Community Energy Resilience:
UNDP RR Perspectives and RE case studies

ADB Conference on Inclusive Community Energy Resilience in Bangladesh 2019

Dr. Md. Taibur Rahman

Project Manager

Development of Sustainable Renewable Energy Power Generation (SREPGen) project

UNDP Bangladesh and SREDA, GoB

Empowered lives.
Resilient nations.

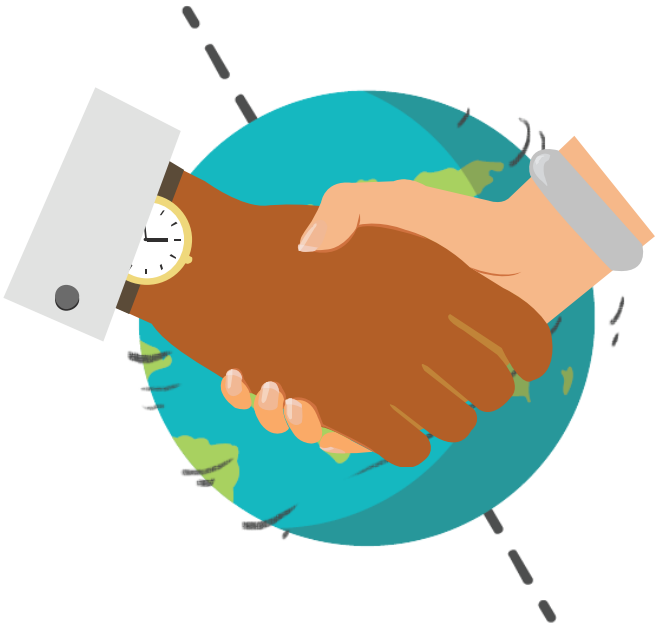
Protecting Development from **Disasters**:
UNDP's framework for DRR: Pre SFDRR

