

The biofuels boom and bust in Africa: a timely lesson for the New Alliance initiative

Summary

Policies promoting biofuels development through financial incentives in Europe and in the United States of America are major drivers of the 'land rush' in many African countries. Yet, we know that most of the first projects have not achieved their intended objectives on the ground. Amidst these controversial and failed investments, which continue to hold large tracts of land in Africa, the G8 initiative called the New Alliance for Food Security and Nutrition is trying to attract substantial new private investment in agriculture in ten African countries. The New Alliance focuses on public-private investments, with host governments offering large tracts of land to investors. These land-based investments follow similar patterns to unrealised ambitions of biofuels investments. Given the evidence of negative impacts of biofuels investments on rural communities' access to and control of land, water and forests, the New Alliance implementing partners need to consider lessons from the biofuels rush, and take different pathways to avoid such impacts.

Key points for policymakers

- Recognise and secure legitimate customary land rights, and carry out new land reforms where needed. Improve land administration and land registration while enforcing existing legislation, especially in countries with progressive land laws.
- Ensure that all land-based investments have secured free, prior and informed consent and that there is full participation of all land users.
- Consider new land tenure arrangements such as short-term leases of 5-20 years, depending on the type of crop and payback period. Contracts must be legally enforcing investors' commitments, and without investment stabilisation clauses which disfavour host countries.
- Equip the national land ministries and relevant institutions with sufficient and knowledgeable personnel and working tools to improve their effectiveness and efficiency in pre-screening, negotiating, monitoring

and auditing investment projects in the country.

- Guarantee that priority investments in agriculture focus on African farmers as the land owners and don't lead to their displacement, including in the value chain, upstream and downstream activities and public goods and services.
- Formulate a comprehensive biofuels policy and revoke the ownership of collapsed land deals including those of previous biofuels projects.

The boom and bust of biofuels investments in Africa

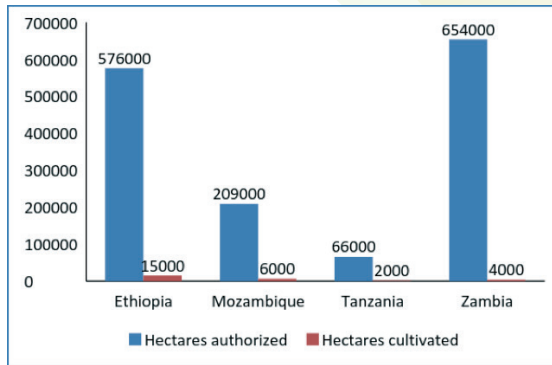
Biofuels are generally defined as liquid, solid or gaseous fuels that are mainly or exclusively produced from biomass.¹ Currently, few of the operating or planned projects aim to grow biofuels feedstocks such as sugarcane, soybeans, sunflower, canola, oil palm and jatropha. Several of these are 'flexcrops' which can be used either as food or as fuel, and thus respond to the fluctuating world prices of food and fuels.² The rise of biofuels investments in Africa was driven by the European Union and United States policy targets, adopted in the mid-2000s, to increase the use of renewable sources of energy in their fuel supplies and offset rapid increases in food and oil prices. These targets were coupled with significant financial incentives provided by countries for producing and consuming biofuels. This motivated investors from developed countries to start acquiring land, especially in Africa and Southeast Asia, to produce renewables such as ethanol and biodiesel and sell them to ready markets in the North. Investors targeted African countries with fertile soil, available water and favourable climates, and were welcomed by the host governments to establish biofuels projects.

A number of the early biofuels investments implemented between 2005 and 2008 in Africa have been described as 'land grabs' because they acquired land in circumstances that violated human rights, and they did not follow the procedures required to obtain free, prior and informed consent from affected people.³ Most of the biofuels investments were speculative and high-risk. Data from four countries shows that *Jatropha curcas* (hereafter jatropha), the supposed wonder crop promoted by investors as a biofuels feedstock that could grow in marginal land, has been proven unviable.⁴ The hype among investors and governments was based on a wide range of knowledge gaps and unproven assumptions. Large-scale commercial cultivation of jatropha has proven unviable in the absence of irrigation and other inputs and its economies of scale appear marginal.⁵ Companies that acquired large tracts of land for biofuels in Africa did so with little experience in biofuels feedstocks, but rather took advantage of the availability of cheap African farmland and labour, and the promise of ready markets in Europe and elsewhere.

