Green Revolution push in Afric 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

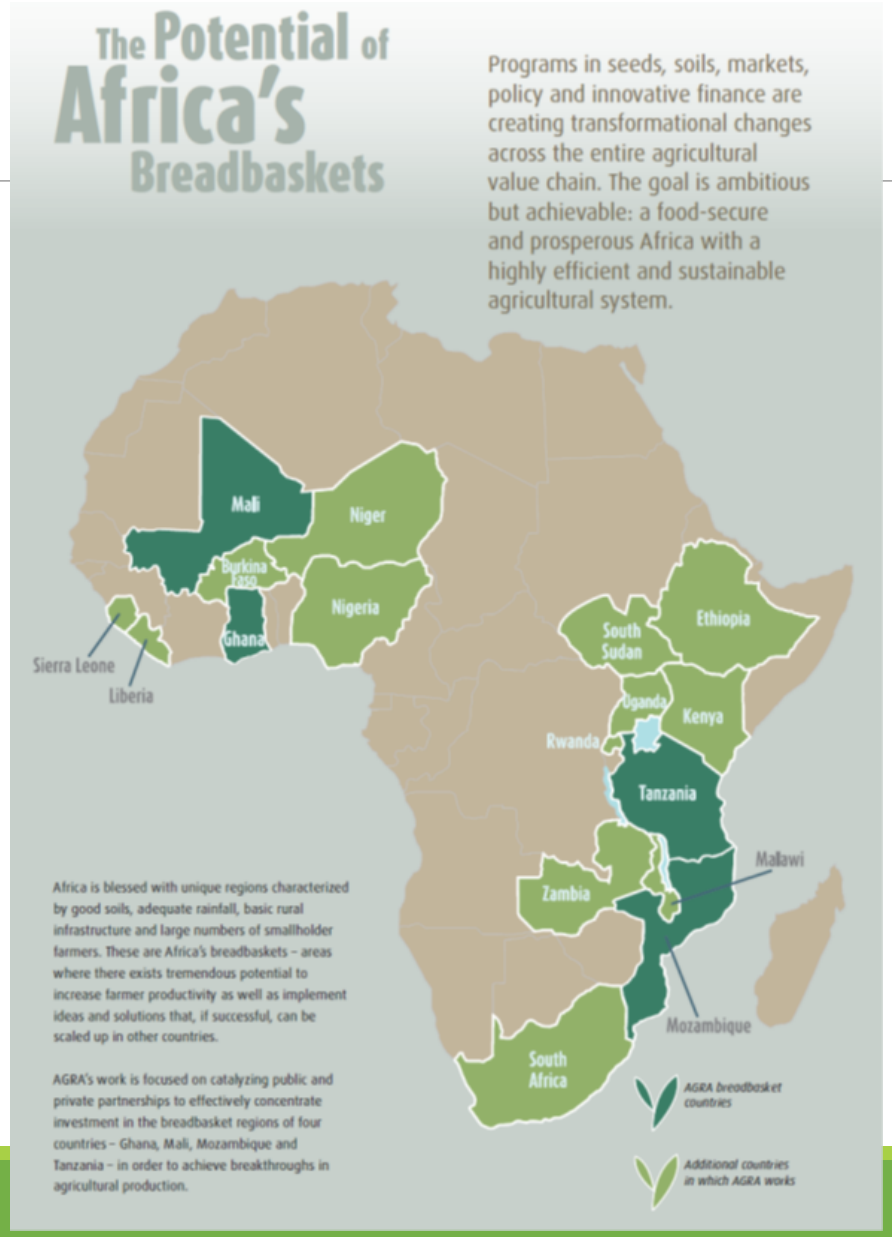
Gates – Monsanto shares, proprietary (privately-owned) technologies

Rockefeller – CGIAR institutions (2nd food regime)

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

The Guinea Savannah

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

Land

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 traditiional 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 –

