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# Local Understandings of (Food) Security at the Agriculture – Forest Interface An Actor-Network Approach

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espa ecosystem services for poverty alleviation

UNIVERSITY OF Southampton

# The challenges of the policy context

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## GOAL 2

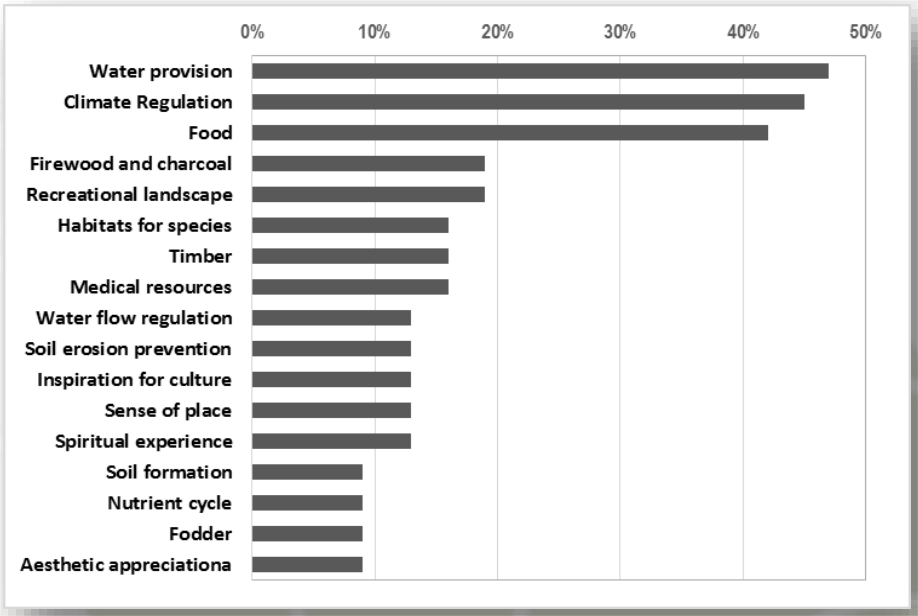
End hunger, achieve food security and improved nutrition and promote sustainable agriculture

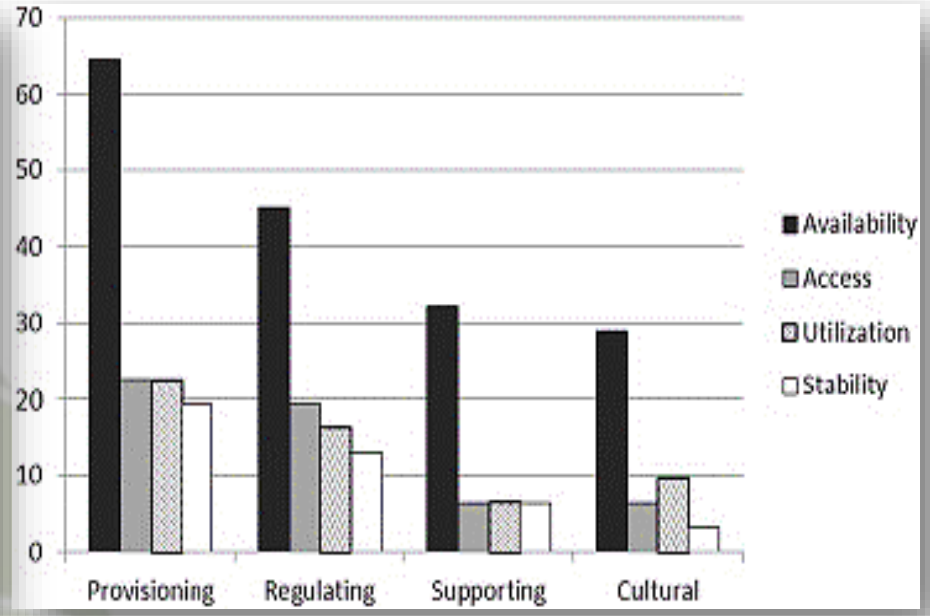
- Production and productivity.
- Income.
- Genetic diversity.
- Resilience and adaptation.

- Poor people
- Vulnerable groups: infants, elderly, women.
- Family farmers, pastoralists and fishers.

