



e-briefing on Nitrogen Working Group

# Relevance of international coordination to mitigate nitrogen pollution in global livestock systems

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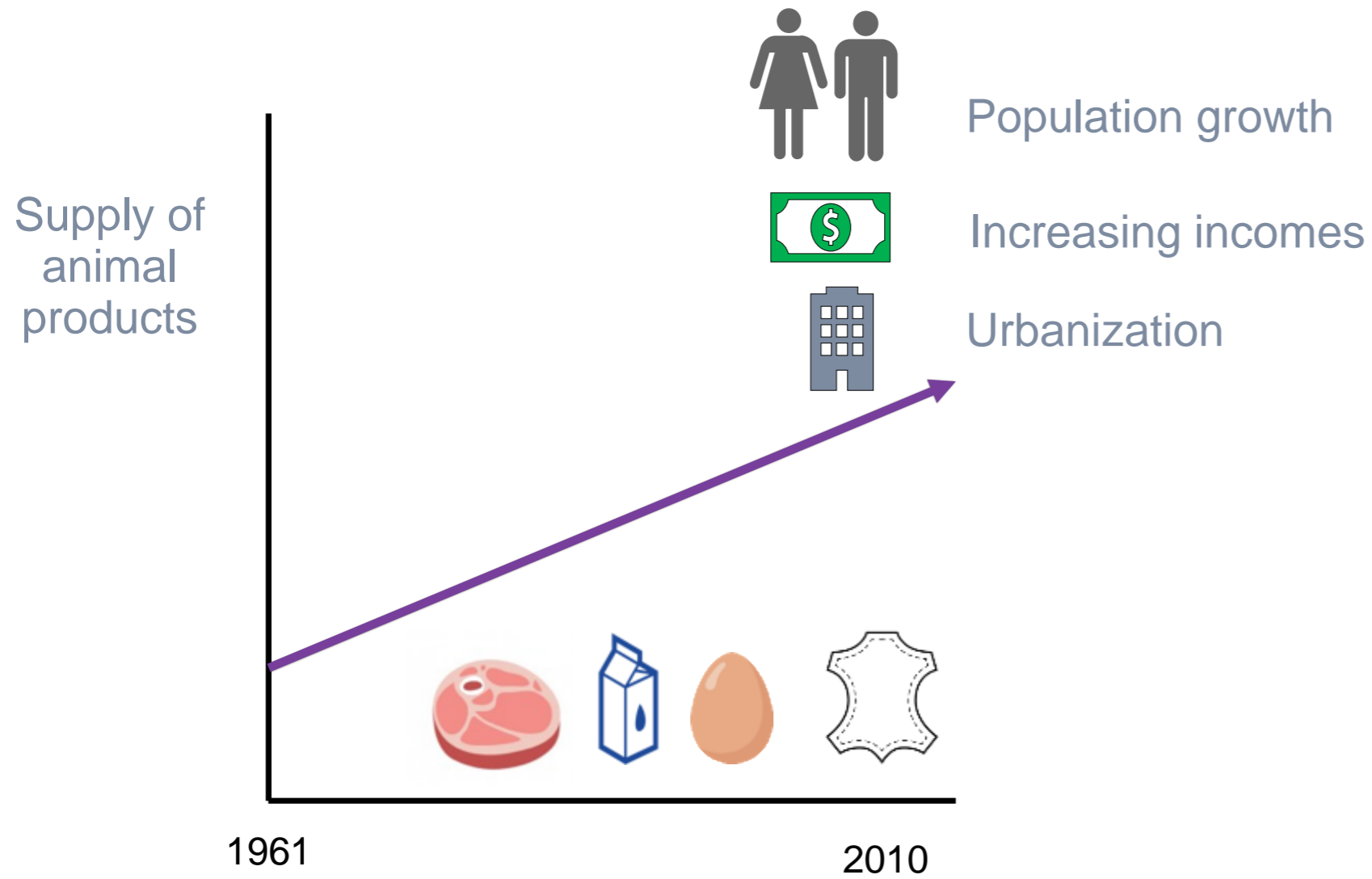
Livestock Policy Officer

