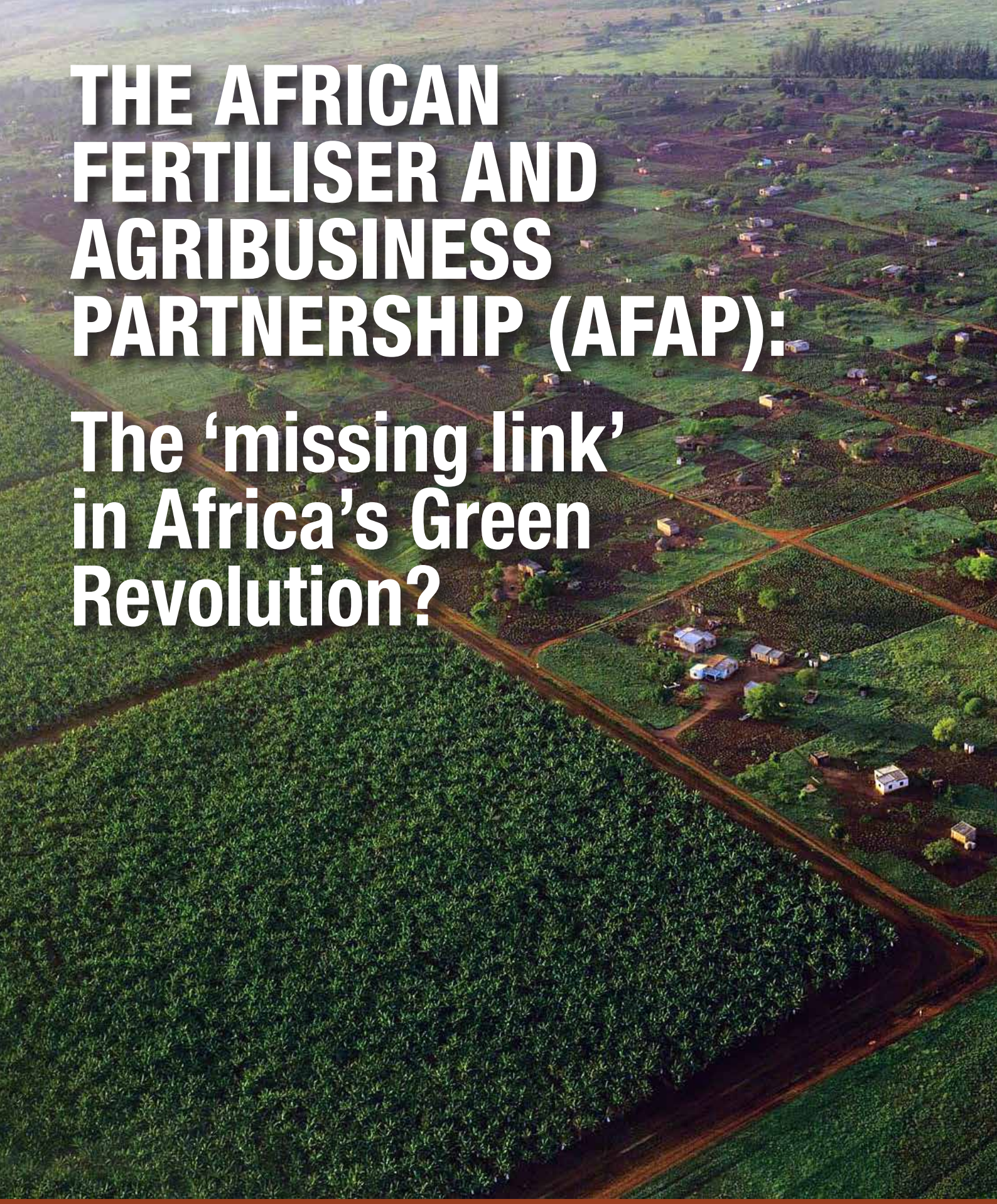

# THE AFRICAN FERTILISER AND AGRIBUSINESS PARTNERSHIP (AFAP):

## The 'missing link' in Africa's Green Revolution?

african centre for biosafety
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# Contents



The African Centre for Biosafety (ACB) is a non-profit organisation, based in Johannesburg, South Africa. It was established to protect Africa's biodiversity, traditional knowledge, food production systems, culture and diversity, from the threats posed by genetic engineering in food and agriculture. It, has in addition to its work in the field of genetic engineering, also opposed biopiracy, agrofuels and the Green Revolution push in Africa, as it strongly supports social justice, equity and ecological sustainability.

The ACB has a respected record of evidence-based work and can play a vital role in the agro-ecological movement by striving towards seed sovereignty, built upon the values of equal access to and use of resources.


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# Acronyms

| | |
|---|---|
| AFAP | African Fertiliser and Agribusiness Partnership |
| AfDB | African Development Bank |
| AGMARK | Agricultural Development Marketing Trust |
| AGRA | Alliance for a Green Revolution in Africa |
| APC | Agribusiness Partnership Contract |
| ASIF | African Seed Investment Fund |
| ATA | Agricultural Transformation Agency (Ethiopia) |
| AU | African Union |
| CAADP | Comprehensive African Agricultural Development Programme |
| COMESA | Common Market for Eastern and Southern Africa |
| DfID | Department for International Development (UK) |
| FISP | Farm Input Subsidy Programme (Malawi) |
| G8NAFSN | G8 New Alliance on Food Security and Nutrition |
| IDH | Sustainable Trade Initiative (Netherlands) |
| IFA | International Fertiliser Association |
| IFDC | International Fertiliser Development Centre |
| IRM | International Raw Materials |
| NEPAD | New Economic Partnership for Africa's Development |
| SHP | Soil Health Programme (AGRA) |
| SSI | SCPA-Sivex International |
| SSTP | Scaling Seeds and Technologies Partnership |
| USAID | United States Agency for International Development |
| UNFAO | United Nations Food and Agriculture Organisation |



# Key points

- The African Fertiliser and Agribusiness Partnership (AFAP) was established with a US$ 25 million grant from the Alliance for a Green Revolution in Africa (AGRA) to increase the use of synthetic and inorganic fertilisers by small-scale farmers in Africa. AFAP will do this by providing credit guarantees to agribusinesses engaged in the fertiliser trade in select African countries. Essentially, AFAP is using agricultural development funds to subsidise both the multinational fertiliser companies who dominate the African fertiliser trade, and the large multinational banks who are lining up to extend (from their point of view) risk-free credit to small-scale farmers.