1. **Need greater understanding of human – nature relations affecting food security in its multiple dimensions.**
2. **Need to integrate views from the ground so that ES-based recommendations are implemented.**

# ES and food security




Cruz-Garcia, Sachet, Vanegasa & Piispanena (2016)

# Let's try with two words

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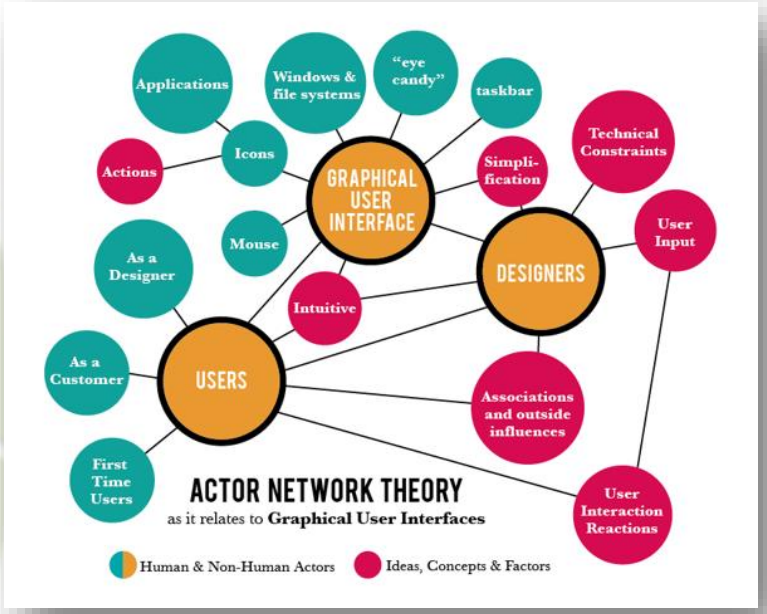
## COFFEE

## TUNA

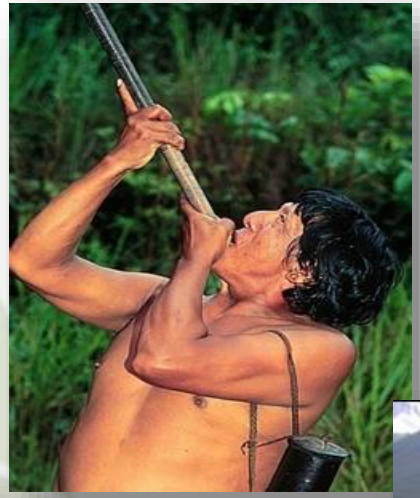
# Actor-Network Theory

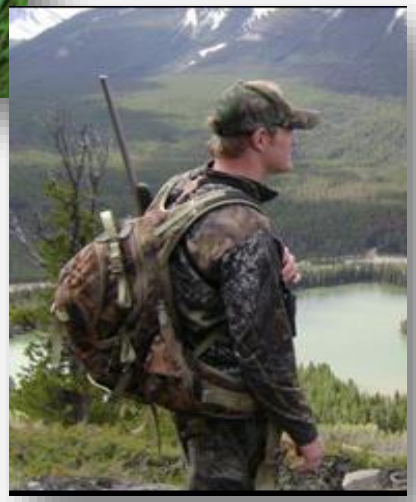
- Sociology of science and technology Callon (1986), Latour (2005)
- **It rejects traditional dualisms between natural and social orders**, science or culture, and between human and non-humans.
- Practices emerge from **a collective agency** developed through 'networks' of people, artefacts, animals, plants, and texts.
- Connections between human actors and non-human entities imply **acts of translation**, giving these entities meaning, identity, interest, roles, and projects.
- Accepted narratives represent a stable network that successfully accommodated one or more acts of translation.



# ES, food security, and ANT

- Views on nature's role in food security are not unlikely to be based solely on the amount of food obtained from natural sources.
- **OBJECTIVE:** to disentangle the diversity of human – nature 'meaningful' relations shaping local narratives of food (security).





