



A brief introduction to the Millennium Institute

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Millennium Institute



- Established in 1983, MI is a not for profit organization based in Arlington VA, USA.
- Our goals are:
 - To develop and disseminate advanced analytical tools to support strategic planning on critical issues;
 - To build capacity in countries to use our tools to help address critical issues;
 - To develop a network of partners to inspire, endow, and implement more integrated planning towards a sustainable future.

MI's Core Capabilities



- Illustration of the synergies and implications of different options across a broad framework
- Provision of a basis for productive long-term planning and unite various parties around consistent policies
- Deeper understanding of the interrelations existing among critical issues
- Support for the creation of cooperation among stakeholders at the planning and technical level

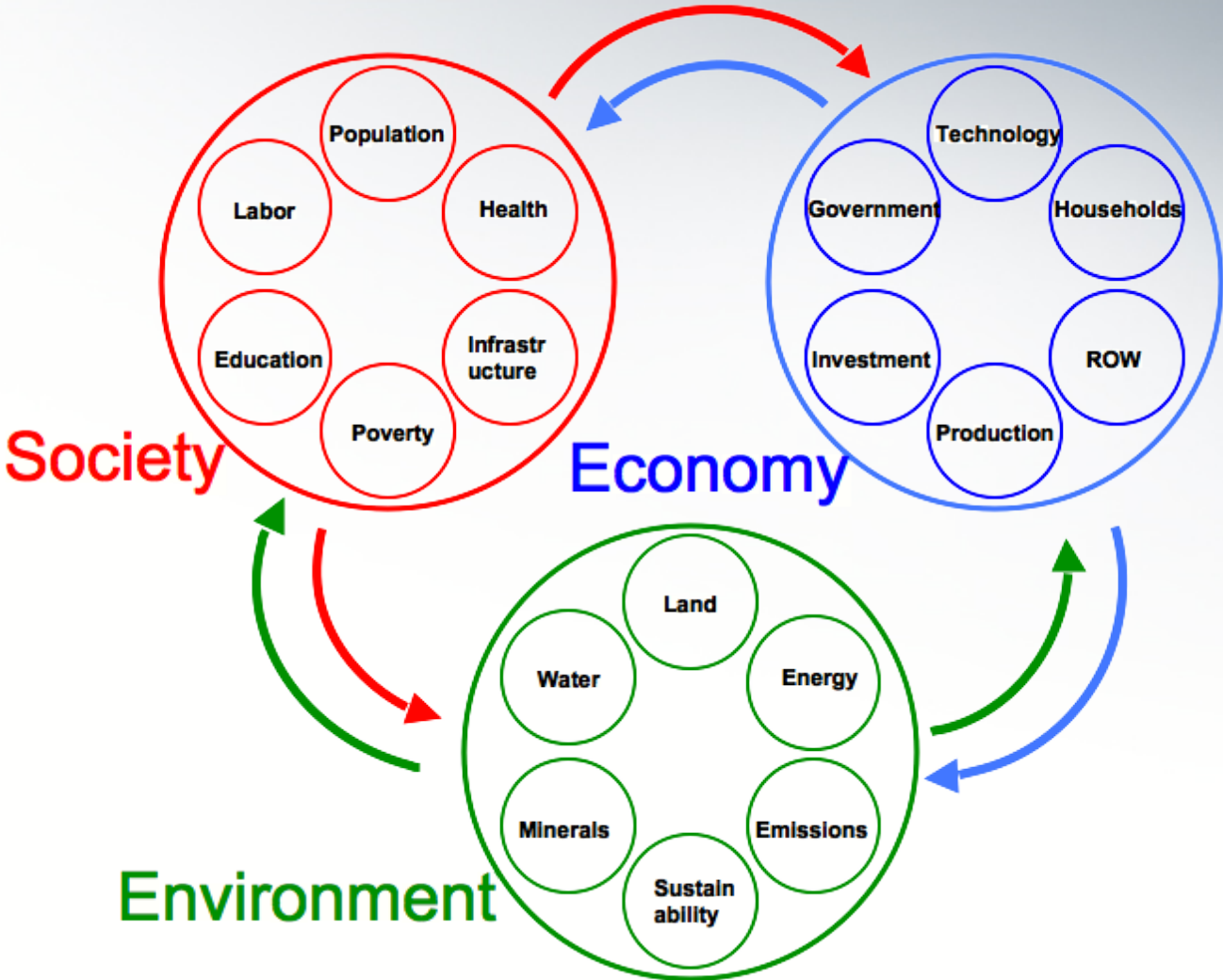
Clients and partners



- Governments
- International organizations
- Private sector
- Academia
- NGOs

MI normally involves local partners in data collection and model customization

Architecture



Characteristics of tools used (2)



System dynamics methodology

- Based on wide range of existing sector models and analyses
- Built to reflect observed real world relations in country of application
- Analyzes cross-sector links and feedback loops

Composed of three main pillars

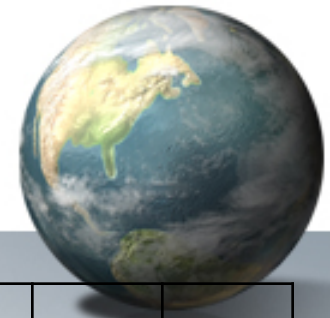
- Economic -- based on SAM, key market balances, and production
- Social -- based on dynamics in population, health, HIV/AIDS, education
- Environmental -- based on area specific issues and information

Adapted to specific data, issues, objectives, actual relations

Calibrated against history and provides reality checks

Transparent and easy to use

Existing approaches to NDP



| Approach | Software | E | C | D | T |
|---------------------------|----------|-----|-----|-----|-----|
| Disaggregated consistency | MS-EXCEL | NO | NO | NO | YES |
| Macro-econometrics | EIEWS | YES | NO | YES | NO |
| Computable general eq. | GAMS | YES | NO | YES | NO |
| Integrated simulation | VENSIM | YES | YES | YES | YES |

1. Endogenously represent key variables (E)
2. Comprehensive (C)
3. Properly represent dynamic complexity (D)
4. Transparent (T)

NDP models and Cloud Computing



- (1) - Privacy: many governmental organizations like to keep their data confidential.
- (2) - Reliability of service: we have to make sure that servers are up and running at all times.
- (3) - Creation of a tailored algorithm / software.
- (4) – Internet availability and reliability in Africa, or remote areas. Should we work with local servers too?

Thank you for your attention



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Or visit
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