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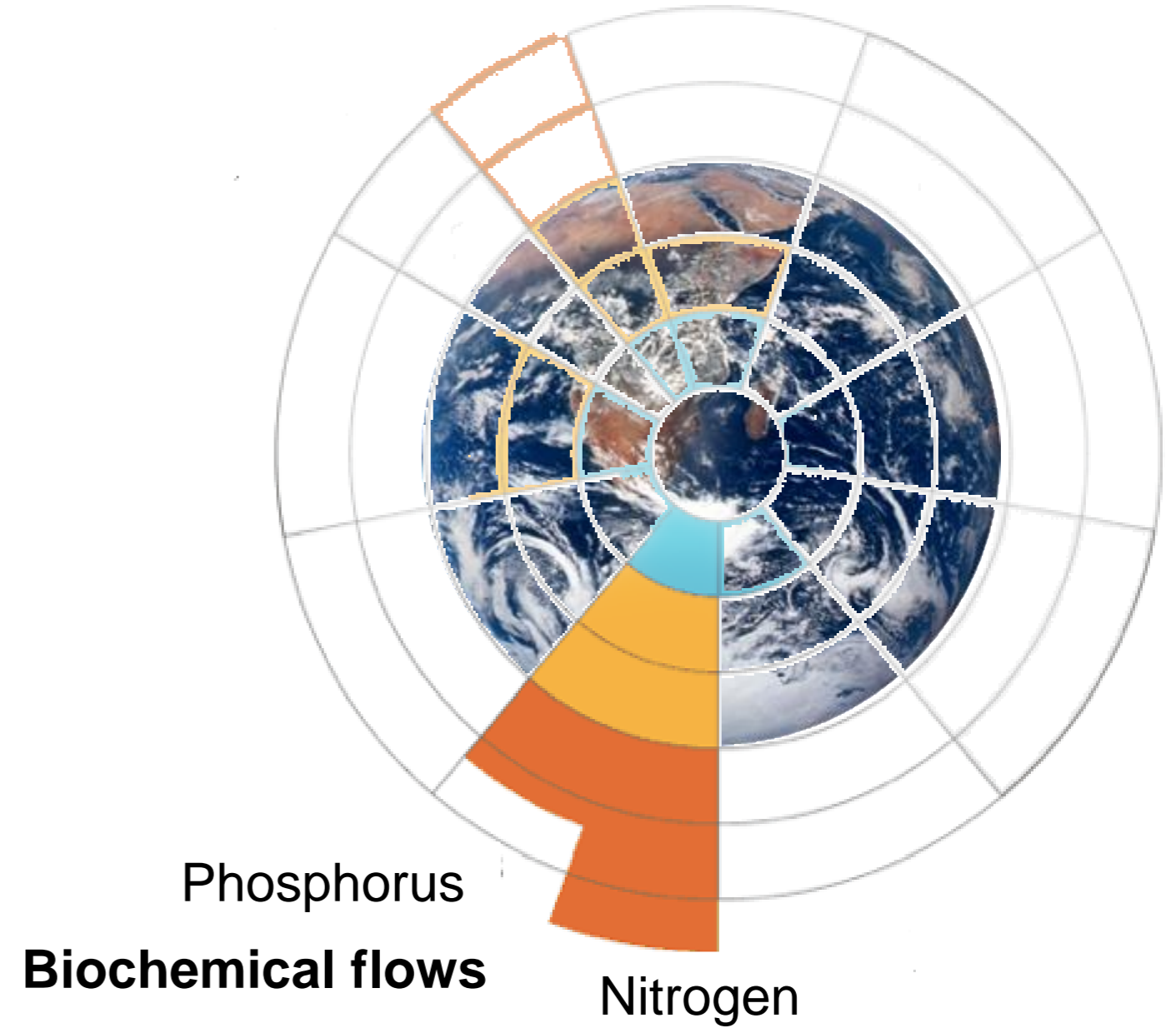
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# WHY LIVESTOCK SECTOR?



