

Spatial Knowledge of Indigenous Communities

Sumit Sen



Human societies all across the globe have developed rich sets of experiences and explanations relating to the environments they live in. These 'other knowledge systems' are today often referred to as traditional ecological knowledge or indigenous or local knowledge



[Countries In The Americas With The Highest Indigenous Populations - WorldAtlas](#)



They encompass the sophisticated arrays of information, understandings and interpretations that guide human societies ...



[Inside A Remote Indigenous Island Community - On The Road - \(ontheroadmagazine.com.au\)](http://ontheroadmagazine.com.au)



... around the globe in their innumerable interactions with the natural milieu: in agriculture and animal husbandry; hunting, fishing and gathering; struggles against disease and injury; naming and explanation of natural phenomena; and strategies to cope with fluctuating environments.



Mainstream Geospatial Technologies are inadequate ...



[Indigenous speakers share their languages on Google Earth \(blog.google\)](https://blog.google)



Mainstream Geospatial Technologies are inadequate ...



[Aboriginal Bushtucker Story | I was fascinated with Aborigin... | Flickr](#)



Scientific processes and Uncertainty



Indigenous knowledge systems, and the processes for their evolution over time, can support rapid adaptation to complex and urgent crises. Rather than encouraging these knowledge systems to become more “scientific,” we urge a respectful acknowledgment of their distinctiveness and epistemology



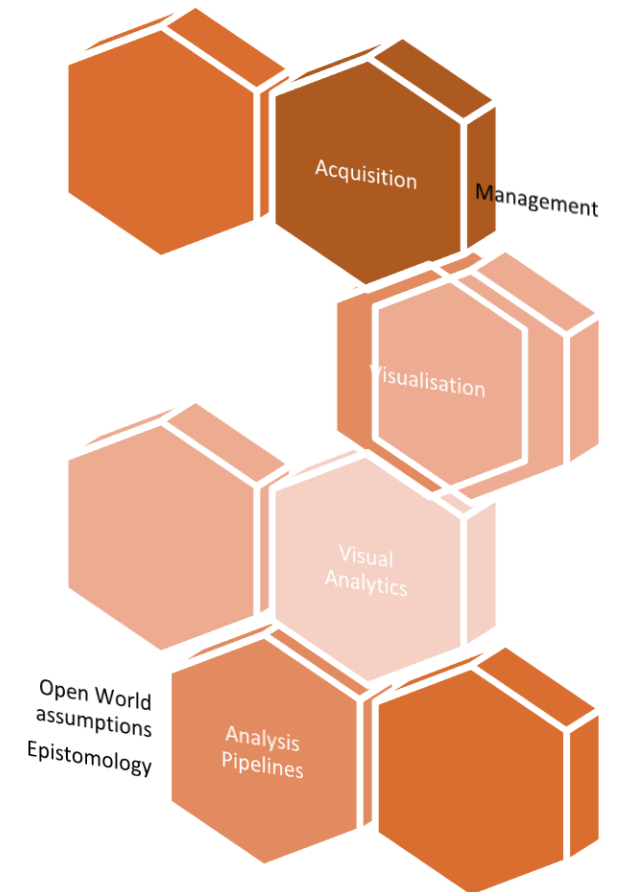
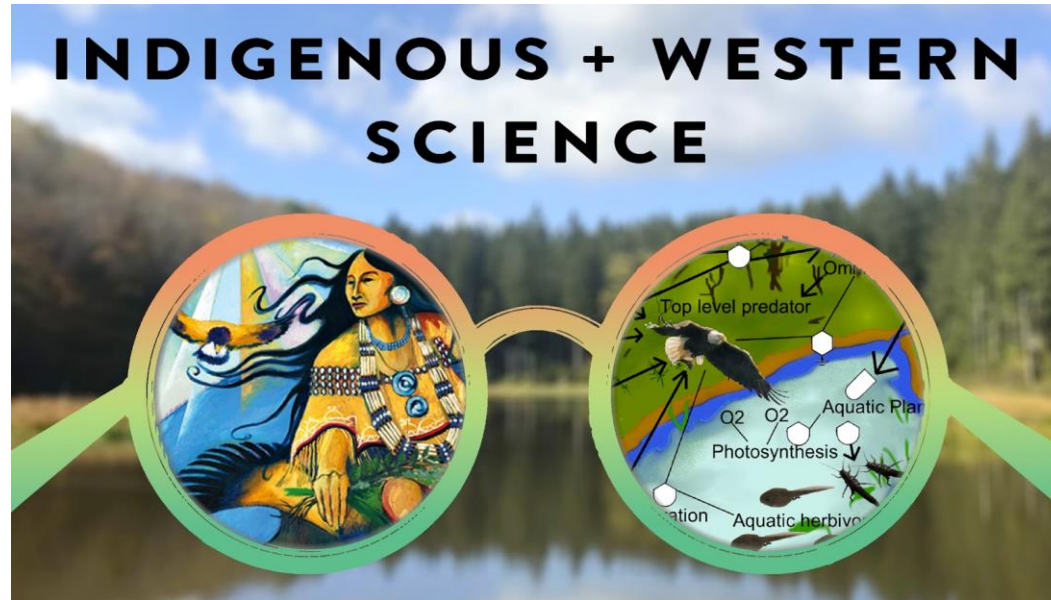
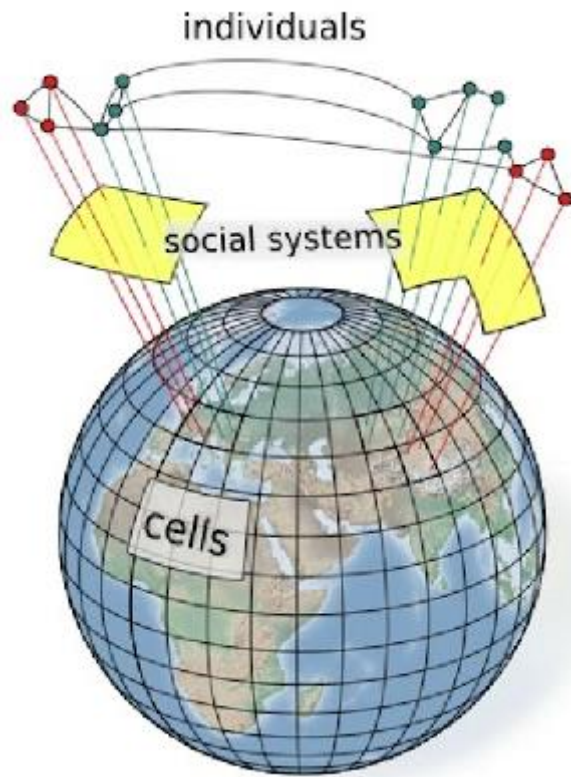
Engagement is necessary



