



The Establishment of a Sustainability Science
Demonstration Pilot Project on the

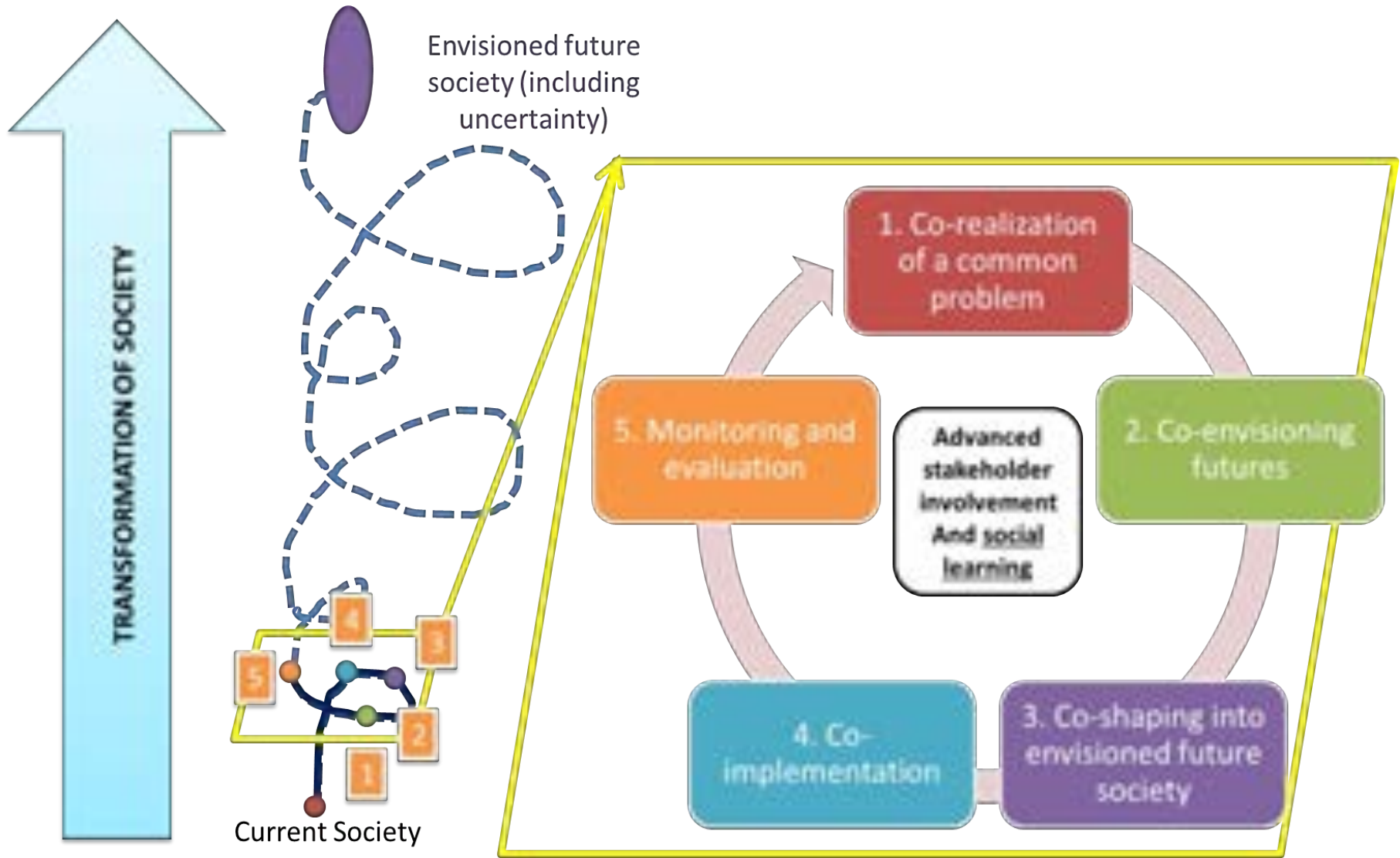
Rice Terraces of the Philippine Cordilleras