- Financial flows are fundamental to the success of the Green Revolution (GR) model of agriculture, as the majority of small-scale farmers in Africa will require some form of credit to purchase expensive inputs, such as certified seed and fertilisers, upon which this model is based. The African Union (AU), under the Abuja Declaration on Fertilisers of 2006, has called for fertiliser use across the continent to increase from 8kg/ha to 50kg/ha by 2015.

- The US$ 25 million grant from AGRA to AFAP is, to date, the largest single grant AGRA has given. Subsequently, AFAP has received funding from USAID, the United Kingdom's Department of International Development (DfID), the United Nations Food and Agriculture Organisation (UNFAO), the Soros Foundation, the sustainable development initiative of the Sustainable Trade Initiative (Netherlands) (IDH) and the Agricultural Transformation Agency (ATA) of Ethiopia.

- AFAP's goals are to increase fertiliser use by 100% and the number of fertiliser users by 15% in its three target countries—Ghana, Mozambique and Tanzania. This implies consolidation over time, with agricultural production concentrated in smaller numbers of more capital-intensive farming operations. Recent ACB fieldwork from Malawi has found small-scale farmers using extremely high levels of fertiliser (on soils that are technically infertile) with very little material benefits to show for the extra costs.

- AFAP's primary work is to establish 'agribusiness partner contracts' (APCs) with 'eligible agribusiness'; the contracts come in the form of credit guarantees for fertiliser financing and grants for investments in infrastructure (up until now predominantly to increase fertiliser warehouse capacity). Some very large banks look set to benefit from these credit guarantees, including UK-based Barclays, Stanbic Bank (part of the Standard Bank group) and Dutch financial group Rabobank (which co-chairs the Grow Africa working group on finance with Norwegian fertiliser giant Yara). AFAP is also engaged in fertiliser-related projects in Cote d'Ivoire, Ethiopia, Malawi, Nigeria and South Africa.

- Among the 35 APCs signed by AFAP so far are deals with Louis Dreyfus Commodities, one of the world's largest grain traders, and International Raw Materials (IRM), a US-based multinational fertiliser trader. In Cote d'Ivoire AFAP is piloting its APC mechanism in the Cocoa Fertiliser Initiative, whose members include Cargill, Nestle and the world's largest chocolate maker, Barry Callebaut. Cocoa production in West Africa is characterised by volatile international prices, high levels of agro-chemical use, high incidences of child trafficking and appalling working conditions.

- In the policy space AFAP has become a highly influential actor since its inception. It assumed a leading role under the CAADP's pillar two (market access for food security), and has signed official agreements with COMESA, NEPAD and the government of Mozambique. AFAP has also established close links with the International Fertiliser Development Centre (IFDC) and is also involved with Grow Africa's seed policy harmonisation efforts. In West Africa AFAP is an implementing partner of USAID's West Africa Fertiliser Programme. The efforts to harmonise fertiliser policies and laws being undertaken by AFAP and other actors bear a striking resemblance to similar processes underway to harmonise Africa's seed laws.



# About this paper

In the past few years the African Centre for Biosafety (ACB) has embarked on a research programme to track, monitor, and critique the plans and activities of the Alliance for a Green Revolution in Africa (AGRA) and, more generally, initiatives aimed at advancing a Green Revolution in Africa. These include the links to private agri-business expansion and the implication of these for small-scale farmers on the continent. ACB has identified seed and soil fertility as strategic entry points into broader debates about agricultural development in Africa, as the adoption by small-scale farmers of improved seed and inorganic or synthetic fertilisers is considered essential to the modernisation of African agriculture.

Following two initial desktop studies offering an overview and critique of AGRA's programmes on seed and soil health, the ACB has launched a field research programme in partnership with farmers, farmers' organisations and other civil society organisations (CSOs) in southern and eastern Africa. This is both to track the implementation of AGRA and other Green Revolution projects and to consider the impacts on small-scale farmers as a heterogeneous group in which not everyone is equally affected. This fieldwork will be complemented by further desktop research into the key themes and actors in the Green Revolution push, including those behind attempts to increase fertiliser use on the continent. The ACB will use this research to inform strategic and practical approaches as well as national, regional and continental level partners in the struggle for food sovereignty in Africa.

In its paper *The political economy of Africa's burgeoning chemical fertiliser rush* the ACB gave an overview of recent trends in fertiliser use in Africa and mentioned some of the major corporations, organisations and institutions behind the push for increasing fertiliser use. The purpose of this paper is to take a more in-depth look at one of these organisations, the African Fertiliser and Agribusiness Partnership (AFAP), which was established in 2012 with a US$ 25 million grant from AGRA.



# Introduction

*"In AGRA we believe that AFAP was the missing link towards achieving an African Green Revolution."*

Jane Kuruku, former president of AGRA.[1]

In recent years a tremendous amount of energy and resources have been expended by public and private organisations alike, in promotion of the 'modernisation' of agriculture in Africa. This modernisation agenda is based upon the Green Revolution (GR) model in which small-scale farmers must adopt 'improved' seed varieties and fertiliser to increase yields, reduce rural hunger and poverty, and lead to the general upliftment of hundreds of millions of farming families across the continent.

However, the cost of these inputs is beyond the reach of the majority of small-holder farmers in Africa without access to some form of subsidy or loan. Accordingly, widespread adoption of GR inputs will likely result in widespread farm-household debt. Theoretically this debt will be repaid from the larger surpluses harvested, but this glosses over a plethora of marketing challenges faced by small-scale farmers in Africa (to say nothing of environmental and bio-diversity impacts associated with the GR model of agriculture).

Despite the obvious limitations of this model, the AU's Comprehensive African Agricultural Development Programme (CAADP) has (under the Abuja Declaration on Fertilisers of 2006) called for fertiliser use to increase from its then level of 8 kg per hectare (ha) to 50 kg per ha by 2015. The Declaration calls for a number of interventions to achieve this end, from harmonising fertiliser policies and procurement at regional and national levels, to investments in infrastructure, strengthening agro-dealer networks and establishing national, regional and continental fertiliser finance mechanisms.

Overall progress has been slow, though the Declaration's sentiments are being echoed and championed by all the major actors behind the Green Revolution push, from AGRA and the United States Agency for International Development (USAID) to the more recently formed Grow Africa Partnership platform and the G8 New Alliance on Food Security and Nutrition (G8NAFSN).