To be politically legitimate and long-lasting, incentives and regulations for better conservation and climate change mitigation must engage with the claims, rights, and knowledge of local and indigenous populations, which may be spread over immense and distant territories



New GI, New Stories -> Acquisition, Management, Analytics, Visualization and information lifecycles



Some Answers ... More Questions



360° INNOVATION

On Aruba the wind blows approx 360 days a year from the same side. This makes it very interesting to build houses 'on the wind' in order to cool the houses in a natural way. People do this already for centuries. Now with new forms of building and technology we still see this happen. For example also greenhouses. By making the roof of greenhouses semi open on top and placing the greenhouses in such a way that the wind can take the heat out of the greenhouse, the greenhouse can be cooled in a natural way and energy can be saved.



Some Answers ... More Questions



360° INNOVATION

Indigenous wisdom concerning geospatial information and earth observation on islands like Aruba is very important. People on islands are most of the times far more connected with nature and know how to connect with nature in such a way that it benefit both nature itself as well as the way people can live. In order to ensure this knowledge and voices, there should be a place where all this knowledge is gathered and where people can learn and share this knowledge with others to benefit from it. Why not start with a digital platform or maybe even a university on applied science concerning indigenous wisdom on geospatial information and earth observation?



Need for comprehensive investment in geo-enablement

- ✓ The indigenous people have their traditional wisdom to sustain life.
- ✓ Their knowledge regarding different resources of nature passes on from generation to generation orally.
- ✓ One community is dependent on other communities for their livelihoods.
- ✓ Migration of indigenous people from their native place (e.g., for the purpose of education, employment etc.) dissociate them from their roots.
- ✓ Geo-enablement of tribal communities will help them to sustain their indigenous knowledge and culture.

