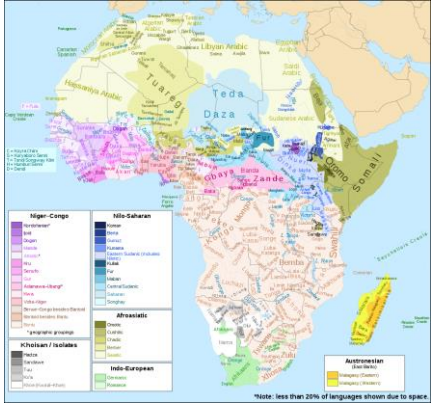
Indigenous Knowledge at the Rescue

PPt 5D

Linked to Readings D10 & D11



Merging themes:
Tackling Environmental Issues with
Community Ingenuity to attain S.D.
Zooming on Africa

About reading D10, "IK...: An African Perspective"

- What is the value of such an article?

→ A lot of knowledge on IK

→ A lot of studies on Disaster Risk Reduction from Scientific Knowledge

- So what is missing?

→ **DRR + IK**, especially in… Africa

- Why is that?

Watch Animation:
Colonization of the world over time

Some Key Terms & Ideas:
Risk Disaster Reduction
Adaptive strategies
Sc. K & IK
Colonialism
Community level
Western education
Policies
Failed projects
Climate Change

Values IK promotes:

- Empowerment at the local/community level
- A model of education (TEK) – different from Western model
- Working along side nature rather than against

Characteristics of IK:

- Unique to particular community/environment
- Relatively stable over time & resistant/resilient
- Knowledge passed on through "intuition, dreams, visions", stories, myths
- K's roles in community: local empowerment, cultural identity, community participation

Some fields of IK applications - Note the key points in the table below (for yourself)

Agriculture	Medicine	Land and Soil mgt	Natural Resource mgt

Let's walk through the article together…

"Hard" vs "Soft" tech:

"Soft"= community-led, based on "local laws and experience to alter nature to promote Hum. Dev."

- "Science of the local people": evolves, grows or diminishes
- Based on centuries of observation

"Hard" = K derived from Physical/Natural Science

- Based on the scientific method and on "hard" evidence

Goal: - "Takes ideas from 'soft tech' and advances it into more physical forms", i.e. hard tech

- *Why higher casualty in "developing countries" when natural disasters occur?*
- *Why do people in "developing countries" lack the capacity to cope?*

We need SOLUTIONS!

Adaptation strategies = more important that ever because of rapid CHANGES in the environment, especially Climate Change.

So, vulnerability is enhanced...

- *Role of IK?* To "help to cushion [local communities'] vulnerability while adaption to effects of climate change…"

- *How is that to be done?*

Mitigation = "the act of mitigating something or the state of being mitigated **:** the process or result of making something less severe, dangerous, painful, harsh, or damaging" (merriam-webster dictionary)

Adaptation = "adjustment to environmental conditions" (Merriam-Webster dictionary)

- *How does the article link "hard" and "soft" tech with "adaptation" and "mitigation"?*

Locals are the **adaptation** experts, having developed **adaptive strategies**, i.e. **"soft" technologies**, for generations which allowed them to thrive in their environment.

Meanwhile, **professionals** in "development" (in the more contemporary sense), have the **"hard" technology** expertise to come up with **mitigation** plans.

"There is a need to integrate **indigenous knowledge** in **mitigation plans** for development, as this knowledge has helped local communities survive and adapt for generations" (Iloka, 2016, p. 4)

Another characteristic of **indigeneity** is **resilience**.

- What is resilience?

In Vanuatu… Cyclone Pam (category 5) in 2015 - Watch:

- People of Vanuatu build disaster resilient homes (2 min.)
- Resilience song: Tujah Resilient Music Video ft KC & ALA (5 min.)

Now back to Africa…

"**However, in Africa**, they [authors of *Red Cross/Red Crescent Societies'* work] mentioned various programs – W.M.O. programs, W.H.O. programs, and W.F.P. programs – aimed at disaster risk reduction. They say these programs are undertaken with a combination of expert knowledge and inputs from the local people. Such programs are funded and managed by developed countries (Red Cross/Red Crescent Climate Centre 2013)." (Iloka, 2016, p.6-7)

- Do you recognize the same pattern as "bottom-up approach" from reading A-3?

