

Global conference on Nutrient management

“Learning from cases and exploring policy options” to ensure food security and environment sustainability

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1. Why this conference

There are two books which provide a comprehensive system view on N & P

Our Nutrient World

The challenge to produce more food & energy with less pollution



Prepared by the Global Partnership on Nutrient Management
in collaboration with the International Nitrogen Initiative

Global Overview on Nutrient Management

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Sustainable Phosphorus Management

A Global Transdisciplinary Roadmap



 Springer

1. Why this conference?

- **Food security** asks for sustainable nutrient management including securing supply security
- Current increased nutrient management shows unwanted **environmental impacts**: Does the nutrient cycle derail?
- There are obviously **low efficiencies** in many parts of the supply chain of N and P
- Resources of P and K are **unequally distributed** (equity, geopolitical risk)
- There is a **high potential for technology development** for inefficient nutrient use at least with N and P
- N and P are good cases for sustainability learning on biogeochemical cycle management (closing fertilizer loops)
- We need proper **new policy processes** (such as transdisciplinarity) to allow for sustainable transitioning of global resources management

2. What are the goals of Global TraPs

Few characteristics

- 5 year project (2011-2015) ending with a 2nd World Conference
- Co-leadership between theory and practice in a strict sense
- Sustainable phosphorus management in mutual learning among science and society partnership (including all key stakeholders, relating different epistemics)
- Taking a supply-demand chain perspective/system view for including key (economic) actors
- Promoting technology development in a domain with high potential of technology development
- Providing policy orientations based on a comprehensive system (coupled human-environment system) understanding of nutrient use



The Guiding Question of Global TraPs

What new knowledge, technologies and policy options are needed to ensure that future phosphorus use is sustainable, improves food security and environmental quality, and provides benefits for the poor?

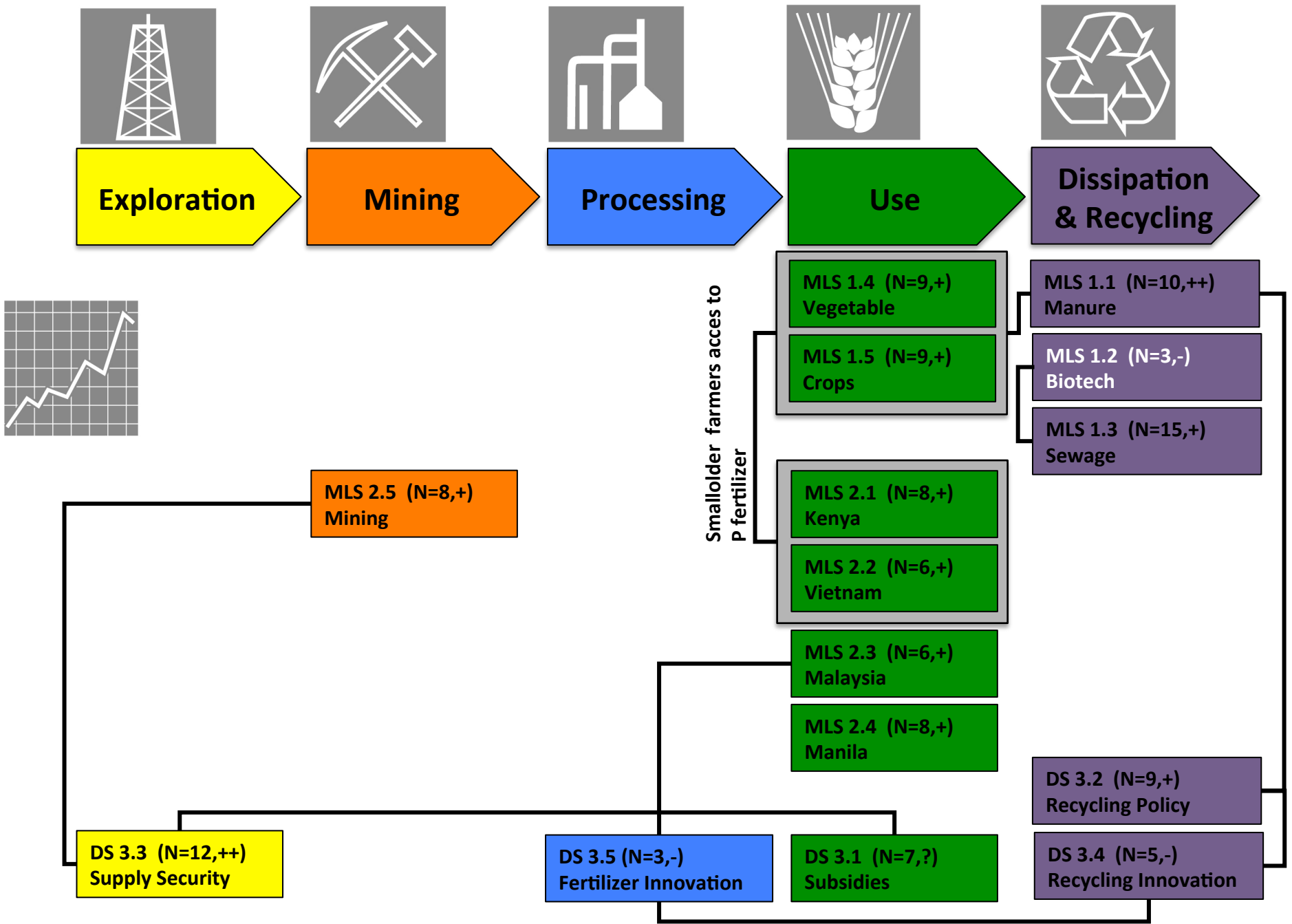
How is this 5 year discourse of Global TraPs organized?

