



Delivering Impact from African Animal Agriculture: The Agriculture-Mining Conundrum of Grass or Brass; Bread or Stones

Yemi Akinbamijo PhD
Executive Director



&

Jimmy Smith PhD
Director General



Outline

- **Innovation and the Livestock Sector in Africa**
 - **Significance and Challenges**
- **Impacts of mining on agriculture (Grass vs. Brass)**
- **Concluding Remarks**

Some Guiding Principles and Thoughts on Agriculture and Mining in Africa



Thoughts on Food

- Africa cannot and MUST not live in the past. Africa must look to the future.

Late Dr Bingu Wa MUTHARIKA

Chairman of the Assembly of the African Union and former President of the Republic of Malawi



Thoughts on Food

There is need for high political leadership to take bold decisions and follow up with the required actions to eradicate hunger so that all people in **Africa** can enjoy the most basic and fundamental of human rights – **the right to food, and thus to existence and life.**

Jacques Diouf (2009)

FAO Director-General



Grass or Gold?

“It is a challenge for the two sectors to coexist. Given the choice between a sector that employs 100,000 people or the capacity to feed 12 million people, I prefer the latter”

*Jacqie Sultan
Guinea's Agriculture Minister*



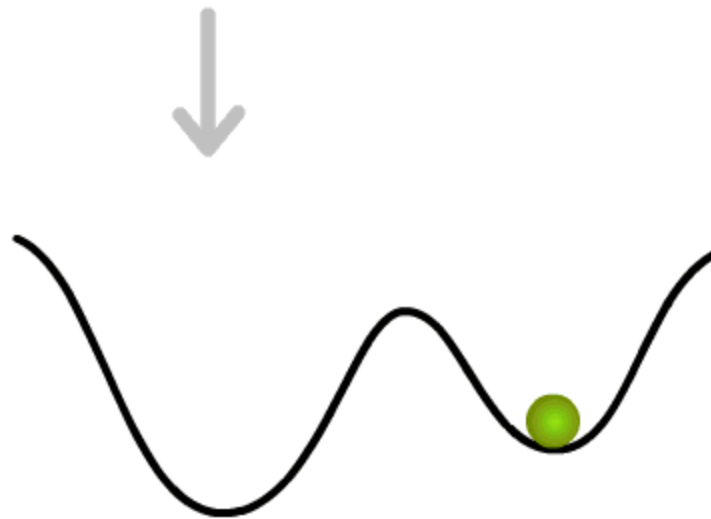
Africa Mining Vision

**“Transparent,
equitable
and optimal**



**exploitation of mineral resources to
underpin broad-based sustainable growth
and socio-economic development”**

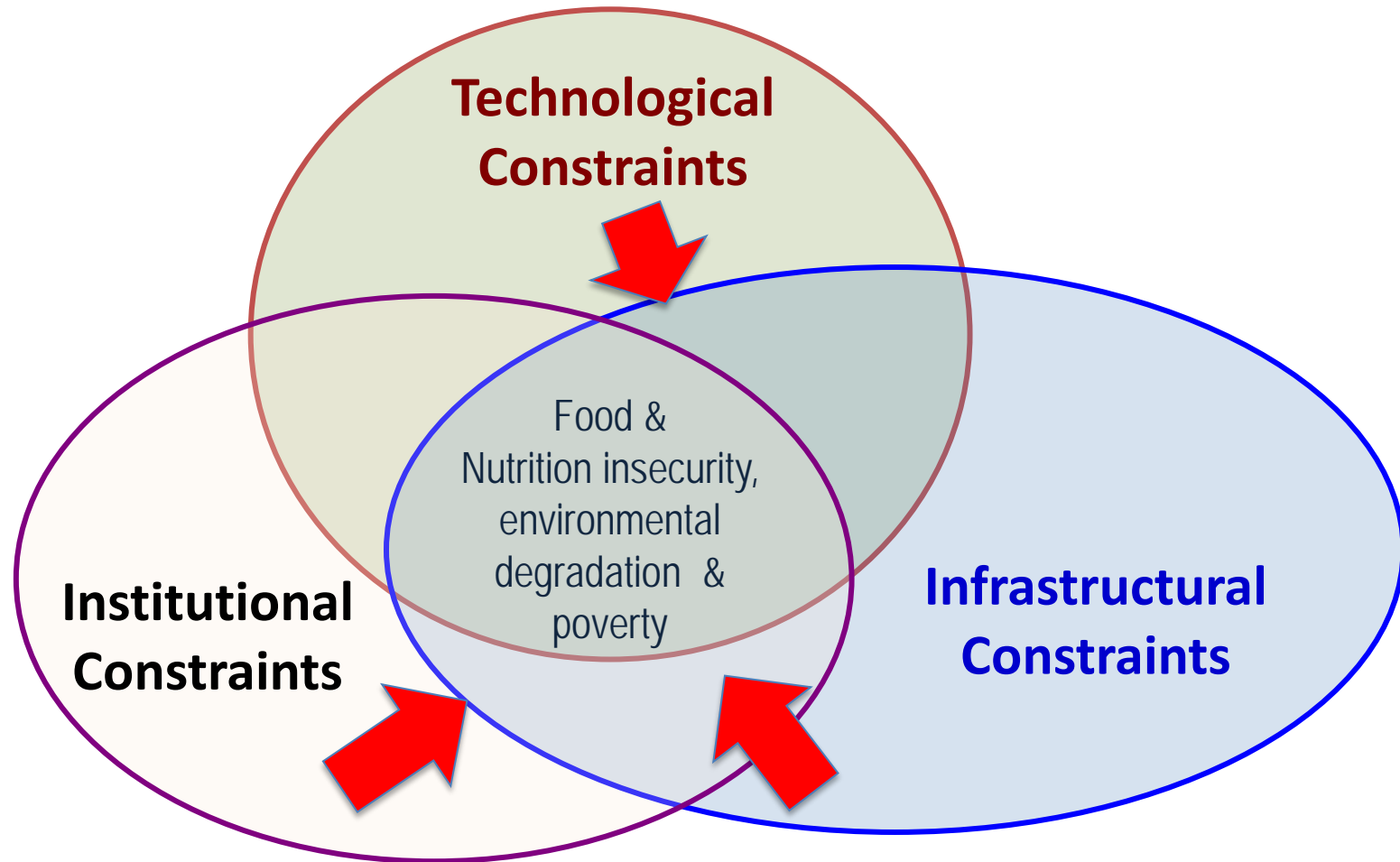
Changing landscape: no level playing fields



