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SPS 2012: OUTCOMES

- New and strengthened **networks** (new community)
- Deepened **knowledge** & cross-fertilization of ideas
- Establish **SPS as biannual event** & SPS Scientific Committee
- Relinking the '**institutional**' P cycle (not only biophysical P cycle which is broken)
- **National Strategic Phosphorus Advisory Group**
- **Blueprint for Global Phosphorus Security:**

Designed with input from delegates during Summit, the Blueprint outlines the principles, challenges and opportunities involved in achieving global phosphorus security. It recommends initiatives, strategies, roles and responsibilities to identified stakeholders.




3rd SUSTAINABLE PHOSPHORUS SUMMIT, SYDNEY 2012



3rd SUSTAINABLE PHOSPHORUS SUMMIT
29th February - 2nd March, 2012
University of Technology, Sydney

Blueprint for Global Phosphorus Security

- 1. Shared understanding of sustainable P future**
- 2. Priority actions:**
 - **Continued:** increasing awareness, interdisciplinary stakeholder engagement, developing recycling and P-use efficiency throughout the food chain, improving linkage between research and policy
 - **Initiated:** introducing policies and incentives (including research funding) to support sustainable phosphorus management: recycling trials, efficient crops, soil dynamics, extraction impacts of new phosphate reserves,
 - **Changed policies/practices/attitudes:** Transparent P reserve data, appropriate policy tools (e.g. market-based instruments), address market failures re externalities and equity, address decision-making disconnect between other sectors (sanitation) and P.



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(continued):

- 3. Stakeholder roles & responsibilities:** UN, CGIAR, National Governments (e.g. develop effective policies, national coordination), municipalities (reduce organic solid waste to landfill), universities/research orgs (pilot projects, i.d research gaps, draft global research agenda).
- 4. Unresolved issues/ gaps:**
 - **Global governance:** is coordinated global approach needed? How to account for differences between developed and developing countries? Is P a 'human right'?
 - **Regulation, subsidies & targets:** can recycling happen at scale without targets? Are subsidies ever warranted and under what conditions?
 - **Communicating P security:** many reasons to move to sustainable P trajectory – how best to communicate complexity without complicating?

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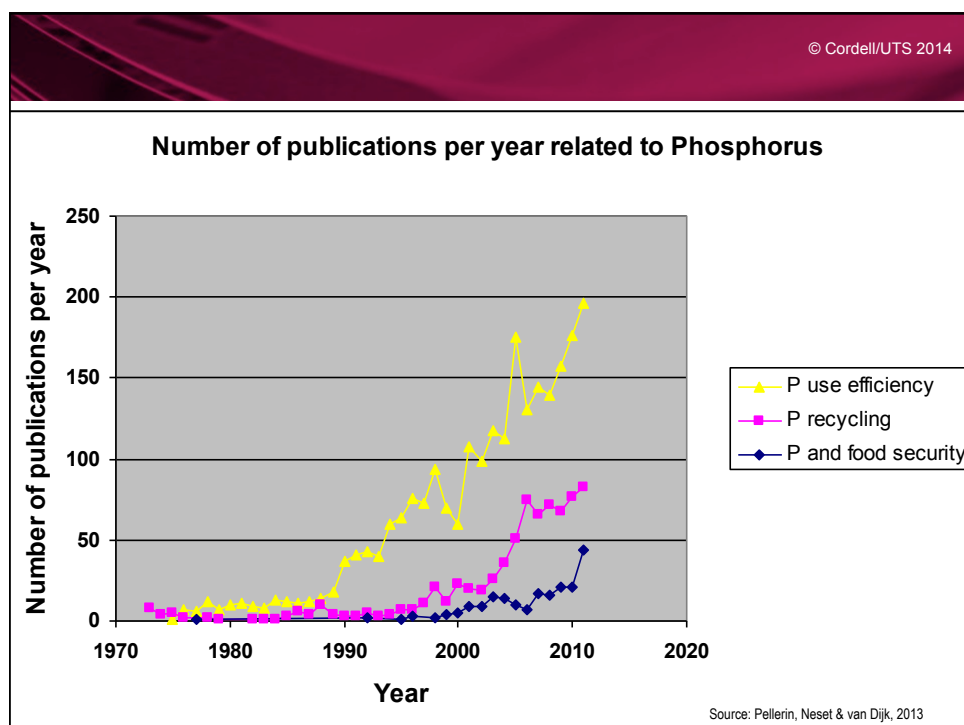
WHAT'S NEW SINCE 2012?

