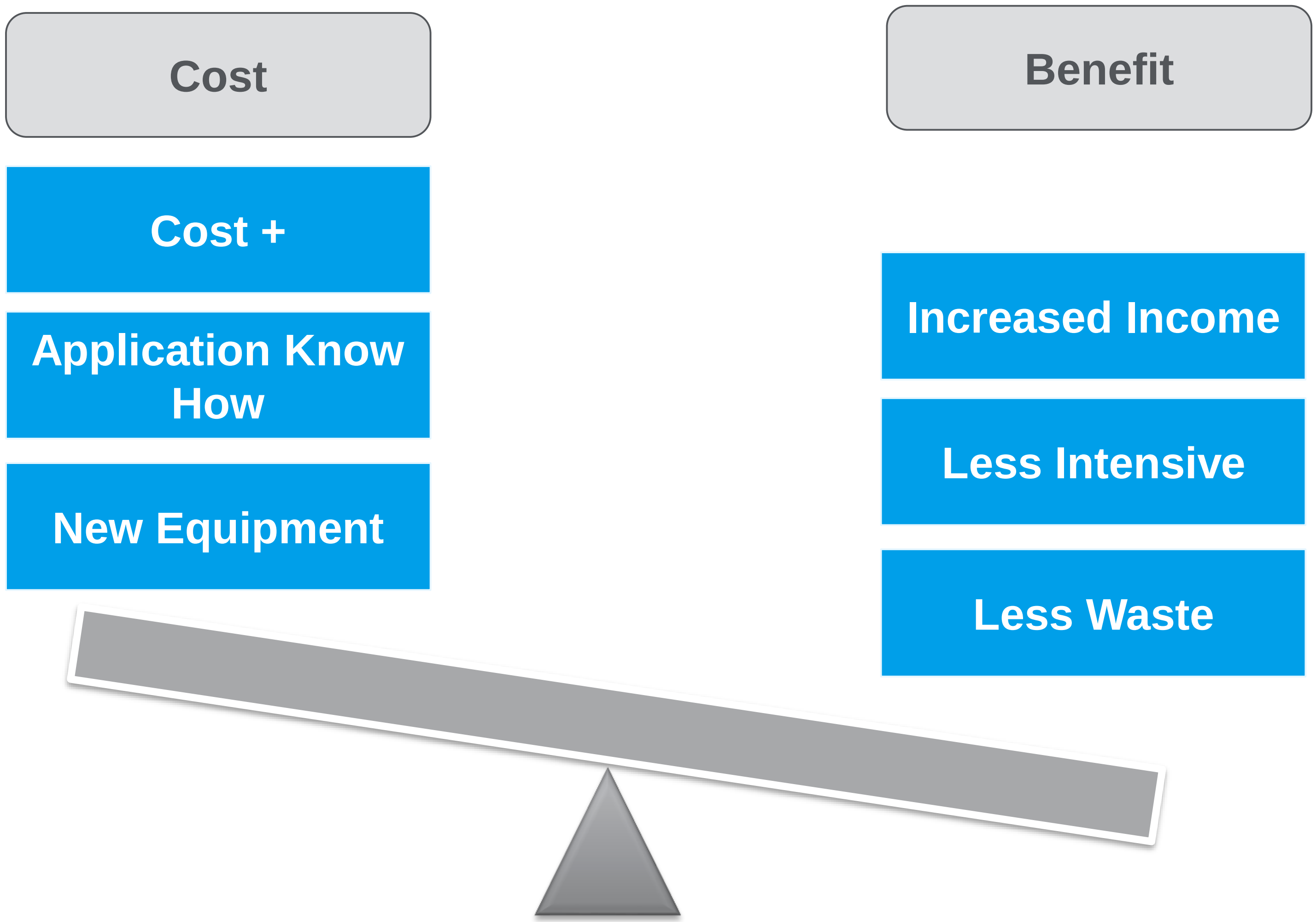
By applying "control release" and "slow release" Urea or NPKs

Consumers would demand healthy products

Need to provide micro-essentials such as B, Cu, Zn, Se proactively besides affordable slow/control release fertilizers