# Our study areas: Malawi, Peru and Colombia

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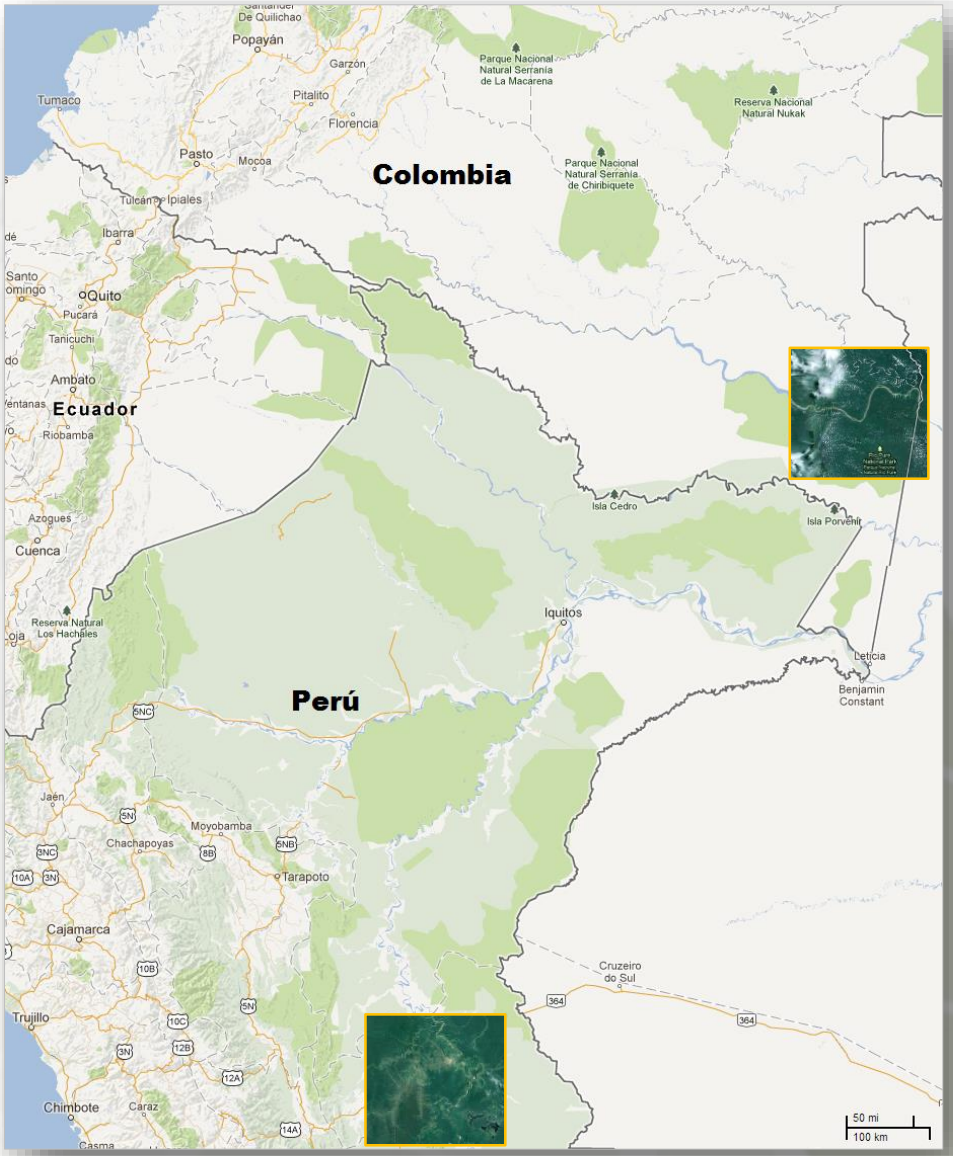

