Crop genetic diversity conversation, exchange, and use

PERSPECTIVES ON FUTURE SCENARIOS

Gideon Kruseman (CIMMYT)
A convening on measuring the global consequences of inaction, Washington DC, August 26-27, 2019
Context

• What is the cost of inaction with respect to investments related to crop genetic resources with a focus on the low and middle income target geographies of CGIAR
• See Blog post about the convening.
• This redacted presentation contains Gideon Kruseman’s contribution to the panel on “perspectives on future scenario’s”
Interdisciplinary even within economics

- Development economics basis
- Environmental economics perspective added on
- Management science concepts needed
- Evaluation science
- Financial economics
- New institutional economics/ political economics
Ecological economics perspective

Confronted with some key foresight issues

- Bequest value
- Use value
- Insurance value
- Options value

- Climate change
- New and emerging pests and diseases
- Rural transformation
- Changing diets and food systems
- Emerging game changing technology
Risk management science

- Occurrence
- Severity
- Magnitude of impact

- Sphere of Control
- Sphere of Influence
- Sphere of Concern
Evaluation science

• Impact pathways
  – States and transitions
  – Critical nodes
  – Assumptions (implicit and explicit)
    • Institutional arrangements
    • Organizational structures
    • Governance and politics
  – External factors (events)

• Can get really complex if you do it systematically.
Personas

• Design thinking (digital transformation in management science)
Financial economics

• Are we unique with our problem?
  • No!
• High risk, high cost, long term investments in the energy sector have tackled this issue.
• Real options theory (Robert Merton got the Nobel prize in economics for this in 1997)
Political economics

• Policy choices matter
• Interpretation in national legislation of international treaties matter
• Winners and losers of different ways of dealing with genetic resources matter
Thank you for your interest!

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