

## **Petition to Form a Special Interest Group on Environment and Natural Resources Management (ENRM)**

Dear Sirs,

We are writing on behalf of six colleagues from the society who support the formation of a new SIG dedicated to educate and develop the system dynamics and systems thinking network focused on sustainability. Our aim is to subsume the Water, Energy and Agriculture and Food SIGs to enable better communication amongst the sectors that are vital to sustain life.

This has been done in agreement with the heads of the SIGs concerned.

The purpose, objectives, activities and leadership are described in the charter proposal (included).

Thank you for considering our proposal. We are open to discussing this further and refining our objectives in alignment with the society's goals.

Sincerely,

Joseph Londa  
Erica Rieder  
Christine Tang  
Antoni Oliva

November 6, 2024

## **ENVIRONMENT AND NATURAL RESOURCES SIG – Charter proposal**

### **1. The SIG shall be known by the name:**

The Environment and Natural Resource Management (ENRM) Special Interest Group of the System Dynamics Society, Inc.

### **2. The purpose of the SIG shall be:**

The sustainability of the earth needs a Systems Thinking approach combining social and ecological factors, especially for mitigating the effect of and building resilience to climate change. Recognizing this need, the Environment and Natural Resource Management SIG replaces the Environmental SIG and subsumes the Water, Energy, and Agriculture and Food SIGs to enable better communication amongst the sectors that are vital to sustain life. By collaborating and co-hosting meetings, the operational integration of the disparate SIGs provide vitality, a consistent meeting structure, and cost sharing of the logistics for the SIGs involved.

The purpose of this SIG is to educate and develop the system dynamics and systems thinking network focused on sustainability. A key stock we will focus on is the development of social capital for the purpose of sustainability.

Social capital refers here to the networks, relationships and social interactions at the local level, and to culture, shared values and routines that shape societies at the national or regional level.

### **3. The objectives of the SIG shall be:**

- **Integrating other SIGs.** The Environment and Natural Resource Management SIG (ENRM SIG) covers many aspects that can have already been addressed or discussed in the framework of some other existing SIGs. That is why we propose to work in a fuzzy network, coordinated by the ENRM SIG with independent nodes. To achieve this objective, we will
  - increase engagement in the SIGs
  - make it easier to coordinate, streamlining efforts
- **Build capacity** - The SIG will build the capacity of its members through the sharing of lessons learned and different approaches, best practices for implementing SD in the natural resource sector, providing a forum to discuss issues and through connecting members with resources they need through the network.
- **Grow the SD Network for ENRM** - Provide a platform for people in the SDS to get to know each other and to learn about work being done in the

environment and natural resource sector. Foster collaboration and connection in meetings.

- **Provide shared frameworks** - Development of a qualitative **general model** of the dynamics regarding consumption, needs, goods, natural capital and social capital. This will allow different research or consultancy groups to see themselves in the general picture and will foster dialogue around new ways of tackling environmental and ENRM challenges.
- Focus on generating insights for effective **communication for action**.

#### 4. Activities

- **Networking**
  - Regular updates on news, research collaboration opportunities, upcoming appointments, etc.
  - A minimum of 4 meetings per year, including one face-to-face meeting during the International System Dynamics Conference.
  - Spaces for presentation and getting to know each other in meetings and webinars.
- **Frameworks**
  - Building a shared framework of how different environment and natural resource sectors align using a participatory approach.
  - Collection of relevant references and discussion on existing models.
  - Host relevant discussions around subjects of interest raised by the community.
- **Build capacity of members**
  - The SIG will seek speakers with international research centres in climate change, socio-economic transitions, and any other issue of importance for transitions and natural resource management.
  - Organise webinars and meetings to discuss and share learnings on methodologies and techniques relevant to SIG objectives.

## 5. Leadership

The SIG will be co-led in equal partnership by the following individuals:

- Joseph Londa - Retired from a 40 year career in Systems Engineering in the field of Information Technology and Computer Engineering, currently the Environmental SIG leader. Currently focusing on Battery Technology and Electric School Bus Transition.
- Erica Rieder - Postdoctoral Researcher at the University of Montana (US) who focuses on applying participatory system dynamics to both national and international wildlife conservation issues.
- Christine Tang - Water SIG leader, New Mexico Water Resources Research Institute at New Mexico State University Research Scientist, System Dynamics Society Conference Program Assistant and WPI PhD Student.
- Antoni Oliva - Agricultural Engineer. Founder and consultant at 22SISTEMA. System Dynamics modeling in European projects, focused on sustainability, natural resources and rural ecosystems: INSURE (2004-2007), PoliRural (2019-2021), GoDigiBios (2025-2028).

Each person will be responsible for:

- leading at least 1 meeting per year
- execution of tasks in accordance with the internal agreement
- participate in the preparation of the annual report

## 6. Members

#	Name	Affiliation	email	SDS member?
1	Joseph Londa	Gunks EcoLodge	londajm@gmail.com	yes
2	Christine Tang	New Mexico State University, WPI, System Dynamics Society	ctang@nmsu.edu ctang@wpi.edu christine@systemdynamics.org	yes
3	Erica Rieder	University of Montana	ekrieder@gmail.com	yes
4	Antoni Oliva	22SISTEMA	aoliva@22sistema.com	yes
5	Saeed P. Langarudi	UiB	saeed.langarudi@uib.no	yes
6	Ali Saysel	UiB	ali.saysel@uib.no	yes

## SIG ENRM: SIGNATURES OF SUPPORT

The undersigned support the formation of the Special Interest Group Environment and Natural Resources Management (ENRM SIG), with the objectives and activities mentioned in the charter,

<p><b>Joseph Londa</b> Environmental Sig Leader</p> 	<p><b>Erica Rieder</b> University of Montana</p> 
<p><b>Christine Tang</b> Water SIG Leader New Mexico State University</p> 	<p><b>Antoni Oliva</b> Consultant, 22SISTEMA</p> 
<p><b>Saeed P. Langarudi</b></p> 	<p><b>Ali K. Saysel</b></p> 

November 7, 2024