Innovation Platforms as a Concept

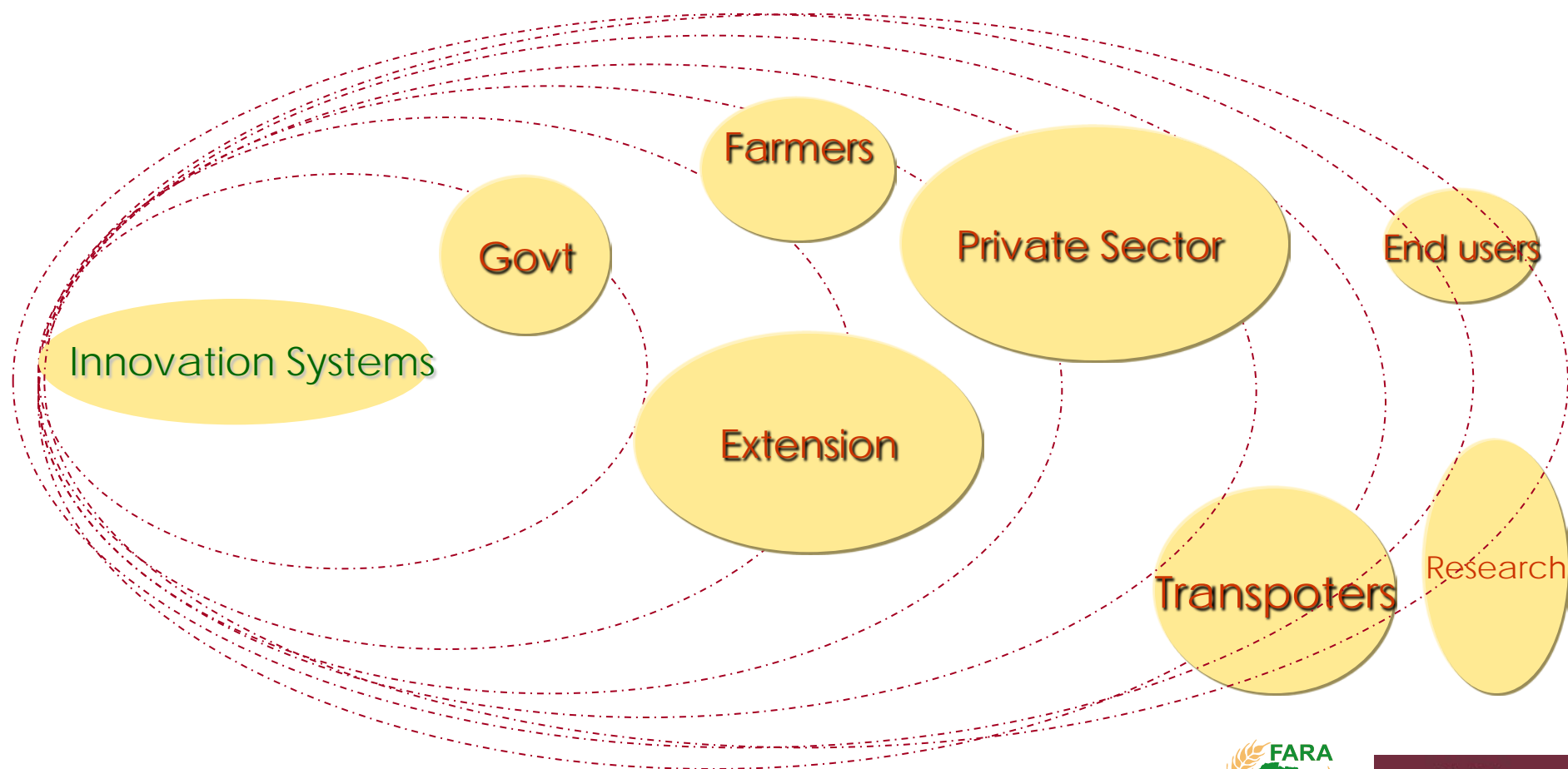
Example of Nerica

- Good technology
- Spread is slowed down by non – availability of seeds



Governance as an overarching factor

Innovation Platform: Participation and Gainful Interaction

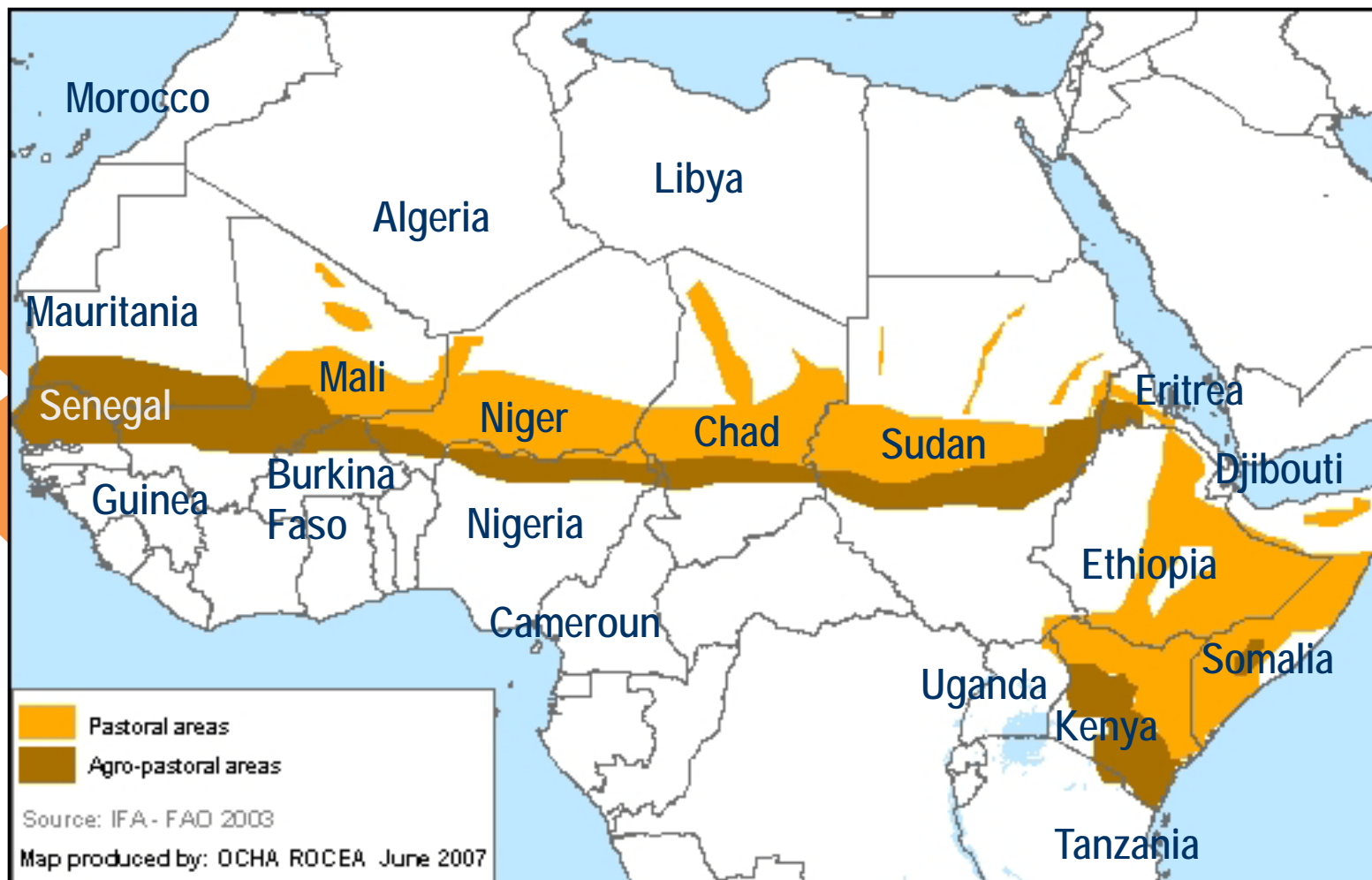


Livestock Sector in Africa

- Major contributor to incomes especially in arid and semi-arid areas (about 80% of the land).
- Employs about 50% of agricultural labour force
- Contributes about 10% of GDP
- Accounts for over 40% of agricultural GDP
- It is the largest anthropometric user of land
- However, sector receives < 2% of national budget allocation.