Event	Date	Location	Focus/Guiding Theme
1 st Workshop	February 6-6, 2011	Muscle Shoals, AL/Phoenix AZ	Building Partnership and Co-Leadership
2 nd Workshop	April 31-May 1m 2011	Zurich, Switzerland	Consenting the Guiding Question
3 rd Workshop	August 19-30, 2011	Zurich, Switzerland	Identifying Critical Questions
4 th Workshop	March 15-16, 2012	El Jadida, Morocco	Defining Case Studies – Exploring Policy Options
1st World Conference	June 18-21, 2013	Beijing, China	Learning from Case Studies – Exploring Policy Options
Workshop	Summer 2014	Latin America	Looking for New Paradigms – Understanding the Soil and Agrotechnology System (tentative title)
2 nd World Conference	Fall 2015	TBD	Orientations for Industry, FReserach, Governments and the Public at Large

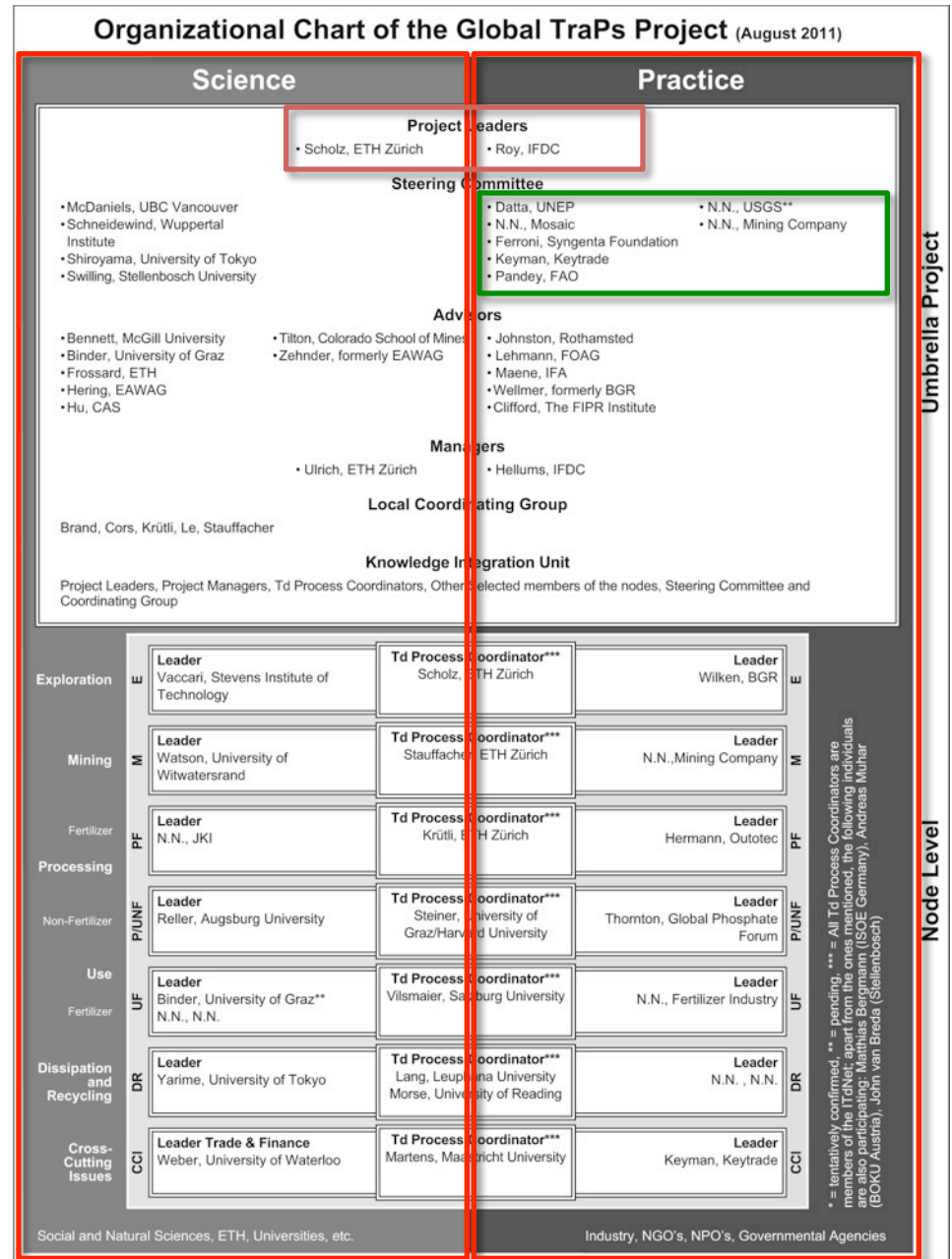
“Learning from cases and exploring policy options”

