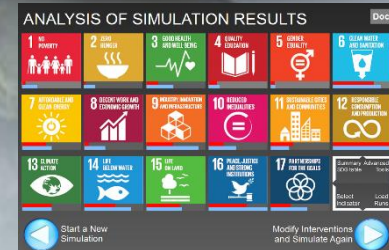


# iSDG a Scenario Tool for Policy Integration and Development Planning

HANS R HERREN  
PRESIDENT  
MILLENNIUM INSTITUTE  
Washington D.C.

Co-Willing  
Economic Development conference

January 26 2019



# Our new & universally agreed Sust. Dev. framework. Time to act is now



The Earth Summit (Agenda 21)



The Millennium Development Goals (MDGs)



**17 Goals, 169 Targets, 242 Indicators**



**ANALYSIS OF SIMULATION RESULTS** Doc

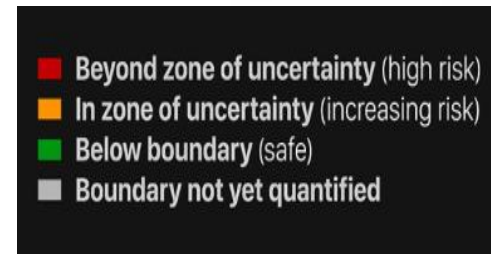
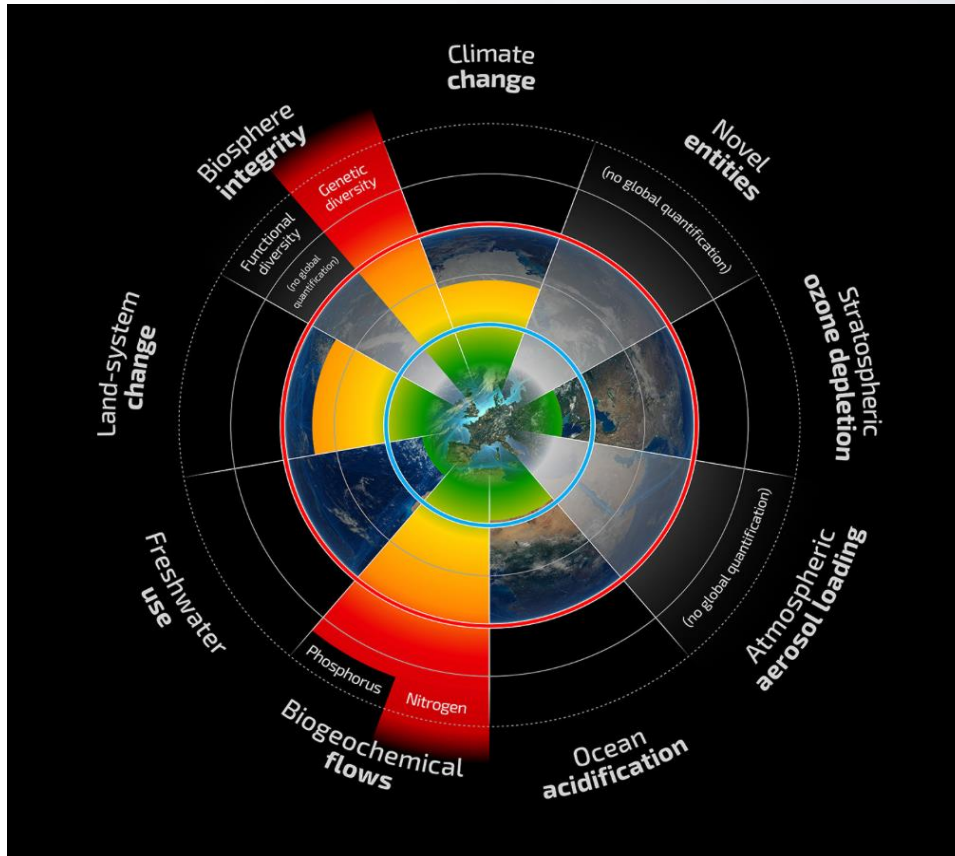
1 NO POVERTY	2 ZERO HUNGER	3 GOOD HEALTH AND WELL-BEING	4 QUALITY EDUCATION	5 GENDER EQUALITY	6 CLEAN WATER AND SANITATION
7 AFFORDABLE AND CLEAN ENERGY	8 DECENT WORK AND ECONOMIC GROWTH	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	10 REDUCED INEQUALITIES	11 SUSTAINABLE CITIES AND COMMUNITIES	12 RESPONSIBLE CONSUMPTION AND PRODUCTION
13 CLIMATE ACTION	14 LIFE BELOW WATER	15 LIFE ON LAND	16 PEACE, JUSTICE AND STRONG INSTITUTIONS	17 PARTNERSHIPS FOR THE GOALS	Summary Advanced SDG table Tools