**Fertiliser trends in Africa[2]**

- The global fertiliser industry is characterised by massive economies of scale; in 2012 global sales of NPK fertilisers alone were over US$ 200 billion. (NPK fertilisers are three-component fertilisers providing nitrogen, phosphorus, and potassium.) In the same year, the ten largest companies registered over US$ 13.8 billion in profit, an overall increase of 173% since 2009. Yara, the world's second largest fertiliser company by revenue, US$ 15 billion in 2012, is the most active of the fertiliser giants in Africa.

- Fertiliser use is currently low in sub-Saharan Africa, 1.6% of the global total, but parts of the continent contain enormous deposits of natural gas, a key feedstock in the production of nitrogen-based fertilisers. A spate of new fertiliser plants have been earmarked as a result, while mining companies are busy prospecting for potassium and phosphorous deposits.

- On the demand side, fertilisers are central to the new Green Revolution push, exemplified by the Abuja Declaration on Fertilisers and the activities of AGRA, the IFDC, USAID, the G8 New Alliance and the Grow Africa platform. The G8 New Alliance and the Grow Africa platform both emerged from the World Economic Forum, with Yara being instrumental in their formulation.

- Since the turn of the century fertiliser subsidies have re-emerged as a major agricultural policy instrument throughout sub-Saharan Africa. In 2011 ten African countries spent over US$ 1 billion on agricultural input subsidies (with fertilisers accounting for the lion's share of this). Although targeted (or 'smart') subsidies are encouraged under the Abuja Declaration and even by the World Bank, they have become highly politicised in numerous countries and are beset by examples of corruption and cronyism.



AFAP is a non-profit organisation that was established to further some of the actions identified by the Abuja Declaration and others, particularly, though not exclusively, related to finance and policy. AFAP's broad goals are to increase the number of fertiliser users by 15% and to double (at least) total fertiliser consumption in the countries in which it works, through the creation of 'more competitive and sustainable fertiliser markets' by facilitating public-private partnerships.[3]

While AFAP was established with a grant of US$ 25 million from AGRA, the New Partnership for Africa's Development (NEPAD), the IFDC, the African Development Bank (AfDB) and the Agricultural Market Development Trust (AGMARK) were also instrumental in its founding and continue, along with AGRA, to be key partners. AFAP has also subsequently received funding from USAID, the UK's DfiD, the UN Food and Agricultural Organisation (UNFAO), the Soros Foundation, the Sustainable Trade Initiative (IDH) and the Agricultural Transformation Agency (ATA) of Ethiopia. In Ghana AFAP has received nearly US$ 2 million from USAID and the IDH[4] (IDH is also a Grow Africa partner; it operates in Burkina Faso, Cote d'Ivoire and Ethiopia).[5]

Initially AFAP's work was focused on Ghana, Mozambique and Tanzania, three of AGRA's four so-called 'breadbasket countries', but it has since expanded its scope to include Cote d'Ivoire, Ethiopia, Malawi, Nigeria and South Africa. The initial choice of Ghana, Mozambique and Tanzania was highly strategic: in addition to being AGRA 'breadbasket countries' (countries seen to have high agronomic potential), they are also members of a number of other efforts to modernise agriculture in Africa, including the G8NAFSN, Grow Africa and USAID's Feed the Future initiative. Further, all three countries have access to the sea and are seen as gateways to another eleven countries on the continent: Cote d'Ivoire, Mali and Niger in west Africa; and Burundi, the Democratic Republic of Congo (DRC), Malawi, Rwanda, Swaziland, Uganda, Zambia and Zimbabwe in southern and eastern Africa.[6]

Although it is a relatively small organisation, AFAP's Board of Trustees includes two former presidents of AGRA, the head of the AfDB's Department of Agriculture and Agro-industry, the director of the agriculture service with the International Fertiliser Association (IFA) and the AU's commissioner for rural economy. Its vice president, Professor Richard Mkandawire, held a senior position within the AU's CAADP for eight years before joining AFAP,[7] while the recently appointed CEO of the Alliance for Commodity Trade in Eastern and Southern Africa (ACTESA),[8] Argent Chuula, previously served as the AGRA-AFAP coordinator (see annex 1).[9]

**Figure 1: AFAP is at the nexus of the Green Revolution push in Africa**

| Country | AFAP target countries | AGRA 'breadbasket' countries | G8 NAFSN | Grow Africa | Feed the Future (USAID) |
|---|---|---|---|---|---|
| **Ghana** | | | | | |
| **Mozambique** | | | | | |
| **Tanzania** | | | | | |
| Cote d'Ivoire | | | | | |
| Ethiopia | | | | | |
| Malawi | | | | | |
| Nigeria | | | | | |
| South Africa | | | | | |



**Figure 2: Fertiliser in Ghana, Mozambique and Tanzania at a glance**

| | Ghana | Mozambique | Tanzania |
|---|---|---|---|
| Consumption (MT)<br>Imports (MT)<br><br><br>[MT = metric tons] | 218 000 (2009)<br>218 000 (2009) | 56 400 (2010)<br>248 000 (2010)<br>(includes fertiliser imports in transit to Malawi, Zambia and Zimbabwe) | 210 904 (2012/13)<br>180 981 (2012/13) |
| Major uses (crops) | 50% cocoa, 30% food crops, 20% large plantations (palm oil, rubber, cotton, pineapple, banana) | Tobacco (51%), sugarcane (42%), bananas (3%) | Maize (67%) tobacco (15%), coffee (8.5%)[10] |
| Major importers | Yara-Ghana/Wienco, Chemico, Golden Stork (Louis Dreyfus) and Dizengoff | Mozambique fertiliser company (MFC), Omnia | Yara, Export Trading Group, Tanzania Crop Care, Premium Agro-chemicals |
| Retailers | 2 700 | Est. 250 (2011) | Est. 3 000+ |
| Subsidy programmes | Introduced in 2009;<br>Not-targeted—government funded fertiliser imports based on historical consumption by small-holders;<br>Small-holders given coupon (average of 45% of cost of fertiliser-cost varied by district); | Pilot scheme introduced in 2009/10 & 2010/11 in four provinces;<br>Implemented by IFDC, funded by European Union and UNFAO;<br>25 000 small-holders targeted;<br>farmers paid 30% of cost of package of 2 bags fertiliser (NPK + Urea), 10kg maize seed, 40kg rice seed | National Agricultural Input Voucher Scheme (NAIVS): Targeted 2.5 million small-holders from 2008-2013; farmers offered 2 vouchers worth 50% of a bag (50 kg) of basal and top-dressing; in 2011 the programme accounted for 46% of public agricultural spending in Tanzania. |

Sources: Ghana: IFDC & IFPRI (2012),[11] World Bank (2012);[12] Mozambique: World Bank (2012),[13] IFDC (2012),[14] IFPRI (2012);[15] Tanzania: Africafertiliser (2014), IFDC (2014).[16]



# The scope of AFSA's work

*"We want to get these companies to adopt the Coca-Cola model for distribution, using spaza shops as a distribution network."*[17]

Cecilia Khupe, Director of Programmes, AFAP.

