

Centering Knowledge Co-Production in Sustainability Science: Why, How, and When

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California



Knowledge is possible only when you come close. From a distance, and in a formal atmosphere, knowledge cannot blossom. **Being together** is the **foundation of knowledge.**

~ Gurudev Sri Sri Ravi Shankar



Transformational
knowledge &
solutions are
urgently needed
for the complex
challenges
facing society





Knowledge co-production as a tool

- Policy-relevant
- Solutions-oriented
- Socially robust

Knowledge co-production
for ocean sustainability is...

**an interactive, participatory
process that brings together
diverse actors to collectively
generate, integrate, and
apply knowledge to address
complex sustainability
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Defining the 'who' is important

- Broad range of **actors interested in and/or affected by a process**, including but not limited to those that have a stake, share, right, or interest in a particular question or issue
- **People across communities of place, practice, identity, and interest**
- Working with and among a **diversity of perspectives**, including across career stages, generations, sectors, disciplines, regions, backgrounds



Many terms but similar core components

Goal = knowledge/solutions

Collaboration & sharing

Bring together diverse forms of knowledge



Knowledge co-production is **increasingly used in sustainability science...**

Yet, few resources provide a **framework and practical guidance** for those new to **assessing and navigating knowledge co-production in sustainability science**



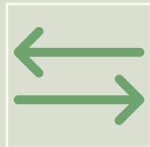
Wheel of knowledge co-production



Synthetic framework for implementing co-production approaches in sustainability and environmental sciences



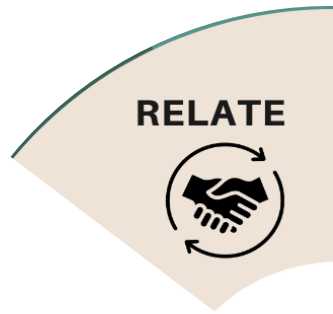
7 interconnected phases & objectives and **7 cross-cutting foundational themes**



Non-linear, responsive, adaptive process



Wheel of knowledge co-production *phases*



Knowledge Co-
Production for
Sustainability

Relate

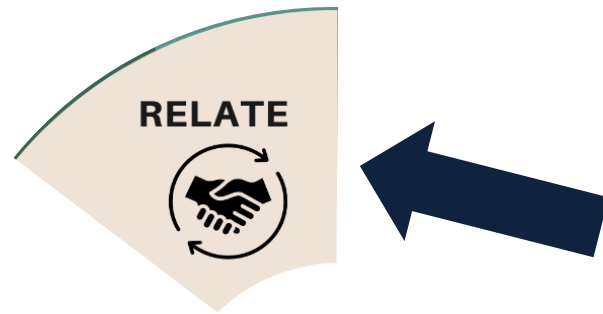
- Build & maintain relationships
- Cultivate openness & develop trust



Wheel of knowledge co-production *phases*

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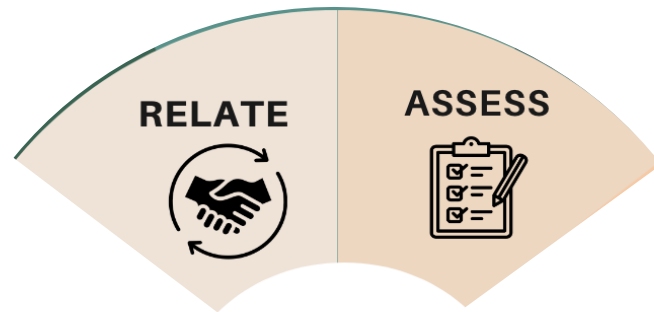
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This conference is ideal as part of the 'relate' phase – **exchanging knowledge & building relationships**