By 2013 only about two percent of all land authorised for biofuels development had been cultivated (see Figure 1). This is an even worse kind of 'land grab': one where people lose access to land and other natural resources as a result of large-scale land deals, but no actual investment or employment-generating production follows.

To date, land acquisitions for biofuels have threatened rural peoples' access to land and other resources – water, minerals, forests and wildlife – and thus have caused deeper and broader food insecurity in communities that were already poor and food insecure. Despite investors' argument that biofuels investments would be allocated to land that is marginal, idle and unused, in many African countries, this has not been the case.⁶

Figure 1: Areas under biofuels cultivation in 2013



Source: Locke and Henley 2013: 7

Biofuel-producing companies have targeted fertile land, just like any other agricultural investors. A well-documented example of the failed ProCana biofuels project in Mozambique was allocated fertile land close to publicly-funded infrastructure, including a dam and road. And while some governments eagerly agreed to such deals in the hope of improving national energy security, biofuels investors have intended to supply their ethanol and biodiesel to more lucrative European markets.⁷ Investors have argued that such exports increase the inflow of foreign currencies to host countries.⁸

What is the relationship between biofuels and food security?

At present, there is a controversy as to whether biofuels are causing or are likely to cause food insecurity in countries where their production is taking place. Some studies suggest that biofuels production, done appropriately, may improve food security,⁹ but other studies claim that it has caused food price volatility and food insecurity on the basis of restricted or reduced access to productive resources – land,

water and labour.^{10,11} In 2013, the Committee on World Food Security (CFS) recognised that 'biofuel development encompasses both opportunities and risks in the economic, social and environmental aspects, depending on context and practices'.¹² The report further highlighted the links between biofuels and food security, which are often complex, and can occur at different geographic levels.

A number of biofuels companies such as Nippon Biodiesel Fuel Co. Ltd (Mozambique) and Agro EcoEnergy (Tanzania) have turned out to be the current leading champions of the New Alliance Initiative.

Useful lessons from biofuels investments

1. *Limited or restricted access to resources such as land, water and forests*

Large-scale investments in biofuels have imposed restrictions on immediate communities' access to key natural resources. The British Sun Biofuels Company, which

was allocated 8,211ha apportioned from 11 villages in Kisarawe District in Tanzania, took over the only water source used by villagers, causing uproar among them.¹³ Land-based investments further threaten women's access to and control over land, cash and food crops. In sub-Saharan Africa, while women contribute about 40 to 70 percent of labour used in food production for household consumption and sales, women's secure access to land resource remains limited.¹⁴ Yet, as evidence from past and current biofuels investments shows, the focus is on commercial crops usually dominated by men, further reducing women's chances to produce household consumption crops.¹⁵

2. Problematic patterns and nature of compensation payment

At present the methods and amounts of compensation paid to the individuals or communities affected by land-based investments remain controversial. In many countries the compensation paid does not take into account intergenerational impacts. Compensators often fail to provide full information about the project to the communities. For example, the Dutch Company, Bioshape acquired 34,000ha of village lands in Kilwa District, Tanzania for

Figure 2: Sun biofuels jatropa farm



99 years. The company paid a compensation of US\$324,000 of which the district council received 60 percent and villages earned a mere 40 percent.¹⁶ This transaction is in violation of the Tanzania's Land Act No 5 and Village Land Act No 5 both of 1999, which recognize only a Village Assembly as the manager of the Village Land and the district council had no right to receive such a large share of the compensation. In addition, many countries' land laws do not consider the land value itself in compensation, but rather treat land via its additional development value such as planted trees, houses and other visible developments.¹⁷ This treatment of value added of land contributes to undervaluing the true commercial value of land in many African countries.