AFAP has been described as 'a one-stop shop focused on fertiliser market development' that offers technical expertise to governments and other actors in agricultural supply chains and engages with fertiliser policy and advocacy at the national, regional and continental level. However, the nuts and bolts of what AFAP does[18] is establishing agribusiness partnership contracts (APCs) with eligible agribusiness, an agreement whereby AFAP provides assistance in return for substantive market development contributions to increasing fertiliser use.

Assistance provided by AFAP is principally in the form of credit guarantees and other financial assistance to fertiliser importers, blenders and distributors. For example, allowing suppliers to extend their payment periods from 30 to 90 days.[19] Access to credit in the case of fertilisers is particularly important when considering that an importer could need up to US$ 16 million to import a 40 000 (MT) shipload of fertiliser, while a domestic distributor could need up to US$ 4.5 million to purchase 10 000 tons.[20] In addition, AFAP is also in a position to provide technical, logistical and marketing support, as well as training for local entrepreneurs and farmers.

According to the latest report from AGRA's Soil Health Programme (SHP), to date AFAP has established credit guarantee facilities with eight banks for suppliers and others in need of credit; leveraged US$ 1.1 million from other donors; and further proposals have been submitted and approved, valued at US$ 3 million.[21] Though none of the banks are named in the report, AGRA's 2013 annual report states that at the time of publication (year end 2013) AFAP was in negotiation with Stanbic bank, Barclays, ProCredit and Opportunity International Savings and Loans in Ghana; Millennium International (BIM), Banco Comercial de Investmentos (BCI), and Cooperativa de Poupança e Crédito dos Produtores do Limpopo (CPL) in Mozambique; and Stanbic and the National Microfinance Bank (NMB) in Tanzania.[22]

The same report states that by the end of 2013 AFAP had approved 35 APCs—16 for guaranteed credit facilities and 19 for matching grants. Guarantee facilities will provide a 50% surety by AFAP on roughly US$ 4.3 million worth of credit and will, in the words of the report, 'enable over 407 500 MT of fertiliser to reach nearly 3.2 million small-holder farmers'. Matching grants are primarily aimed at increasing fertiliser storage capacity and the 19 grants approved so far are said to increase current storage capacity in the rural areas of AFAP's target countries from 5 165 MT to over 70 400 MT.[23]

http://www.yaraghana.com/getfile/27ce3726-231b-4ec3-9be0-a7266096283d/olewgh_0211.aspx

By providing fertiliser credit guarantees AFAP is, in effect, subsidising both the multinational fertiliser companies who will account for the majority of fertiliser imports, and the commercial banks themselves, many of which have international links. Stanbic is part of the South African Standard Bank Group, while NMB in Tanzania is 35% owned by the Dutch financial house Rabobank.[24] Rabobank is a key partner organisation in the Grow Africa initiative; it co-chairs Grow Africa's working group on finance and seconded a staff member to provide support to this group.[25] In Mozambique BCI is a subsidiary of Caixa Geral de Depositos, a Portuguese state-owned

http://www.kraaijvanger.nl/en/projects/1/rabobank-office-campus/

banking corporation and the largest financial group in Portugal.[26] Important questions remain as to the terms of these loans, such as rates of interest and collateral required. Will the loans be forwarded to individuals or farming groups? Will farmers be given sufficient information as to how the loans will work?

AFAP's other sources of funding, for which online information is limited, will require closer scrutiny as the organisation expands. What, for example, is the nature of the support it receives from Ethiopia's ATA, given its role as a public body in the country? Will the additional donor funding AFAP seeks come from traditional development donors, or from the ever-increasing pool of venture capital funds that are emerging on the continent? If these extra funds are to be channelled to farmers on the ground, under what conditions will this take place? What is the opportunity cost of sourcing funding for fertiliser purchases versus investments in basic soil science and alternative soil health methodologies? In Malawi, for example, public input subsidies have consumed up to 70% of agricultural budgets in recent years, leaving less than 15% to be invested in crop and soil science.[27]

Leaving these questions aside, it is a simplistic notion to equate huge increases in fertiliser-use, and the credit required to purchase it, with corresponding increases in crop production and material improvements in the lives of small-scale farmers. The case of Malawi, where a near decade of input subsidies has dramatically increased the adoption rate of fertiliser among small-holders does not appear to support this hypothesis (see 'Running to stand still').

There is no doubt that the major global fertiliser companies, particularly Yara in the short to medium term, will be the major beneficiaries of AFAP's activities. Though the majority of APCs listed on AFAP's website[30] (see Figure 3) appear to be with local companies—bar two noticeable exceptions—the majority of fertiliser currently used in sub-Saharan Africa is imported, predominantly by the major global fertiliser companies. In Tanzania, for example, the Norwegian fertiliser company, Yara, accounted for 42.7% of imports and 40.9% of exports from June 2012 to December 2013.[31] The Export Trading Group (ETG) was responsible for 14.1% of imports and 34.2% of exports over the same period. In addition, Yara/Wienco is estimated to control 50–60% of the fertiliser import market in Ghana.[32]

AFAP states that its APCs are open to any agribusiness, whether international, regional or local, that can demonstrate that their project will improve access and affordability for small-holders, reduce constraints to supply and demand and 'contribute to the lives and communities' in which they operate.[33] As will become evident below, AFAP's support is less about nurturing small and medium enterprises and more about providing a stimulus to already established agribusinesses.

## AFAP's agribusiness partners

Few agribusinesses come more established than Louis Dreyfus, listed as an AFAP partner in Ghana. The company was formed in 1851, is a member of the so-called 'ACBD' group of grain-traders[34] and is one of the world's largest agribusiness corporations with operations in over 100 countries. In 2013 it claimed to have transported and processed over 77 million tons of commodities and commanded net sales of US$ 63.6 billion. According to its 2013 annual report, the company is in the top

**'Running to stand still'—small-scale farmers and fertiliser in Malawi**

Malawi, which had endured a long history of fertiliser subsidies even before its highly publicised agricultural input supply programme was introduced in 2005—which was later renamed the Farm Input Subsidy Programme (FISP)—has been hailed as a Green Revolution success story. However, FISP has placed an extraordinary burden on the public purse; it absorbed close to 55% of the entire national agricultural budget in 2012/13, and has been tarnished by corruption, politicking and operational shortcomings.[28]

At ground level farmers do not appear to be benefitting from the adoption of the hybrid seed and fertiliser Green Revolution package. Fieldwork carried out by the ACB working with Malawian researchers and organisations, in June 2014,[29] revealed that small-scale farmers are using alarmingly high levels of synthetic fertiliser at great cost to themselves and the environment.

