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**Assessing the
Alliance for**

***Green Revolution*
in Africa**

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1. INTRODUCTION

ActionAid recognizes the vital role of agricultural development, particularly in Africa where the majority of livelihoods are derived from farming and related activities. Understanding the role of governments, private and civil society actors acting in agricultural development is critical to the advocacy work of ACTIONAID. The present assessment of Alliance for Green Revolution (AGRA) is intended to enhance understanding in ActionAid networks, of the nature of AGRA's interventions and its impacts on small producers, and to inform ActionAid policies and programmatic initiatives.

The Alliance for a Green Revolution in Africa (AGRA) is one of the largest single initiatives intended to promote smallholder farming in Africa. This is in response to food productivity deficits through a largely market- and aid-driven process. The few disparate and systematic analyses of AGRA's content mainly focus on the broad potential impacts of agricultural technologies, based on extrapolations from the effects of the first green revolution (Dano, 2007; Gimenez et al, 2006, Mayet 2007). Most of the documented responses to AGRA are from Western think tanks rather than African.¹ A broad spectrum of civil society actors involved in agriculture and rural livelihoods issues has not yet been extensively included in debates about the AGRA initiative.

This assessment of AGRA relates mainly to its formative phase, following its establishment in 2006 and operations in 2007. ActionAid examines AGRA's programmatic orientation to participatory work, its linkages to other African initiatives, and its potential impacts. ActionAid also assesses the level of consideration (by AGRA) of civil society responses and proposals to it. We look at the efficacy of the proposed technological interventions, as well as the nature of the social, political and economic relations which arise from the interventions, in order to establish whether the expected technological transformation can be realized in a sustainable manner.

This study was undertaken using various approaches and sources of information. First, an extensive review of literature on the green revolution, Africa's agricultural development, AGRA documents and various commentaries on AGRA was undertaken. Various interviews with officials working with AGRA, government officials, farmers and civil society personnel were also conducted. The study also benefited from an ActionAid workshop involving various civil society actors, including farmers' unions, in September 2008. A consultative meeting on African agriculture and the green revolution convened by the UN special Rapporteur on the Right to Food, in December 2008, also provided new data and insights. Finally, a two-day dialogue session with AGRA personnel, followed by a field visit to Machakos, Nairobi in April 2009 provided an extensive critique of the ACTIONAID draft paper and provided extensive information on AGRA.

2. THE CONTEXT: DECLINING AGRICULTURAL PRODUCTIVITY

Over 70 percent of Africa's population derives its livelihood from self employment in farming and agricultural contributions of around 20 percent to GDP. The value of agricultural output increased by 2.5 percent per year in Africa over the past 4 decades (IFPRI, 2004), but per

capita production over the last 20 years declined by 2 percent a year. Population growth rates outpaced the real expansion of agricultural production and productivity. Africa has not resolved its basic agrarian questions of food security and productivity, due to land distribution inequalities, inappropriate agricultural production patterns, social and gender biases in resource allocation and poor integration into the predatory global agro-industrial production trade system.

Africa was somewhat bypassed by the first green revolution largely due to the reversal of agricultural and wider interventionist policies under structural adjustment, and its consequent 'fiscal crises'. Africa's technological deficit was driven by the disproportionate costs of inputs relative to commodity prices and incomes, and inequitable trade relations, in the absence of subsidized public finance. This trajectory did not arise from an intrinsic scientific technological 'backwardness', voluntary state neglect and other unique physical constraints (e.g. soils, land locking, transportation, etc). Nor was it the results of the inappropriateness and undesirability of the available productivity enhancing technologies. It was the anti-developmental stance of neoliberal policies, which undermined the capacity of small producers and the state to deepen technological transformation (see Moyo, 2008). The prospect of transforming African agriculture through small producers remains untested.

3. OVERVIEW OF THE AGRA PROJECT

3.1 Background

AGRA's roots are in the Rockefeller Foundation's 2006 White paper² which describes it as 'a dynamic African led partnership' established to help millions of smallholder farmers and their families in their livelihood struggles against poverty and hunger. AGRA is a public charity aimed at reducing hunger and poverty in Africa through agriculture (AGRA, About Us, n.d; Dano, 2007:13). AGRA is portrayed as a response to the calls made by African leaders (in the 2003 African Union Maputo summit and the 2006 African Union Abuja summit) to enable smallholder farmers to prosper. It also responds to and endorses the African Union's (AU) Comprehensive Africa Agriculture Development Programme (CAADP) – which among other things seeks a 6 percent annual growth in food production by 2015, and the allocation of a minimum of 10 percent of national budgets to agricultural development (AGRA, 2007). Initially two organizations were established: AGRA and ProGRA (Programme for a Green Revolution in Africa). In October 2007 ProGRA was merged into AGRA. In 2007 AGRA appointed the former UN Secretary Kofi Annan as its' Board Chairman. Currently it has two offices in Africa, one in Nairobi and another in Accra. The AGRA programmes are continuously being modified and new partnerships are being made, such that this assessment addresses AGRA as a rapidly evolving organisation (see annex tables).

3.2 Principles and policies: defining the problem and interventions

AGRA defines Africa's agricultural problem as being primarily one of low yielding seed varieties among the majority of smallholder farmers, inadequate access to better inputs and practices, rudimentary extension systems and weak off-farm infrastructure, such as roads and markets. Furthermore AGRA argues that since Africa has the highest rates of soil fertility depletion, inorganic fertilizers are a critical factor in decreasing productivity decline.

The alliance claims to be conscious of the multifaceted challenges faced by Africa's small scale farmers and seeks to respond in a comprehensive manner to both on- and off-farm constraints. AGRA's main goal is to increase the productivity and profitability of smallholder farming using technological, policy and institutional innovations that are environmentally and economically sustainable within 10-20 years (AGRA, undated, 3). Three areas identified for intervention (on- and off-farm) are:

- improving currently available seed varieties,
- strengthening soil and water management techniques and
- developing stronger off-farm systems and markets from storage to transportation.