Source: Agrotain International, Koch, SABIC

NEW ENHANCED EFFICIENCY FERTILIZERS NEED A CLEAR COST-BENEFIT CASE



Source: SABIC analysis

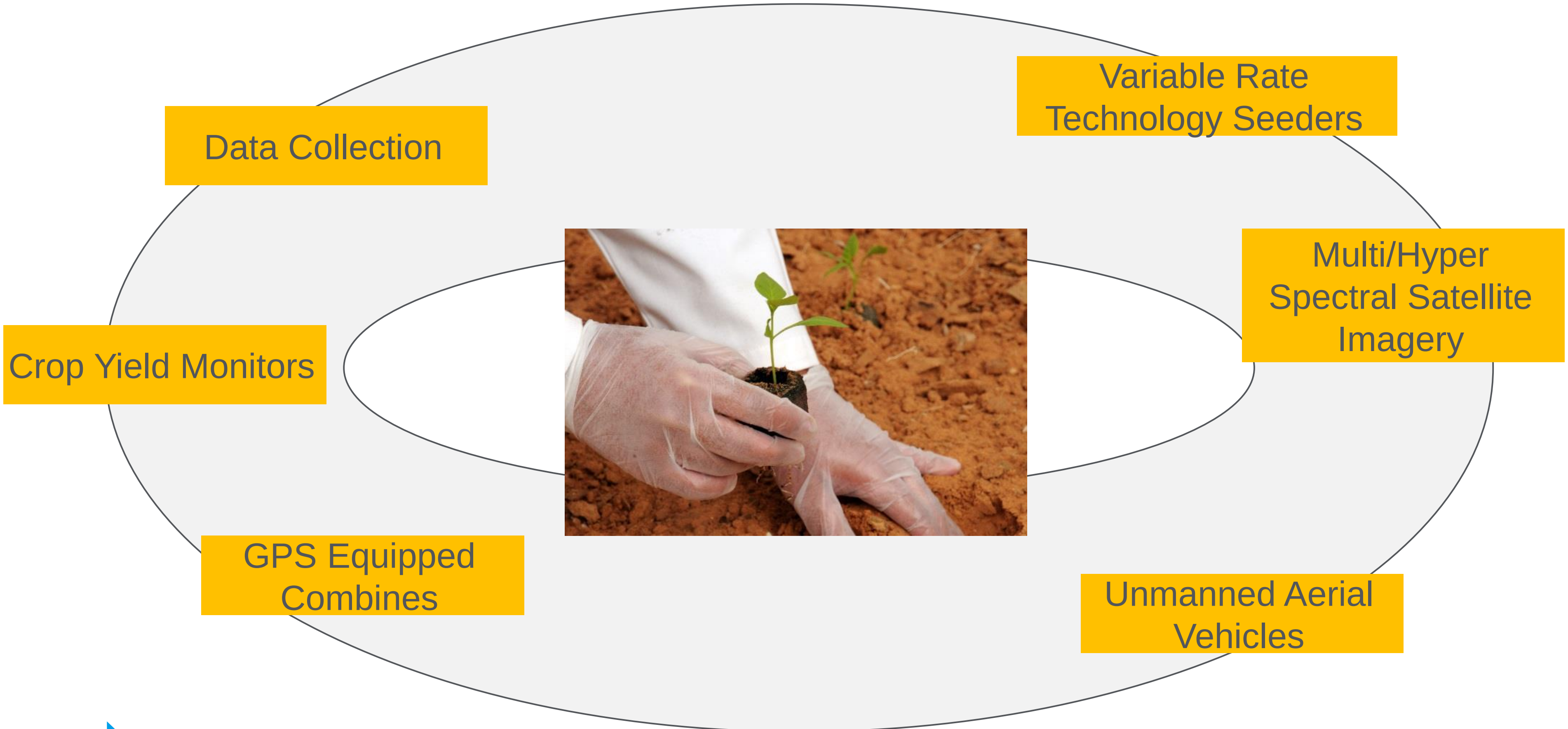
CHINA – REMAINS A KEY INFLUENCER ?