Select Indicator Load Runs

Start a New Simulation Modify Interventions and Simulate Again

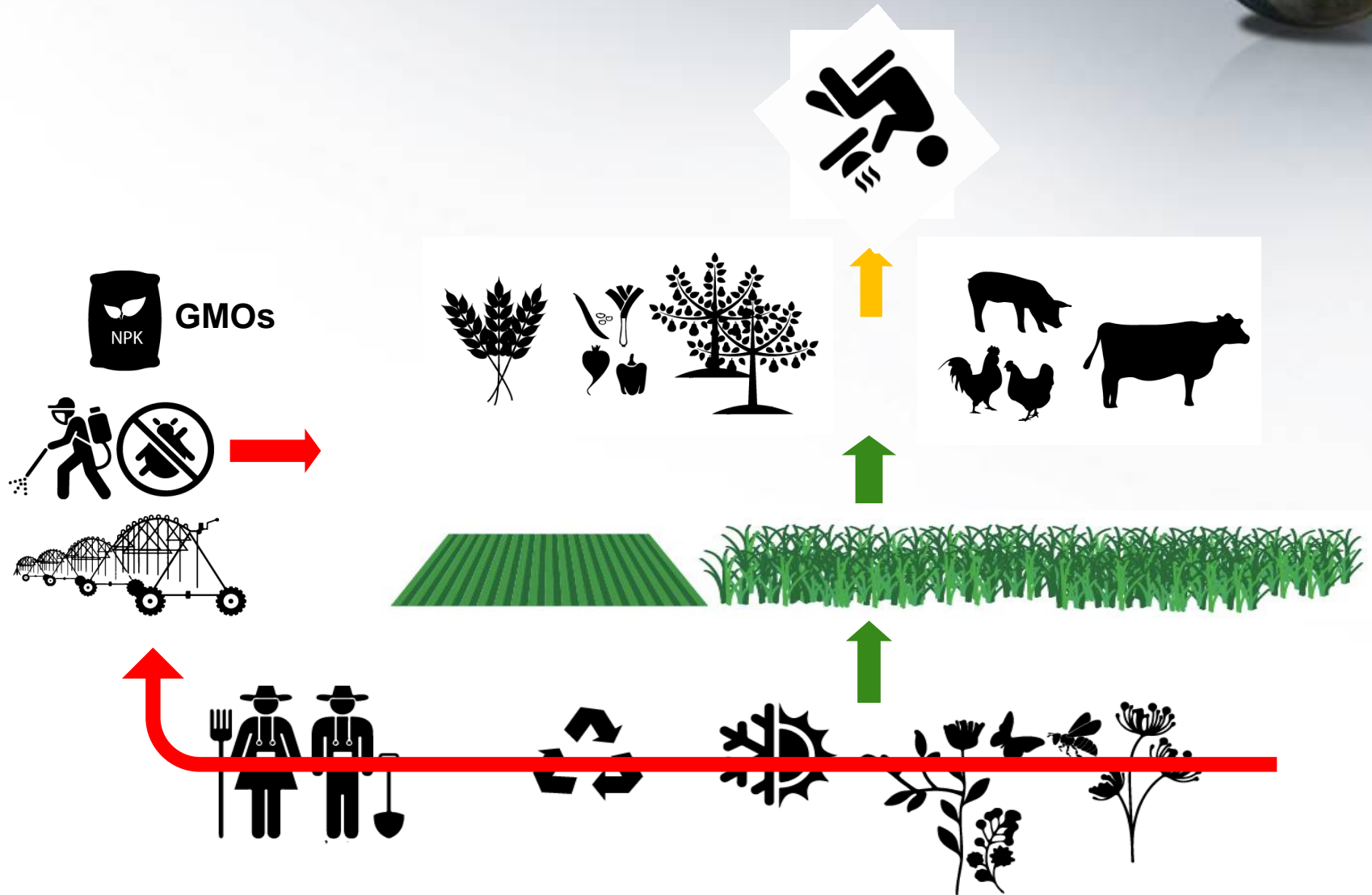
[www.isdgs.org](http://www.isdgs.org)

# The Planet today.....we need to act to save it.....



Rockström et al, 2011

# How did we get there?...among others, our food systems



# How did we get there?...among others, our food systems



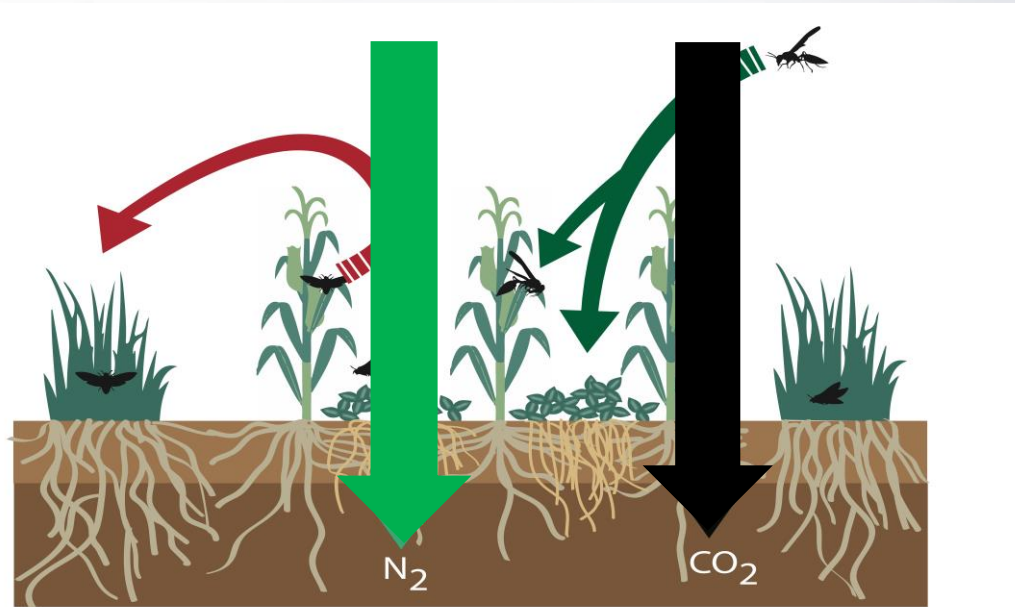
...the so(i)lution is righ under our feet.....draw down carbon, save the planet