Pastoral and Agro-pastoral Areas



Livestock systems are changing

Need to understand how systems will change in the future: **the target is moving!**

- To design more coherent and dynamic research and policy agenda that benefits the poor
- To target investments more adequately
- To bridge the technology adoption gap
- **Key drivers:** Population increases, urbanisation, Market access, demand shifts and Climate change

Mining Land use as % of available land mass

Country	Mining Land Use
USA	0.02-0.01
Canada	0.01
Peru	0.01
Brazil	<0.45
Australia	<0.26

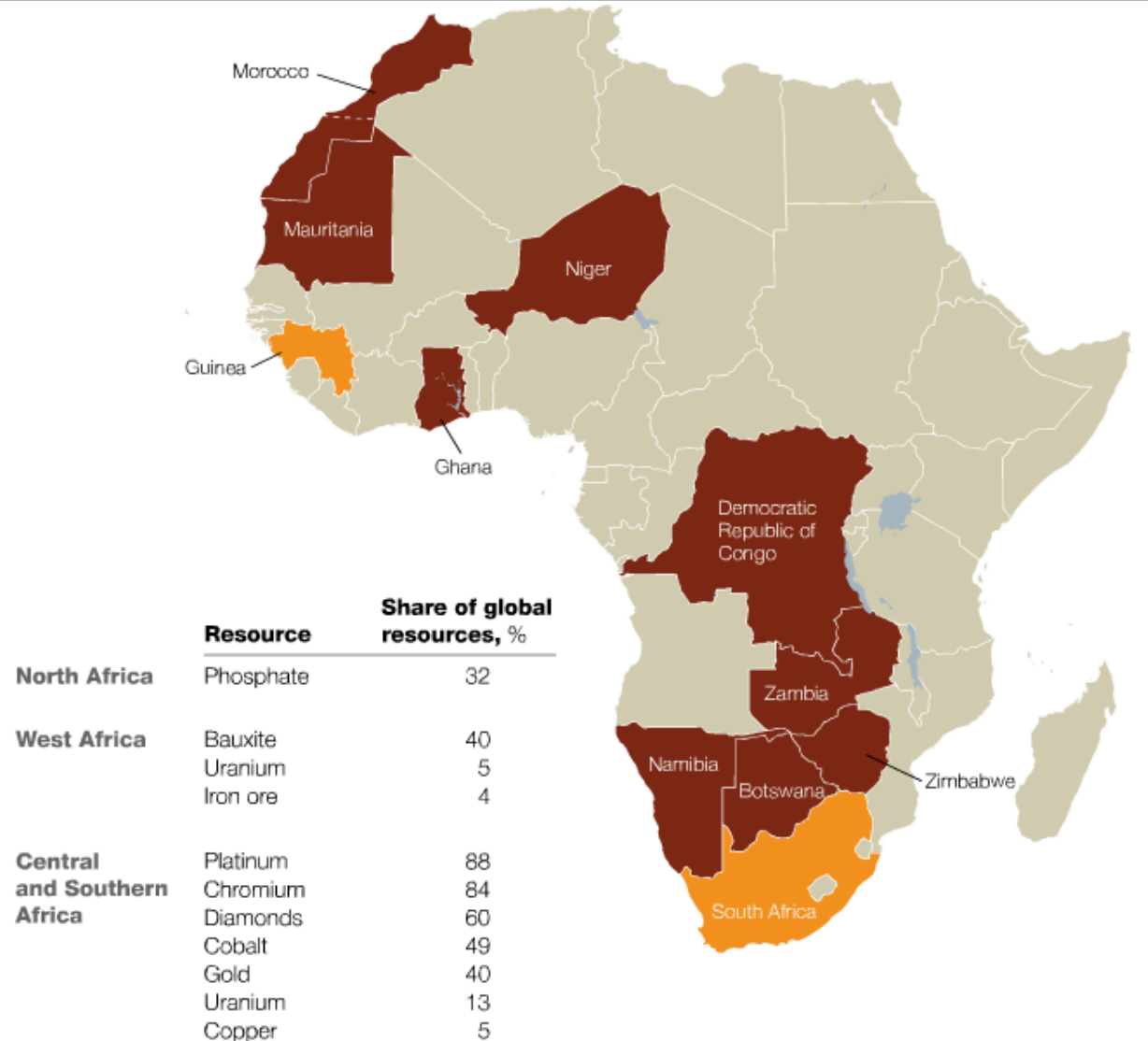
Source

Paulo Riveiro de Santana, Ombudsman, Department
Nacional de Produção Mineral, December, 2011