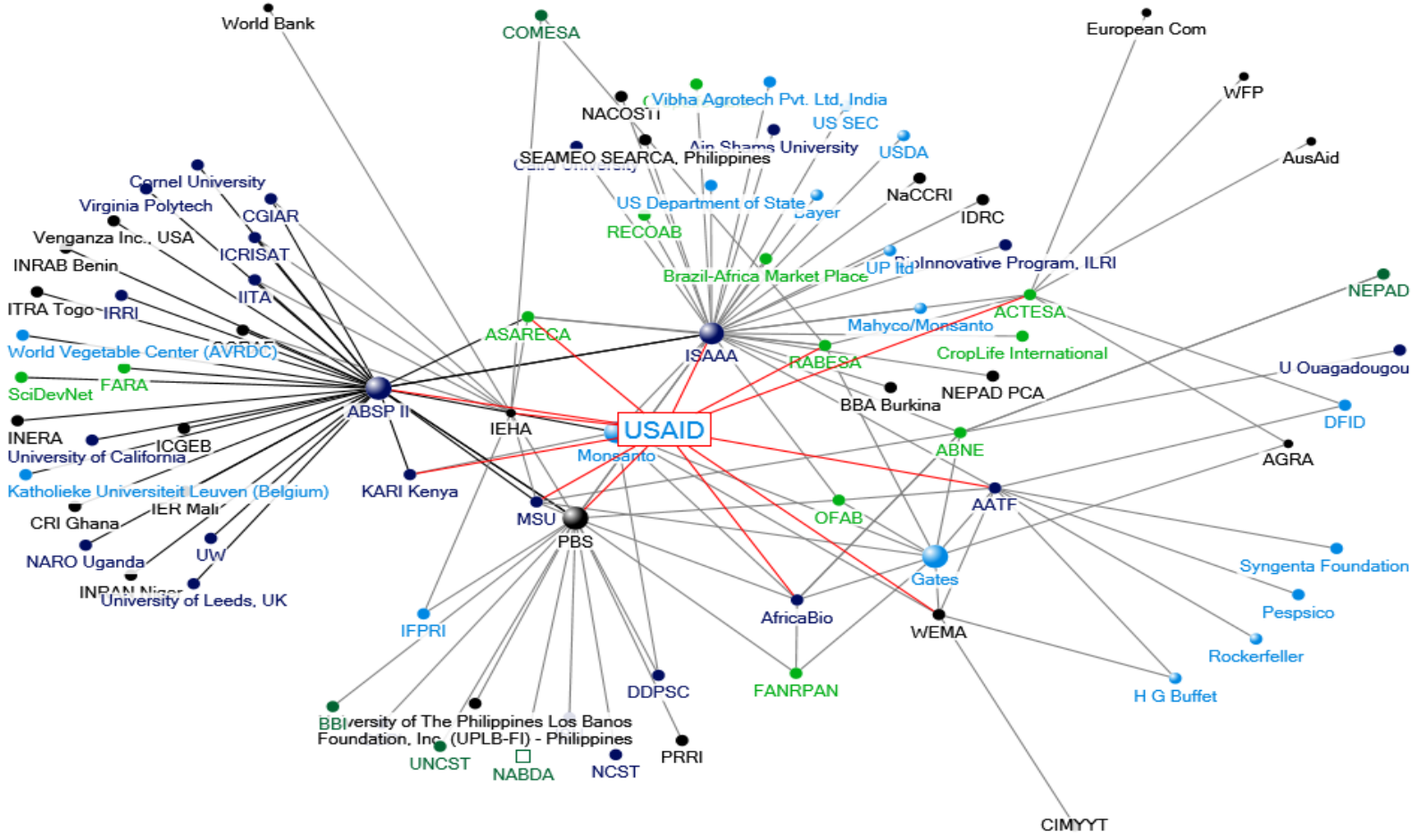
South Africa (1997 – cotton, maize, soya), Burkina Faso (2008, Bt cotton), Sudan (2012, Bt cotton)

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-fashion 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"

	Burkina Faso	Cameroon	Ethiopia	Ghana	Kenya	Malawi	Mozambique	Nigeria	South Africa	Sudan	Swaziland	Tanzania	Uganda
Bananas					GH - insect/ virus resistant. 2015	materials for FT planting imported 2016							Banana bacterial wilt resistant cooking banana. MLT FTs 2016
Cassava					FT Virus resistant FT Pro-vitamin A			FT Pro-vitamin A				CU - virus resistant	FT Virus resistant FT Pro-vitamin A
Cotton	CR BollgardII cotton 2008. Phasing out by 2017	MLT FTs 2015	FT - Bt 1st trials July 2016	FT - HT since 2013 and stacked since 2014	BollgardII 2016 2-3yrs NPTs approved	BollgardII CR pending		BollgardII CR approved 2016	CR since 1997. 100% GM production 2016	CR - Bt 2012	MLT - Bt		FT stacked HT/Bt
Cowpeas	Field trial - CR application imminent			Field trial - CR application imminent		FT		FT - CR application imminent					
Maize					FT - Drought tolerant (WEMA)/ Bt		FT WEMA approved Sept 2016	FT NK603 and MON 89034 x NK603	CR - Bt/HT/ stacked since 1998 CR 2016 Drought tolerant WEMA)			FT - Drought tolerant (WEMA)/Bt (2016)	FT Drought tolerant (WEMA)
Rice	GH NEWEST			FT NEWEST (2011) FT NUE				GH NEWEST					FT - NEWEST 2013
Sorghum	FT - Vit A 2012				GH Vit A			FT Vit A					
Sugarcane					CU - Virus resistant 2016				various FTs, nothing since end 2014				
Sweet potato				GH									
Irish potato													FT Disease resistant

- CR - Commercial release/placing on the market
- FT - Field Trial
- MLT – Multi-location Trial
- NPT - National Perforamance Trial
- GH - Greehouse
- 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