...there are so(i)lutions



**Economic returns to multi-intervention investment: Direct and synergetic benefits**



# Holistic SDGs and National Goals (Big 4) planning is essential for success



“Achieving the SDGs (Big 4) together as an ‘indivisible whole’ is not only possible, but the **only** way of achieving them.”

-Science and Technology Major Group Position  
Paper - HLPF 2018

# Action Examples: Kenya The Big 4



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- 1.
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4. Ur

and Agro-processing

There is  
levels an  
the Big 4  
of the SDG

timing, investment  
ability to implement  
contributing to the achievement







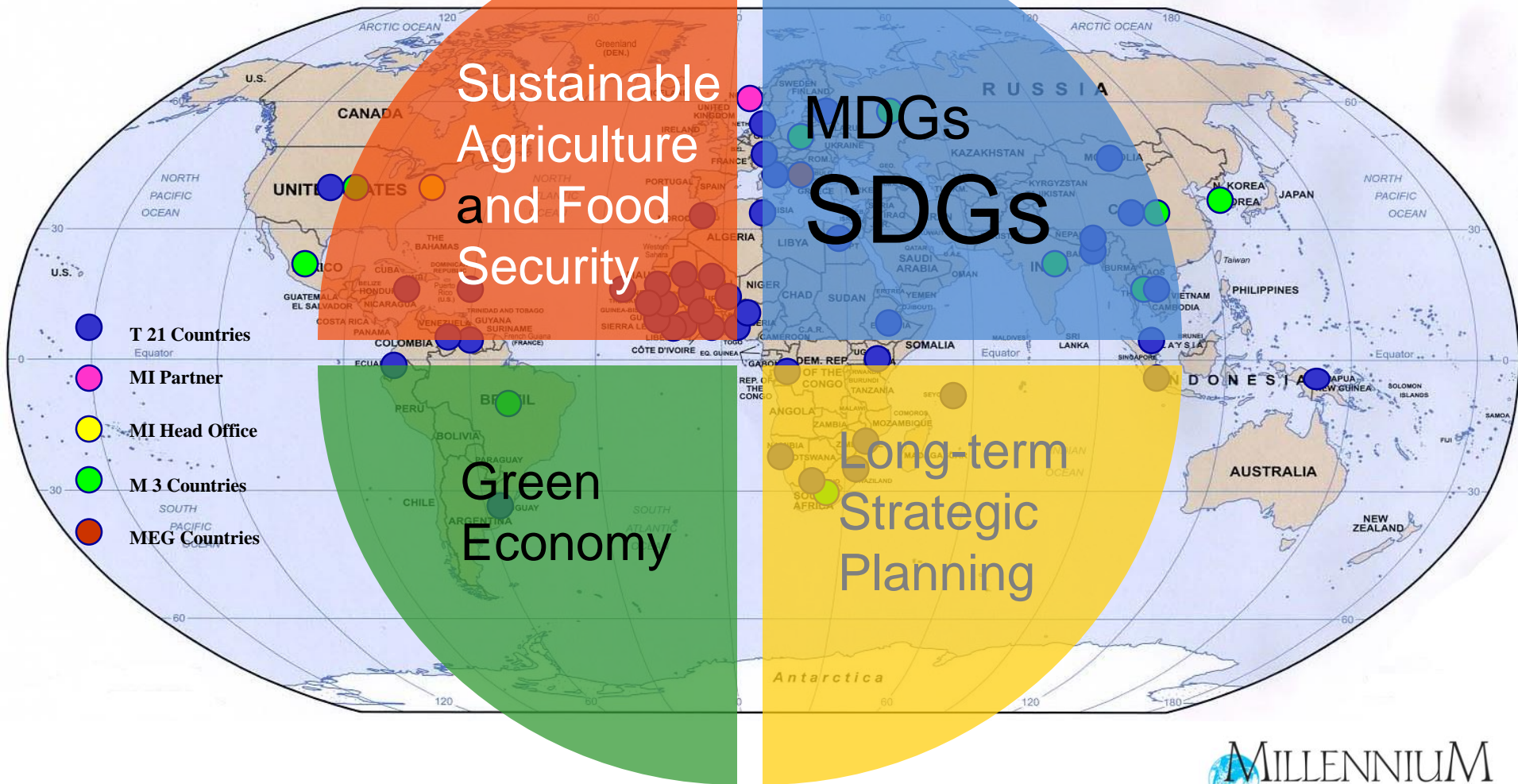
## Support strategic planning through:

- Develop Integrated analytical tools
- Perform analysis and reporting (VNR)
- Facilitate multi-stakeholders processes
- Build technical capacity