Africa is hugely endowed in mineral resources

Brown: 1 resource holding in top 10 globally : **Orange** >1 resource holding in top 10 globally



The Unpalatable Oxymoron

"የአባይን፡ልጅ፡ወሃ፡ጠማው፡፡"

The child of the Nile
(Abay) is thirsty

- Ethiopian proverb



Grass-Brass Land Challenge

Conflict has arisen where:

- 1. Mining is perceived to be competing with agriculture and livestock grazing or other traditional land uses**
- 2. Farmers have been displaced from mining areas and comparable land could not be purchased for them or farmers without land title were unjustly evicted**

Grass-Brass Water Challenge ...1/2

- Conflict has arisen when there is competition for use of water resources by agriculture and mining
- Concerns about water use in mining relate to amount of water used, especially in areas with limited fresh water resources, and to changes in water quality due to mining activities.
- Water quality is regulated by environmental legislation but capacity of developing countries to enforce this legislation is usually weak

Grass-Brass Water Challenge ...2/2

- **Current best practices of large-scale mines in Africa are less damaging to the environment than subsistence farming, poverty-related deforestation and communal grazing**
- **Despite local allegations of water pollution, reputable studies have failed to demonstrate that large-scale mining practices are significantly damaging water quality.**

Mining impacts on Agriculture ...1/2

- **Worker Mobility: from Farmers to Miners**
- **The discovery of large mineral deposits may lead to abandonment of farmland.**

Mining can improve infrastructure for Agriculture e.g.

- **New roads constructed for mining operation improve market access**
- **Rural road construction also improve agricultural wages & reduce transaction costs**
- **Local processing of agricultural goods is enhanced by improved access to water, electrification, and improved sanitation.**



Mining impacts on Agriculture ...2/2

Corporate Social Responsibility may be deployed to support agriculture

Newmont Ghana Gold's Ahafo Agribusiness Growth Initiative (AGGI) has provided training to 1,368 farmers to increase agricultural productivity and farm business skills

Lessons from the Past – The Will and The Bill

- The Land Grant Bill
- Do we have ‘The Will’
- An International Council on Mining & Metals study suggests that mining complements agriculture and there are growing synergies between these sectors
- In Argentina, the amount of land under cultivation in communities near mines increased between 2001 and 2007 despite mine construction and operation