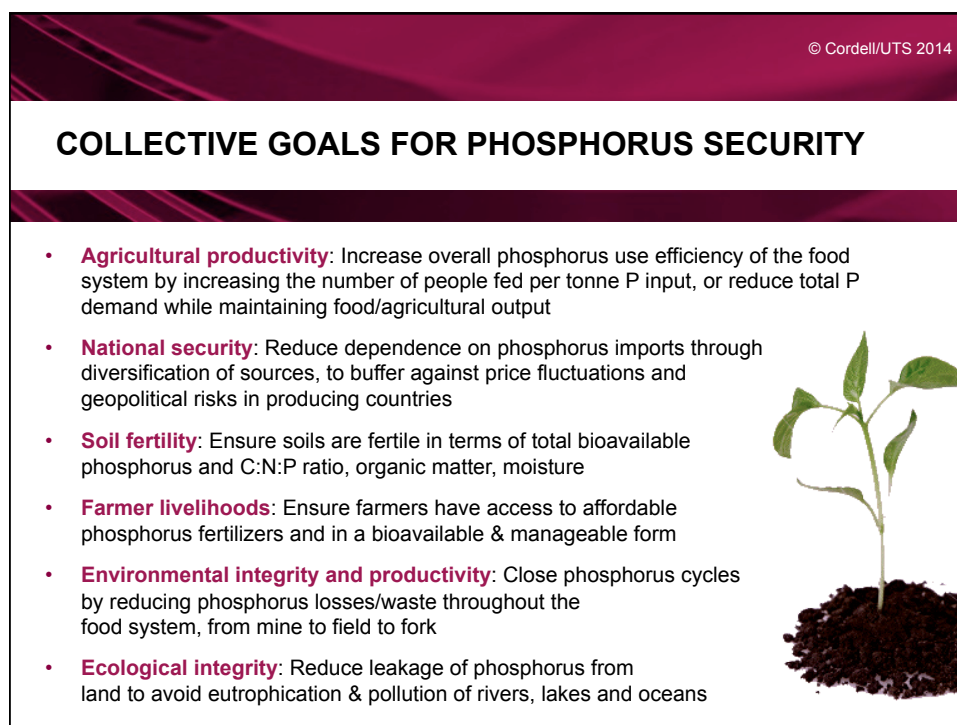
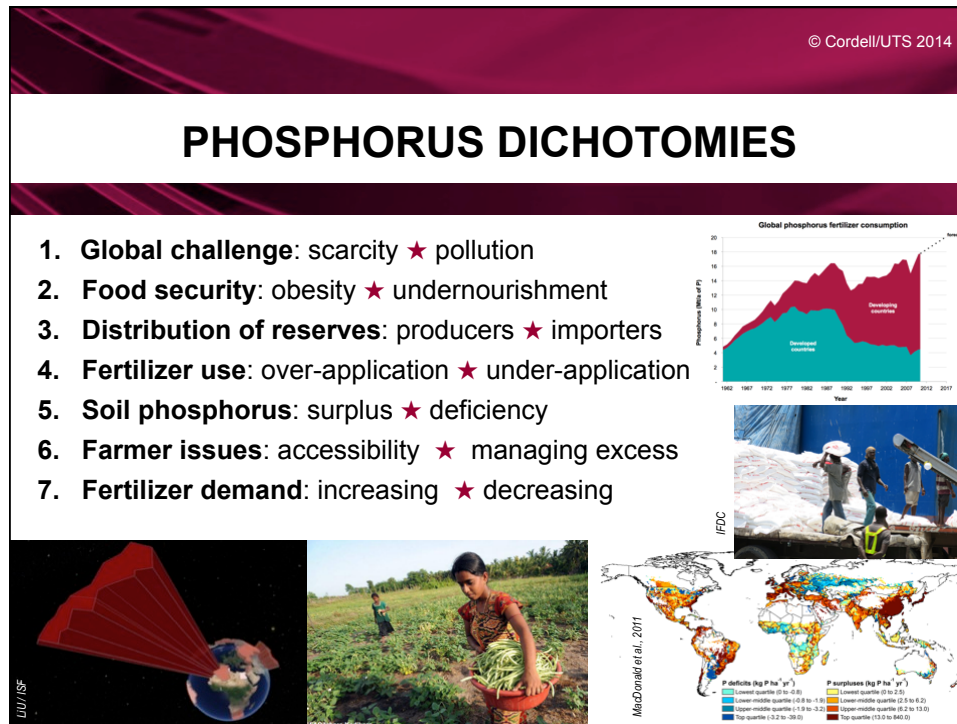
- **Platforms:** Europe (ESPP), Australia (NSPAG), French Platform, German Platform, North America (P RCN and... watch this space!)
- **Policy:** EC Consultative Communication, Phosphate rock in EU Critical Raw Materials list, UK Parliamentary Note
- **Research:** National P flows, P recovery trials, future scenarios (depletion/alternative), HCSS report
- **News:** Massive algal blooms (China to Lake Erie); food insecurity down (842 million people), new Sustainable Development Goals (post-2015 Agenda)