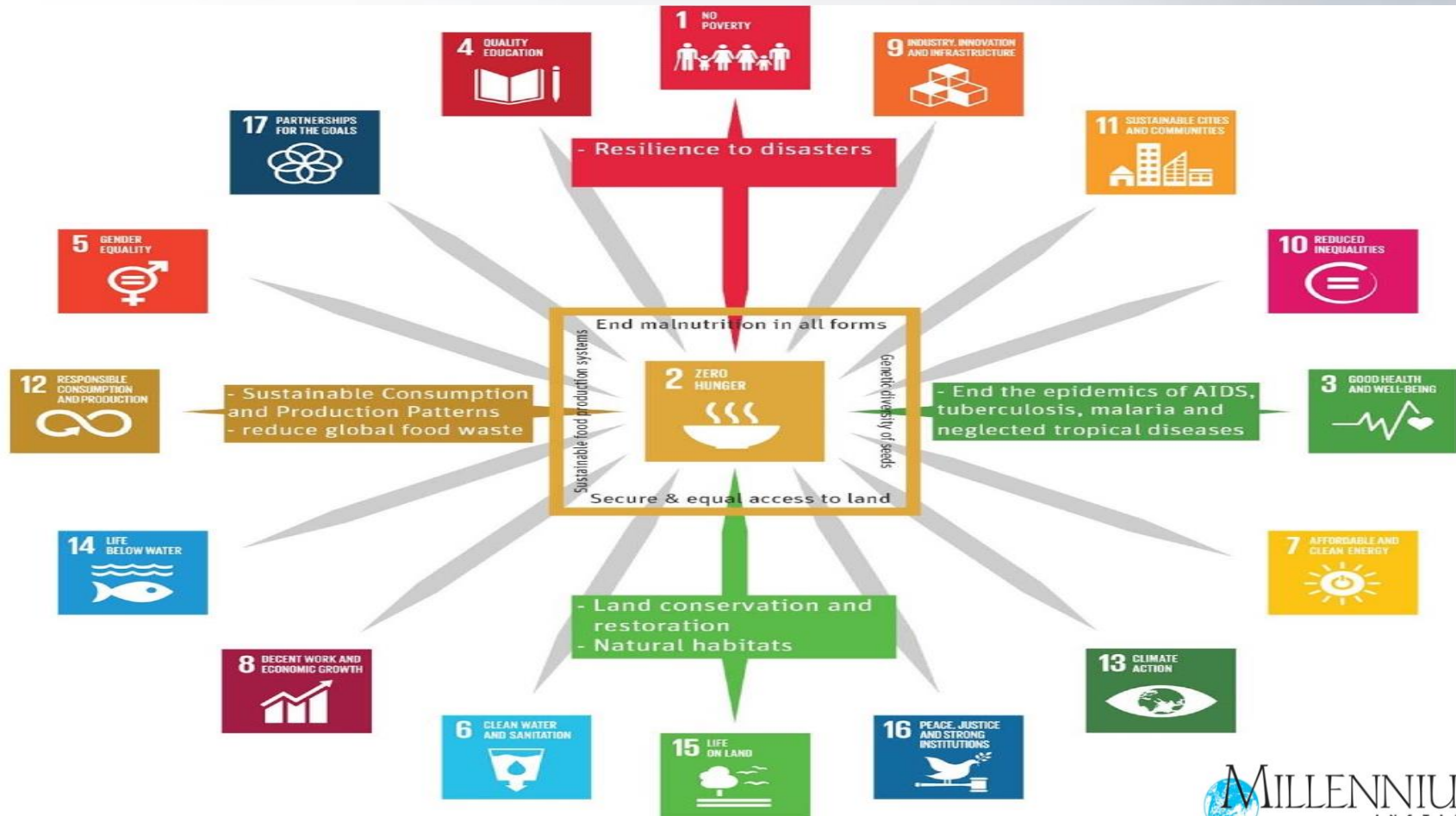




# Worldwide Application of the T21 and iSDG models in support of sustainable policy development: what's the experience?



# Challenge: reduce complexity and overcome Government paralysis in the face of the 169 targets and 242 indicators



# iSDG - a simulator for holistic SDG and national goals policy development



- Enables policy makers and planners to understand the complex interconnections of SDG / NDG policies
- Projects likely impacts of SDG / NDG policies before adoption
- Based on 25+ years of Threshold-21 model applications
- Implemented in 15 countries in Sub-Saharan Africa to date (and over 30 in LA, Asia)

# Why Scenarios



- 1. Scenarios are a pioneering futures studies method**
- 2. Through scenarios we can embrace uncertainties**
- 3. Scenarios are an eye-opening mindset**
- 4. Scenarios come in various colours**
- 5. Scenarios are about re-framing**
- 6. Scenarios launch a learning and communication process towards action**
- 7. The value of scenarios is in their usability**

*Scenarios are like beehives – collectively and interactively constructed in fluent communication*

# Guiding Principle: Policy Integration



Breaking silos

Exploiting synergies

Addressing trade-offs

Shared understanding

**Challenge: the reality so far at Government level are silos, lack of policy coherence, no exploitation of synergies**



# SDGs - The Challenge



- Goal 1
- Goal 2
- Goal 3
- Goal 4
- Goal 5
- Goal ...
- Goal 17

## Resources:

- How much?
- Where?
- When?
- Financing?

