

# Astro-tourism as a Sustainable and Socioeconomic Development Strategy for the San Communities in Botswana

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# Background



Tribu San

- One of the oldest continuing cultures to date.
- They were traditionally hunters and gatherers.
- They are also referred to as Basarwa or bushmen.
- The San community encompasses several groups across Southern Africa. Including the **Ju/'hoansi** (NorthWest), **Naro** (or Nharo) (Ghanzi), **Khwe** (or Khoe) (Okavango Delta) and **Central Kalahari San**(CKGR).

# Background



The distribution of the San in Southern Africa. The Tsila/Tshua sub group is located in Botswana in the central region. **Credit:** Hitchcock (2019).

Populations estimated around 60 000 in Botswana

# Background



- A study carried out in 2019 & 2021.
- Investigate:
  - if Indigenous astronomy is still being applied in their everyday lives.
  - If yes, how was it applied
  - If there is an existing understanding and interaction with scientific astronomy.

# Findings

## 2019 – Tshua of Central Botswana

- Still applied, but not as much as before.
- Initially it was for
  - **Hunting** (Common for cattle herders)
  - **Navigation** (Cattle herders)
  - **Leadership** (Did not divulge due to sacredness)
  - **Rainfall prediction**(farmers)
- Integrated into the Bangwato significantly changing their way of life.
- Tswana speaking San.

## 2021 – San of Moralane

- Still applied, not as much.
  - Practised largely to the spiritual side of indigenous astronomy (Very sacred, protected from outsiders)
    - **Spiritual healers** (Possess a larger scope of the knowledge esp. ancient)
  - Willing to only common knowledge(**2019 study**).
  - They are not clicks-speaking San
  - Had deeper knowledge and interpretation compared to the Tshua.
- 
- Notice certain objects in the sky different from their knowledge(Satellites).
  - Shooting/Sebala dinaledi considered a bad omen if seen.

# Outcome

*Indigenous Astronomy in the Space Age*  
*Proceedings IAU Symposium No. 399, 2025*  
*A.C. Editor, B.D. Editor & C.E. Editor, eds.*

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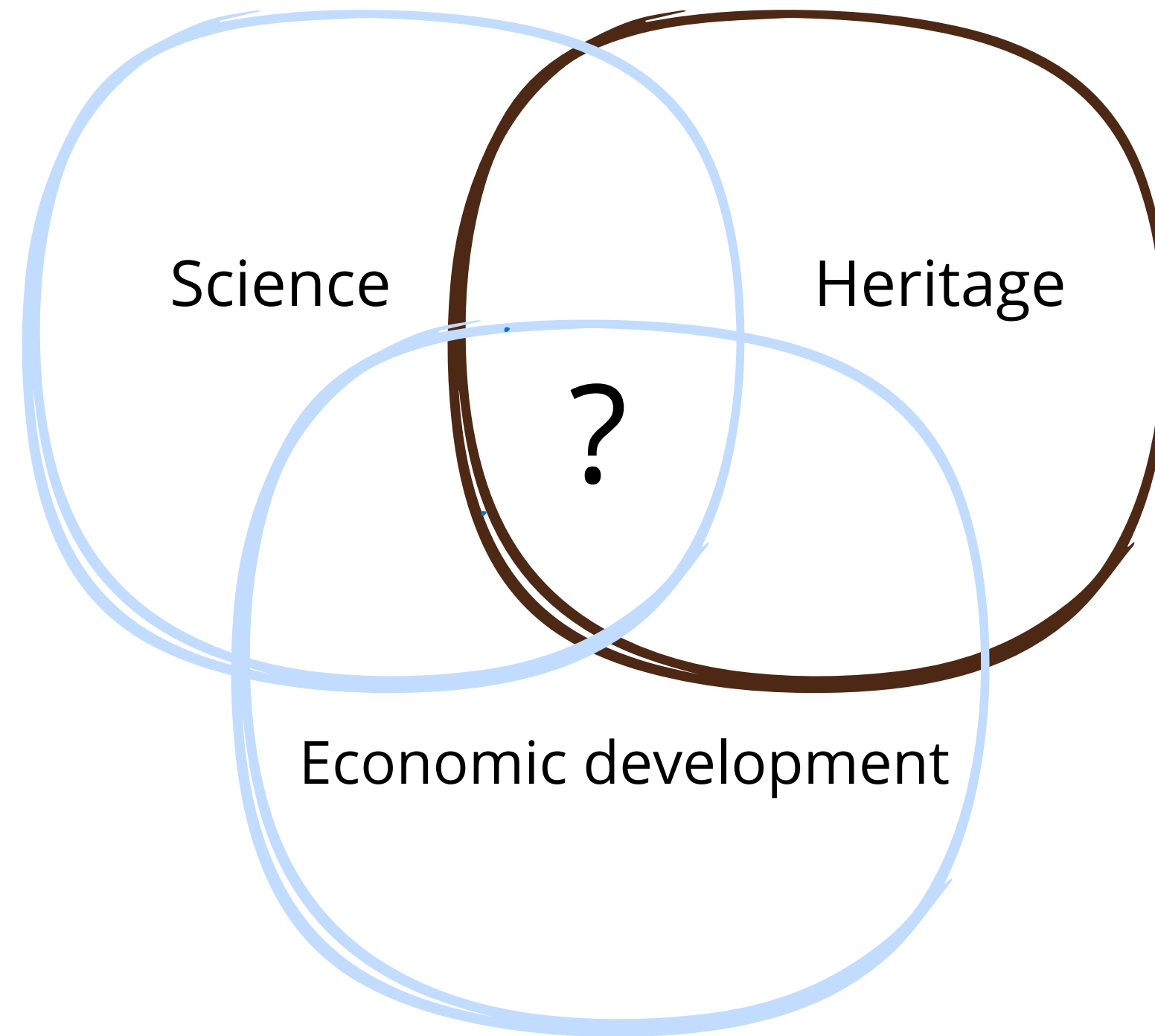
## **The Nexus Between Indigenous People, their Ancient Knowledge of the Night Sky and Scientific Astronomy Projects: A study on Indigenous San Communities in Botswana and Namibia.**