Critical gaps identified – Tail piece

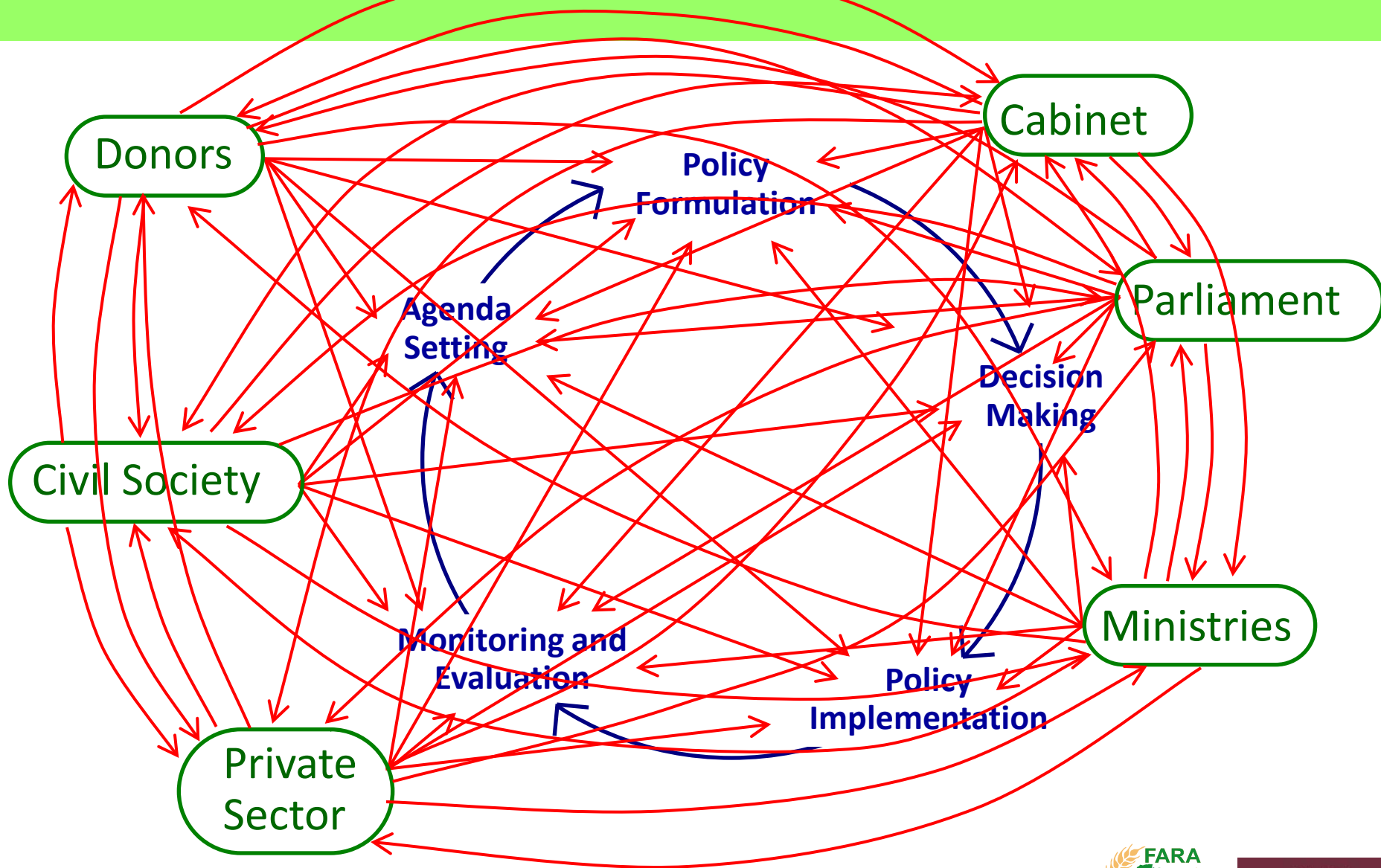
- **Transfer of knowledge and sharing of success stories – how to share with communities and learn from their experience?**
- **More effective and endogenous assessments of vulnerability and adaptation, and need to retain experts**
- **Need to strengthen national institutions so they can develop and use multistakeholder and all inclusive policy and formulation and implementation and information for decision-making at appropriate scales**
- **Need to improve the institutional framework for environmental impact assessment and implementation**

Concluding Remarks

- Livestock sector in Africa deserves greater attention than what is currently accorded to it
- Systems are changing—need to understand how the system will change (foresight and visioning) and determine the outcomes we want
- Dearth of information about impact of mining on agriculture, especially livestock sector in Africa. Major study AND ‘THE WILL’ on this subject needed
- Don’t give the ‘fish’ (Corporate social responsibilities are limited in time and space) teach to fish – empowerment for resilience; investing in the future!
- Need to craft an uptake mechanism of the Recommendations of the Crawford Fund outcomes. Sir John Crawford would have so wished!



Policy Processes



Post thesis

Everything can wait but
agriculture cannot wait!

Jawaharlal Nehru

Indian Statesman and First Prime Minister

Thank You for Listening



Forum for Agricultural Research in Africa

www.fara-africa.org

International livestock Research Institute

www.ilri.org