Sustainable  
Development

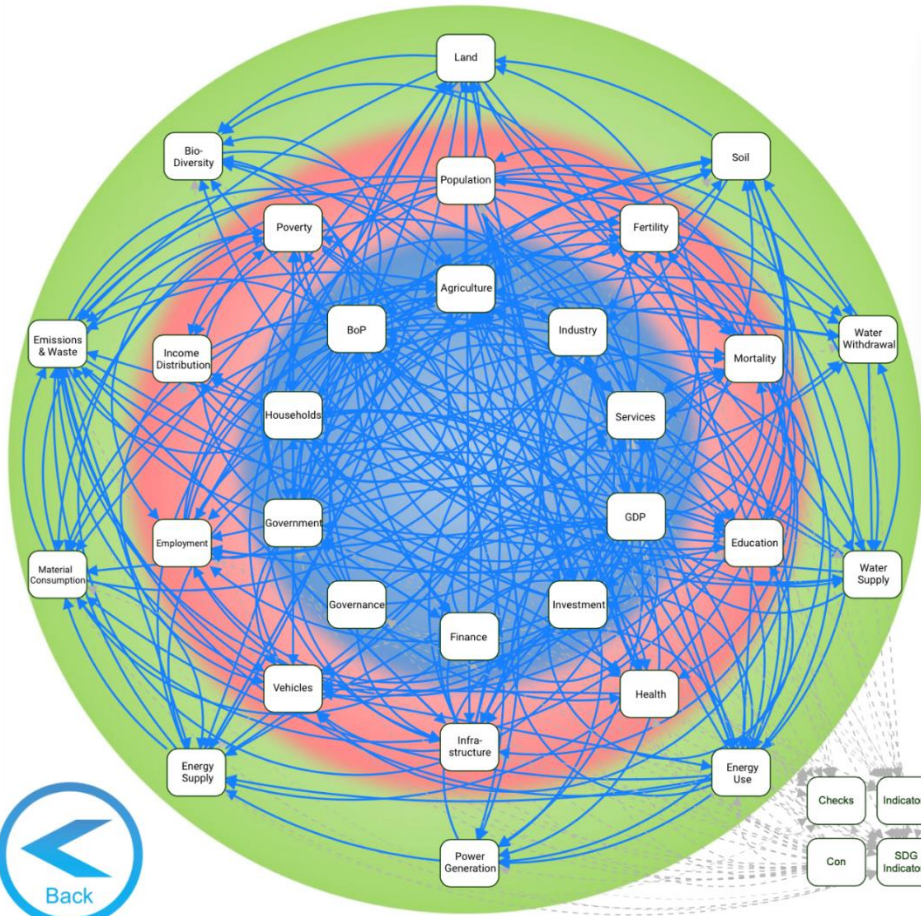


# How to get policy coherence... everything is connected



## MODEL STRUCTURE OVERVIEW

HELP



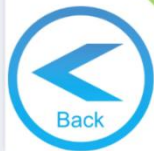
### NAVIGATION GUIDE

The diagram to the right represents the 30 sectors of the iSDG model, organized around the three pillars of sustainable development: Economy (the blue circle); Society (the red circle); and Environment (the green circle).

The sectors of the model are all dynamically interlinked, and the blue arrows indicate influence of the performance of a sector onto another one. As a consequence, when a policy change is introduced in one sector, its impact propagates across the whole model.

Click on any sector to display a simplified diagram of its main indicators and their drivers.

Click anywhere to close this dialog.



# iSDG interface



## DEMO VERSION FOR A SUB-SAHARAN AFRICAN COUNTRY

HELP

### PERFORMANCE OVERVIEW AND INTERVENTIONS



VERSION 2.0

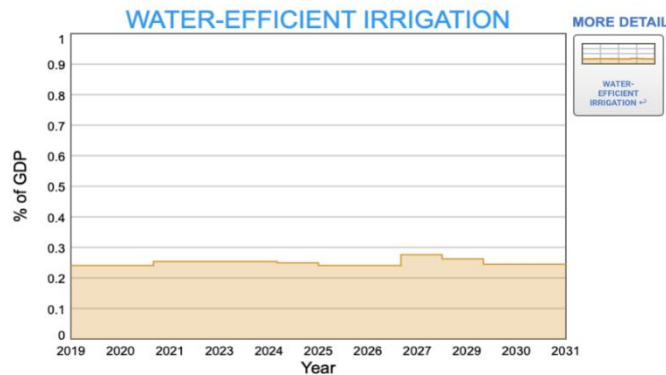
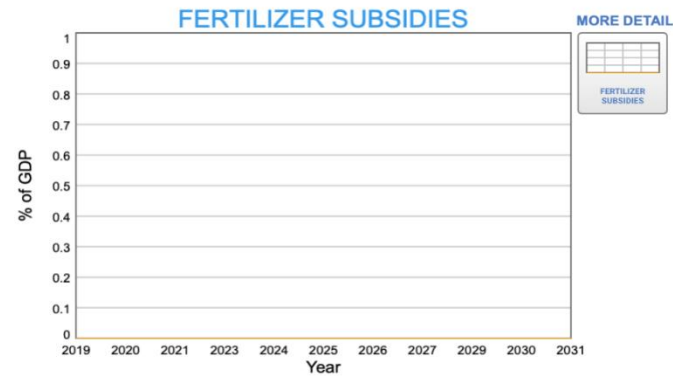
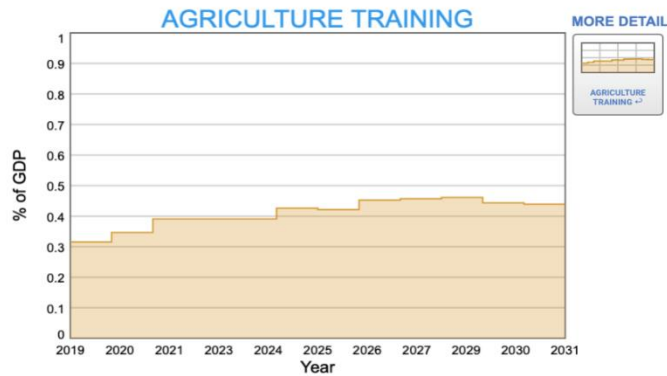
MILLENNIUM INSTITUTE