AGRA has identified the production of resilient seed varieties as critical to the turn around of Africa's agriculture. However, AGRA recently announced that the 'introduction of genetically engineered crops is not part of the current strategy at this time ...' and that AGRA's approach to improve seeds is 'using conventional breeding' (AGRA, FAQs, 2007:5).

AGRA is portrayed as a pro-poor and pro-environment organisation interested in learning from the constituencies it seeks to service. It espouses a paradigm of participatory development approaches and favours building partnerships with individual farmers, women's associations and farmer unions, as well as with African governments. It has mobilized prominent national and regional African institutions, leaders of finance, business, as well as scientists and entrepreneurs involved across the agriculture value chain (AGRA, n.d; 2)

The AGRA approach falls within a specific development philosophy and strategy. Although AGRA documents are not coherent in defining this framework, the philosophy can be decoded from various sources. AGRA affirms the market ideology, which assumes it is an efficient resource allocator. In areas where markets are weak or absent they have to be created. AGRA seems sensitive to the shortcomings of the market (although this is weakly articulated) and calls for 'smart subsidies' to correct market inefficiencies. Specifically AGRA proposes a modernization process of technology transfer as the overarching solution to Africa's agrarian crisis. Through smart public subsidies, already attempted in countries like Kenya, Malawi, and Tanzania, it is expected that there will be an increased availability of improved seeds and fertilisers delivered through the private sector to poor farmers.

3.3 Programmes and their implementation

AGRA programmes respond to six interrelated issue areas; (i) the inadequate access to improved varieties of food crops,(ii) decreasing agriculture incomes and weak markets, (iii) inadequate agricultural knowledge, (iv) increased soil depletion, (v) weak water management systems and (vi) weak government agricultural policies (See Annex 2-1). Four programmes are to be designed to respond to these issue areas with a projected to cost USD\$200 million each: Africa's seed system programme; soil health programme; market access programme and the policy programme. Currently AGRA works in 13 African countries: Burkina Faso, Ethiopia, Ghana, Kenya, Malawi, Mali, Mozambique, Niger, Nigeria, Rwanda, Tanzania, Uganda and Zambia.

AGRA's Income and Programme Allocation

A five-year financial plan (2007–2011) was approved, with a total amount of USD\$370 million. By December 31, 2007 AGRA had received a total income of USD\$126,755,460 and spent a

total of USD\$36,959,205. This amount was spent on grants, monitoring and evaluation costs and programme and general support costs, comprising USD\$34,105,155; USD\$561,304 and USD\$2,292,746 respectively. By December, 31, 2008 AGRA had a total income of USD\$55,054,818 and a total expenditure of USD\$57,410,878. This was spent on grants, monitoring and evaluation costs and programme and general support costs, comprising USD\$45,420,383; USD\$820,793 and USD\$11,169,702 respectively. Up to April 2009, AGRA's grants in the 13 countries where it has programmes amounted to about USD\$84 million. (AGRA financial statements for 2007 and 2008).

Table 2.0: Summary of AGRA's Budget and Funding

In USD\$ million	Year			Cumulative total
	2007	2008	2009	
Applied for				
Administrative support	2.913	6.646	9.124	18.683
Programme support	0.573	4.083	9.420	14.076
Monitoring and Evaluation	0.956	0.821	4.180	5.957
Fixed Assets	1.018	1.064	1.366	3.448
Grants	36.802	45.420	89.396	171.618
Total	42.262	58.034	113.486	213.782
Applied for				
Staff costs	1.236	3.853	10.848	15.937
Board of Directors	0.214	1.200	1.330	2.744
Travel	0.368	1.118	2.518	4.004
Operating Cost	2.624	5.379	8.028	16.031
Fixed Assets	1.018	1.064	1.366	3.448
Grants	36.802	45.420	89.396	171.618
Total	42.262	58.034	113.486	213.782
Funds received from				
Bill & Melinda Gates Foundation	127.430	40.194	30.000	197.624
Rockefeller Foundation	72.071	2.000	2.370	76.441
DFID		6.277	3.569	9.846
Netherlands		2.562	2.653	5.215
Consultative Group to Assist the Poor (CGAP)		0.075		0.075
IFAD			0.200	0.200
Interest Earnings	6.265	3.945	1.750	11.960
Total	205.766	55.053	40.542	301.361
Source: Dialogue session with AGRA personnel, April 2009;			AGRA records	

AGRA started by implementing the Programme for Africa's Seed Systems with 4 sub-programmes: Agro-dealer Development (ADP), Education for African Crop Improvement (EACI),

Fund for the Improvement and Adoption of African Crops (FIAAC), and Seed Production for Africa (SEPA). It focused on nine countries aiming to address an identified deficit in improved seed varieties and the weak distribution of inputs. With a total budget of USD\$150 million it was announced in 2006 but formally launched in February 2007. The goal of PASS is to introduce '1,300 new crop varieties of at least 10 staple crops within 10 years and to ensure the adoption of the new varieties on at least 20 to 30 percent of the land cultivated by African small farmers (AGRA, PASS, undated:1). A total of USD\$43 million has been committed towards developing 100 new improved crop varieties that mature earlier and produce larger yields that are suitable for ecologically varied agricultural environments in Africa, for five years. PASS allocates varied levels of funding (see chart 2.1) to education, improvement and adoption of crops, production of improved seed varieties and developing agro-dealer networks.