	Title	When
1	Documenting Reserves Transparency of the Mineral Commodity Estimations - the Example of Phosphate reserves and resources	Started 3/2013-9-2013
2	SMAP Kenya ; Smallholder Farmer Access to Phosphorus (the Trader-Farmer interface)	Started 1/13-12/14
3	SMAP Vietnam ; Smallholder Farmer Access to Phosphorus (the Trader-Farmer interface)	Started (1/13-12/14)
4	SMAP Senegal/Ivory Coast; Smallholder Farmer Access ...	Financed 9/13-9/14
5	Malaysian Palm Oil : Sustainable Fertilizer Use in Plantations	Planned
6	Manila Laguna Detergents	Started
7	Phosphorus Recycling Technology Innovation and Integrated Soil Fertilization	Going to start
8	P recycling Japan VS Switzerland:	Finished
9	PreTISoF Phosphorus Recycling Technology Innovation and Integrated Soil Fertility Management	Starting 1/13

Global TraPs takes a Supply-Demand Chain Perspective



Science and practice should be balanced on all levels of the project!



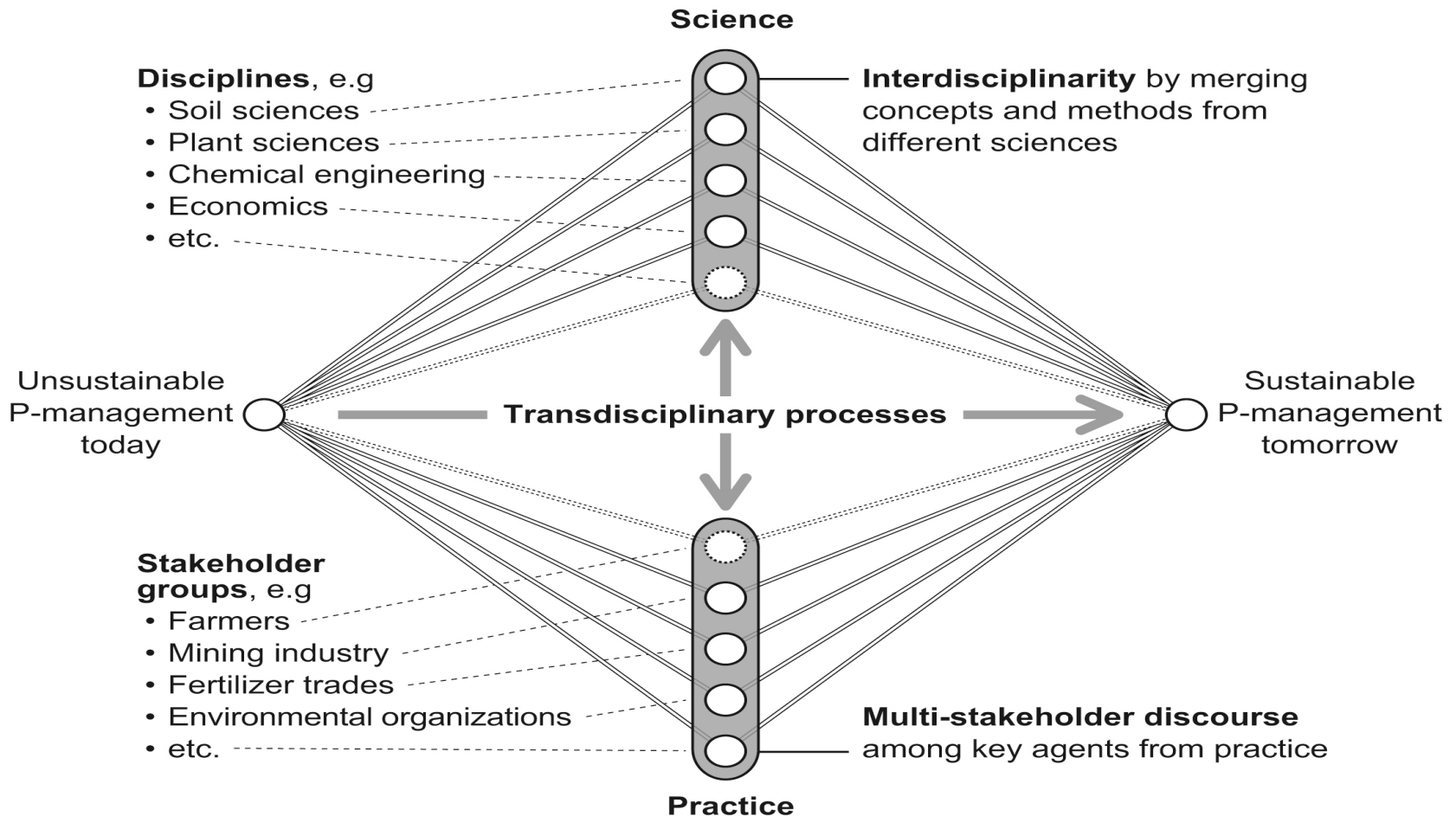
Umbrella Project

Node Level

3. How does **trans**disciplinarity differ from other forms of theory practice collaboration?

- What are other forms
 - (i) Scientists as a consultants; (ii) “Truth to Power (IPCC)”, (iii) Triple Helix (see the contribution of Prof. Shiroyama), (iv) ...
- **Co-leadership**; equal footing of science and key stakeholder of society
- **Precompetitive** (strategic sustainability management)
- **Knowledge integration**, mutual learning, relating different epistemics
- **Capacity building** & **consensus building** about sustainable transitioning as