In a survey of 90 farmers in three districts, 81.1% of respondents reported using urea for top-dressing, while 67.8% are using a Nitrogen-Phosphorous-Potassium (NPK) blend as basal fertiliser. According to all the farmers who reported using fertiliser, the average fertiliser application was 341.5 kg for an average cultivated area of 2 ha. Though fertiliser use on different parcels of land was not investigated in depth, its use was concentrated on maize and tobacco plots. This means that fertiliser use is likely even more intensive and significantly higher than the Abuja Declaration's oft repeated target of 50 kg per ha. Interestingly, despite the scale of FISP in Malawi, among the districts surveyed more farmers were purchasing urea and NPK fertilisers from agro-dealers (44% for both) than were receiving these via FISP (37% and 25% respectively).

The average amount spent on fertilisers across all households was MK 95,000 (US$ 226.19), more than the market value of 1.5 tons of maize at MK 60/kg (US$ 210) on local markets, with high fertiliser prices identified as a serious challenge by 99% of respondents.

Though the combination of hybrid seed and fertiliser increased yields by around 500 kg, the extra cost of this increase is considerable. Given structurally low food prices in Malawi and the limited bargaining power farmers have in local markets, the adoption of Green Revolution technologies by small-holders in Malawi is resulting in net transfers away from farming households to agribusinesses.

From an agronomic point of view, soil tests conducted by Chitedze Research Station revealed soils that are technically infertile, with very low levels of key nutrients and nutrient holding capacity, despite years of synthetic fertiliser applications in these locations. This gives the lie to the argument that the addition of synthetic fertiliser is necessary for long-term improvements in soil fertility. Soil scientists at Chitedze recommended increases in organic matter as a key intervention to improve the quality of the soils over time.

three corporations globally for wheat and sugar handling and citrus processing and has significant interests in coffee, cotton, dairy, rice, sugar and even metals.

The company is also one of the largest distributors of fertilisers and agricultural inputs in West Africa,[35] having purchased French company SCPA-Sivex International (SSI) in 2011.[36] Louis Dreyfus appears also to have entered the Tanzanian fertiliser market, though on a small scale, having imported small quantities of fertiliser during 2013.[37] In Ghana AFAP has also partnered with West Africa Fair Fruit (WAFF), a member of the highly controversial Roundtable on Sustainable Palm Oil (RSPO).[38]

Another notable AFAP partner in Mozambique and Tanzania is International Raw Materials (IRM), a US-based marketer and distributor of fertilisers with offices in Australia, Canada,



Madagascar, Mauritius and Singapore.[39] In Madagascar IRM has been contracted to market the estimated 210 000 tons per year of ammonium sulphate fertiliser produced as a by-product of the Ambatovy nickel and cobalt mining project. At full production Ambatovy, a partnership of four multinational companies,[40] is expected to be the world's largest vertically integrated mining, processing and refining facility, producing finished nickel and cobalt from lateritic ore. AFAP, together with IRM and IFDC, has been exploring ways in which to expand its work in Madagascar, and met with the Malagasy minister of agriculture in March 2014.[41]

Dengo, an AFAP agri-business partner in Mozambique, has previously received a US$ 400,000 investment from the African Seed Investment Fund (ASIF). ASIF is an investment vehicle launched in 2009 by AGRA and the African Agricultural Capital Fund to provide 'risk capital' to seed companies in Ethiopia, Kenya, Malawi, Mozambique, Rwanda, Tanzania, Uganda and Zambia. ASIF is managed by Pearl Capital Partners, an independent agricultural investment management firm domiciled in Mauritius.[42] Dengo has also signed a letter of intent under the New Alliance on Food Security and Nutrition and the Grow Africa Forum, and has pledged to invest US$ 1.9 million in Mozambique, of which US$ 500,000 is reserved for a seed processing plant while the remainder will expand its core business. As a result of this investment Dengo expects to produce 500 000 tons of certified seeds and to distribute these to approximately 200 000 small-scale farmers in Mozambique.[43]

Aside from its work with agribusiness partners, AFAP is the implementing partner in Tanzania for six projects within AGRA's SHP and Programme for Africa's Seed Systems. This includes a US$ 12 million project from January 2010 to November 2013 titled Fund Management for the African Seed Investment Fund.[44] In July 2014 AFAP, together with AGRA, IFDC and USAID, organised a national platform for dialogue and the promotion of fertiliser use in Mozambique. In his opening remarks AFAP vice president, Prof. Richard Mkandawire, noted that this was the first platform of its kind in Eastern and Southern Africa.[45]

AFAP has also been engaged in a number of initiatives outside its focus countries, in Cote d'Ivoire, Ethiopia, Nigeria and South Africa. In Cote D'Ivoire AFAP is piloting its APC mechanism with the IDH (a sustainable trade initiative with its headquarters in The Netherlands) and twenty 'industry partners' from the cocoa sector to form a Cocoa Fertiliser Initiative. The initiative was launched in November 2012 during the World Cocoa

**Figure 3: AFAP's Agribusiness partners**

| Ghana | Mozambique | Tanzania |
|---|---|---|
| 18th April Company Ltd. | Dengo Commercial LDA | Lipambikayika Agrovet |
| Sakant Enterprise | Insumos Agricolas e Veterinarios Ltd. | Mohamed Ngaula Agrovet |
| APUS Enterprise Ltd. | Mutual Commerical LDA | Minjingu Fertiliser company |
| Seedshop | CADECO LDA | International Raw Materials |
| WAFF Agro | International Raw Materials Ltd. | |
| Louis Dreyfus Commodities | Limpopo Valley Agricultural Company | |
| Agyaaku Farms & Trading Ltd. | Manica Mbeu LDA | |
| Ekudank | | |
| North Gate Agro products enterprise | | |
| Wumpini Agro-chemicals | | |

Source: AFAP (2014).



Conference and its members include: Archer Daniels Midland (ADM), Cargill, Louis Dreyfus, Olam, Mars, Barry Callebaut (the world's largest chocolate maker), Nestle and Rabobank.[46] The introduction of APCs through AFAP is expected to leverage fertiliser distribution worth € 2.2 million during the 2014 cocoa season.