PASS specifically aims to train 220 African crop scientists at MSc and PhD levels, to establish 40 national breeding programmes a year and to assist 40 African seed companies within 10 years as well as train 10,000 agro-dealers within the first five years. The SEPA programme will create a loan called African Seed Investment Fund (ASIF) with a total of USD\$12 million, to capitalize seed enterprises over a period of eight years. The breeding programmes are expected to improve local participatory crop breeding practices and to provide higher yielding seeds for small farmers.

Table 2.1: Summary of Projects Implemented under PASS

AGRA's sub-programme	Total amounts (USD) in millions 2007-2009	Participating countries
Agro-Dealer Development (ADP)	\$18.7	Kenya, Malawi, Tanzania, Mali, Nigeria, Zambia
Education for African Crop Improvement ³ (EACI)	\$7.6	Ghana, Uganda, South Africa and Sub-Saharan Africa
Fund for the Improvement and Adoption of African Crops (FIAAC)	\$14.6	Ghana, Kenya, Malawi, Mali, Nigeria, Ethiopia, South Africa, Tanzania and Uganda, Sub-Sahara Africa
Seed Production for Africa (SEPA)	\$14.8	Ghana, Nigeria, Burkina Faso, Kenya, Malawi, Mali, Mozambique, Rwanda, Tanzania and Uganda, South Africa, Sub-Sahara Africa
Total	\$55.7	

Source: AGRA Annual Report 2007 and www.agra-alliance.org

3.4 The actors and partnerships involved

3.4.1 AGRA Leadership

AGRA represents a collaboration between the Rockefeller Foundation and the Bill and Melinda Gates Foundation.⁴ Intellectual and technical support was initially rendered by the Consultative Group on International Agricultural Research (CGIAR), an institution originally created by the Rockefeller Foundation. The CGIAR was the key scientific and technical backbone of the green revolution in Asia (Dano, 2007).

The AGRA board includes two senior staffers from the Bill and Melinda Gates Foundation, a representative of the Rockefeller Foundation, and six Africans.⁵ These consist of a mixture of members of the private sector, technocrats and academics: Kofi Annan, Chairman and Former Secretary-General to the UN, Monty Jones, Board Member and Executive Secretary of FARA; Strive Masiyiwa, Board Member and Chairman and Chief Executive Officer of Econet Wireless International; Sylvia M. Mathews, Board Member and President of Global Development at Bill & Melinda Gates Foundation; Moise C. Mensah, Board Member and High Commissioner for Consultative Governance, Benin; Mamphela Ramphele, Board Member and Executive Chairperson, Circle Capital Venture, South Africa; Rajiv J. Shah, Board Member and Director for Agricultural Development at Bill & Melinda Gates Foundation; Nadya K. Shmavonian, Board Member and Vice President, Foundation Initiatives, Rockefeller Foundation (resigned September, 2008 and replacement under process); Rudy Rabbinge, Board Member and Professor, Wageningen University, The Netherlands and Mohamed Ibrahim, Board Member and Founder of Celtel. AGRA was first established in September 2006 under an “Implementing Director”, employed by Rockefeller Foundation. An African, Dr Amos Namanga Ngongi then succeeded him as its first president in November 2007.

Partnerships with fellow aid agencies, farmers’ associations, unions, agricultural forums and African governments are central to AGRA’s goal of building an alliance. Some of the partnerships (especially NGOs and Universities) entail grant making and the joint implementation of projects. Many of its programmes entail scaling up existing green revolution activities. Currently AGRA is supporting eight universities under the Education for African Crop Improvement programme (EACI). They are: University of Ghana – WACCIS and Kwame Nkrumah University (Ghana); Ahmadu Bello University and University of Ibadan (Nigeria); Makerere University (Uganda); Haramaya University (Ethiopia); Sokoine University (Tanzania); Cornell University (USA); University of KwaZulu-Natal (RSA) and Moi University (Kenya). Some AGRA programmes are a continuation of Rockefeller activities such as the education and the agro-dealer programmes.

3.4.2 Implementation partnerships

AGRA claims that one of its core values is working through African based partnerships. In the past two years African partners have included: Ministries of Agriculture, plant breeders, soil scientists, agricultural extensionists, universities and private sector actors. AGRA has loose albeit formal relationships with African governments, something which did not happen in the first green revolution. AGRA works more directly with some local NGOs and farmers’ associations, and with some government ministries. These form part of AGRA’s strategic vision to build partnerships that pool the strengths and resources of the public and private sectors...’ (IFAD, 2008). Regarding the private sector partners, AGRA reported that it does not collaborate, nor partner with transnational corporations (TNCs) involved in agriculture, such as Syngenta, Monsanto and Dupont, and various African firms. However, recently AGRA has partnered with multinational banks such as Standard Bank in order to mobilize resources for credit and indicated that ‘AGRA will work with TNCs if there is a clear and compelling benefit to smallholder farmers’ (AGRA, 2009).

In May 2008 AGRA entered into a partnership with the Coalition for Rice Development, Japan International Corporation Agency and NEPAD in order to reduce Africa’s reliance on expensive rice imports and increase rice production. In June 2008 AGRA entered into collaboration agreements with the Millennium Challenge Corporation (MCC), International Fund for Agricultural Development (IFAD) , Food and Agriculture Organisation of the United Nations

(FAO) and World Food Programme (WFP). The agreement with the MCC involves collaboration and implementation of specific projects in Ghana, Madagascar and Mali, in order to ‘foster broad-based agricultural growth and poverty alleviation’ (AGRA, 2008:2). This collaboration covers five broad areas: (i) agricultural-related infrastructural support, (ii) agricultural research, (iii) increasing access to financing, (iv) improving market infrastructure and (v) working towards a more a conducive pro-poor policy environment (ibid:2). The MOU with IFAD, FAO and WFP is aimed at optimising production in areas with relatively good rainfall, soils, infrastructure, and markets.