What makes a transdisciplinary process?



4. The goals of this conference

- Contributing to coping with the **nutrient challenge** (from a mineral resources management perspective)
- “**Learning from cases and exploring policy options**” (distinguish policies and politics)
- Preparing for providing “**socially robust orientations**” for sustainable phosphorus management on all steps of the supply chain
- Promoting multi-stakeholder discourses and science-society (transdisciplinary) processes

The script of the conference program (1/2)

Today

- **Opening:** Setting the stage – Global views (Töpfer) and the history and transitions in Chinese phosphate industry (Mrs. Xiu)
- **Plenary I:** Providing a general view on current N and aP resources management (Oenama, Scholz, Jones) and the global industry perspective (Heffer)
- **Plenary II:** The agro-system perspective (Velthof, Sims, Roelcke, H. Zhang), farming perspectives (Roberts, Masso, Vijoo)

The script of the conference program (2/2)

Tomorrow

- **Startup**: Messages from MLS & DS (Vilsmaier & Roy)
- **Plenary III**: Views on policies - Science-society interaction; Greenpeace and nutrient management Shiroyama; the view on supply security (Wellmer-Vaccari) and industry visions (Vaughn Astley)
- **Forerunners of recycling**: Europe/Switzerland & Japan (Ohtake & Morf) & Trade & Finance (Weber & Steiner)
- Two panels close the conference
 - A subject/resources based
 - A policy and polity oriented one

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