- Greater reduction in emissions, phasing out old plants
- New coal-fired power plants to be “ultra low emissions”
- Focus on High yielding and cost efficient crop production
- Zero growth in use of pesticide and chemical fertilizers
- Fast in developing and selling new fertilizer solutions

Source: Chinese New 5 Year China economic plan, SABIC assessment

"PRECISION FARMING" WILL GAIN IMPORTANCE

Solution for farmer to utilize "big data"

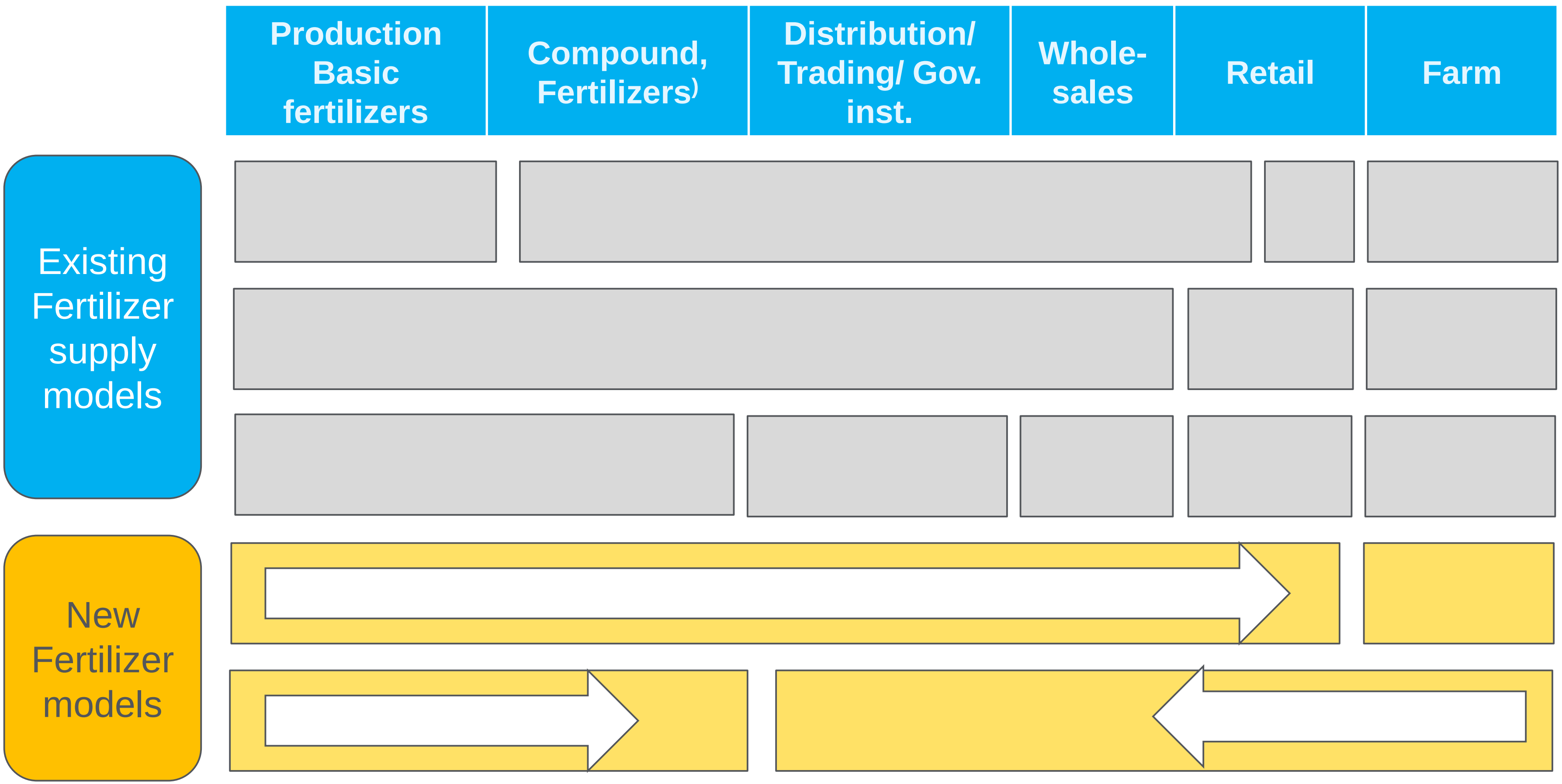


Site Specific/ crop specific balance dosing of Fertilizers

Source: Company reports, SABIC

SUPPLY MODELS WOULD EVOLVE

Value Chain Integration Fertilizers



Source: SABIC

IMPLICATIONS ON GCC PRODUCERS

Major Changes in Fertilizer Supplier Model

Existing	Indicative Future
Commodity portfolio	Commodity plus Value added Products
Selling large bulk vessels	Selling solutions, Combine shipments and flexible/smaller vessels
Stand alone business model	Partnership, cooperation's and M&A
Standard cash management cycle	Value Chain integration and risk management
Transactional Model	Partnership Model

Source: SABIC

THANK YOU