Table 2.1.1: Summary of key AGRA’s partnerships

Partner	Purpose
Millennium Challenge Corporation (MCC)	Build private seed sectors, agro dealer development and rural finance interventions
International Finance Corporation (IFC)	Support fertiliser value chain financing
Equity Bank Limited, International Fund for Agricultural Development (IFAD) and Kenya Ministry of Agriculture	Loan facility of USD\$50 to accelerate access to financing for 2.5 million farmers and 15,000 small and medium agricultural businesses. AGRA and IFAD allocated 2.5 million each as a cash guarantee fund.
Earth Institute at Columbia University in New York	To model and deliver science and technology solutions
Food and Agriculture Organization of the UN (FAO), IFAD and World Food Programme (WFP)	Boost food production in Sub-Saharan Africa
Japan International Cooperation Agency (JICA), NEPAD/CAADP and Africa Enterprise Challenge Fund (AECF)	Form the Coalition for African Rice Development (CARD) to double Africa’s rice harvest in 10 years and host AECF (USD\$50-100 million) to encourage private sector development in agriculture sector.

To date numerous Kenyan-based organizations have benefited from AGRA grants, perhaps due to the fact that the alliance is headquartered in Nairobi (see chart 2.3). AGRA funding by country indicates that a few countries, such as South Africa (24 percent), Ghana (20.1 percent), Kenya (18.4 percent), and Tanzania (16 percent) have received the bulk of its funding, followed by Malawi (13.5 percent), Mali (1.7 percent) and Uganda (3.5 percent) (See Annex 2-2). Even the USA has received some funding to work with African universities. The seed production sub-programme involves numerous private companies, although some governments and research centres have also received some funding. A US-based NGO, Citizens Network for Foreign Affairs (CNFA), has received most of AGRA’s funding allocated to NGOs for the Agro Dealer Development Programme in Kenya, Malawi, Mali and Tanzania. Citizens Network’s affiliate, the Agricultural Market Development Trust (AGMARK) based in Kenya is reportedly responsible for the implementation of the various projects within the programme. CNFA implements similar programme in Burkina Faso, Ghana, Niger, Nigeria, Angola, Mozambique, Malawi and Uganda, with funds from USAID.

AGRA partnerships with government institutions focus mainly on the Education for African Crop Improvement Programme (EACI) and the Fund for Improvement and Adoption of African Crops (FIAAC) The former is being implemented jointly with tertiary institutions - such as the universities of Makerere, KwaZulu-Natal and Ghana. The latter programme is being implemented by national research institutions (e.g. Council for Scientific and Industrial Research; National Agricultural Research institute; Kenya Agricultural Research Institute,

Ethiopia Institute for Agricultural Research; Division of Research and Training; etc) and the universities of Moi, Makerere, Ebony and KwaZulu-Natal. The role of these government institutions is either to build capacity (through training) or to develop and improve seed through conducting research on selected African crops. Government institutions' involvement in the other two programmes is limited (Chart 2.2).

Table 2.2: AGRA implementing partners

	State institutions	NGOs	Private sector
Kenya	- Kenya Agricultural Research Institute (KARI) - Ministry of Agriculture - Moi University	- Citizens Network for Foreign Affairs (CNFA) /AGMAK - IFAD	- Equity Bank - Western Seeds - Dryland Seeds - Leldet - Farm Input Promotions Africa
Tanzania	- Division of Research and Training- Ministry of Agriculture, Food Security and Co-operatives	CNFA	- Tanseed International Ltd - Zanobia Ltd - Krishna Seed Co. Ltd
Uganda	- Makerere University - National Agricultural Research organisation		- Victoria Seeds Ltd
Ethiopia	- Ethiopia Institute for Agricultural Research		Anno Agro-industry PLC
Rwanda	- Co-op des Agric de Mais dans la region des Volcans		Rwanda Seeds Co. Ltd
Malawi	- Ministry of Agriculture and Food Security		- Funwe Farm Ltd - Seed Tech Co
Zambia	-	CARE	
South Africa	- University of KwaZulu Natal		
Nigeria	- Ebony State University		- Jirkur Seed Producers Co-op Society - International Fertiliser Development Centre
Mali	- National Agricultural Research Institute	CNFA	
Mozambique	Instituto de Investigação Agrária de Moçambique		Semente Perfeita Limitada
Ghana	- University of Ghana - Council for Scientific and Industrial Research (CSIR) - Millennium Development Authority (MiDA)		Savanna Seed Company Millennium Challenge Account

3.4.3 AGRA and regional organisations

AGRA has indicated that it will work closely with the AU, through NEPAD, and with other African development institutions. The African Development Bank (AfDB) does not yet have a formal relationship with AGRA although it has been mandated by the AU, through the Abuja

declaration on Fertiliser for the African Green Revolution, to promote this area of work. However, the AfDB and the AU are yet to operationalise the declaration. There are a few differences between the AGRA approach and that of the CAADP and AfDB, although AGRA has invested heavily in seeds, research and training, while the latter institutions have been slow to take off.

A few regional partnerships have been entered into by AGRA with African-based NGOs and universities. The most prominent partnership is the establishment of the West African Centre for Crop Improvement with the University of Ghana. The alliance has funding partnerships with Agricultural research centres in East and West Africa and private sector companies involved in seed manufacturing and distribution. There are also engagements with some civil society-based networks through an American consultancy firm.