3. Externally driven policies

Most of the African countries had no biofuels policies or legal framework in place when they embarked on the development of such projects. They were merely given some financial assistance and promises by foreign development agencies that they will be able to develop the industry. In Tanzania, for instance, the first biofuels investments were promoted under the auspices of a study by the German Federal Enterprise for International Cooperation (GIZ), concluding that the country 'can learn by doing'.¹⁸ As a result, the government of Tanzania first registered biofuels investments without having any policy, legal or institutional framework to monitor them.

4. Inefficient and ineffective institutions

A number of African countries promoting foreign direct investments in agriculture and many other sectors have established investment promotion centres with the chief role of ensuring that countries compete to attract investors. The Ministry of Agriculture of Burkina Faso states: 'All countries are nowadays competing to attract

foreign direct investments by adopting far more liberal and attractive investment codes. Burkina Faso cannot remain on the sidelines of this competition.¹⁹ Yet, these centres remain largely understaffed. In Tanzania, presently, there is a gross lack of transparent and up-to-date information on land-based investments and it is not clear which agency collects, monitors and updates this information. When consulted about this problem, for instance, officials of the Tanzania Investment Center (TIC) complained of a shortage of staff, which limits their ability to update the status of the companies they have registered.²⁰

The foundation and the implementation of New Alliance in Africa

Ten African governments have agreed to implement the New Alliance cooperation frameworks with specific commitments for each country to alter the policy environment and to facilitate the development of infrastructure – roads, irrigation schemes and markets to provide an attractive environment for private sector investments in the agricultural sector.

New Alliance is aligned to the Comprehensive African Agriculture Development Programme (CAADP) – the Africa's policy framework for agricultural transformation, wealth creation, food security and nutrition, economic growth and prosperity for all. It is further implemented in conjunction with the Grow Africa platform – the project whose overarching goal is to facilitate increases in private investment and scaling innovation.

While the investment in agriculture is needed to achieve development goals: poverty reduction, food security and improved nutrition, an investment that displaces the rural people and turns them into wage laborers does not meet such goals. There are two main forms of investments in Agriculture. The most common form of investments involves the acquisition of land rights through long-term leases or concessions. The second one involves a variety of arrangements with small producers.²¹ Since the large -scale acquisitions of land have displaced and continue to displace the majority of rural poor in different parts of Africa, this form of investment remains contested.

Text box 1: The New Alliance for Food Security and Nutrition

The New Alliance for Food Security and Nutrition is an initiative launched in 2012 by the G8 in partnership with six African countries. It aims to foster the private sector and development partners' investment in African agriculture and lift 50m people out of poverty by 2022 (G8 2012). As of 2015, ten African countries – Benin, Burkina Faso, Ethiopia, Ghana, Ivory Coast, Malawi, Mozambique, Nigeria, Senegal and Tanzania – have joined the initiative.

Like the many previous investments in biofuels, the New Alliance involves land-based investments and targets fertile land. The New Alliance is built on public-private partnerships (PPPs) with funding commitments from G8 governments and policy concessions and provision of land by African host countries. Large multinational corporations from G8 countries dealing in seed, fertiliser and agrochemicals are in the forefront, developing programme strategies and making pledges to be supplemented by other financiers, such as the World Bank.

The challenges of implementing New Alliance Frameworks with African countries

1. Inadequate commitment to smallholder farmers

The collaboration between large-scale commercial farmers and smallholder farmers, for instance in terms of nucleus-outgrower schemes, is mentioned with limited details in specific country-G8 cooperation frameworks.²² In Burkina Faso, of the land set aside for New Alliance investments, only 20 percent is allocated to smallholder farmers. The Tanzanian government is allocating large tracts of land for large-scale investment without specific allocation to smallholder farmers.²³ The New Alliance progress report²⁴ states that the initiative's aim is to learn how to work with smallholders at scale, but concedes that the capacity to help those who are able make a transition to small, commercially viable family farms is wanting.