This foray into cocoa production appears to have taken AFAP beyond the scope of its primary benefactor, AGRA, who, so far at least, has concentrated its efforts on food crops. It is also a worry in itself, as cocoa cultivation in West Africa is beset with problems, from its environmental effects to issues around labour standards (see box below).

In Ethiopia AFAP has been working with the ATA on its fertiliser blending programme, including providing technical assistance for the ATA's plans to construct five blending plants with a capacity of 100 000 MT in each of the country's major agro-ecological zones. Other organisations involved in the project include USAID, the World Bank, the IFDC and Canadian multinational Allana Potash.[59] Allana Potash has four potash concessions in Ethiopia's Danakil Depression, covering an area of 312 km$^2$, and was granted a mining licence by the government of Ethiopia in October 2013. Allana claims to have been in discussion with the Ministers of Transportation, Mines, and Defence regarding infrastructure projects in the Danakil region, while Ethiopia has also received financial commitments from China and India to construct some 5 000 km of

http://msnbcmedia.msn.com/j/MSNBC/Components/Photo/_new/pb-110117-cocoa2-jb.photoblog900.jpg

**Cocoa in West Africa**

Cameroon, Cote d'Ivoire, Ghana and Nigeria account for 70% of the world cocoa trade, but the vast majority of this is exported in raw or semi-processed form. For example, a report produced in 2009 by the UN FAO states that only 6% of Nigeria's cocoa exports were in processed form. The figures for Cameroon, Cote d'Ivoire and Ghana were 9.8%, 56.6% and 24.6% respectively. However, processing here is classified as the conversion of cocoa beans into cocoa butter, powder and paste; these are all semi-processed materials, the majority of which are then further processed into confectionery and other foods in Europe and the United States.

It has been estimated that while total global cocoa exports are worth around US$ 10 billion annually, the total value of all finished goods from cocoa is as high as US$ 200 billion per year.[47] Although recorded in 2002, World Bank statistics appear to bear this out, reporting that cocoa farmers in Cote d'Ivoire received only 15% of the retail price of chocolate. Cocoa production is also precarious; farmers are prey to international price movements for which cocoa is notorious—between 1970 and 2011 world cocoa prices exhibited far greater volatility than agricultural prices generally.[48]

All the multinationals named in the cocoa fertiliser initiatives derive huge profits from cocoa: Barry Callebaut recorded operating profits of 340 million Swiss Francs in 2012/13 (approximately US$ 360 million).[49] For the 2013 calendar year Nestle's confectionery arm reaped profits of over 1.6 billion Swiss Francs. This is likely an underestimation of the true value of cocoa to Nestle; it reported profits in its powdered and liquid beverages division of 4.6 billion Swiss Francs.[50] Mars, the fifth largest private company in the United States, recorded revenues of US$ 33 billion in 2013.[51] Being a non-listed company, disaggregated financial information is hard to come by, but

the company's chocolate division claims to own five 'billion dollar' brands.[52] Cargill, whose 2013 revenue of US$ 136 billion makes it the largest private company in the United States, obviously sees a lucrative future in the cocoa market, having recently agreed to purchase ADM's chocolate business for US$ 440 million.[53]

Given the scale of the cocoa trade it is unsurprising that it has also been associated with rampant environmental degradation and human rights abuses. In West Africa, where cocoa production doubled between 1987 and 2007, cultivation has been associated with the continuous deforestation of virgin tropical crops. The Guinean Rainforest of West Africa, identified over 20 years ago as a global biodiversity hotspot, had been reduced to 18% of its original area at the start of the new millennium.[54]

There is also a high level of pesticide use in cocoa production. A study from Cote d'Ivoire found that 80% of cocoa farmers used pesticides in 2014, up from 50% in 2012.[55] A multi-country study of West Africa, conducted by CABI (an international NGO who provide agricultural research and extension type services in more than 70 countries) from 2006–2008 found similarly high levels of use, that only 10–31% of farmers had received any formal pesticide training, and that 50% of the chemicals being used were banned in the European Union.[56]

In common with many agricultural commodity crops, labour conditions in cocoa production can be appalling. The United Nations Children's Fund (UNICEF) estimates that 200 000 children work on cocoa farms in Cote d'Ivoire, and that the vast majority of these children originate from Mali, Burkina Faso, Togo and other regions within Cote d'Ivoire itself..[57] In September 2014 a US appeal court ruled that Nestle, ADM and Cargill could all be held accountable for aiding and abetting child slavery on cocoa farms in Cote d'Ivoire. This followed a lawsuit, originally filed in the United States in 2005 by three individuals from Mali who claimed they were trafficked into Cote d'Ivoire, forced to work unpaid for 14 hours a day, and subjected to frequent whippings and beatings. Senior circuit judge D.W. Nelson said that the three companies controlled the Ivorian cocoa market and, instead of using their influence to stop slavery, had actually been facilitating it. In a separate case, US chocolate maker Hershey is also facing a US lawsuit for alleged complicity in child labour in West Africa.[58]

railway in the country, including access to the Danakil Potash region.[60]

At the request of the Nigerian Ministry of Agriculture and DfID, AFAP assessed the country's Growth and Enhancement Scheme (GES) with a view to improving the private sector value chain for fertilisers.

In southern Africa, AFAP is one of the key implementing partners in Malawi of the Scaling Seeds and Technologies Partnership (SSTP). The SSTP is a four-year, US$ 47 million project from the G8NAFSN.[61] Through the Kenya-based AGMARK, a key partner in Eastern and Southern Africa, AFAP has been working with the provincial department of agriculture in Limpopo, one of South Africa's poorest provinces. In May 2013 a delegation of key agricultural stakeholders travelled to Kenya to witness first-hand AGMARK's hub agro dealer model.[62]

It is said also that AFAP is in discussion with a number of large fertiliser companies regarding future collaboration, including South African fertiliser company Kynoch, Yara International, the OCP Group of Morocco and 'several local producers', including urea manufacturers in Nigeria.[63]

## AFAP's work with the International Fertiliser Association (IFA)

The IFA represents the interests of the global fertiliser industry. AFAP has recently entered into two high profile initiatives with the IFA—the African Fertiliser Volunteer Programme (AFVP) and its Small-holder Access to Fertiliser



campaign. The AFVP was launched at the Argus FMB Africa Fertiliser conference in Marrakech, Morocco in February 2014 and is 'aimed at mobilizing global expertise in support of increasing small-holder fertiliser users and usage in sub-Saharan Africa'. Initially, it has been rolled out in five countries. Figure 4 below outlines some of the country level priorities that have been identified by the AFVP.[64]

