# Welcome



## Soil for Society Network

Advancing land & soil management for food security and climate adaptation

### XVIII World Water Congress, Beijing Special Session SS-68

September 14th; Room 12, 14:00 - 15:30



# Agenda

- 1. Introduction to the Network
- 2. Network Engagement Activities
- 3. Discussion
- 4. Reflections & Closing Remarks







# Core Team









Shanon Hankin



Tala Awada (Co-PI)



Debu Misra (Co-PI)



Rabi Mohtar (Co-PI)



Prem Parajuli (Co-PI)

5 PIs, 6 senior personnel, & a project coordinator from 7 Land Grant Institutions along a climate gradient from Alaska to Texas.











Francisco Arriaga



Bassel Daher



Khalil Dirani



Majdi Abou Najm



Art Nash



Gretchen Sassenrath











## Collaborators





























McGill UNIVERSITY









AND WATER CONSERVATION







Lincoln















Resources Conservation Service

Leadership Coaching and Consulting













#### **AccelNet - Design**

Accelerating Research through International Network-to-Network Collaborations

- To support <u>strategic linkages</u> among U.S. research networks and networks abroad.
- To <u>leverage resources</u> to tackle grand research challenges requiring significant coordinated international efforts.
- To foster high-impact science and engineering by <u>providing opportunities</u> to <u>cooperatively identify and coordinate efforts</u> to address knowledge gaps and research needs.

Society Network





## Soil for Society Network

<u>Vision:</u> To empower a globally connected network of soil systems advocates for sustainable development.

<u>Mission:</u> To co-create a diverse and inclusive soil systems community of scientists, practitioners, and society toward climate-smart, sustainable, food and water systems.

National Science

# Motivation

- 1) How can the <u>global community transform the management of soil</u> <u>systems</u> to support a growing population, store carbon, & enhance resiliency?
- 2) How can society **shift the paradigm** to view soil & land use as a solution?

3) How can we create a diverse, inclusive, & supportive learning environment that transcends environmental, political, and social stressors impeding global coordination to advance soil as a critic resource?

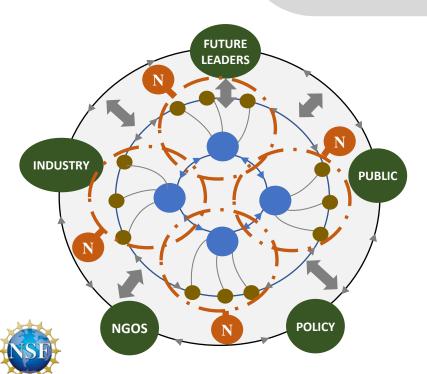
Soil for

Society Network



**Engagement** 

**Collaboration** between **researchers & working partners** is needed to **solve grand challenges** of land & soil management at a global scale.



#### Help us co-design the network

- Farmers & Practitioners
- Next Generation (early career professionals)
- Public Sector (governments & municipalities)
- Non-governmental Organizations & Non-profit's
- International Organizations
- Private Sector (industry)
- Society Members
- Underserved Communities





# Our strategic and inclusive global network of networks upholds to:

- **1.** <u>Create Community:</u> A diverse and inclusive, evidence-based community of soil-enthusiasts spanning career stages, geographies, cultures, disciplines, and sectors of society.
- **2.** <u>Build Capacity:</u> Preparing a NextGen workforce of systems thinkers to address complexities of future sustainable development.
- 3. Provide Space: An inclusive space that fosters a culture of integrated systems thinking.
- **4.** <u>Co-design Solutions:</u> Community based, innovative solutions driven by a systems approach across social and economic dimensions.
- 5. Exchange Knowledge: Creating a platform for transparent, safe, data and knowledge exchange
- **6.** <u>Facilitate Access to Knowledge:</u> Facilitating access to data & knowledge through transdisciplinary collaboration.
- 7. <u>Empower Communities:</u> Empowering communities with local knowledge and applied tools to guide adoption of evidence based decisions and policies.

Soil for Society





#### **Project Timeline**









The workshop series informs the structure & focus of the network.