Wheel of knowledge co-production phases



Knowledge Co-
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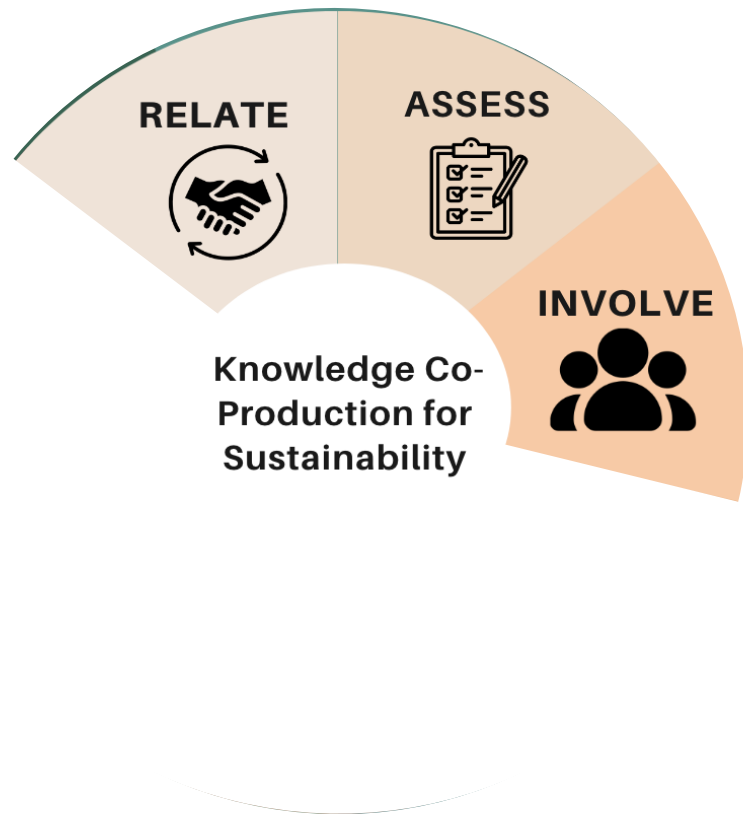
- Build & maintain relationships
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Assess

- Establish shared interest & assess appropriateness of co-production
- Scope available resources for co-production



Wheel of knowledge co-production phases



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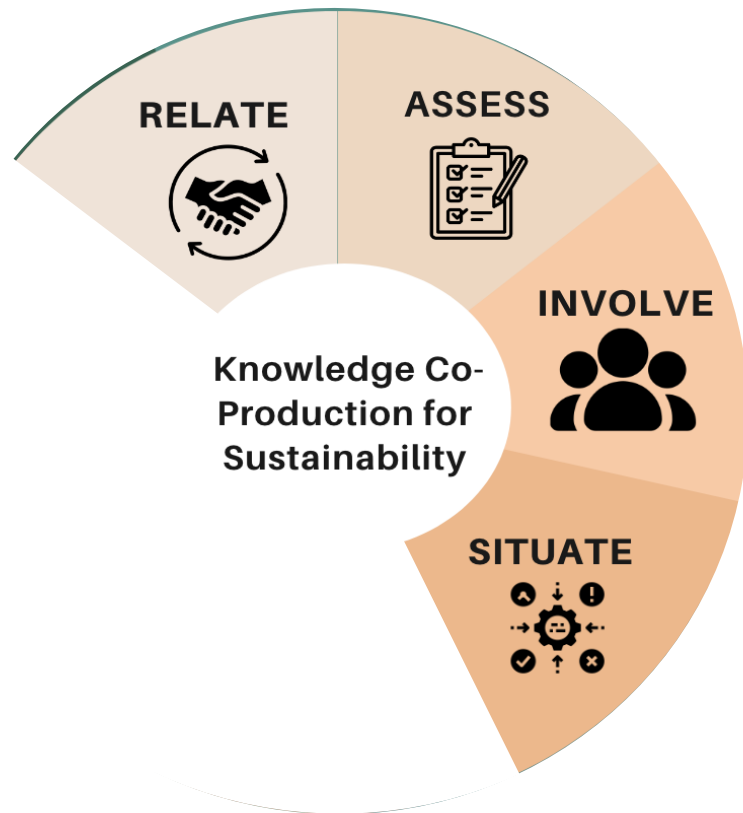
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Involve