2. Contentious focus

The New Alliance's focus on attracting private sector investors, particularly multinational corporations, into African agriculture emerged against a backdrop of renewed interest in African farming in the late 2000s. This trend had its roots in the global financial, economic, food and energy crises of 2007 and 2008. Around the same time, studies by the World Bank highlighted Africa as a 'sleeping giant'²⁵ with an 'abundance of available fertile land', and claimed that 'Africa's production structure is inefficient, based as it is on many small farms producing mainly for themselves and their neighborhoods.'²⁶

Among the focal issues of the G8 Cooperation Frameworks with African countries are policy and legislative reforms to ensure land availability to investors (see Table 1 below). These reforms do not necessarily address the needs of the common people, but rather represent a

Table 1: Selected New Alliance host countries' commitments to land reforms

African country	Main objective on Land	Agreement/action
Burkina Faso	To facilitate access to land and its secure productive use	'Commit to draft transparent procedures for access to land in State or local government-developed areas, delineate, register the land areas already developed and issue documents relative to land use rights in all the developed areas, including for women'
Ethiopia	To strengthen land use rights to stimulate investment in agriculture	'Extend land certification to all rural landholders, initially focusing on the Agricultural Growth Program (AGP) districts. Refine land law, if necessary, to encourage long-term land leasing and strengthen contract enforcement for commercial farms.'
Tanzania	No specific objective on land apart from broad incentive system in agriculture and tax regime	'Secure certificate of land rights (granted or customary) for smallholders and investors: <ul style="list-style-type: none"> All village land in Kilombero demarcated; All village land in SAGCOT region demarcated; and 20% of villages in SAGCOT complete land use plans and issued certificate of occupancy'

Source: New Alliance Progress Report 2013; New Alliance Cooperation Frameworks for Burkina Faso, Ethiopia and Tanzania entered in 2012.

top-down approach to meet the needs of large investors – easy access to land and tenure security.

3. Questionable land tenure approach

As part of their commitment to implement New Alliance cooperation frameworks, host countries such as Tanzania and Mozambique in collaboration with donors are undertaking land use planning in villages and issuing individual land titles – mostly Certificates of Communal Rights of Ownership (CCROs).²⁷ It is through these land use planning and issuance of title deeds that the government is setting aside land for large-scale investments sometimes without the real will of the communities using the land. According to the cooperation frameworks the aim is to ensure there is productive use of secure tenure. Land registration and titling are being promoted in contexts where most rural land is held under customary tenure. Such titling initiatives neglect the extensive evidence from across Africa, and notably in Kenya, that individual titling does not achieve its goals of securing tenure, and accentuates inequalities among rural communities, with particularly negative impacts on women.²⁸ Also, secure tenure is not by itself a sufficient condition for the improvement of farmers' incomes; the 'context' is what 'matters'.²⁹

Research into the African land grabs indicates that the solution to this problem includes changing the process governing the acquisition of land for foreign investments. This should include ways of reconciling the real need for land-based investments in agriculture and other natural resource sectors with the land tenure interests of rural communities.³⁰ In countries with more progressive land laws such as Tanzania and Mozambique, where Village/ Customary Land is legally recognised, what is

required is improved land administration and enforcement of existing laws.³¹

4. Contradicting policies and priorities

The current implementation of the New Alliance initiative contradicts the European Union Food Security Policy Framework, adopted in 2010, that recognises the Right to Food. The Framework emphasizes the need of 'creating an enabling environment for the smallholder sector as the single most effective instrument for increasing food security in developing countries'.³² In light of this framework, the European countries that are part of the G8 and their African counterparts are expected to be investing on the existing smallholder farmers, instead of focusing on the allocation of large tracts of land to big corporations and farmers.

Recommendations

The New Alliance initiative needs to be informed by the past failures and ongoing successes and challenges of large-scale biofuels projects in Africa. The initiative thus needs to take a new route to address food security and nutrition in Africa by focusing on empowering existing farmers and land users rather than increasing aggregate output through commercialisation at scale. The following are suggested pathways:

1. **Recognise and secure unregistered and legitimate customary land rights** in land reforms; improve land administration, and enforce existing legislation. Peoples' priorities and suggestions on the type of land tenure security they want must be carefully established and considered, and women's rights to land must be protected.