Understand

Reduce

Manage

New Context and Challenges

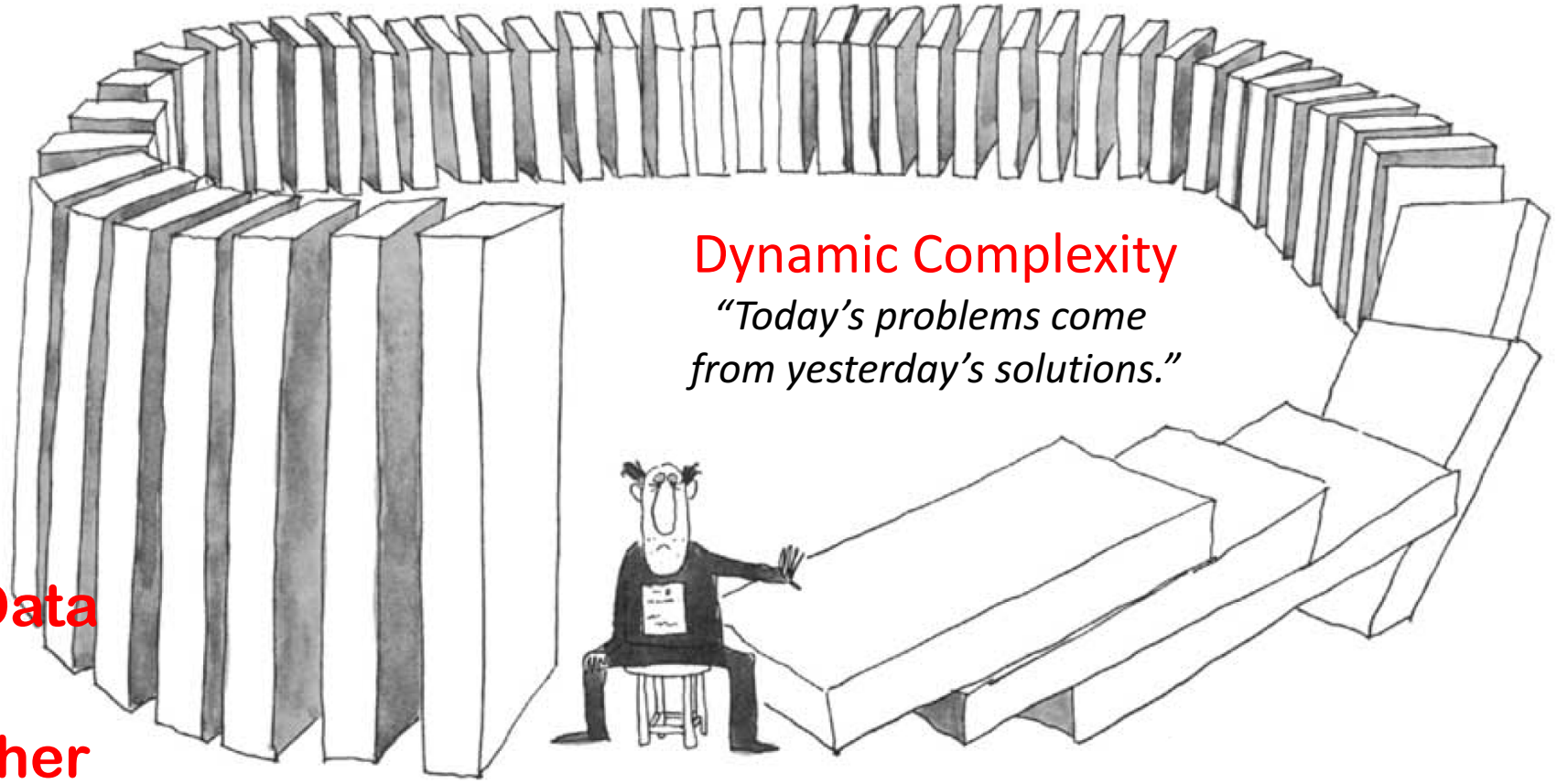


1. **Complexities of building resilience**
2. **Ensuring that development is sustainable**
3. **No one is left behind**

Dynamic, uncertainty, unpredictability

Empowered lives.
Resilient nations.

Business as usual? Same strategies?



New ways:

1. Systems thinking
2. Risk Analysis and Data Ecosystem
3. How we work together

Empowered lives.
Resilient nations.

SYSTEMS THINKING: Invest on resiliency, sustainability, inclusiveness

The achievement of SDGs **3**, **4**, **6**, **7**, **8**, **9**, **11**, **13**, **14** and **15**, is heavily dependent on increased capital **investment in infrastructure**. However, in low income countries, portfolio represents 30% of capital investments.