- Ensure diverse representation
- Identify key participants



Wheel of knowledge co-production phases



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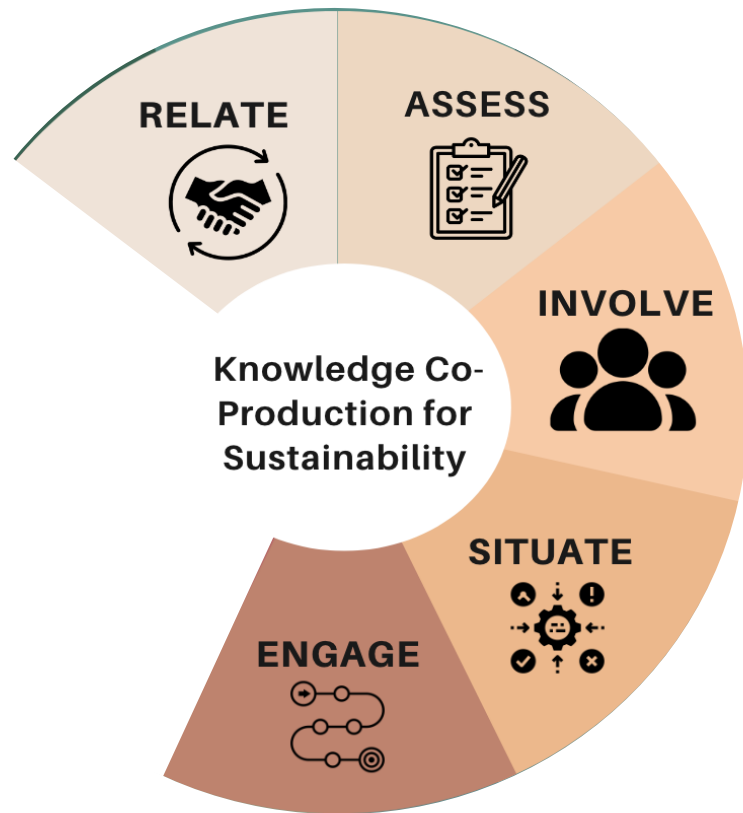
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Situate

- Understand the context of engagement
- Develop a shared understanding of engagement



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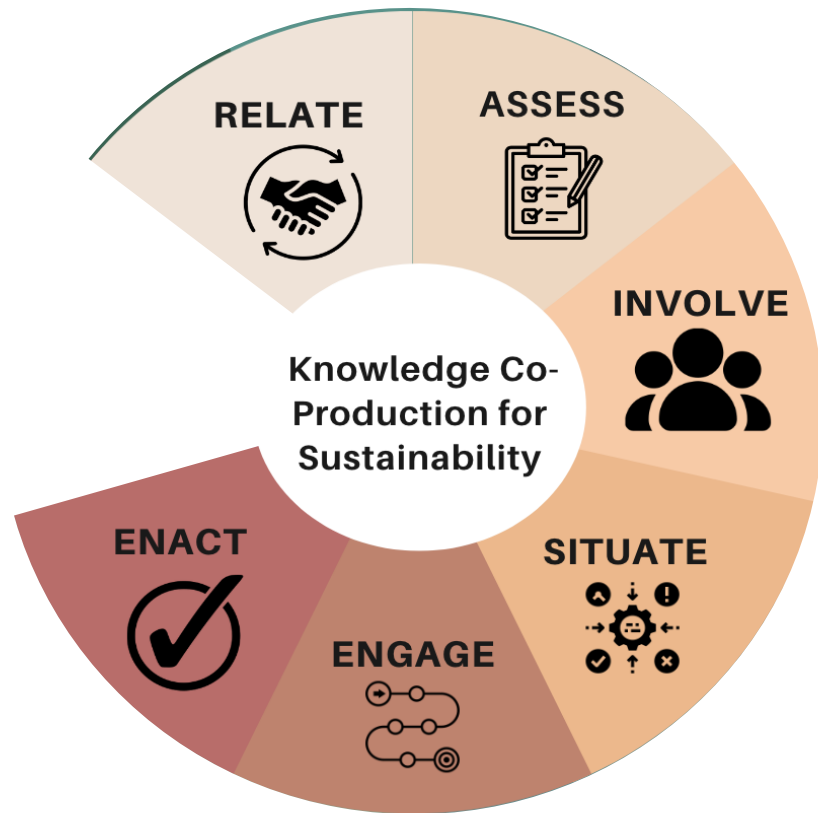
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Engage