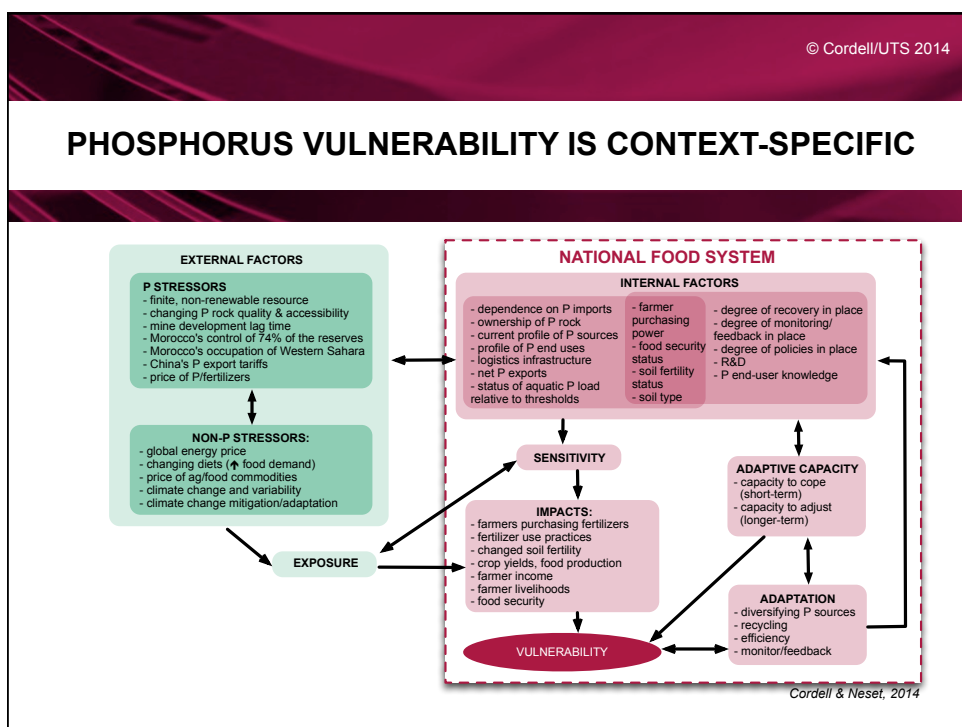
Increased awareness, knowledge, action?
(...but mostly action in Europe?)