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# Outcome

From our previous studies we have concluded that:

- A need to preserve their indigenous knowledge through documentation.
- Development of a strategy to improve the socio-economic status of different San communities that benefit the majority



# Existing initiatives/Practices

## KURU ART

The Kuru Art Project was initiated in 1990 by the then Kuru Development Trust, as part of their cultural initiative. Through the years the Kuru Art Project has supported the marginalized San of especially the D'Kar community to improve their lives and promote, preserve, and strengthen their cultural values through art and currently supports 20 San artists.

## Community trusts

The rights to their intellectual property in the different forms



San cave paintings

# Existing initiatives/Practices

## Indigenous Knowledge Reference Groups

Organizations are working with San communities to form reference groups to document and protect traditional knowledge, specifically against exploitation.

## Access and Benefit-Sharing

- Botswana is developing legislation to ensure that communities can authorize access to their traditional knowledge and share in the benefits.
- Training of the San in commercialising their knowledge and talents.
- Training and employing them as tour guides.
- Astro-tourism training e.g (**BIUST & AfAS pre conf. activity**)



San cave paintings

# Challenges

## Individual impact

- Existing systems only impact a small number of San. Majority of their communities are still largely disadvantaged.
- They do not have access to proper facilities and services afforded everyone.
- They live in remote areas

## San ownership

Despite the legal frameworks, the San remain one of the most disadvantaged groups in Botswana, and their knowledge is sometimes used by outsiders such as in ecotourism without proper benefit sharing.



# Our perspective

## How do we ensure sustainable economic return for San communities?

- There are structures and frameworks already in place.
  - Need to be updated to current times of digitization and information sharing.
  - Update them to protect the San community against new practices that exploit them.
- Standardizing and enforcing the legal route for interacting, documenting, data collection with the San communities.



San tribe in Kalahari

# Our perspective

## How do we ensure sustainable economic return for San communities?

- Current initiatives only benefit the few participating and not the wider community.
  - Diversifying the roles to be more inclusive and diverse (Not just art and tour guides)
  - integrate folklore, performances that require different age groups.
  - Establishing several annual activities such as camping, stargazing, music festivals, art festivals in different regions across Botswana to help past the tourism peak in the North.



