



Innovative Science Communication: Making a Case For Science In Africa's Development

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iPIC Building, JKUAT

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## Africa



- 1.2 billion people
- Produces only 1% of global knowledge.
- 300, 000 scientists working in various disciplines.
- **Challenges:** Disease burden. Illiteracy. Food insecurity. Low outputs/quality research. Poor infrastructure/integration. Climate change. Governance.

## What is Science Communication?

Application of appropriate skills, media, activities and dialogues in order to



- Create awareness,
- Enjoyment,
- Understanding, of science and its outputs
- Interest/Appreciation,

## Cont.

- "...is about making research relevant, accessible and meaningful to specific public or policy audiences."
- It often involves presenting information from a scientist's point of view to a non-scientists or general public, in way that relates to their everyday lived lives.
- Major objective of science communication should be to effect change in the society
- It helps to foster rapport between scientists, universities and research organizations and the larger society

## Key Questions in designing effective science communication strategy

- ❖ **Why communicate** - the purpose
- ❖ **What to communicate** - knowledge, innovations
- ❖ **To whom** - audience, actors
- ❖ **How to communicate** - methods, instruments, tools

## Some constraints in science communication



- Bureaucracy
- Fear of professional backlash i.e from colleagues, institutions, professional bodies
- Lack of packaging skills to target different audiences
- Use of inappropriate channels

### What happens when we fail to communicate?

- Innovations hit the valley of death
- Policy makers are left without facts
- We impede further research/promote duplication
- Curtail public participation in policy making
- Lost opportunity to attract young people into science



### Ethics & responsibility in Science communication



- Pay special attention to any intellectual property involved
- Avoid messaging or cherry picking research findings
- Solid research and sound evidence is better than pomposity & public show
- Avoid plagiarism and other forms of professional misconduct

Source: Development Research Uptake in Sub-Saharan Africa (DRUSSA)

### Some suggestions

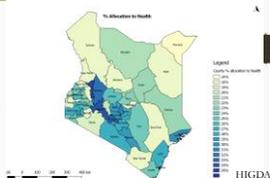
- Use of exhibitions, expositions, Good examples include Tech Expo (JKUAT and Innovation week (UoN) and Display Corner at iPIC Centre
- Africa- Next Einstein Forum
- Organized with close collaboration with industry



- Strong lobbying platforms for science-based policy frameworks.
- Inviting carefully selected players based on certain running themes to witness innovation research activities like final year presentations of AFRICA-ai-JAPAN Project



- Use of appropriate methods of data/ findings presentations like visualization charts, dashboards, graphs. HIGDA Project.
- Avenues like iODAV can be leveraged to equip researchers with skills in this area.



- Engage the industry through internships. Students should spend enough time in the industry, working on identified challenges
- Introduction of periodic press briefings on ongoing research and innovation outputs



### Social Media & Science

Calestous Juma: @Calestous

- Mobile penetration in Kenya is 88% (37.8 million users)
- Number of internet users in Kenya: 31.9 million  
*(Source: Communication Authority of Kenya for 2015/2016)*
- More people around the world are signing up to social media platforms
- It is now an avenue to disseminate information, including science related messages.



### JKUAT Social Media platforms



Twitter: @DiscoverJKUAT  
Facebook: Discover JKUAT

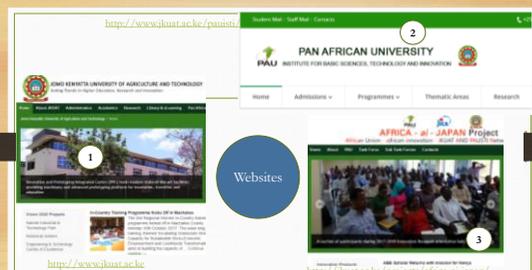
### PAU Social Media Pages



Followers: 129, Tweets: 26



- Undertake more useful and impactful research. Premised on country condition (PAU rule). **Not engaging in research for research sake.**
- Share research findings with people you collect data from. **Effective way to effect social change.**



1: <http://www.jkuat.ac.ke>

2: PAN AFRICAN UNIVERSITY  
INSTITUTE FOR BASIC SCIENCES, TECHNOLOGY AND INNOVATION

3: <http://jkuat.ac.ke/projects/africa-at-japan/>

### Other Channels

- Magazines
- Newsletters
- Brochures
- Television
- Radio
- Social media



### Action points



- Invest time, and other resources into sharing their work beyond the limits of academia;
- Target key stakeholder groups. Understand how they access and process information.
- Listen and respond to the concerns and expectations of a variety of interest groups;
- Present your work in ways that policy makers and decision makers can easily understand and use it.

### “Uncommunicated science is a waste”



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