### SELECT INTERVENTIONS

HELP

INCREASE IN EXPENDITURE RELATIVE TO BASE RUN (%GDP)



# iSDG

## policy intervention impact



### iSDG DEMO VERSION

INTEGRATED SIMULATION TOOL FOR A SUB-SHARAN AFRICAN COUNTRY

HELP

### PERFORMANCE OVERVIEW AND ANALYSIS



VERSION 2.0

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# iSDG policy intervention analysis

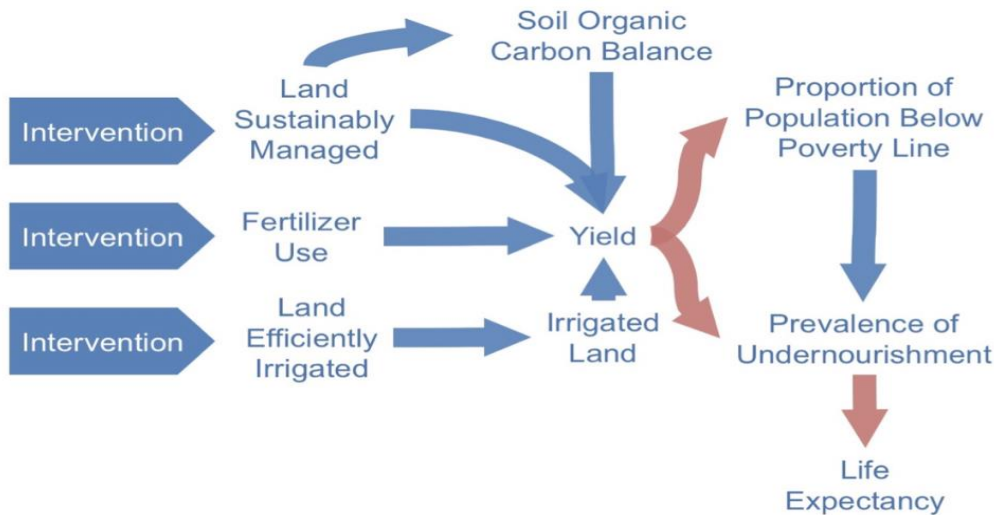


## SIMULATION RESULTS

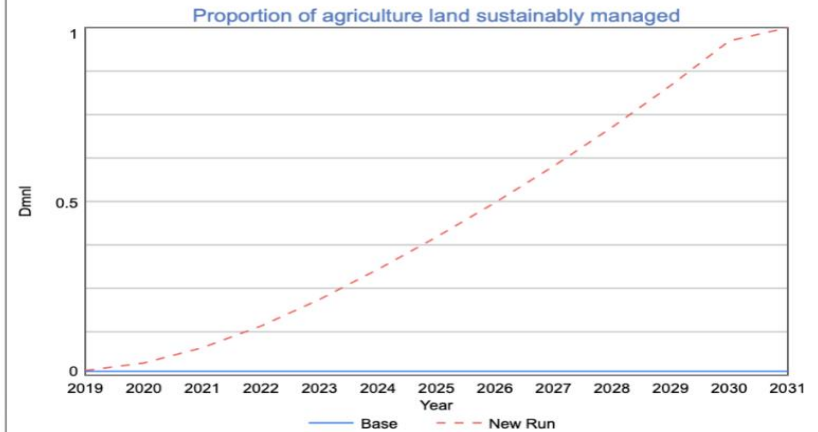
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### IMPACT ANALYSIS