Mrinal Mandal. SKBU





Traditional knowledge and protection

"Traditional knowledge":

- Its knowledge possessed by indigenous people, in one or more societies
- It could be in one or more forms, including, but not limited to, art, dance and music, medicines and folk remedies, folk culture, biodiversity, knowledge
- Protection of plant varieties, handicrafts, designs, literature.

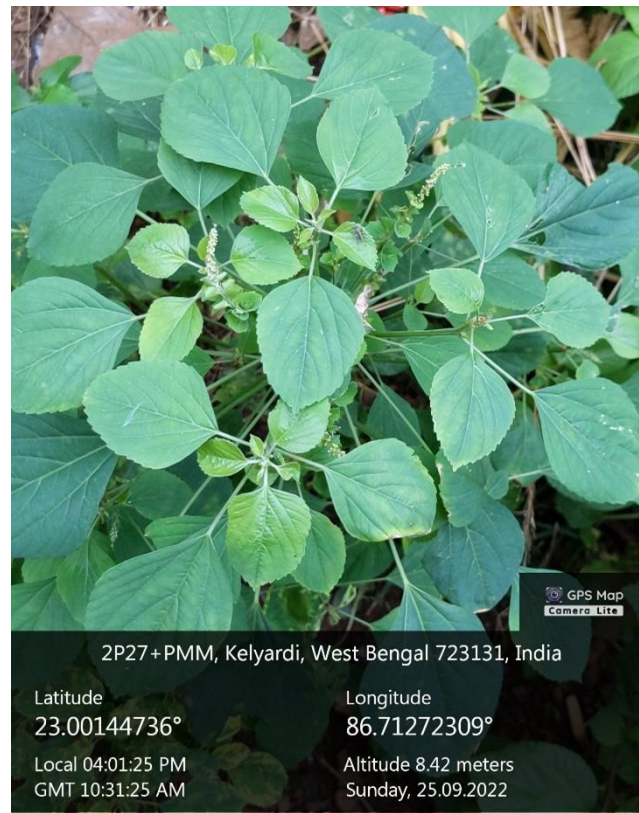
"Indigenous people":

- Refers to people who characteristically exist under conditions of severe disadvantage relative to others within the states constructed around them.

Traditional knowledge in the form of art, music, or folklore, can be developed into certain form that can be understandable to the rest of the world.

- These traditional intellectual property needed to be recognized internationally.
- It can be done via patents; copyrights; trademarks; geographical indications; protection of undisclosed information; layout designs of integrated circuits; industrial designs.

Ragavan, Protection of Traditional Knowledge, 3 MINN I NTELL. PROP. REV. 1, 8 (2001).



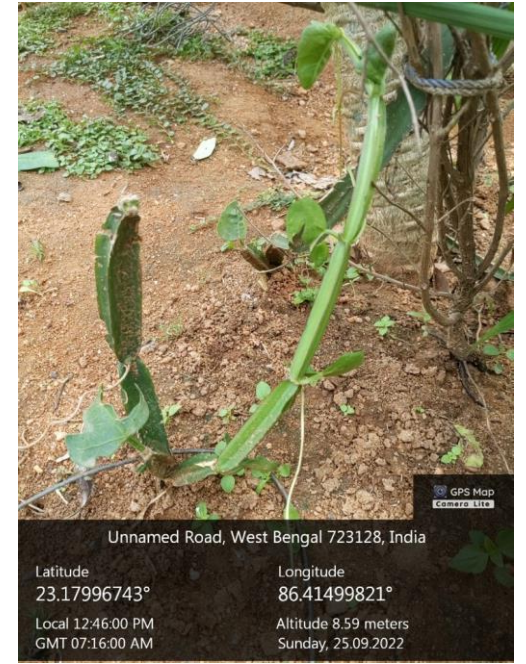
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Altitude 8.59 meters
Sunday, 25.09.2022





What is the Rightful Place for Indigenous People
in the Geospatial Congress? the IGIF?