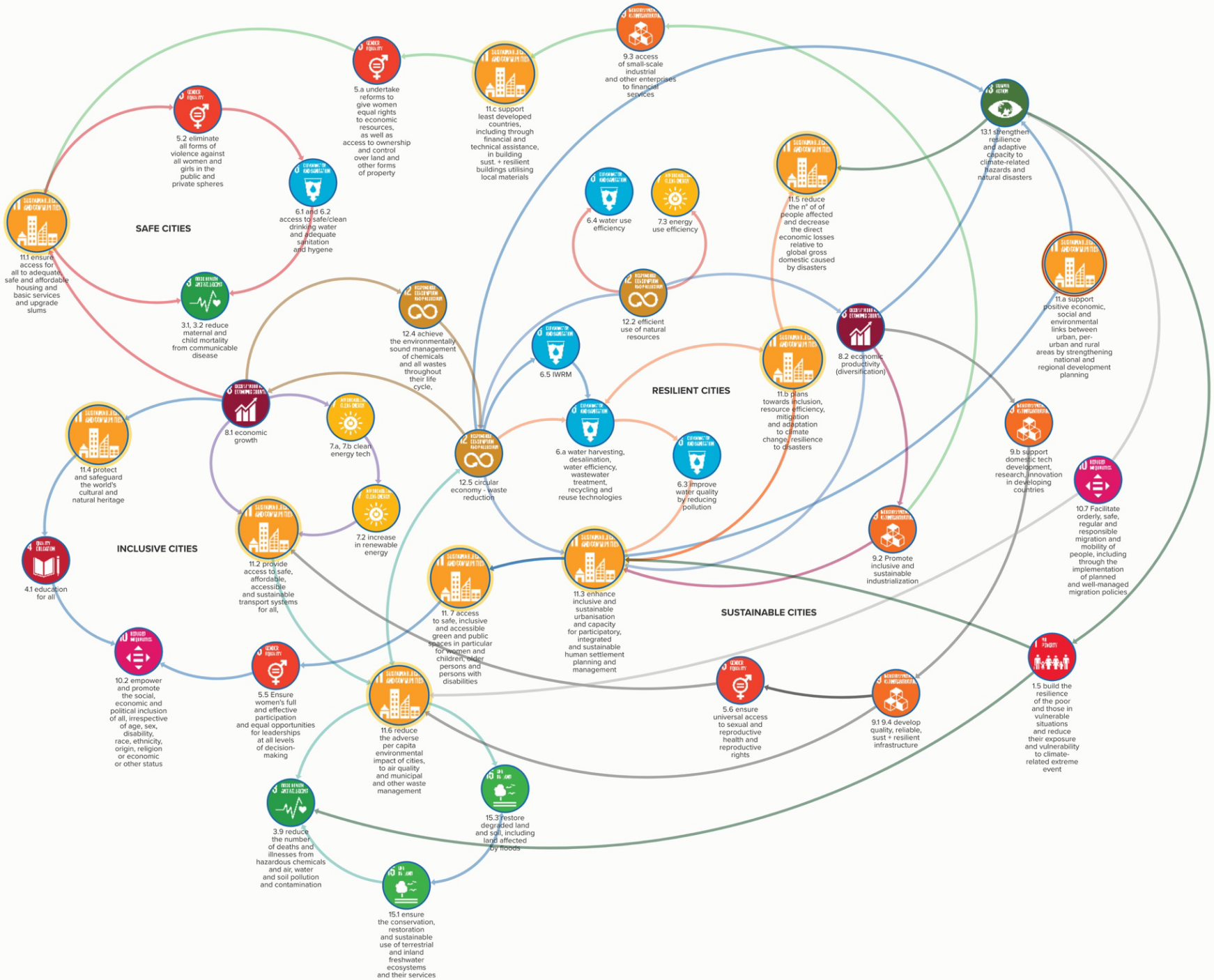
Empowered lives.
Resilient nations.

SYSTEMS THINKING: invest on Resiliency, Sustainability and Inclusiveness

The achievement of SDGs **1**, **2**, **3**, **4**, **5**, and **10** depends on increasing **social expenditure. However in low income countries, it is 20% in social expenditure**

Empowered lives.
Resilient nations.

11 SUSTAINABLE CITIES AND COMMUNITIES



Legend

- - - - - Opposite

RR integration into SDG platform process
How can we work together

1. **Joint analysis including the importance of data/evidence;**
2. **Policy, Programming and advisory service on the resilience agenda of the SDG;**
3. **Innovative Partnership and Financing;**
4. **Leave no one behind agenda**

Empowered lives.
Resilient nations.

UNDP Bangladesh has three main clusters

1. **Resilience and Inclusive Growth**
2. **Governance and human rights**
3. **Partnerships**

Disaster Risk Management	Water, Environmen and Energy	Poverty and Social Protection	Climate Change	Managing Urbanization

Empowered lives.
Resilient nations.

Title: Development of Sustainable Renewable Energy Power Generation (SREPGen) **Implementing Partner:** Sustainable Renewable Energy Development Authority (SREDA), GoB
Project period: January 2014 to May 2020)

Specific Objective:

- Cumulative direct post-project CO_2 emission reductions of **1.64 Mtons CO_2** resulting from the RE technical assistance and investments by end-of-project (EOP) and its impact period
- Support SREDA to achieve **10% share of RE** in the power generation mix of Bangladesh by 2021 as per RE Policy 2008 and 7FYP

Budget: US$ 4.07 million (GEF):

Project Components:

- Component 1: RE policy and regulatory support program
- Component 2: (RE) Resource assessment support program (Solar, Wind, Bio-mass)
- **Component 3: Diffusion of "RE products" to low-income households**
- **Component 4: Renewable energy investment scale-up support**

Some initiative of SREPGen project for community energy resilience:

Solar-powered Ice Plant in off-grid island area

Context

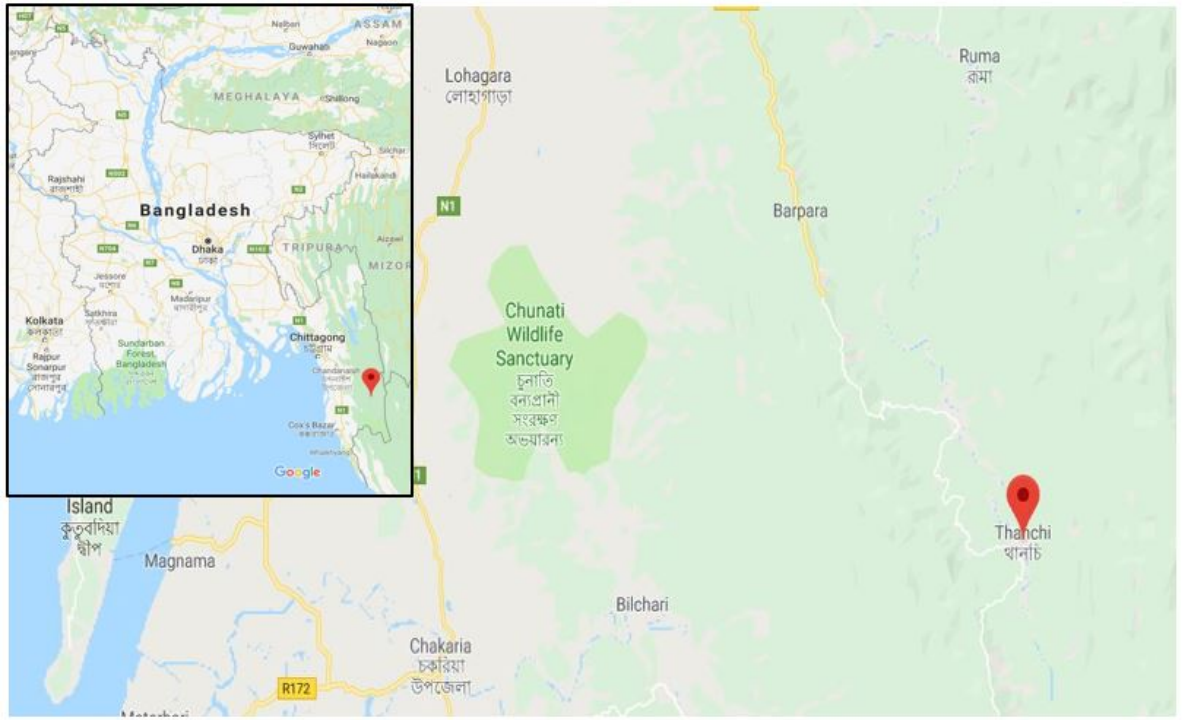
- Fisheries sector contributing 3.69% to the GDP of Bangladesh
- More than 17 million people (about 1.4 million women) depend on fisheries sector
- Due to lack of electricity, there is no ice plant in many islands where 90% people are involved with fishing
- Resulting in low price of fish, lower livelihoods and poverty
- At Char Montaz Island of Rangabali Upazila, SREPGen is installing a solar powered ice plant for local fishing community.

Pico Hydro Power Plant

Photo: Nytong Para stream

Upcoming project with capacity 20 kW

- The proposed project site is Nytong Para village, Ruma, Bandarban.
- This village is the residence of 62 families
- The total population of the village is 260 including 87 males, 90 females and 83 children
- The livelihood for 61 families is Jhum cultivation and the rest one family operates a grocery shop.
- 33 families are currently living under the acute poverty line and 8 families are in the risk of food crisis.
- Electricity access will significantly improve the quality of life of this villagers



Some initiative of SREPGen project for community energy resilience: Pico PV

Context

- One of the small micro Solar Home Systems (SHS) for domestic lighting and mobile charging
- Capacity range: 3 Wp up to 10 Wp
- Contains a solar panel, high tech internal charge controller and a battery equipped with LED lamp.
- **6000 lanterns** have been distributed by SREPGen through IDCOL POs in off-grid rural areas instead of kerosene lamp
- **It has significant impact on rural women and students which increases productive time at night for at least 3 hours.**


Thank you for your attention!