- Are such schemes, as those above-mentioned, genuinely grass-roots?

Let's see what Iloka responds to that…

"So why is this so? Why should solutions for disaster risk reduction come from initiatives from developed nations and not from the local people who are directly affected? Where is the local knowledge that had helped the forefathers of Africa survive disasters for centuries?" (Iloka, 2016, p.6-7)

A virtual conversation with Iloka's text…

The reality though is that… "Local communities have not always been helpless…" (p.5)

So, where is the problem? "preference to scientific knowledge, […] particular ideologies from scientific knowledge, [… including] specific assumptions and theories" (p.5)

Problem with assumptions… "dismissing important evidence of historical data from Africa" (p.5)

E.g. "wood fuel crisis theory" Read up

Theories and assumptions come from where? "… conceived during the period of African colonisation, when the idea of 'conserving the environment' was proposed. Such ideas were just used as a form of **social control** for the benefit of the settlers from Europe. This approach came to be known as **colonial science**" (p.5)

Results of colonial science? Some of the approaches used by these researchers had previously portrayed African locals as agents of environmental change in a negative way, even though not directly" (p.5)

E.g. 70s-80s droughts and famines in the Sahel " Read up

What did the West make of that? "To ensure that they manage their environment better, they had to be helped to become civil and modernized" (p.5)

What aspect of European colonization impact the African continent? "Western education and Christianity [… which were] not rooted in 'African culture and knowledge systems'… Western education destabilized the African indigenous knowledge and technological systems" (p.5)

Results of European colonization? "Locals abandoned their traditional ways of life and indigenous knowledge, which was the core of their 'indigenousness', in pursuit of the Western knowledge " (p.5)

A virtual conversation with Iloka's text…

What about youth? "they are interested in 'modern' ways of life. The younger generations are not interested to learn because some believe indigenous knowledge is 'knowledge of the poor' "(p.5)

But the knowledge is there, no? "custodians of this knowledge do not write down this knowledge […] There is a breakdown in traditional communication channels and socio-economic imbalances – lifestyle changes and exposure for the younger generation due to global influence limit interaction with the older people in communities and such older people die without passing down the indigenous knowledge " (p.5)

Are there other challenges for passing down this precious knowledge? "African libraries find it difficult to document this indigenous knowledge to be used for global development initiatives. Lack of funds, technological problems and a lack of specific frameworks from government aimed at harnessing this knowledge…" (p.5)

Is that why top-down approaches continue to be use? "[Yes], as development experts and even governments believe documented, tested and tried methods are safer to use in Africa. The problem here is that these ideas are usually obtained from different parts of the world and they may not be effectively applied in the African context, leading to failed projects" (p.5)

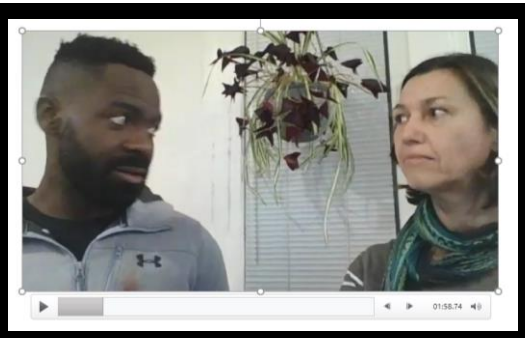
To wrap-up, what is the basic unit IK should be drawn from?
African indigenous knowledge[is to be] shared and implemented in the most basic form of community (the household unit). There is also a need to understand how these households relate with their environment. " (p. 6)

Interview with Franck Nlemba – 2020 (15 min.)

Identify from this interview all the key terms and key ideas that you recognize in the course material so far covered.

FYI: Kongossa forum

KWS: Franck NLEMBA, Fondateur Kongossa Technologie (2 min.)



Click here to access it: https://web.microsoftstream.com/video/9b3dd453-065e-4ae7-8000-18ec14a368eb
It is also available under "Course Videos"

Do you have questions for Franck? He will be happy to answer them!

Here is for you to visualize this section of the course through a tour of the world…

Watch: Land Use and Adaptation – Traditional Knowledge and Climate Science series (18 min) [As part of Reading D-11]

Some Key Terms & Ideas:

Your turn to extract them from the video!