Green Revolution push in Africa: the occupation of the Guinea Savannah—where the GM push fits in.

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Overview

• AGRA and ‘old hubs’ of capital
• The Green Revolution agenda and AGRA
• Land, seed
• GM push
• Conclusions
AGRA and ‘old hubs’ of capital

The US, EU and African agricultural modernisation

G8 New Alliance on Food Security and Nutrition (NAFSN), USAID and US foreign policy

AGRA – Gate Foundation, Rockefeller Foundation – philanthro-capitalism

Corporate drivers – Monsanto, Syngenta, Yara and many others

Gates – Monsanto shares, proprietary (privately-owned) technologies

Rockefeller – CGIAR institutions (2nd food regime)

World Bank – Guinea Savannah – “600 million ha ripe for commercial farming”
AGRA breadbasket areas

“increasing yields and expanding cultivated land in fertile areas already endowed with a minimum of essential infrastructure” - AGRA
SAGCOT and Beira Corridor
The Green Revolution agenda

Technological package
Institutions – legal, administrative, technical
Large-scale commercial farming, including plantation/contract farming arrangements
Recognition of importance of small-scale farming base in Africa

Two strategies:
  ◦ i) integrate into corporate chains for export
  ◦ ii) growth of commercial small-scale farming class, with increasing economies of scale over time
Green Revolution logic

Africa with huge resources but low productivity
Linear modernisation
Profit motive and competition as drivers of economy
Value chain approach
Subsidised inputs
Higher investments in land will “induce land holdings to adjust” (AGRA, 2013) – concentration in land holdings and dispossession

NAFSN and land – surveying and individual title

Surveying as the first step in commodification and alienation of land (Craib, 2004)

Irrigation and water
Seed

Majority of seed recycled – plasticity – adaptation to local socio-ecological context – built up by African producers themselves with some external input

Colonialism - introduction of ‘non-local’ crops like maize, European fruit and vegetables etc.

Green Revolution in US-led second food regime to increase yields – expansion of profitable markets for proprietary technologies

Role of CGIAR and USAID – long-term vision, patient build-up – seed breeding and production - towards commercialisation

Private seed companies following structural adjustment/liberalisation

But focus on ‘core’ profitable crops – “row crops amenable to industrialisation” (Aline O’Connor, AGRA consultant)

‘Orphan’ crops previously ignored – failure to meet strong but localised demand for diverse improved seed but quite a bit of R&D into GM traditional crops
Preparing the ground

Legal and policy frameworks – private ownership of land and germplasm – IP and PVP - regional harmonisation

Technical and governance structures

Education and R&D – AGRA (higher education, variety development)

Contradictory processes – is value in expanding this technical knowledge, but question of competitive, profit-seeking orientation

Inappropriate quality criteria

PPPs

AGRA and NAFSN – Scaling Seeds and Technologies Partnership (SSTP), seed enterprises
The GM Push

In 20 years since global introduction only 3 African countries have approved cultivation – South Africa (1997 – cotton, maize, soya), Burkina Faso (2008, Bt cotton), Sudan (2012, Bt cotton)

42 Africa countries party to Cartagena Protocol but only a handful have implemented domestic biosafety frameworks

USAID has funded capacity building, technology transfer and infrastructural development, Gates has also been instrumental in funding both policy interventions and scientific projects particularly on indigenous crops.

Regional Economic Communities (RECs) are developing biosafety policies to apply blanket-fasion to all member states reducing case-by-case risk assessment and promoting cheap and easy regional trade of GM seeds and commodities. COMESA has approved, ECOWAS is pending
USAID has laid an intricate web of partnerships with corporations, key political bodies, national agricultural research institutions, academia, CGIAR institutions and NGOs in a long-term multi-pronged strategy to foist GMOs onto reluctant Africa.