Growth of livestock sector



Planetary boundaries

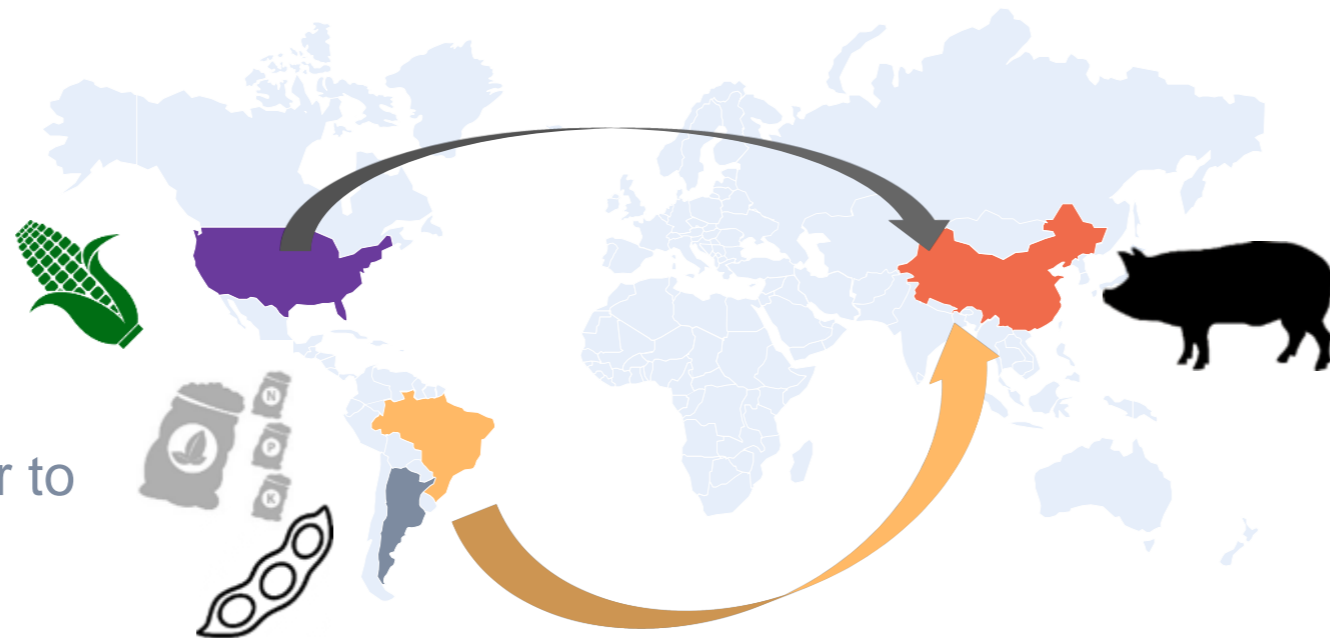
# THE STRUCTURE OF THE LIVESTOCK IS CHANGING



Small-scale farms



Large use of synthetic fertilizer to produce feed



Disconnection between feed production and animal production

Large-scale and geographically concentrated farms



# POTENTIAL OF INNOVATIVE CIRCULAR PIG SYSTEMS TO REDUCE N LOSSES

Regions	Change	
	Life-cycle-NUE <sub>N</sub>	N losses in feed production stage
South Asia	<b>+30%</b>	-53%
North America	<b>+6%</b>	-28%
Western Europe	+13%	-33%
East and South East Asia	+17%	<b>-56%</b>
Eastern Europe	+12%	-35%
Oceania	+13%	-31%
Latin America	+9%	-50%
Russian Federation	+18%	-53%
Sub-Saharan Africa	+7%	<b>-11%</b>
Near East and N. Africa	+17%	-49%

Feeding food waste to pigs

Substitution of grains and soybean by feed from food wastes for industrial pork supply chains



Uwizeye et al., 2019. Nitrogen flows in global pork supply chains and potential improvement from feeding swill to pigs. Resources, Conservation and Recycling, 146, pp.168-179.



