

MILLENNIUM INSTITUTE



a sustainable future is possible

www.millennium-institute.org



who we are

Millennium Institute (MI) was founded in 1983 to inspire global action on sustainability issues. We envision a world where society manages its economy equitably in harmony with its all life-supporting environment and within the available renewable natural resources. We believe that a global community of people, institutions, and corporations that understand the dynamics of whole systems as well as the consequences of their actions, will help to mobilize and attain this future.

what we do

Modeling and consulting services

Over the last two decades, MI has provided professional consulting on development issues to governments, national planning institutions, international organizations and multinational companies. Our expertise in simulation modeling techniques complements the vast field experience in macro analysis of social, economic and environmental issues. We work with clients to build dynamic decision-making models that support comprehensive and integrated analysis of global, regional, and national development challenges such as poverty reduction and economic growth strategies, climate change and global warming, and peace-building in post conflict regions. Our simulation models have the unique advantage of integrating environment, society, and economic considerations within a single framework to facilitate comprehensive analysis and reveal unintended impacts of proposed strategies.

Training courses

MI believes in the value of self-empowerment. We provide capacity development as an integral part of our modeling services to ensure clients have mastery of the models being created, and can actively contribute to their development.

Millennium Institute has blazed a trail by harnessing the capacity of system dynamics to analyze development problems, and thus made it possible for countries to plan their development from a holistic consideration.

– Fulai Sheng, UNEP

We also offer regular training courses in system dynamics to impart knowledge and skills required to effectively analyze complex development challenges and determine the best approaches to mitigating them. The courses are targeted at professionals – including government staff, advocacy and civil society groups, policy research institutions, private foundations, and bilateral donors.

Public education

MI conducts workshops and seminars for policy makers, planning agencies, aid agencies, development practitioners, and business groups to introduce them to dynamic modeling as a tool for designing policies and programs to address critical medium and long-term global development issues. MI also organizes media events and public presentations to introduce the public at large to the relevance of systems thinking for sustainable development.



Modeling services

Millennium Institute's suite of dynamic simulation models enhances insight and decision-making in complex systems. With our support, governments, civil society groups, and business corporations are using the models to inform and design policies that promote sustainable development.

Threshold 21

Threshold 21 (T21) is a simulation model used for medium-to-long term national planning. It enables integration of the most important economic, social, and environmental factors that influence socio-economic-environmental development. T21 also supports comparative analysis of alternate development strategies and helps users to identify and mitigate unintended consequences that may undermine well-meant interventions.

T21 models have been customized for over 20 countries in Africa, Asia, North and South America, Caribbean, and Europe, where it is being used to formulate and debate sustainable development plans.

Multi-Entity Gaming

MEG is a multi-player gaming tool used to support collaborative visioning and strategic planning. MEG promotes dialogue among groups with varied and potentially conflicting interests, and supports reaching a shared consensus on how to foster equitable socio-economic development.

MEG has been used in the Western Balkans region, and further applications are being planned for the West Africa sub-region and others.



What our partners are saying

MI's T21 analytical tool is essential for effective national development strategies.

- Ed Cain, Director Global Development Initiative, Carter Center.

T21 is an important complement to ASPO-USA's mission of educating the public and for informing policy decisions with the best available information on energy and resources. The model gives ASPO-USA a foundation, built on known real-world constraints and physical laws, for its policy recommendations and public statements on energy issues.

- Dick Lawrence, Association for the Study of Peak Oil-USA.

The model's simulation of Jamaica's historic development over the last fifteen years has afforded policymakers, scholars, and the wider public a common set of values to debate, and from which to draw consensus.

- Planning Institute of Jamaica



Modeling services

M3

M3 is a comprehensive transportation model used to conduct analysis of vehicle markets. M3 emphasizes the interconnectedness of the vehicle market with factors such as the economy, demography, regulatory policies, infrastructure, energy demand, and congestion.

M3 is currently used by General Motors in 9 countries – USA, China, Brazil, India, Mexico, Poland, Russia, South Korea, and Thailand.



What our partners are saying

MI's integrated dynamic models have been vital for General Motor's sales forecasts.

- Paul Ballew, Executive Director Global Market & Industry Analysis, General Motors

It has been my dream for ten years to get the PIOJ departments to work together. Now it is happening with T21. With T21, I can see team-building and networking across the ministries and government agencies, and effective communication.

- Wesley Hughes, Director General Planning Institute of Jamaica

We need to use this tool at the Headquarters, in our embassies and help our country partner acquire it.

- Ton Boon von Ochssee, Ambassador for Sustainable Development, The Netherlands



Training courses

One of MI's objectives is to create a critical mass of systems thinkers who use system dynamics-based tools to analyze development challenges and propose effective and sustainable solutions. We provide training as part of consulting projects, and organize regular courses in partnership with leading universities in system dynamics research.

System Dynamics-based Development Planning Course

The System Dynamics-based Development Planning Course is a six-week residential course designed to impart the knowledge and skills required to analyze complex development challenges from a comprehensive and systemic perspective.

This intensive and highly interactive course exposes participants to the theory, method, and tools used in integrated planning. Participants are guided through the model-building and analysis process using a hypothetical country, and bring their own knowledge of development issues to contribute to the model's development.

The course is targeted at government agencies, advocacy and civil society groups, policy research institutions, private foundations, and bilateral donors, who are responsible for designing and implementing development policy and programs. Professional educators, researchers and graduate students also enroll in the course to improve their teaching and research skills. The course is offered several times during the year in locations around the world, in collaboration with academic institutions of international repute. Special sessions of the course, tailored to the needs of the audience are also organized on request.



What participants are saying

The course strengthened my capacity in modeling and analysis, especially how to analyze several development sectors under one framework.

- Participant from Togo

I cannot think of a more motivated team of course leaders, a more comprehensive curriculum and better exercises than this course provided, that puts you up to speed in System Dynamics in six weeks.

- Participant from Germany

The critical-thinking pedagogical approach is what I liked most in this course. It encouraged us to think critically, to deliberate with others, and to take an active part in learning. We had meaningful involvement in the creation of a model for a virtual country, which made it easy to understand development planning and modeling as well. It is exactly what is called 'learning by doing'.

- Participant from China



Public education

Millennium Institute's workshops and seminars target policymakers, planning agencies, aid agencies, development practitioners, and business groups, to educate them on the benefits of incorporating systems thinking as an important component of designing policies and programs that address critical medium and long-term global development issues.

Examples of MI's public education activities:

– Informing the U.S. Energy Policy Debate

This event was a public presentation of the T21-USA model to inform and catalyze transparent and unbiased debate about America's energy future. The event was attended by a diverse group of stakeholders within the government, nonprofit organizations, policy think tanks, academic institutions, donors, and the private sector.

– Supporting Development of Integrated Polices and Interventions Workshop

This workshop was conducted for officials of the Netherlands Ministry of Foreign Affairs to demonstrate how MI's models can support the ministry's efforts to promote integrated policy and intervention programs in their 36 partner countries.

– Economic Community of West African States Workshop

This seminar demonstrated how MI's models could support regional integration and cooperation, and address critical sustainable development issues in a coherent manner among ECOWAS member countries.

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