# Our study sites

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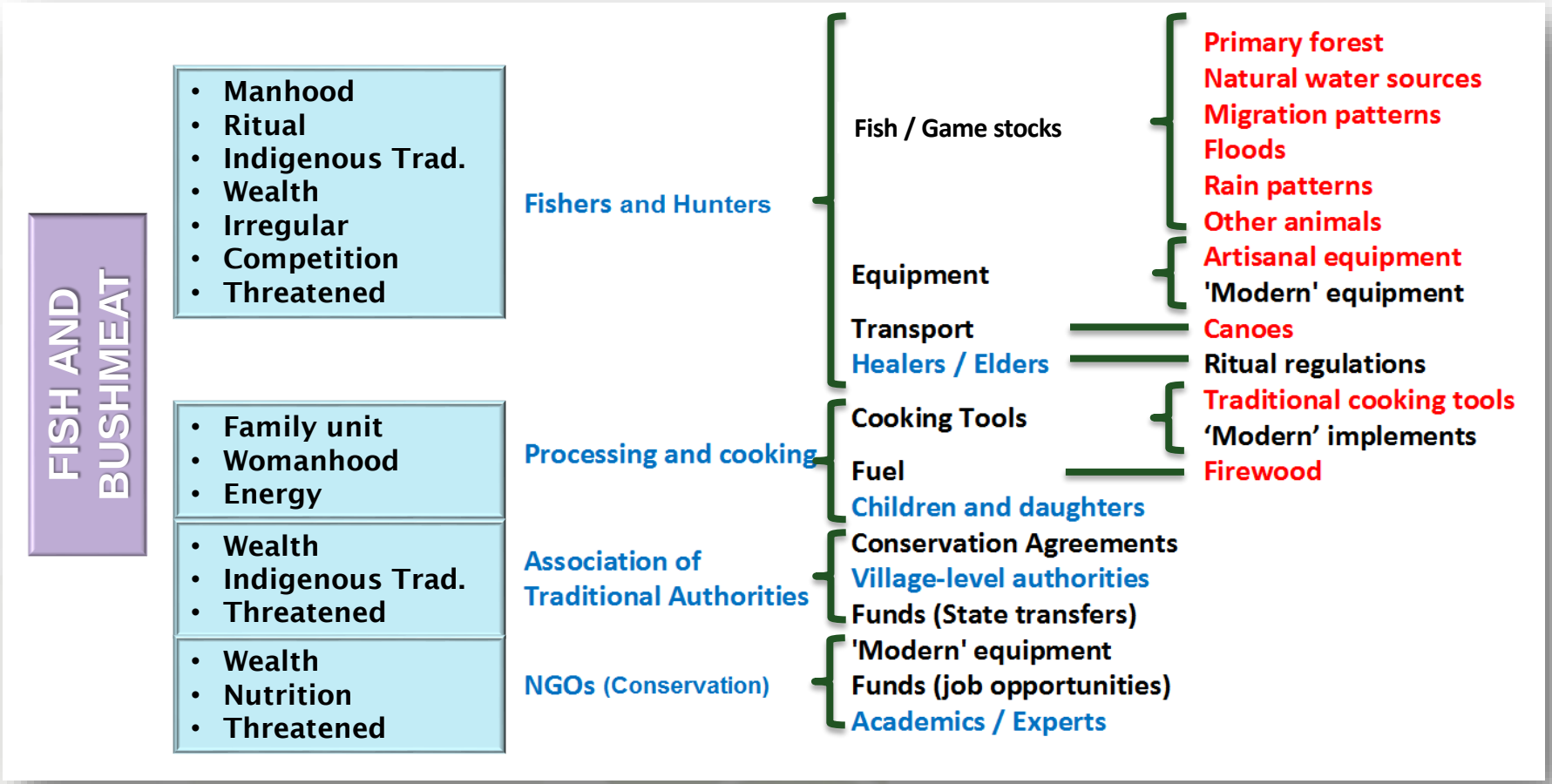
| Socio-economic characteristics | COLOMBIA (11 villages) | PERU (9 villages) | MALAWI (6 villages) |
|---|---|---|---|
| **Poverty** (official) | **54%** | **38%** | **64%** |
| **Stunting** (survey) | **29%** | **18%** | **27%** |
| **Self-class. as food insecure** (survey) | **47%** | **72%** | **62%** |
| **Livelihood Strategies** | **Subsistence:**<br>▪ Fishing<br>▪ Hunting<br>▪ Slash-and-burn agriculture<br>▪ Foraging | **Mixed:**<br>▪ Fishing<br>▪ Slash-and-burn agriculture<br>▪ Commercial agr.<br>▪ Timber extraction<br>▪ Foraging<br>▪ Casual jobs | **Mixed:**<br>▪ Fishing (seasonal)<br>▪ Agriculture: commercial and self-consumption.<br>▪ Foraging (seasonal)<br>▪ Casual jobs |

# Methods

- Participatory exercises on diets and food sources (Colombia: 7; Peru: 6; Malawi: 6).
- Separate focus group discussions on food security - availability, access, regularity and quality - with men and women (Colombia: 14; Peru: 12; Malawi 12).
- Average number of group members: 5.
- Qualitative thematic analysis.