# POLICY IMPLICATIONS



# STRENGTHENED APPROACH TO SUSTAINABLE NITROGEN MANAGEMENT



**United Nations  
Environment Assembly of the  
United Nations Environment  
Programme**

**United Nations Environment Assembly of the  
United Nations Environment Programme  
Fourth session  
Nairobi, 11–15 March 2019**

## **Sustainable nitrogen management\***



## **KORONIVIA JOINT WORK ON AGRICULTURE**

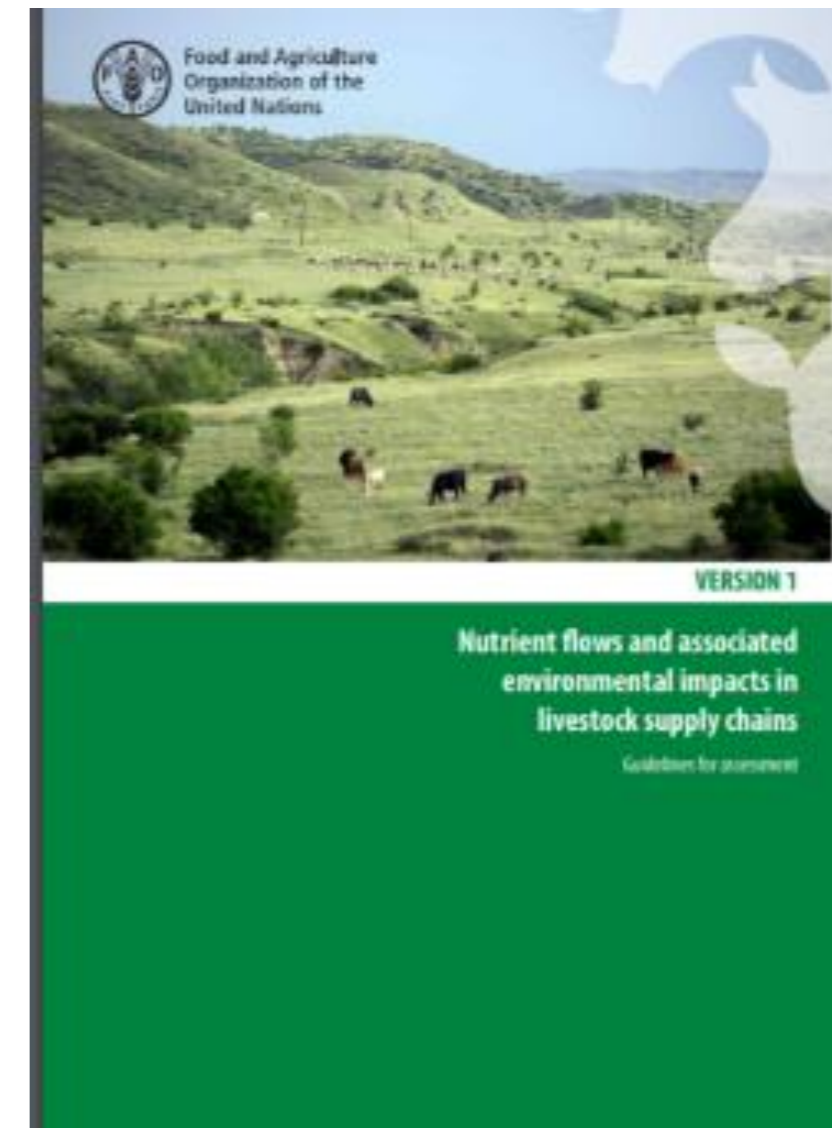
SABSTA 51 - Workshop organised during  
COP25 in Madrid, Spain  
(d) Improved nutrient use and manure  
management towards sustainable and resilient  
agricultural systems;

- Best management practices for improving  
nutrient use and manure management and  
mitigation efforts need to be location specific



# MULTI-STAKEHOLDER INITIATIVES

- Livestock Environmental Assessment and Performance (LEAP) Partnership



- Global Agenda for Sustainable Livestock



# KEY MESSAGES

- Circular bio-economy offers cost-effective solutions for the sustainability of food systems
- Nitrogen pollution deserves a global convention, with a prominent role of livestock scientists and stakeholders
- Inter-conventional Nitrogen Coordination Mechanism would need to be inclusive and links with other inter-governmental conventions such as UNFCCC.