3.5 Distribution of AGRA grants

The initial funding for the establishment of AGRA came from the Rockefeller Foundation and the Bill and Melinda Gates Foundation, which contributed USD\$50million and USD\$100million respectively. This is the largest single investment in Africa's agriculture. Currently less than a third (USD\$33,708,982.00) of the committed/pledged amount from the main funders has been spent on actual programmes. So far more than 45 percent of these funds have been spent on education (see Annex2-2). Some funding has been received from DFID, Netherlands, CGAP and IFAD. AGRA recognizes that the magnitude of its goals requires funding from other international financing organizations, NGOs and donors. In terms of the regional distribution of AGRA programme, East and West Africa have set up the bulk of them (52 percent and 26 percent respectively), with Kenya and Ghana accounting for 80 percent of the funding.

Table 2.3: The distribution of AGRA grants awarded up to April 2009

Type of organization	Grants approved in USD	Nº of projects
Farmers Associations	\$437,750	3
Individual Seed Businesses	\$419,284	3
International NGOs	\$20,378,830	9
International Organizations	\$6,000,000	2
International Research Institutions	\$3,344,446	2
National Regulatory Agencies	\$185,000	1
National Research Institutions	\$8,005,997	44
National/Regional NGOs	\$2,823,862	4
Private Agri-Business Companies	\$12,396,200	3
Private Financial Institutions	\$2,500,000	1
Private Seed Companies	\$2,564,456	16
Programme Administration	\$4,258,673	5
Programme Development	\$497,806	4
Public Financial Institutions	\$1,000,000	1
Public Universities	\$19,323,807	16
TOTAL	\$84,136,111	114

Source: An update on AGRA's Grants; AGRA records

4. AN ASSESSMENT OF AGRA

The efficacy of any agricultural development strategy for Africa (such as AGRA) depends on the systemic nature and sources of the agricultural problem identified and the suitability of the interventions proposed. In a large and diverse continent, the national specificities of political economy and the complex agricultural systems would need to be taken into account.

AGRA began by focusing on a few specific technological interventions, which it believes are the key aspects of Africa's agrarian problem. Evidently, AGRA does not address the wider socio-political and economic aspects of Africa's agrarian issues. No doubt transforming Africa's productive forces (technological change) towards improved productivity of all resources can contribute to increased agricultural surpluses and contribute to fair social development and the expansion of the industrial and other sectors. While it is doubtful that the proposed technological changes alone can achieve the desired development, the importance of technology cannot be under-stated. ActionAid assesses AGRA's promised market-led, smallholder technological change project, by its socio-economic and financial feasibility impact, and its broader sustainability.

4.1 Market-led agricultural transformation

The agricultural model proposed by AGRA emphasizes the role of the private sector in the development of agricultural technologies and input and output markets, with success predicated on the 'free' market leading resource allocation. Moreover, while AGRA promises to support the development of local small and medium private companies involved in agriculture, it is unclear how these efforts would not be undermined by Trans National Corporations (TNCs) with their monopolistic tendencies and unequal power relationships in Africa. These need to be regulated to enhance local capital accumulation. The local companies and small-scale rural farmers could become exploited by a few large TNCs, through the sale of expensive technologies with the bulk of the profits sent back abroad (Holt-Gimenez, Altieri and Rosset, 2006). In the current context where the state has disinvested from agriculture, 'profit inflation' is likely to limit the affordability of the proposed technologies.

While AGRA emphasizes private markets, it supports 'smart subsidies'; meaning '...those that support the poor, while building private markets ...' (AGRA, FAQ, p 8). Coined by the World Bank, smart subsidies are meant to be limited and targeted, and primarily focused on fertiliser (WDR, 2008). There are no clear procedures in the programme design which can guarantee that smart subsidies will be accessible and affordable to most smallholder farmers who deserve them. More critically, while AGRA does work with public institutions involved in agricultural development, it does not advocate that the African state resuscitate critical agricultural agents such as parastatals.

The first green revolution in Asia and Latin America was initially accompanied by heavy state intervention in its initial phases, through subsidies, which enabled smallholder farmers to access expensive technology packages and guaranteed a market for private companies (Lipton, 2008;

Otsuka and Kalirajan, 2005; Freebairn 1995). For instance, in the 2005/06 agricultural season, the Malawi government managed to avert a famine by re-introducing fertiliser subsidies, having ignored World Bank advice (Majele-Sibanda, n.d; Chisunga, 2007 quoted in ActionAid, 2007).

The AGRA initiative does not directly call for a public sector programme to support the infrastructural needs of resource-poor smallholder farmers, although its partners, including the state, are expected to address the capital investment challenges beyond the farm (e.g. roads and other essential infrastructure). AGRA argues that these fall outside its mandate (Rockefeller Foundation, 2006).

AGRA appears to subscribe to the mainstream development paradigm of a 'minimalist state' and 'active market', with some space being provided for NGO partnerships. It has used largely private consulting firms for programme design, sidelining the planning role of African governments, while including African universities and farmers' unions in minor implementation roles. African agricultural development must be based on participatory national development strategies and led by national governments. AGRA seems to believe that technology transfer is not an intractable problem, but rather that African markets and the state have failed to provide these to small-scale producers. Yet planning in the first green revolution was coordinated by the state, with donor support. The AGRA approach may suffer from weak coordination and risk duplication in the absence of a central role for the state and civil society engagement.

Furthermore, AGRA's financiers seem to believe that Africa has to play 'catch up' with the developed West without the need to reform global agrarian structures of capital, aid and trade (e.g. WTO), despite the inequalities and crisis (food, energy and financial) these have generated.

4.2 The small farmer focus

The AGRA initiative is correct to focus on smallholder farmers since they produce the bulk of the food and other agricultural commodities. However these farmers are food insecure themselves and poverty is largely a rural phenomenon in Africa. Such a focus should not forget women farmers as they are the main actors in small farmer systems.