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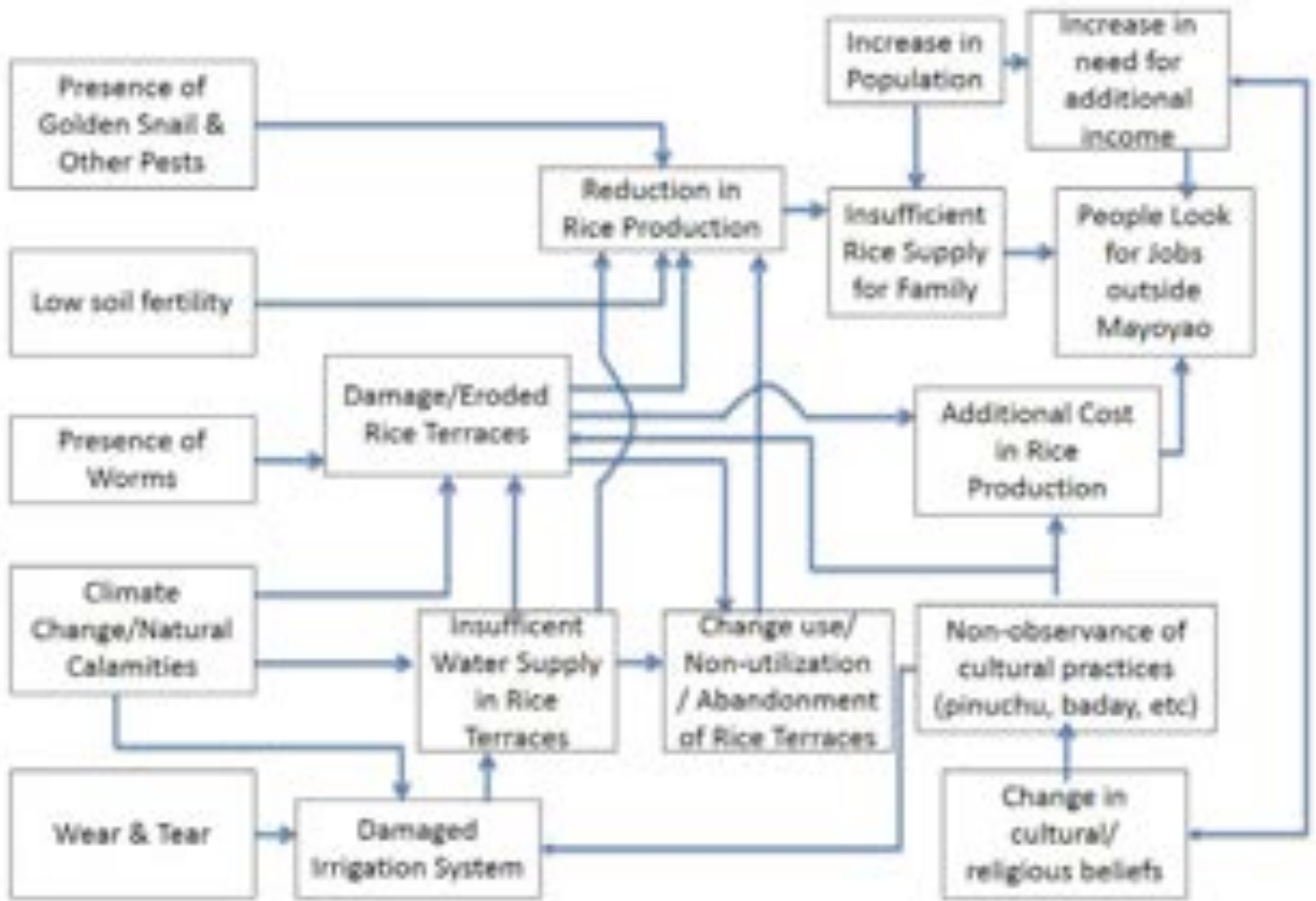
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STAR Sustainability Science Implementation Framework

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- **Rice terraces recognized for their capacity to provide rice as nourishment, as source of income for households and the government, as a tourist attraction, and as a form of cultural identity in local and global scales**
- **These indicate rice terraces are viewed as a resource**
- **Changes in their capacity to serve this purpose appear to be prominent concern among locals**



