



**AFRICAN CENTRE
FOR BIODIVERSITY**

**Emerging Issues relating to IPRs and genome editing for
Africa**

***International Farmer Seed Gathering – Antibes, Nice
Sabrina Masinjila – 4th October 2024***



Agenda

Status quo on IRS regime for Plants in Africa

Patent laws in Africa

Status on genome editing projects and push for deregulation
and implications on future plant IPR regime on the continent



Snapshot over the last two decade

- In Africa – IPR laws have long existed in the form of Plant Variety Protection (PVP) – based on TRIPS provisions under WTO
- Growing external investment in African agriculture including seed systems – led to setting up of legal frameworks for private ownership over germplasm
- Drive for PVP by corporate sector – push for adoption of restrictive one-size-fits-all UPOV 1991 at national and regional levels

- In Africa – there is minimal debates on patents on plants in comparison to Europe



- African countries with patent laws in place – do not allow patents on plant or animal varieties or essentially biological processes for their production e.g.,
 - ✓ South Africa, (Patents Act, Section 25)
 - ✓ Uganda (Industrial Property Act of 2014, Article 33)
 - ✓ OAPI – Bangui Agreement, Article 6
 - ✓ ARIPO – Harare Protocol, Section 3 (10)



NOTE: What is excluded is plant varieties and not plants and their parts and components

Provisions also don't apply to microbiological processes or the product thereof incl. processes related to modern biotechnology for the development of GMOs including emerging technologies such as CRISPR/Cas

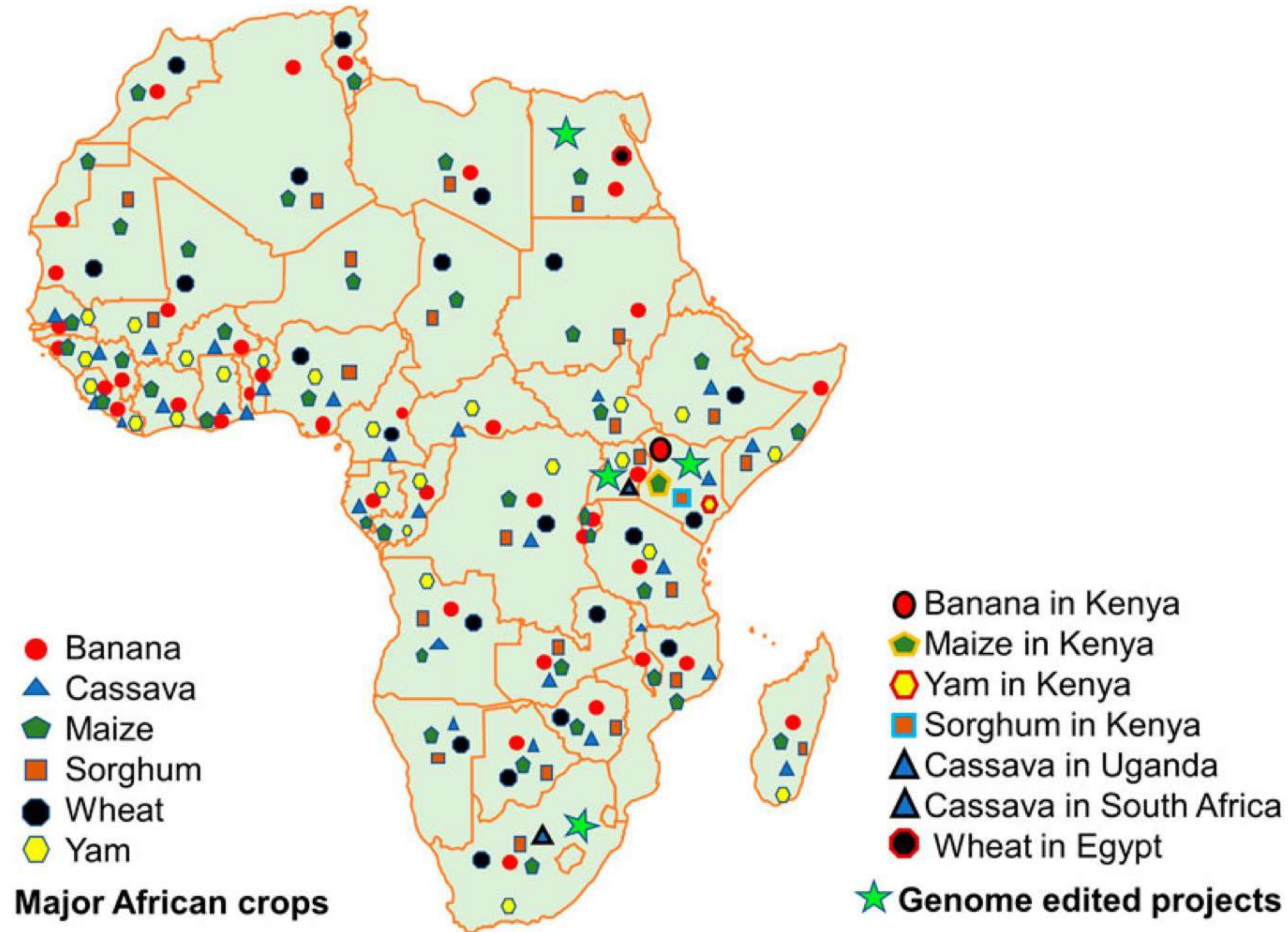


Genome editing projects are at various stages of development

- Countries targeted include:
Kenya, Nigeria, Uganda,
Ethiopia and Ghana
- Through PPPs
- Use of CRISPR/Cas



Targeted crops in Africa



Credit: Tripathi, L., Dhugga, K., Ntui, V., Runo, S., Syombua, E., Muiruri, S., Wen, Z. & Tripathi, J.N., 2022.

Genome editing for sustainable agriculture in Africa.

<https://www.frontiersin.org/articles/10.3389/fgeed.2022.876697/full>.

- As with first generation GMOs – promises that new technologies will address the continent's multiple and complex agricultural challenges and crises – lots of hype with no commercialized products yet
- Done through lobbying, communication, campaigns, research funding, and policy development including deregulation and multiple IPR regimes



Push for deregulation



- Push for regulation of gene edited products same way as conventionally bred crops – places techniques and products out of the scope of national biosafety laws and Cartagena protocol
- 4 countries: Nigeria, Kenya, Malawi and Ghana – adopted guidelines for genome editing that excludes technology and its products unless detectable DNA is present in the final product
- Eswatini and Burkina Faso to follow
- **Only South Africa** – decided to regulate both technology and genome edited seed/crop in terms of biosafety legislation

Why the push for deregulation by the industry?

- Allows agrochemical – biotech corporation to ‘hide’ knowledge related to test results, manufacturing processes and other related information as trade secrets
- Allows broad patent applications lacking the detail that would enable another company to generate the same product on the expiry of the patent – extending monopoly

Implications for deregulation and why we should push against it

- Huge implications for the broader African food and agricultural system
 - ✓ Violates consumer rights – Labelling and traceability requirements are not mandated making it impossible for farmers and consumers to know the origin of what they are using or consuming
 - ✓ Lack of consideration of ethical, social and sustainability issues – especially in the context of corporate concentration in seed and agricultural input markets
 - ✓ Social justice concerns – access and benefit sharing issues linked to DSI and lack of obligation to disclose information in databases



Implications to IPR regime linked to seed and plants

- Question is whether the current trajectory towards gene editing in Africa will now start shifting the already existing patent frameworks such as in South Africa, Uganda and at regional levels such as ARIPO and OAPI



Thanks



**AFRICAN CENTRE
FOR BIODIVERSITY**