Beyond technology *per se* smallholder farmers in Africa face wider structural constraints, such as access to land, water, infrastructure, information and credit that need redress to facilitate meaningful production. Only since September 2008, has AGRA initiated activities in some of these broader areas. It is envisaged that AGRA would implement a holistic small producer support system; including essential services such as infrastructure, extensions, training, marketing and distribution services etc. For it is not clear how the technologies being promoted by AGRA would be accessible to the majority of poor small scale producers, without such public support. Indeed the supply could not be captured by large scale farmers, as happened in the first green revolution in Asia and Latin America, leading to increasing inequality in the countryside (see Freebairn, 1995). For instance, access to improved seeds through credit has proved to be tied to land ownership as found in Kenya, where many small farmers without their own land are excluded. AGRA needs to be cautious not repeat the mistakes of the previous green revolution, whose 'one-size-fits-all' plant breeding strategy, led to the support of increased monocultures.

Moreover, most of the inputs supplied by TNCs have tended to focus on export crop biotechnology and genetic engineering research rather than the staple food crops grown by most smallholder farmers (FAO, 2004; Forum for Environment and Development, 2007). Although smallholder involvement in export crop production has been growing (e.g. horticulture and floriculture in Kenya), such exports are mostly dominated by larger-scale farmers in both volume and value terms.⁶

A key contradiction in AGRA's smallholder farmer focus is that some of its key partners, such as the International Institute for Tropical Agriculture in Nigeria (IITA), have recently shifted focus away from smallholder farming to the development of industrial production and processing of cassava for export biofuel markets. AGRA's strategy entails encouraging a transformation which moves from 'subsistence' to large scale farming (GRAIN, 2007).

In general, AGRA is perceived as being likely to contribute to the deepening of class differences between the rich and poor farmers (Gimenez, et al 2006), given that AGRA seems to assume that small-scale farmers are a homogenous group, who can respond to input markets and extension incentives in the same manner. Although AGRA indicates that they will concentrate efforts on small holder farmers with land size between 1/4ha to 4ha it does not elaborate on other criteria such as labour and capital intensities. Linked to the fact that AGRA does not implement activities (as it works through partners) there is no clear mechanism to guarantee that the partners will have the poorer small farmers as the actual beneficiaries.

4.3 Access to land and water resources and tenure security

Although AGRA recognizes the importance of land access and security of tenure, these have not been part of its direct interventions, until early 2009, when land, gender and environment programmes were set up in the policy unit. The priority instead was 'stimulat[ing] investment[s] by small scale farmers in technologies, farm inputs and off farm inputs' (AGRA, 2008a, p4) through the PASS programme. AGRA expects to work with the AU, New African Partnership for African Development (NEPAD) and United Nations Economic Commission on Africa (UNECA) 'to further advocate equitable land access and security of land tenure' (Ibid, pp.4) but falls short of advocating for extensive land redistribution and tenure reform. Moreover, its NEPAD partner neglects the inequitable land redistribution of land and water resources and tenure insecurity in its founding policy documents. Instead, it poses Africa's land problem primarily as being the declining fertility of soils and climatic variability (Moyo, 2006). Without balanced (re)distribution of land and water resources and the security of women's land rights the predicted 'benefits' of AGRA would most likely accrue to the larger scale male farmers, with more secure land rights.

The current AGRA support to seed improvement is fortunately (presently) focused on Africa's main food crops such as cassava (eight grants), sorghum (five grants), maize (38 grants), banana (two grants), beans (eight grants), cowpea (four grants), groundnuts (three grants), millet (three grants), rice (six grants), soybean (two grants), sweet potato (two grants) and wheat (one grant). It cannot be ascertained yet whether export-oriented land uses and production goals will find their way into AGRA, as has been the case with most African agricultural initiatives. Moreover, the AGRA project could still find itself contending with existing and new private sector-led and government facilitated export-oriented land uses, as we have seen with biofuels. For instance, agribusiness dominated initiatives to increase biofuels indicate that over 5 million hectares in Africa are being converted to biofuel production with the target exceeding 55 million hectares by 2012 (see Thompson, 2008). For example in Ethiopia and

Mozambique, 1.2 million and 3.5 million hectares, respectively, have been earmarked for biofuel feedstock production.

The AGRA strategy is also unclear as to the effects of the technological revolution on Africa's complex social relations of agricultural production, including widespread tenancy sharecropping among rural households.⁷ Experiences from India and Brazil show that the green revolution undermined existing tenancies, where some small land owners, who suffered viability problems related to expensive external inputs (HYVs, fertiliser, pesticides and herbicides), lost control of their land (Muller, 1988; Babu, 2006).

4.4 Technology (seeds, chemicals, fertiliser, machinery, irrigation and labour)

The AGRA initiative is probably correct in identifying some of the technological shortfalls underlying African agriculture. Yet AGRA's focus on training mainly crop scientists and neglecting social scientists reinforces the critique of its excessively technical orientation, by defining Africa's agriculture problem as technological. Since Africa is characterised by complex social relations of production, it requires that social scientists assess the effects of technical change. Alumira and Rusike (2005) argue that the development of new technologies for small farmers should be based on understanding the behaviour of households.

Moreover, smallholder farming is mostly practiced through self-exploitation of backbreaking family labour, and thus a key source of employment for over 60 percent of the largely rural population in Africa. It remains unclear (especially for females and children) whether AGRA technologies are benignly labour intensive and/or would have a positive impact on rural employment generation. There is evidence that capital intensification of agriculture has led to job displacement in Africa, prior to and during the era of neo-liberal reforms.⁸ Agricultural job displacement in Africa would have severe consequences for poverty reduction, given the limited job opportunities in non-farm rural and urban sectors.