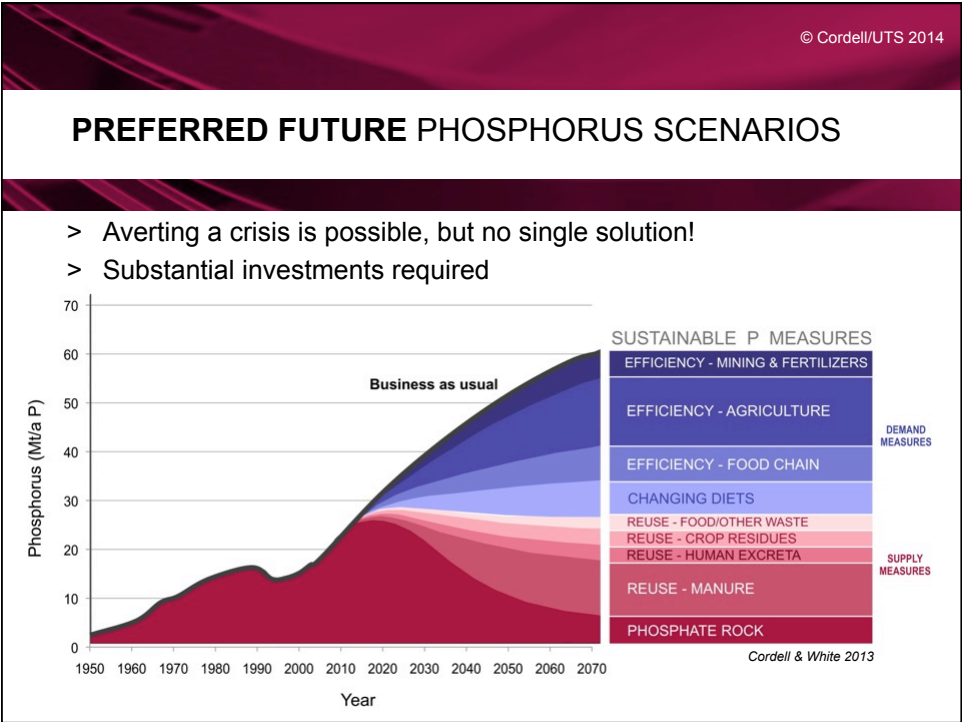