2. **Consider new land tenure arrangements, such as short term leases of 5-20 years,** and strictly state how the investment contracts must be negotiated, including the participation of existing land users and legal enforceability of investors' commitments. Avoid investment stabilisation clauses that disfavour host countries.
3. **Establish efficient and effective administrative systems for all land-based investments.** Ensure that national land ministries, investment promotion centres and relevant institutions have sufficient and knowledgeable personnel and working tools to improve their effectiveness and efficiency in pre-screening potential investors, negotiating contracts, and monitoring and auditing investment projects in the country. Pre-screening should focus on investors' credibility, financial records, past performance, business model viability, sustainability, inclusiveness, shareholders and track records.
4. **Require that all land-based investments secure free, prior and informed consent** and ensure the full participation of land users and other relevant stakeholders.
5. **Implement rigorous environmental and social impact assessments (ESIA)** with independent monitoring prior to and after the implementation of all land-based investments.
6. **Invest in African farmers through the provision of public goods and services.** This can be done by reviving the state support in terms of investments in public goods and services, infrastructure (irrigation and feeder roads) and well implemented legal and institutional frameworks that ensure smooth and timely marketing of the agricultural produce of smallholder farmers.
7. **Formulate a comprehensive biofuels policy and revoke the ownership of collapsed land deals.** African governments need to categorically identify in their development strategies what crops should be planted as the biofuels feedstock. This would help countries to avoid wasting their precious soils on non-productive feedstocks such as jatropha and aim to produce high quality biofuels feedstocks. Countries need to set out agro-ecological zones to protect the food producing regions and possible challenges of managing flex crops such as sugarcane, soy and maize. They must set the domestic biofuels blending ratio, the target markets for biofuels produce and their justification. By doing this, countries are likely to reduce the risks of adopting less profitable feedstocks, and avoid those with environmental damage and potential impacts on the country's food security.

End Notes

1. Sulle, E. and Nelson, F. (2009) *Biofuels, Land Access and Rural Livelihoods in Tanzania*. IIED: London.
2. Borras, S., Franco, J., Gomez, S., Kay, C. and Spoor, M. (2011) 'Land Grabbing in Latin America and the Caribbean', *Journal of Peasant Studies*, 39(3&4)
3. ILC (2011) *Securing Land Access for the Poor in Times of Intensified Natural Resources Competition. Tirana Declaration Endorsed by the ILC Assembly of Members on 27 May 2011*, Rome, Italy: International Land Coalition / www.landcoalition.org/about-us/aom2011/tirana-declaration [accessed 12 January 2014]