In conjunction with the UN FAO's 2014 Year of Family Farming (IYFF), the IFA launched a campaign to increase access to fertilisers for small-holders in Africa. Partner organisations include: AFAP, AGRA, CNFA (a non-profit international development organisation based in Washington, D.C. and a major recipient of AGRA grants), IFDC, the International Institute for Tropical Agriculture (IITA), the International Plant Nutrition Institute (IPNI), the International Potash Institute (IPI) and the One Acre Fund (OAF).[65]

http://www.ambatovy.com/docs/?p=517&shashin_album_key=7

## Policy and advocacy

Since it was officially launched in September 2012, AFAP has maintained a highly visible presence at the policy level (no doubt assisted by its high-profile board and staff members), having been mandated by the AU's CAADP to steer its pillar two of market access for food security in Africa.[67] In preparation for the 2014 Year of African Agriculture and Food Security, AFAP provided leadership to convene technical experts on fertiliser and seed policy at the continental level, as an input into the CAADP Partnership Forum (March 2014), the gathering of Ministers of Agriculture (April 2014), and the Summit of Heads of State and Government (June 2014).[68]

In addition to these connections with CAADP, AFAP has also signed memoranda of understanding (MOU) with: the Common Market for Southern and Eastern Africa (COMESA), the New Economic Partnership for Africa's Development (NEPAD), the government of Mozambique and the Instituto Superior Politécnico de Manica (ISPM) soil laboratory in Mozambique.

The MOU between AFAP and COMESA will see the two organisations collaborate on developing fertiliser markets and access in the region, while AFAP's MOU with NEPAD is expected to revitalise NEPAD's fertiliser support programme, which has been stymied

**Figure 4: Priorities identified under the AFVP[66]**

| Country | Priorities identified |
|---|---|
| Ghana | Inventory Management; Safety, health & environment |
| Ethiopia | Marketing, business management & planning; Blending plant operations management; quality control; warehouse & logistics; Safety, security & health |
| Mozambique | Regulatory support; product marketing & channel development; storage & handling; health & environmental protection |
| Nigeria | Product marketing & channel development; new product development; regulatory support |
| Tanzania | Project development; financing; plant design; manufacturing; regulatory support |

Source: AFAP (2014).



by a lack of financial and human resources. The programme, developed to monitor and promote the implementation of the Abuja Declaration, has five primary components: monitor and report implementation of the Abuja declaration; conduct studies on fertiliser policy and marketing; promote regional policy harmonisation; mainstreaming fertiliser into CAADP; and developing toolkits to assist countries to develop or improve their fertiliser programmes.[69]

AFAP has recently established links to Grow Africa and is listed as a member organisation on the Grow Africa website.[70] At the Grow Africa Investment Forum held in Abuja in May 2014, discussion took place to establish an 'inputs working group ... to promote implementation of harmonised seed policy at the national level, together with the Alliance for a Green Revolution in Africa (AGRA) and the African Fertiliser and Agribusiness Partnership (AFAP)'.[71] Ghana, Mozambique and Tanzania, AFAP's three focus countries, are all G8 New Alliance countries and all have explicit reference to fertiliser policy reform in their G8 New Alliance co-operation frameworks.[72]

In West Africa AFAP is one of the implementing partners, together with the IDFC, of USAID's West African Fertiliser Programme (WAFP), a US$ 20 million programme running from 2012—2017. The WAFP focuses on interventions at both the regional level, through the Economic Community of West African States (ECOWAS), and at specific country levels in the Feed the Future focus countries of Ghana, Liberia, Mali and Senegal. A key outcome of this process to date has been the establishment of the public-private sector West Africa Fertiliser Stakeholder's Forum (WAFSF), which held its first annual meeting in September 2013 in Accra, Ghana. The theme of the event was "Ensuring a favourable policy and regulatory environment for fertiliser trade and use in West Africa".[73]

Five major challenges to fertiliser adoption in the region were identified at the forum and discussed in break-away groups: importing and logistics difficulties, limited short and long term financing tools, the issue of fertiliser subsidies in the region, and the need to create a regional fertiliser trade association and stakeholder platform. Some recommendations to come out of the break-away groups included: investments in road and rail infrastructure in the sub-region and the harmonisation of customs policies (e.g. external tariffs on fertilisers); developing financial and insurance instruments accessible to farmer organisations; the establishment of national task teams to investigate the impact of fertiliser subsidies; ECOWAS member states should 'create awareness and educate citizens' on the recently passed ECOWAS regional fertiliser regulation'; and that steps should be taken to form a regional fertiliser trade association and trade platform.[74]

Moving forward, it was agreed that each ECOWAS member would establish a fertiliser working group which will work with WAFP, ECOWAS and AFAP to develop action plans based upon the forum's recommendations, and to mobilise resources (including those within governments) for their implementation.[75] In Ghana a new fertiliser policy was approved by cabinet in 2013,[76] while in October 2014 the Ministry of Agriculture[77] embarked upon a nationwide sensitisation campaign on the plants and fertiliser Act (Act 803 of 2010), in order to advocate pro-business agriculture policy reforms in Ghana, with WAFP playing a supporting role.[78] In 2014 the WAFSF has been extended to take place in five locations (Togo, Cote d'Ivoire, Senegal, Nigeria and Ghana) from October 2014—January 2015.[79]

There are striking similarities between AFAP's work with Africa's regional economic communities (RECs) regarding fertiliser and processes already underway to implement harmonised legal regimes for seed; for example, the Southern African Development Community's draft protocol for the Protection of New Varieties of Plants (draft SADC PVP protocol)[80] or COMESA's Seed Trade Harmonisation Regulations.[81] In both processes African civil society organisations (CSOs) have been heavily critical of both the procedure, where 'consultation' was reserved almost exclusively for the seed industry, rather than small-scale farmers; and their content, both of which place almost exclusive emphasis on genetically uniform, commercially viable seed varieties.



# Conclusion

AFAP was established in 2012 with a US$ 25 million grant from the Alliance for a Green Revolution in Africa (AGRA), under its Soil Health Programme (SHP). Its main goal is to double fertiliser use and increase the number of fertiliser users by 15% in its target countries (initially Ghana, Mozambique and Tanzania, so-called AGRA 'breadbasket countries' and also targeted by Feed the Future, G8NAFSN, Grow Africa). This will be done by establishing APCs with eligible agribusinesses and engaging in the policy space at national, regional and continental levels.