San tribe in Kalahari

# Our perspective

## How do we ensure sustainable economic return for San communities?

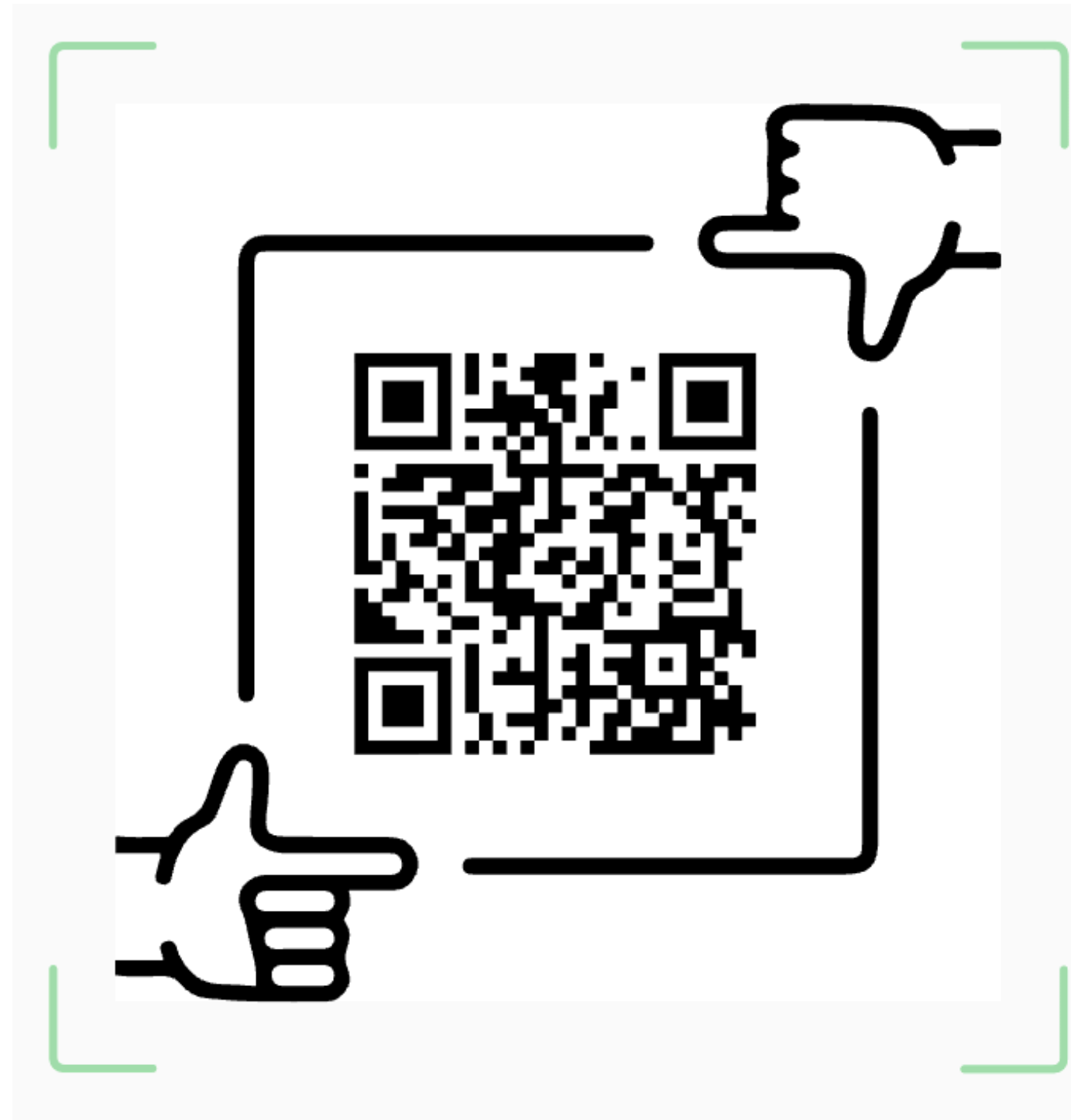
- Infringement of the rights of the San
  - Placement of proper legal representation in existing structures e.g lawyers as part of the community trusts.
- Increasing the ramifications of the infringements of their rights.



San tribe in Kalahari

# Conclusions

- The Indigenous knowledge of the San is crucial and needs to be properly documented.
- Proper channels need to be created or updated for such documentation.
- Legal representation should form the backbone of structures aimed at benefiting the San communities.
- Current socio-economic roles need to be more diverse to help even more people.



# Thank You