- Co-design specific goals of the co-production process
- Establish the co-production process



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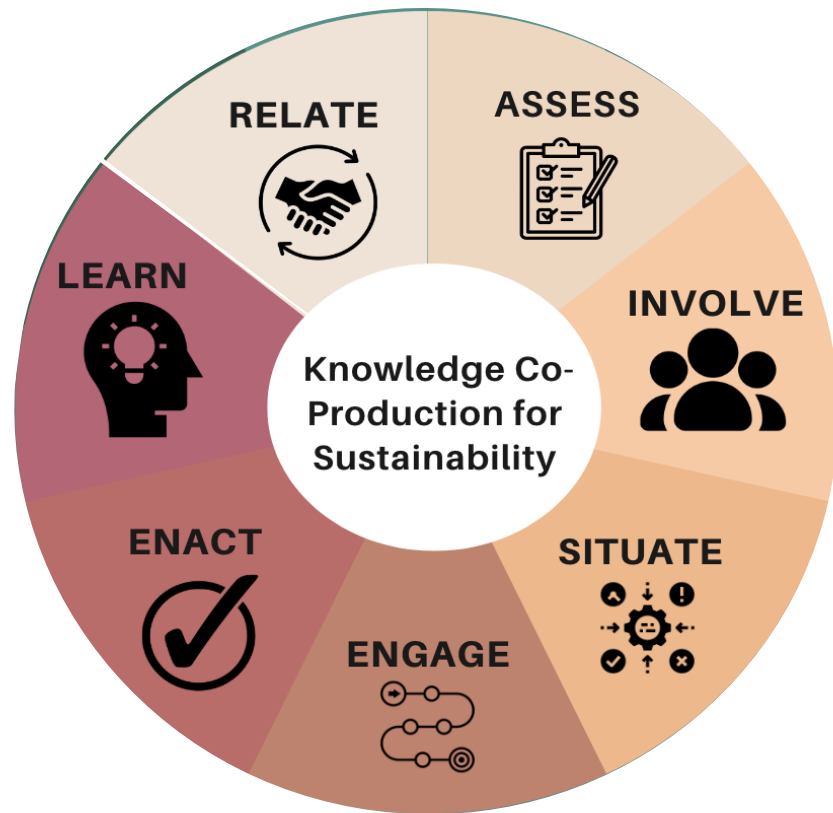
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- Listen throughout the entire process
- Iteratively refine ways to evaluate success