There are also concerns about the forms of technology and transfer models proposed by AGRA. On the transfer of technology and development, the initiative proposes to work with local seed companies and smallholder farmers using local knowledge for the development of improved seed varieties. However there are concerns about the role of TNCs, as their monopolistic control of seed technology patents is increasing through the privatization of public research results and technologies. For example, Zambia and Zimbabwe transferred publicly owned seed patent to private firms. This raised concerns about the security of intellectual property rights, even where public institutions are involved. While AGRA reports that its support to seed breeding is directed at public institutions, it is not clear that this patrimony will not again be privatized.

There is need to investigate further the sources of the 1000 seeds to be improved and their intellectual property rights status, as many observers feel that small holder farmer's local seed banks and breeding systems need to be given greater consideration. For that purpose, AGRA should support the local small and medium private companies that are producing improved seeds that originate from the farmer's locality and assist agro-dealers to provide those seeds to the communities, in order to avoid dependence on large TNCs and expensive credit.

AGRA's agro-dealer development programme if not well monitored may end up facilitating trade for TNCs that provide agricultural inputs. In its current form AGRA does not supervise the outcomes and trends of agro-dealers it has supported in their development. As indicated by Veronica Kingoo, co-owner of Nduki agro-chemical shop in Machakos, Kenya 'currently we work with seeds from Syngenta, Buyer, Seminis, Monsanto and others and fertilizers from Yara. Syngenta supports us with technical training and refer people (farmers and local agro dealers) to us. It is good because they publicize our work and provide clients to us'. Veronica Kingoo further indicated that 'we advise farmers to buy the hybrid seeds and chemical fertilizers because they will get high yields. Today there's no more traditional seeds as these were infected by the new hybrids through cross pollination'. A seed company – Leldet Ltd affirmed that it 'recognizes that for sustainability of the business, the emphasis must lie on developing demand for seed at the farmer level' (AGMARK, 2009:8). These reinforce the idea that the private sector will do all they can to make sure farmers buy the inputs they are selling.

As such, AGRA could potentially induce smallholder farmer dependency on expensive, externally driven inputs from TNCs (Holt-Gimenez et al, 2006). Hybrid and genetically modified (GMO) seeds undermine smallholder seed independence, based on saving and sharing own seed, as well as practices such as intercropping, which are critical in farmers' food security strategy (Ibid, Gill, Lindberg, Thandi and Babu, 2006; Mayet, 2007). Mainstream research and development has focused on uniform seed varieties which promote monoculture farming systems that could potentially displace multiple seed varieties in Africa leading to loss in agrobiodiversity as happened in the Philippines where over 7,000 rice varieties were displaced by green revolution rice (Freebairn, 1995). Hybrid and GMO seeds also require heavy application of fertilisers, pesticides and herbicides meaning increased input costs for smallholder farmers in the absence of state subsidies, and rapid input price increases.

ActionAid does not reject technology. However there are concerns that this be socially constructed, informed by the needs of the people and suitable for local context. Technology must be owned and controlled by the people and not driven by profit motives, otherwise it will deepen the power imbalances between smallholder farmers and TNCs, represented by the 'local' agro dealers and regional wholesalers.

The GMO question

Doubts are also being raised about AGRA's position on GMOs through the inherent contradictions that have been exposed since its formation. For instance in July 2007, Kofi Annan indicated that GMOs will not be part of AGRA programmes. For this he was criticized by the pro-GMO lobby around the world (Mayet, 2007). In reaction, AGRA released a statement stressing GMOs were not part of the current programmes but remain an option for future programmes depending on their endorsement by African governments and availability of provisions for their safe use (Ibid; AGRA, 2007). Prior to that, a meeting on 'Biotech, Breeding and Seed Systems for African Crops' organized by the Rockefeller Foundation which included many of AGRA's collaborators, heard a number of presentations on research and trials on GMO crops in Africa (Mayet, 2007). Thus, at this point in time, AGRA's position on GMOs remains unclear and ActionAid is not in a position to predict whether they will be introduced or not in later phases of the programming.

Yet introducing GMO crops in Africa, characterized by high diversity in crop varieties, presents a potential threat of contaminating local varieties for non-adopters, and threatens the sustainability of these varieties (Gimenez et al, 2006). Furthermore, because these technologies are

patented, non-adopters of GM seeds face law suits from TNCs as a result of crossover of genetic materials to their varieties, and thus farmers could be forced to adopt or face heavy fines (Ibid). It behoves AGRA to at least fund research on the potential impacts of GMOs *vis-à-vis* conventional breeding and household seed banks in Africa.

Some of the key grantees of AGRA are currently actively involved in GM research and development, although AGRA reports that this is not funded by it. For instance, the Bill & Melinda Gates Foundation is currently funding GM research on key African staples (cassava, sorghum and bananas) being led by American scientists in partnership with African researchers in Kenya and Uganda (Mayet, 2007).⁹

Moreover TNCs such as Monsanto, Dupont and Syngenta, have entered into public and private partnership agreements with under-funded national agricultural research centres in Africa to re-orient agricultural research and policy towards GMOs, including AGRA participants (e.g. Kenya Agricultural Research Institute is being funded by the Syngenta Foundation to develop insect resistant maize varieties).¹⁰

Several weaknesses have been identified with GMOs which include: crop failures due to stem splitting, boll drop, contamination of non-GMO varieties through gene crossovers (Holt-Gimenez et. al, 2006) in addition to the concentration of the patented technology by monopoly TNCs. Moreover, research has not been conclusive on the health effects and GMOs are currently being rejected by consumers. especially in Europe.

Although the official AGRA position is that matters related to GMOs and Intellectual Property Rights are the domain and competency of national governments, AGRA should invest into advising African countries on the negative consequences of decisions around those matters.