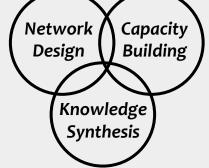
#### 1. DISCOVER

Taking Soil out of Silos to Accelerate Change



#### 4. DELIVER

Defining the Success of the Design of Network of Networks



#### 2. PLAN

Designing Activities to Facilitate Transdisciplinary Coordination



#### 3. DESIGN

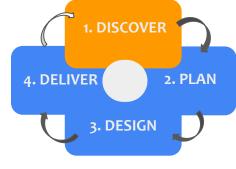
Designing Activities to Engage Emerging Professionals & Underserved Groups







# 1. Taking Soil out of Silos to Accelerate Change

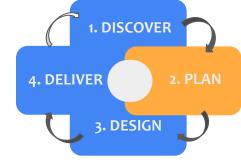


- <u>Importance of soil:</u> human/community health, food & water security, ecosystem services, climate adaptation & mitigation, and is a non-renewable resource.
- Barriers to the adoption of sustainable soil management practices: financial investment, misinformation, cultural limitations, resource limitations, policies & incentives.
- The network of networks can accelerate change through: fostering transdisciplinary collaboration, informing and engaging policy-makers to advocate for soil-focused incentives, promoting co-design with farmers and land users, and addressing knowledge gaps through participatory research.





# 2. Designing Activities to Facilitate Transdisciplinary Coordination

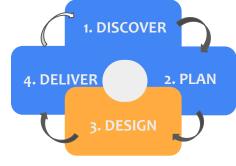


- <u>The stakeholders:</u> government, agriculture, conservation groups, international organizations, Indigenous leaders, media, scientists.
- The barriers to engagement with stakeholders: economic, trust & relationship building, incentives, accessibility, misinformation, limited communication channels, non-inclusive messaging & communication, carbon markets have misguided farmers & public, power dynamics leading to divergent goals & agendas.
- Activities to engage stakeholders: an online platform for farmers & community leaders
  to connect & share, utilize local languages and communication tools, foster curiosity &
  relationship building, inspirational interaction through grassroots & student leadership.





#### 3. Designing Activities to Engage Emerging Professionals & Underserved Groups

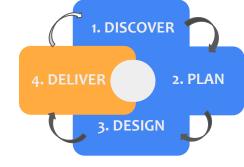


- Engagement methods & activities: integrating the sciences, art & humanities, humancentered design & systems thinking, and workshops, competitions, & citizen science projects.
- <u>Skills to develop:</u> leadership & communication, systems & critical thinking, human-centered design, transdisciplinary skills, open access to data, building support networks, hard skills (GIS, data science, programming, AI, digital communication).
- <u>Leadership roles:</u> mentoring, publication sharing, workshops, event organization, storytelling, empower Indigenous communities, create & distribute newsletters.





# 4. Defining the Success of the Design of Network of Networks



#### Metrics of Success:

- Participation, collaboration & partnerships (quantity/quality & over time)
- Knowledge dissemination & sharing (citations, publication, media coverage, & invitations)
- Capacity building activities (quantity/quality & over time)
- Adoption of network recommendations in policy
- Ability to secure funding







## **Network Objectives**

- <u>Objective #1</u>: Establish a diverse network of networks that is global, and crosses disciplines, societal sectors, and cultures.
- <u>Objective #2</u>: Conduct capacity building activities that provide training in skills needed for emerging professionals & underserved communities (critical and systems thinking).
- <u>Objective #3</u>: Synthesize knowledge leveraged by the network and develop the communication mechanisms needed to share with local communities, practitioners, and legislatures.







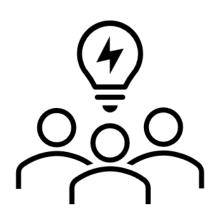


- 1) Why is soil an important resource?
- 2) What is limiting the adoption of sustainable soil management practices?
- 3) What can a global network of networks like Soil for Society address to accelerate change?
- 4) What do you hope to gain from joining the network?





# Discussion Summary









# https://soilforsociety.org











### Join the Network



land & soil mar & climate adap NSF AccelNet - Design		food security
shankin@wisc.edu Switch accoun	int	<b>⊘</b>
* Indicates required question		
Email *		
Your email		
Disclaimer: The intention of th designing Soil for Society Net		credit our partners in co-
Our Vision		
	community to promote the a	







# Thank you!

