#### CAUSAL INTERACTION MAP



#### RESULTS PANEL



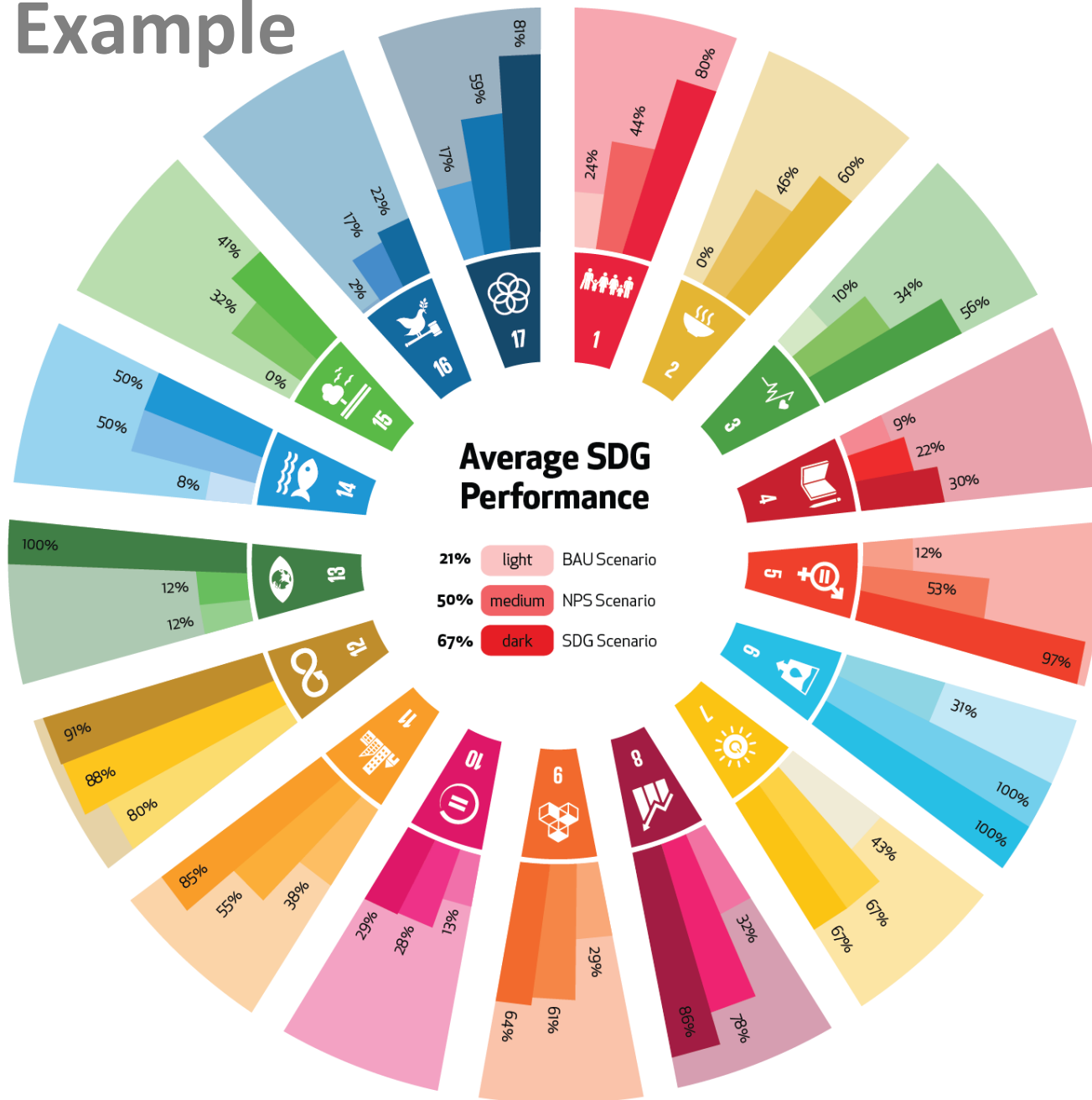
SDG Indicators										
	22	2023	2024	2025	2026	2027	2028	2029	2030	Final
<b>GOAL 2</b>	49	0.296	0.344	0.400	0.462	0.530	0.598	0.677	0.744	0.775
prevalence of undernourishment	90	0.182	0.175	0.168	0.160	0.150	0.139	0.127	0.113	0.101
prevalence of stunting	94	0.189	0.183	0.169	0.150	0.127	0.106	0.077	0.064	0.062
prevalence of malnutrition	98	0.095	0.092	0.085	0.076	0.064	0.054	0.039	0.032	0.031
total agriculture production in tons per labor unit	20	3.567	3.708	3.830	3.949	4.055	4.155	4.251	4.342	4.421
proportion of harvested area sustainably managed	41	0.218	0.305	0.398	0.497	0.602	0.714	0.834	0.962	1.000



Scroll left-right for more years and up-down for Right-click on table to export data