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- **Team made in-depth analysis of current situation and elicited stakeholder picture of their envisioned future**

“Maintaining the character of Mayoyao and way of life”

“Mitigating the damage to the terraces by minimizing the effects of climate change and pests”

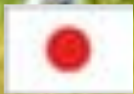
“Ensuring the continuous use of the rice terraces for several generations”

“Enhancing productivity of rice and others crops”

“Regulating tourists arrival”



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Ecological and Physical

Land Utilization

- Total area of terraces used for agriculture
- Area of terraces used productively for rice production
- Area of terraces used productively for other crops
- Area of unutilized terraces
- Area of terraces for residential and other non-agricultural purposes
- Damaged terraces per household

Biotic Diversity

- Diversity of woodlot plants
- Diversity of aquatic

Irrigation

- Total length of main irrigation canals
- Length of concrete-lined main irrigation canals
- Damaged main irrigation canals
- Flow rate of water in irrigation canals
- Rainfall data



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Agricultural and Economic

Crop Yield

- Number of months that households can be self-sufficient with their rice production
- Number of non-rice food sources produced by farmers
- Income from agricultural production
- Diversity of rice varieties grown
- Volume of rice processed at rice millers
- Annual volume of local rice sold outside
- Inventory of all other crops grown locally (native and introduced)
- Volume of other crops harvested
- Proportion of invasive pest species

Consumption

- Average consumption of native rice per household
- Average consumption of imported rice per household
- Average consumption of other crops per household
- Inventory of rice varieties imported from outside
- Annual volume of rice imported from outside
- Inventory of all food products consumed
- Inventory of other crop varieties imported from outside
- Annual volume of other crops imported from outside



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Tourism and Conservation

Tourism

- Total tourism arrivals
- Total tourism revenue
- Tourism revenue spent on repair and restoration
- Tourism visitation behavior
- Inventory of establishments engaged in tourism activities
- Carrying capacity for tourism
- Proportion of households involved in tourism

Conservation

- Government spending for repair and restoration (national, provincial, municipal budget)
- Funding for repair and restoration from other sources (local NGO, international agency)
- Conservation status of property
- Preservation of outstanding universal value



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Social and Cultural

Population Change

- Total individual population
- Total household population
- Average number of individuals per household
- Proportion of migrating household members

Occupation

- Average number of individuals engaged in farming per household in the past six months

- Average number of individuals engaged in non-agricultural activities per household in the past six months
- Inventory of occupations and count

Traditional ecological knowledge and practices

- Proportion of households practicing rituals related to rice production
- Number of households practicing traditional inheritance system (primogeniture)
- Inventory of indigenous practices



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Save the Ifugao Rice Terraces Movement (SITMo) Rice Cycle Tours

- **Community-led and culture based**
 - **Heritage conservation as primary purpose of tourism activity**
 - **Follows the traditional agricultural calendar**
 - **Ritual performances strictly done in context**



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Save the Ifugao Rice Terraces Movement (SITMo) Rice Cycle Tours

- **Participatory**
 - **Community consultation**
 - **Locals and visitors alike get to work together in the terraces**
 - **Farmers and locals directly benefit from tourism**



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- **Preparation – fields clearing pond fields, restoring eroded stonewalls and preparing the terraces for the planting season**
- **Tunod/Bogeh/Bfukay – individual rice seedling are transplanted on the pond fields**
- **Tagtag/Dog-al – ritual performed to drive away pests and malevolence; ensures protection of the growing rice plants.**



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- **Ani/Botok/Pfotoh – harvest stage of the rice cycle highlighted by an elaborate ritual; tourists participate in the harvesting; hudhud also chanted**
- **Bakle – thanksgiving ritual; tourists experience making traditional rice cakes, with generous servings of rice wine**



CULTURAL TOURISM IN MAYOYAO

- **Pfoto' Ad Majawjaw (harvest)**
- **Pfukhay ad Majawjaw (planting)**





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THANK YOU VERY MUCH!

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