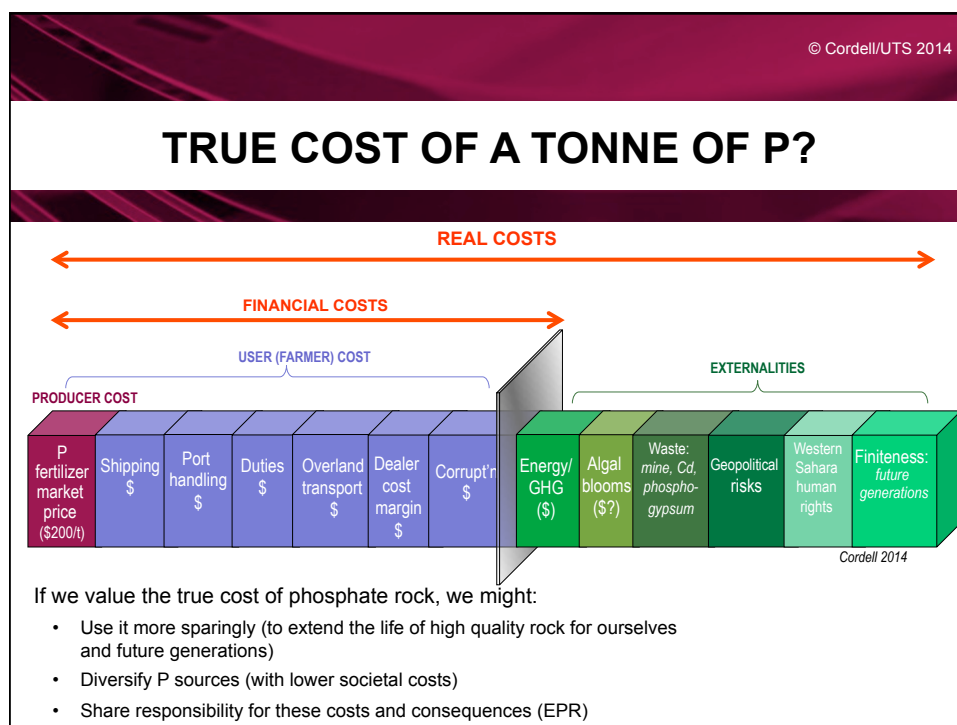
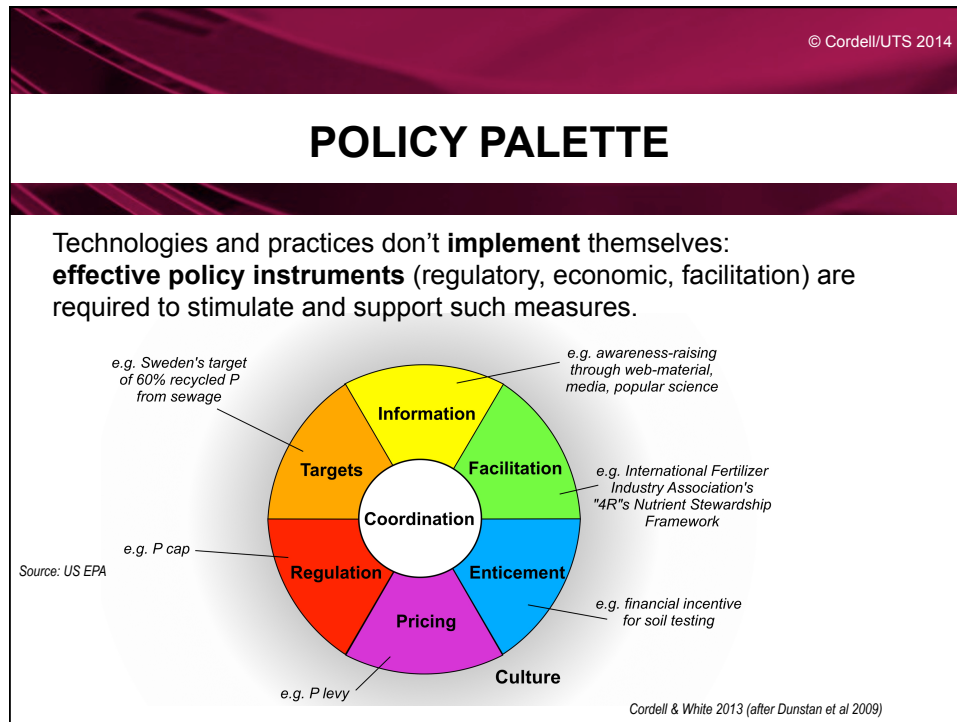