AFAP's stated goal of increasing fertiliser use by 100%, but the amount of fertiliser users by only 15%, is consistent with the overriding logic of the Green Revolution which envisages the consolidation of farming operations as a necessary condition for agrarian development. However, the assumption that increasing access to and the use of fertilisers will improve the situation of small-holder farmers is a tenuous one. Recent ACB fieldwork in Malawi found debt-ridden farmers using alarmingly high levels of fertiliser for little, if any, material benefit.

AFAP's primary instrument for attaining these goals takes the form of an APC signed with eligible agribusiness. Essentially these are credit guarantees for fertiliser financing and financial grants to increase basic storage capacity. These credit guarantees effectively offer some of the world's major financial institutions, including Barclays, Standard Bank, Rabo Bank and Caixa Geral de Depositos of Portugal, near risk-free entry into new and potentially lucrative markets.

Though AGRA's latest annual report states that (up to the end of 2013) 35 APCs have been signed, AFAP's website lists 21 agribusiness partners across its three countries of focus. These partners include a multinational fertiliser distributor, IRM, and one of the world's largest grain-traders, Louis Dreyfus. In Cote d'Ivoire, together with some of the world's largest agribusinesses, ranging from the international grain traders ADM, Cargill and Louis Dreyfus, to multinational food processors Nestle, Mars and Barry Callebaut, the world's largest chocolate maker, AFAP is also engaging in the cocoa fertiliser initiative. Given the issues with cocoa production in West Africa, including highly skewed financial rewards along the value chain, the heavy use of agro-chemicals and appalling labour practices, this is an alarming development.

Further, increasing fertiliser consumption in these (and other) African countries will be of obvious benefit to the multinational fertiliser companies who currently dominate the fertiliser import trade. Yara accounted for 42.7% of Tanzanian fertiliser imports from June 2012 to December 2013; the scheduled completion of its planned US$ 20 million fertiliser terminal at the port of Dar es Salaam is likely to strengthen further its position in the country. Yara is also the largest player in the Ghanaian fertiliser market, with Louis Dreyfus another large player in Ghana (and West Africa generally), following its acquisition of SSI in 2011. In Mozambique the (albeit small) fertiliser import trade is dominated by the Mozambique Fertiliser Company (MFC), a subsidiary of the Meridian Group, a Mauritian-based holding company with extensive interests in Malawi and Mozambique.

At the policy level AFAP has, in a short space of time, become a highly influential body. It has established close links to governments, regional economic communities (RECs) and the African Union itself (via NEPAD and the CAADP process). AFAP has also emerged as a key organisation connected to the Grow Africa process, which itself is closely linked to the G8NAFSN, both of which emerged from the World Economic Forum.[82] There are striking parallels between AFAP's work on fertiliser through Africa's RECs and seed industry initiatives, to change Africa's seed laws on trade and intellectual property rights.

Finance and credit are integral to the Green Revolution model of agriculture, enabling small-scale farmers to purchase expensive inputs such as certified seed and fertiliser. AFAP's role in this is crucial: it is underwriting the profitability of the GR model where it has yet firmly to take root. Further, this is being



done with agricultural development resources under the guise of philanthropy. Thus far, AFAP has operated under the radar of the food sovereignty movement in Africa. It is clear that the role of AFAP within the broad Green Revolution push is too important for this state of affairs to continue, and its activities should come under closer scrutiny moving forward.



# Annex 1: AFAP Board of Trustees

Dr Namanga Ngongi (Chair)
Founding chair of AFAP, former president of AGRA;

Jane Karuku
Former president of AGRA; serves in an advisory role with Barclays Kenya;

Rhoda Peace Tumusiime
African Union Commissioner for Rural Economy and Agriculture;

Patrick Heffer
Director of IFA's agriculture service;

Chief Togbe Afede XIV
Chief of the Asogli State and President of the Volta Region House of Chiefs, Ghana;

Abdirahman D. Beileh
Head of Agriculture and Agro-industry at the African Development Bank.



# Annex 2: Tanzanian fertiliser imports, June 2012–December 2013

| Company | Imports (MT) | % Total imports | Exports (MT) | % Total exports | % Total Trade |
|---|---|---|---|---|---|
| Africa Fertiliser Tanzania Ltd. | 12 000 | 2,4 | 0 | 0,0 | 1,8 |
| China Pesticides (T) Ltd. | 18 480 | 3,7 | 6 250 | 3,85 | 3,75 |
| DRTC Trading Company Ltd. | 8 999 | 1,85 | 0 | 0% | 1,4 |
| **Export Trading Co. Ltd** | **70 651** | **14,15** | **55 9355** | **34,2** | **19** |
| Green Belt Fertiliser (T) Ltd. | 5 085 | 1 | 4 924 | 3,0 | 1,5 |
| Louis Dreyfus Commodities (T) Ltd | 8 885 | 1,8 | 967 | 0,6 | 1,5 |
| Minjingu Mine and Fertiliser Ltd. | 2 500 | 0,5 | 2 278 | 1,4 | 0,7 |
| Minstry of Agriculture | 6 004 | 1,2 | 0 | 0 | 0,9 |
| Nutricare Ltd. | 1 238 | 0,2 | 1 000 | 0,6 | 0,3 |
| Nyiombo Investment (T) Ltd. | 0 | 0 | 14 000 | 8,6 | 2,1 |
| Premium Agro Chem Ltd. | 36 749 | 7,3 | 10 500 | 6,4 | 7,1 |
| Staco Agro Chem Ltd. | 4 446 | 0,9 | 0 | 0 | 0,7 |
| Swiss Singapore Over-sea enterprises | 12 000 | 2,4 | 630 | 0,4 | 1,9 |
| **Tanzania Crop Care Ltd.** | **88 856** | **17,7** | **23** | **0** | **13,4** |
| Fertiliser Company Ltd. | 8 000 | 1,6 | 0 | 0 | 1,2 |
| TATA Africa Holdings Ltd. | 3 623 | 0,7 | 0 | 0 | 0,5 |
| Triachem | 6 | 0,001 | 0 | 0 | 0 |
| Twiga Chemical Industries (T) Ltd. | 25 | 0,005 | 0 | 0 | 0 |
| **Yara Tanzania Ltd** | **213 985** | **42,75** | **66 899** | **40,9%** | **42,3** |
| Total | 501 532 | - | 163 406 | - | 100 |

Source: Africafertiliser.org.



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