# Example



# Integrated Scenario Analysis

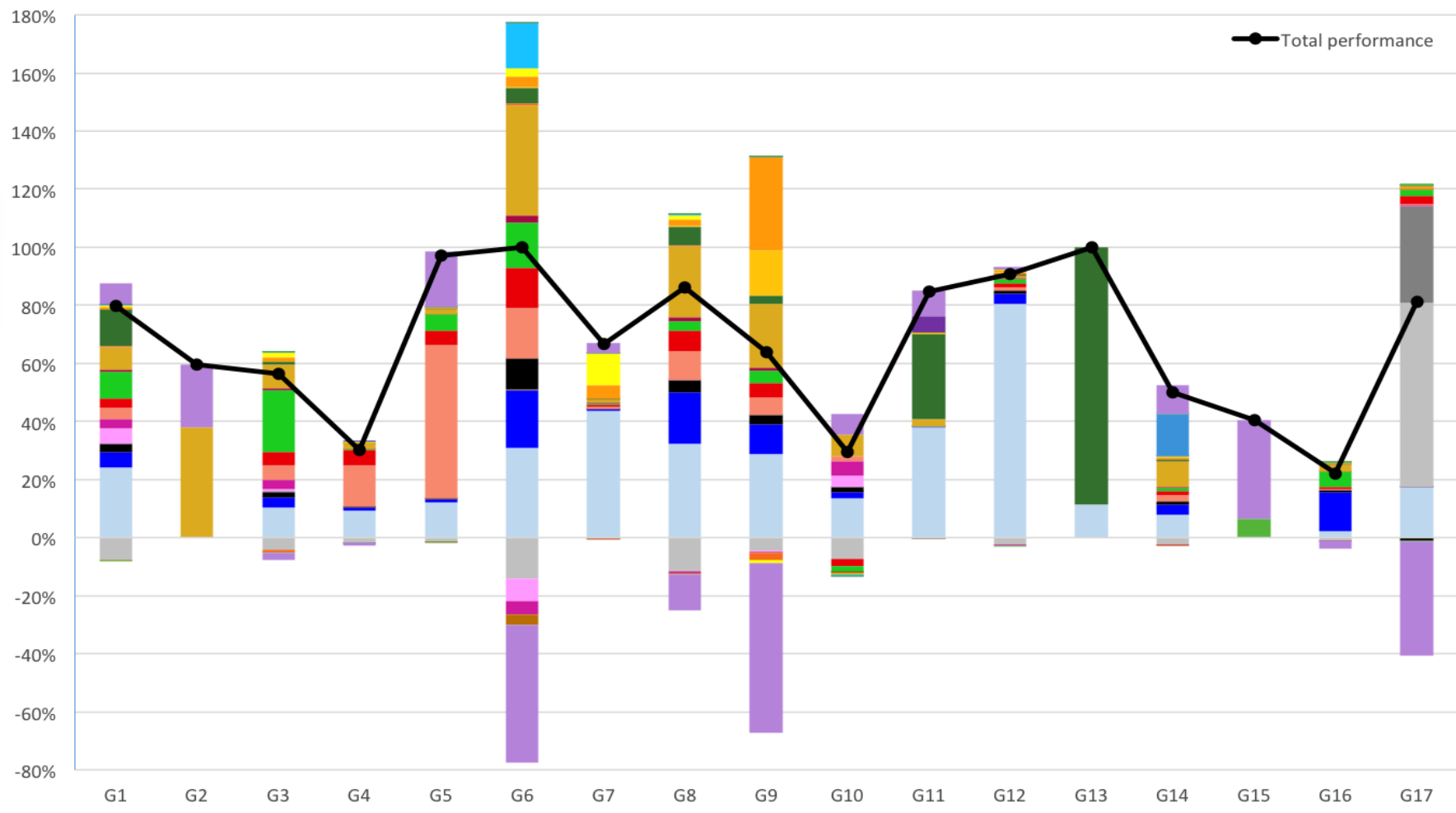
Additional Investment (% of GDP):

BAU = 0%

NPS = 4.5%

SDG = 15%

# Cross Impacts & Synergies



- Base run performance
- International trade tax
- Distribution of fiscal pressure
- Education
- Training on sustainable agriculture
- Water and material consumption efficiency
- Small scale renewable energy capacity
- Protection of marine areas and aquaculture
- Governance
- Taxation
- Subsidies and transfers
- Health and family planning
- Roads and railways
- Water and sanitation
- Reforestation and forest protection
- Migration
- Interest rate on foreign debt
- Gender policies
- Industrialisation
- CC Adaptation
- Large scale renewable energy capacity
- Waste
- Synerg,

# iSDG/Big 4 – Implementation



Broad SD Processes

Core Model (intl. databases)

Model Review

Capacity Development

In-Depth Customization

Institutionalization support

Country Specificity



# Our Approach



## 1. Policy Identification

Identification  
of needs and  
policies

iSDG Model  
calibration and  
customization

- Review of policy process and needs
- Framework for policy harmonization
- Selection of key performance indicators
- Definition of key areas of intervention
- Identification of data sources
- Model adaptation to country needs

## 2. Stakeholder Consultation

Multi-  
stakeholder  
consultation

Scenario  
simulation  
and analysis

- Interactive multi-stakeholder workshops
- Live simulation of policy options
- Policy prioritization
- Development of broadly agreed scenarios
- Policy coherence and synergy analysis
- Capacity building and knowledge transfer

## 3. Report and Monitoring

Report  
crafting and  
review

Monitoring  
and post-project  
support

- SDG Integrated strategy assessment
- Alignment of national strategies with SDGs
- Multi-strategic framework coherence
- Model and data update
- Monitoring progress against milestones
- Continued support



# Inclusive/ participatory approach to policy design for SDG / Big 4 implementation, measuring progress and reporting



# In Summary...



Governments, NGOs, Development partners and private sector need support for the policy design process by:

**Assessing** current performance and needs

**Evaluating** impact of alternative strategies

**Establishing** policy coherence

**Facilitating** stakeholders involvement

Develop successful **integrated**  
NDPs and road-maps aligned with **2030 Agenda**



*Thank you for your attention*

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[www.millennium-institute.org](http://www.millennium-institute.org)

[hh@millennium-institute.org](mailto:hh@millennium-institute.org)

[info@millennium-institute.org](mailto:info@millennium-institute.org)