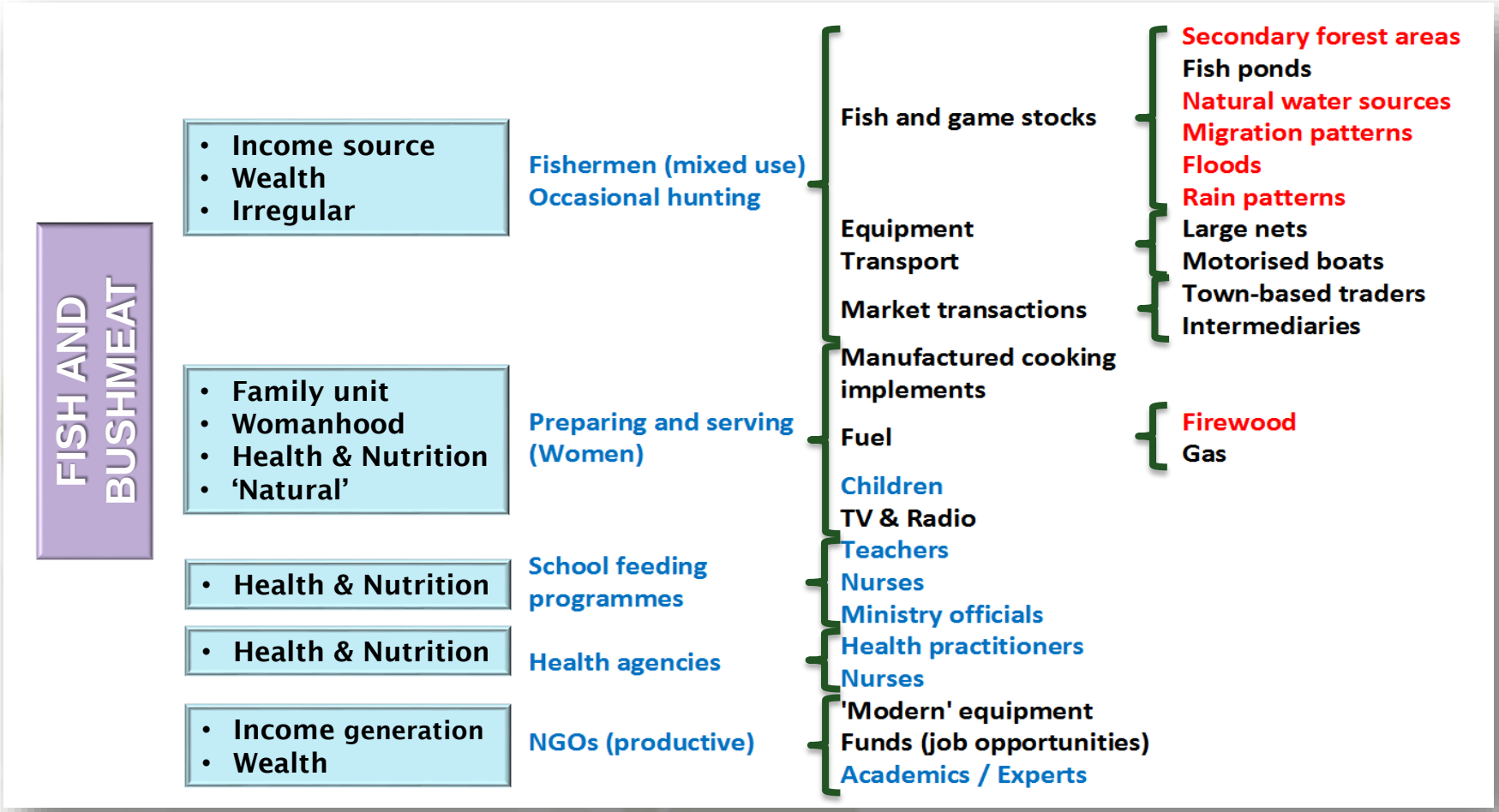
# Fish and Bush-meat

## COLOMBIA (SUBSISTENCE)



# Fish and Bush-meat

## PERU (MIXED)



# Staple foods: Colombia (Casabe) and Malawi (Nsima)

## CASABE

- Manhood
- Indigenous Trad.
- Permanent

Farmers
- Land
  - Tree cover
  - Upland areas
  - Rain
  - Floods
- Plantlets (self-provision)
- Labour
  - Social relations (minga)
  - HH Labour
- Shamans (land clearing)
- Manufactured equipment

- Family unit
- Womanhood
- Safe source
- Makes a meal

Preparing and serving meals
- Firewood
- Equipment
  - Artisanal
  - Manufactured
- Children

## NSIMA

- Production
- Inputs
- Politics
- Ext. support

Farmers
- Land
  - Rain
  - Irrigation infrast.
  - Fertilisers
    - State programmes
    - NGOs and charities (prod. and hum.)
- Seeds
  - State programmes
  - NGOs and Charities (prod. and hum.)
  - Traders
- Labour
  - Hired
  - HH Labour
- Manufactured equipment

- Family unit
- Womanhood
- Makes a meal

Processing and serving
- Firewood
- Processing tools
  - Artisanal
  - Manufactured
- Children

- Hunger
- Nutrition

NGO and Charities (Health)
- Nurses
- Local promoters
- Dietary guidelines

# So what?

- It avoids essentialist or generalised interpretations of local perspectives.
- It shows how local views of nature are constructed progressively, so that we can identify what 'nature' means to people in practical terms.
- It may help to overcome the provisioning / cultural division.
- It facilitates inserting external actors into the network of translations shaping a particular debate.

# THANK YOU

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