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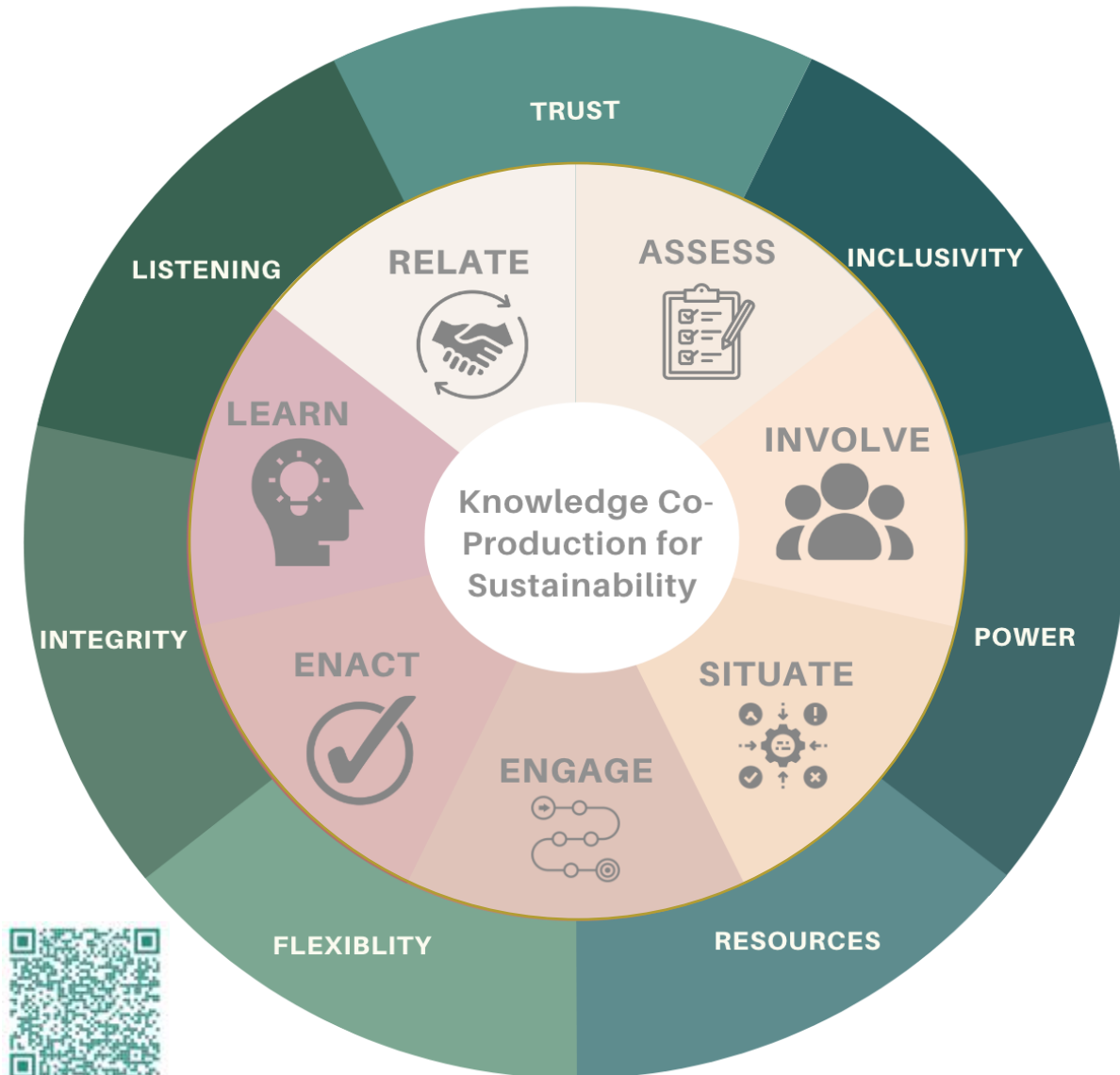
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Wheel of knowledge co-production