4. Kant, P. and Wu, S. (2011) 'The Extraordinary Collapse of Jatropha as a Global Biofuel', *Environmental Science & Technology*, 45:7114-7115
5. Sulle, E. and Nelson, F. (2009) *Biofuels Investment and Community Land Tenure in Tanzania: The Case of Bioshabe, Kilwa District*. FAC Working Paper 73, Brighton, UK: Future Agricultures Consortium
6. Cotula, L., Vermeulen, S., Leonard, R. and Keeley, J. (2009) *Land Grab or Development Opportunity? Agricultural Investment and International Land Deals in Africa*, Rome and London: FAO/IIED/IFAD
7. Schoneveld, G.C. 2011 *The Anatomy of Large-Scale Farmland Acquisitions in Sub-Saharan Africa*. Working Paper 85, Bogor, Indonesia: CIFOR
8. Hultman, N.E., Sulle, E.B., Ramig, C.W. and Sykora-Bodie, S. (2012) 'Biofuels Investments in Tanzania: Policy Options and Sustainable Business Model', *Journal of Environment and Development*, 21(3):339-361
9. Locke, A. and Henley, G. (2013) *Scoping Report on Biofuels Projects in Five Developing Countries*, London, UK: Overseas Development Institute
10. HLPE (2013) *Biofuels and Food Security*. A report by the High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security, Rome, Italy
11. Oxfam (2010) *Addressing Land Grabbing in Africa: Why Governments Should Stand Up for Marginalised Communities*, Oxford, UK: Oxfam
12. CFS (2013) *Fortieth Session Report*, Rome, Italy: (Committee on World Food Security), p.3
13. Sulle and Nelson (2013)
14. FAO (2011) *The State of Food and Agriculture 2010-11. Women in Agriculture: Closing the Gender Gap for Development*. Rome, Italy: FAO.
15. Arndt, C., Benfica, R. and Thurlow, J. (2011) 'Gender Implications of Biofuels Expansion in Africa: The Case of Mozambique', *World Development*, 39(9):1649-1662
16. Sulle and Nelson (2009)
17. Chachage, C. and Baha, B. (2010) *Accumulation by Land Dispossession and Labour Devaluation in Tanzania: The Case of Biofuel and Forestry Investment in Kilwa and Kilolo*, Dar es Salaam, Tanzania: Land Rights, Research and Resources Institute
18. GTZ (2005) *Liquid Biofuels for Transportation in Tanzania*, Eschborn, Germany: German Technical Cooperation
19. Oxfam (2013)
20. Sulle, E. (2013) *The Status of Biofuels Projects in Tanzania*. Draft Report for ODI, London, UK: Overseas Development Institute
21. Vermeulen, S. & Cotula, L. 2010. *Making the most of agricultural investment: A survey of business models that provide opportunities for smallholders*, IIED, SDC, IFAD & FAO.
22. See the G8 frameworks with Tanzania and Burkina Faso.
23. See Oxfam (2013) *For Whose Benefit? The G8 New Alliance for Food Security and Nutrition in Burkina Faso*, Oxford, UK: Oxfam
24. New Alliance (2013) *2013 Progress Report Summary*, New Alliance for Food Security and Nutrition
25. World Bank (2009) *Awakening Africa's Sleeping Giant: Prospects for Commercial Agriculture in Africa's Guinea Savannah Zone and Beyond*, Washington, DC: The World Bank
26. ACB (2013) *Statement by Civil Society in Africa. Modernising African Agriculture: Who Benefits?*, Gauteng, South Africa: African Centre for Biosafety / acbio.org.za/activist/index.php?m=u&f=dsp&petitionID=3 [accessed 12 January 2014]
27. A CCRO offered in Tanzania refers to the individual title issued in the name of the husband, both the husband and wife, or the names of all members of the household. A CCRO can also be offered to a community for communal land such as a grazing area. Under the Village Land Act of 1999, a village must hold a village land certificate before any individual villager can apply for a CCRO.
28. Ensminger J. (1997) 'Changing Property Rights: Reconciling Formal and Informal Rights to Land in Africa', in Drobak, J. and Nye, V. (eds), *The Frontiers of the New Institutional Economics*, San Diego, CA: Academic Press, pp. 165-196
29. Lawry, S., Samii, C., Hall, R., Leopold, A., Hornby, D. and Mtero, F. (2014) 'The Impact of Land Property Rights Interventions on Investment and Agricultural Productivity in Developing Countries: A Systematic Review', in *Campbell Systematic Reviews* 2014:1
30. Sulle and Nelson (2013)

31. Lawry et al. (2014)
32. European Commission (2010) *Communication from the Commission to the Council and the European Parliament: An EU Policy Framework to Assist Developing Countries in Addressing Food Security Challenges*, Brussels, Belgium: European Commission

Acknowledgements:

This policy brief was written by **Emmanuel Sulle** of the **Institute for Poverty, Land and Agrarian Studies (PLAAS) at the University of the Western Cape** for the **Future Agricultures Consortium**. The author would like to thank Ruth Hall, Magdalena Kropiwnicka, Anna Locke, Holti Banka and Christopher Raming for their constructive comments on the earlier drafts of this brief. The series editor is Paul Cox. Further information about this series of Policy Briefs available at: www.future-agricultures.org

The Future Agricultures Consortium aims to encourage critical debate and policy dialogue on the future of agriculture in Africa. The Consortium is a partnership between research-based organisations across Africa and in the UK. Future Agricultures Consortium Secretariat at the University of Sussex, Brighton BN1 9RE UK T +44 (0) 1273 915670 E info@future-agricultures.org

Readers are encouraged to quote or reproduce material from Future Agricultures Briefings in their own publications. In return, the Future Agricultures Consortium requests due acknowledgement and a copy of the publication.



The views expressed do not necessarily reflect the UK Government's official policies.