AATF – African Ag Technology Found.
ABNE - African Biosafety Network of Expertise
ABSP II - Agricultural Biotechnology Support Programme
ACTESA - Alliance Comm. Trade E/S Africa
AGRA – Alliance Green Rev Africa
ASARECA – Ass. Strengthening Ag. Research in Eastern and Central Africa
COMESA – Common Market E&S Africa
IEHA – Initiative to End Hunger in Africa
ISAAA – industry body promoting GM
MSU – Michigan State University
NEPAD – New Economic Path African Dev
OFAB – Open Forum Ag Biotech Africa
PBS - Programme for Biosafety Systems
RABESA - Regional Approach Biotech & Biosafety Policy E & S Africa
WEMA – Water Efficient Maize Africa
On the horizon

Work on indigenous/traditional crops has been a strong tool to train local scientists, develop risk assessment and other regulatory procedures and win over lobbying power in scientific and government circles (e.g. cowpea, pigeon pea, sorghum, cassava, banana)

Particularly worrying – moving from commodities to food security crops, often “women’s crops”, shifting ownership to private hands. Hand in hand with new seed laws

African cotton growers and industry have become allies, calling for weak biosafety regimes and speedy introduction of GM cotton to boost productivity and increase global competitiveness

Gates/ Monsanto Water Efficient Maize for Africa – touted as “climate smart agriculture”
<table>
<thead>
<tr>
<th>Crop</th>
<th>Key Points</th>
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<tbody>
<tr>
<td>Bananas</td>
<td>GH - insect virus resistant 2015, materials for FT planting imported 2016, Banana bacterial wilt resistant cooling banana MLT Fs 2016</td>
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<tr>
<td>Cassava</td>
<td>FT Virus resistant FT Pro-vitamin A, FT Pro-vitamin A</td>
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<tr>
<td>Cowpeas</td>
<td>Field trial - CR application imminent</td>
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<tr>
<td>Maize</td>
<td>FT - Drought tolerant (WEMA)/BT, FT WEMA approved Sept 2016, FT NK603 and MON 89334 x NK603, CR - Bt/Ht stacked since 1998 CR 2016 Drought tolerant (WEMA), FT - Drought tolerant (WEMA)/BT (2016), FT Drought tolerant (WEMA)</td>
</tr>
<tr>
<td>Rice</td>
<td>GH NEWEST, FT NEWEST (2013), FT NUE</td>
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<tr>
<td>Sorghum</td>
<td>FT - Vit A 2012, GH Vit A</td>
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<tr>
<td>Sugarcane</td>
<td>CU - Virus resistant 2016, various Fs, nothing since end 2014</td>
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<tr>
<td>Sweet potato</td>
<td>GH</td>
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<tr>
<td>Irish potato</td>
<td>FT Disease resistant</td>
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<tr>
<th>Country</th>
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<tr>
<td>Burkina Faso</td>
<td>Cameroon, Ethiopia, Ghana, Kenya, Malawi, Mozambique, Nigeria, South Africa, Sudan, Swaziland, Tanzania, Uganda</td>
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CR - Commercial release/placing on the market
FT - Field Trial
MLT – Multi-location Trial
NPT - National Performance Trial
GH - Greenhouse

CU - Confined Use
NEWEST - Nitrogen-use efficiency, Water use efficiency and salt tolerant rice (triple stack)
NUE – Nitrogen Use Efficiency
HT – herbicide tolerant
BT – insect resistant

Disclaimer: Reliable and up-to-date information on GM activities is notoriously hard to come by, this may not be an exhaustive list and in some cases experiments or trials listed may have been discontinued. This list serves as a guideline.
Conclusions

Occupation not only physical space, but also institutional space and assets

Altering seed systems and agricultural techniques

Directing public resources to supporting privatised profit

Advancement of some at the expense of others (e.g. land dispossession)

Alternative based on common, democratic ownership of resources and technologies, cooperation in economic activity, build on what exists rather than replacing

Thank you!

END