foundational themes



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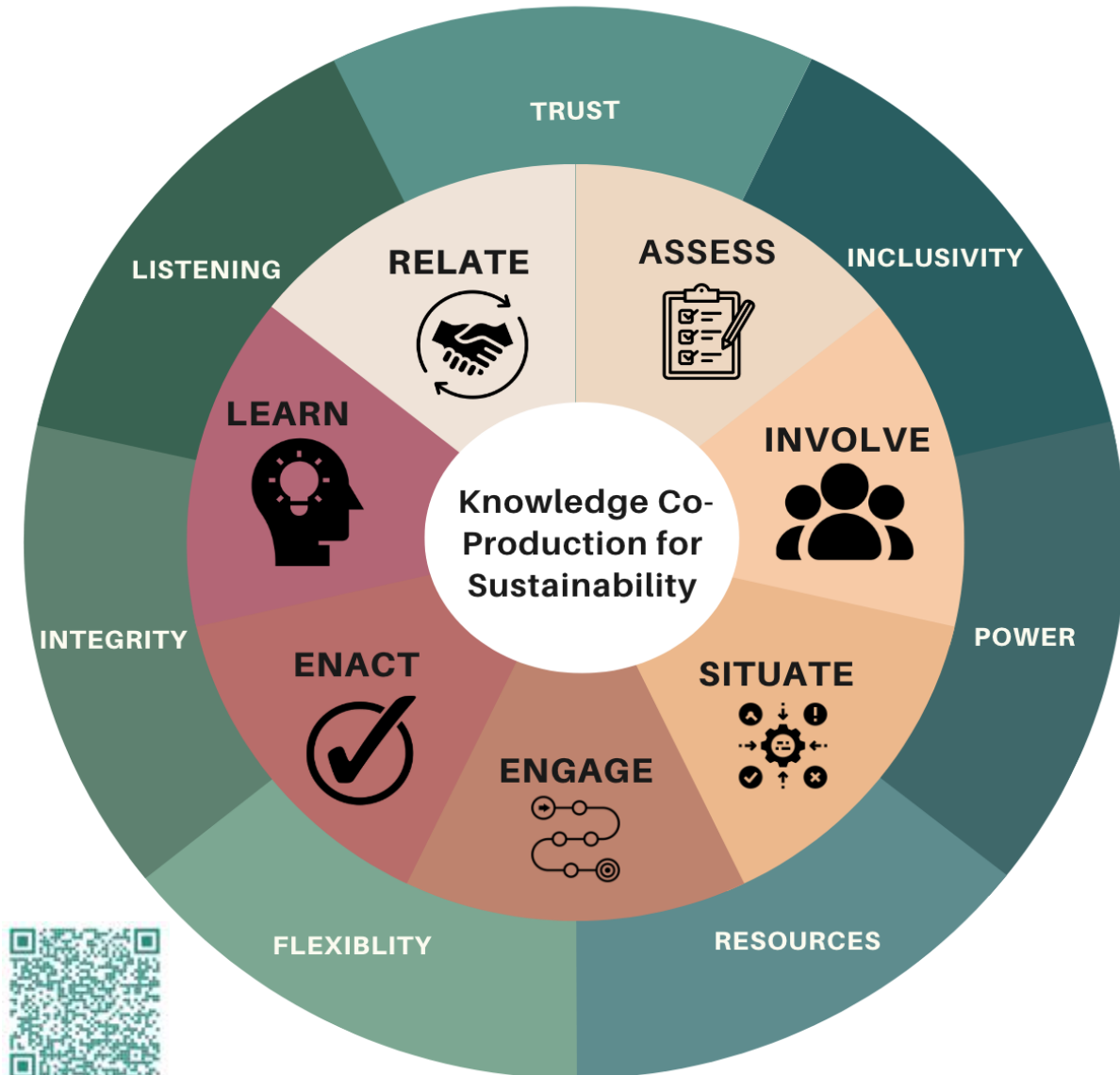
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Scientist & Fishermen Exchange meetings (SAFE)

Example of the wheel in action

- Sea Grant has a long history of extension specialists working with commercial fisheries to improve the sustainability of the fishing industry
- *Enact*. Scientist & Fishermen Exchange meetings (SAFE)
- *Relate*. Build relationships & establish trust
- *Assess*. Identify areas for potential collaboration
- *Involve*. Commercial fishers, agency personnel, other partners
- *Situate & Engage*. Share information, discuss concerns, & identify other topics of interest
- *Learn*. A number of strong relationships & co-developed projects have been initiated at SAFE meetings

Key considerations

Assess if knowledge co-production is the **right approach for a given context**

Ensure **adequate resources exist** since knowledge co-production is resource intensive

Provide **clear incentives to engage** in the co-production process

Place value on bringing together **diverse forms of knowledge & sharing power**

Foster **interest & provide training** to engage in actionable science

Provide **venues/ways to build initial relationships** across people in different sectors or communities

Closing thoughts

- **Relationships** are foundational
- **Equitable approaches themselves need to be co-designed** which requires time and resources
- Successful co-production is a process of **“with”** not **“for”**
- **Clear on goals & who to engage**
- Be **patient** & provide **time** for the process & outcomes
- Desire to start is key and can be **iterative**
- Consider working with established **knowledge brokers**
- Want to further **iterate on & co-design this work** with community members, planners, managers, and local and indigenous partners – *would love your feedback and to potentially collaborate!*



Co-producing
knowledge
is important
to generate
the wisdom
needed
for a
sustainable
future



All that you touch,
you change.

All that you change,
changes you.

The only lasting truth
is change.

~Octavia E. Butler