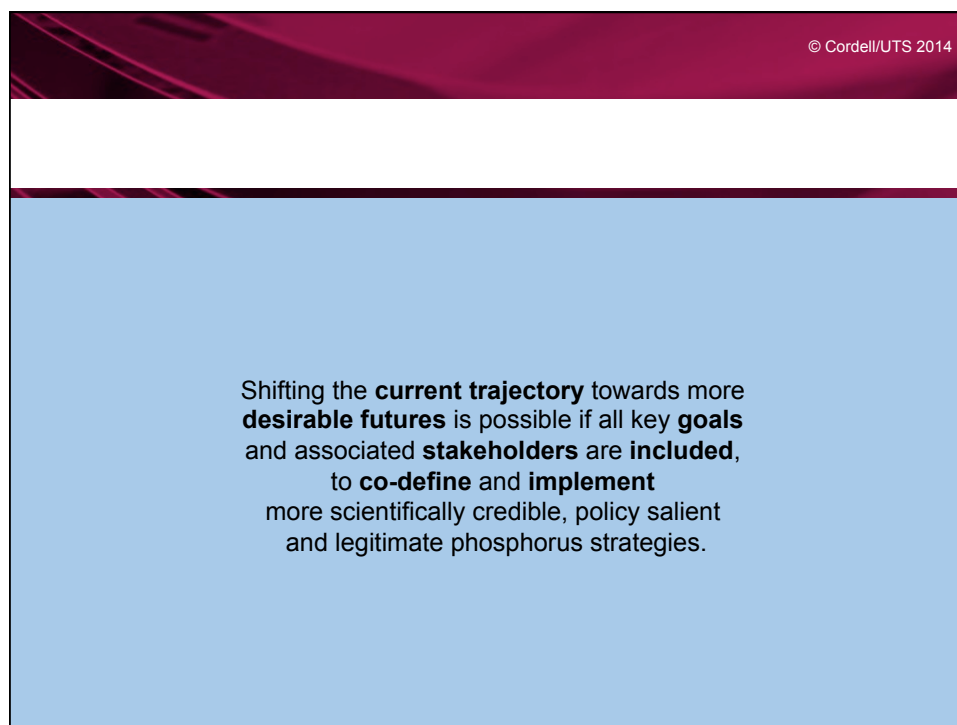
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TOOLBOX OF SUSTAINABLE P SUPPLY & DEMAND MEASURES

Sector	SUPPLY MEASURE (S)		DEMAND MEASURE (D)	
	Recycling (S1)	New source (S2)	Efficiency (D1)	Reduce demand (D2)
Mining (M)	MS1.1 – mine tailings ^b		MD1.1 – reduce avoidable losses	MD2.1 – (all other measures)
Fertilizer (F)			FD1.1 – reduce avoidable losses	FD2.1 – (AD2, LD2, PD2)
Agriculture (A)	AS1.1 – crop waste ^{b,d,e} AS1.2 – (LS1, PS1, WS1)	AS2.1 – (FS2) AS2.2 – green manure	LD1.1 – reduce avoidable losses LD1.4 – soil testing LD1.5 – erosion reduction LD1.6 – microbial inoculants LD1.7 – phytase enrichment LD1.8 – manure P reduction LD1.9 – wastewater management	AD2.1 – plant selection AD2.2 – improved soil characteristics AD2.3 – animal selection AD2.4 – changing diets
Livestock & Fisheries (L)	LS1.1 – manure ^{a,b,f} LS1.2 – bone ^{a,d} LS1.3 – blood ^a LS1.4 – fish ^a	LS2.1 – phosphate rock (supplements) ^h		PD2.1 – plant selection PD2.2 – improved soil characteristics PD2.3 – animal selection PD2.4 – changing diets
Food production (P)	PS1.1 – food production waste PS1.2 – cooked food waste		PD1.1 – reduce avoidable losses PD1.2 – producing food closer to demand PD1.3 – consumer feed selection/preparation	PD2.1 – plant selection PD2.2 – improved soil characteristics PD2.3 – animal selection PD2.4 – changing diets
Wastewater & human excreta (W)	WS1.1 – wastewater ^a WS1.2 – human excreta ^a	N/A	WD1.1 – repairing WD1.2 – minimizing WD1.3 – soil management WD1.4 – avoid dust WD1.5 – reduce spilling WD1.6 – reduce runoff WD1.7 – reduce water use WD1.8 – reduce water use on non-ag	N/A

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