4.5 Environmental impacts and adaptation to climate change

Most critiques of AGRA argue that the green revolution technology is likely to cause further environmental degradation (to African soils and water systems), due to increased fertiliser and pesticide use, and the degradation of African biodiversity. This is likely to be the case in the absence of effective national environmental regulations and mitigation strategies. Preventing this would require organized social movements which can lobby against this potential damage. Available data limits the precise quantification of the potential for this to happen at present, although there is clear need to invest in research and movements to track these issues. For instance Kenyan farmers are already complaining over problems with strong crops from improved seed and negative effects of fertilizers on their soils. (See ACTIONAID country studies on Green Revolution, 2008).

4.6 Agricultural trade issues

Although, the AGRA initiative acknowledges the existence of unfair global trade practices that have had, and continue to pose a serious threat to the viability of smallholder farming in Africa, it seems hesitant in tackling these obstacles. Its emphasis is on first increasing farm production before 'advocat[ing] with other [unnamed] partners for a fairer global trade and domestic agricultural support policies that open up profitable market opportunities for African farmers'

(AGRA, FAQ n.d, p. 6). Already, African agriculture is globalised and lacks state protection, leading to it being locked into a path dependent on a technology-price squeeze treadmill. Yet, changing the exploitative way global agricultural markets work is expected to be possible only after the impacts have been felt. However, without addressing the obstacles associated with unfair global trade practices, the expanded farm production (with surplus to sell to domestic and international markets) that the AGRA initiative is promoting through improved technologies, may not benefit African farmers in the current unequal trade framework.

It might pay to resuscitate parastatals which guarantee agricultural markets and prices above the costs of production for smallholder surplus production, which extend cheap credit to farmers and maintain strategic food reserves (Takavarasha, 1994, ActionAid, 2007, Gimenez et al, 2006). Already AGRA is promoting high interest credit short lending periods (12 percent in Kenya), such that most small farmers cannot access such inputs. This interest rate is reported by smallholder farmers to be too high for them to recoup their production costs. Such agriculture marketing, previously part of the public sphere, is now a largely privately managed (private traders/middlemen, large local companies and TNCs) driven mainly by the profit motive, rather than food security.

4.7 Financing of AGRA

In its current form the AGRA initiative is a wholly externally funded programme. Currently no pledges or commitments have been harnessed from African governments, although these are anticipated in the near future. As much as AGRA brings in much needed resources to invest in African agriculture there are concerns over the inequalities embedded in some of the partnerships that are being forged or will be as a result of this external dependence.

AGRA is supporting a USD\$50 million credit scheme provided by the Equity Bank in Kenya (Kilimo Biashara loan) where IFAD had allocated USD\$5 million as a 'cash guarantee fund' to reduce the banks risk of lending. The same programme is found in Tanzania with the National Microfinance Bank (NMB). Here the credit is worth USD\$5 million and AGRA and the Financial Sector Deepening Trust (FSDT) allocated USD\$1.1 million as 'cash guarantee fund'. These credits aim to facilitate the development of agro-dealers and farmers access to improved seeds, inorganic fertilizers and other market inputs. To get the credit farmers and agro-dealers required approval from the Ministry of Agriculture. The beneficiaries receive vouchers that they redeem at agro-dealer shops in exchange of High Yield Varieties (HYV) seeds and chemical fertilizers. The vouchers are returned by the agro-dealers to the bank who then credits their account. In early 2009 however, AGRA through its innovative financing initiative mobilised USD\$100 million from Standard Bank and USD\$50 million from Equity Bank.

Historically experiences with externally funded initiatives show that in most instances, funding partners have assumed the role of defining priorities and the agenda at the expense of local knowledge and initiatives (Majele-Sibanda, n.d; Holt-Gimenez, 2006; Forum for Environment and Development, 2007). AGRA was conceptualized externally, created by the Rockefeller Foundation and Bill and Melinda Gates Foundation, with limited participation by African governments, farmers and civil society actors, while consultations with smallholder farmers is being planned only after programme inception (AGRA, 2008). Although promised, there is no current representation of smallholder farmers in the AGRA governance structures, which is dominated by large capital and biotechnology personalities.

Given the declining aid flows to Africa from traditional donors and multilateral institutions, external debt service obligations, ballooning food import bills, stagnated or declining Gross Domestic Savings, AGRA in its current form and financial muscle will be irresistible to many African governments, irrespective of the identified flaws, and whether it is accepted by smallholder farmers and the citizenry in general.¹¹ Historical trends also suggest that a large share of the profits from the input and output markets in Africa will be accrued by a few monopolistic multinational companies that are embedded in the AGRA initiative.

Deflationary policies have also reduced local capacities to fund their own production activities, let alone to adopt the proposed technology.¹² Indeed AGRA's financing strategy is intended to deepen high cost credit markets through banks (e.g. Equity Bank in Kenya) and agro-dealers, as opposed to promoting public financing of productivity growth.

4.8 Popular participation in policy making and implementation of AGRA

Roles and influences of donors in policy making

Ever since AGRA's establishment, a number of collaboration agreements with influential donors and multilateral agencies have been entered into. However, seemingly absent are European based development agencies. The key decision makers are the two American foundations with some European partners albeit on a limited scale. The role of China, India and Brazil has, for instance, not yet been articulated although their financing in Africa has grown. However, it might be interesting to note that a South-South component is previewed under CAADP and major input TNCs are starting to operate in Africa through their branches in Brazil or India.

It seems that there remain some critical differences and a conflict of interest among the donors on two critical issues; the definition of the agrarian problem and its solution, as well as the role of genetic seed engineering in addressing the problem. Organisations such as FAO and International Fund for Agricultural Development (IFAD) argue that Africa's agricultural crisis is a result of a long term production problem that needs more than technological transfer, through a more holistic supply response strategy, while other donors embedded in food aid and GMO technologies have emphasized the need for increased aid to expand these aspects, within the current Northern driven and dominated supply chain. Furthermore, it is feared that donor collusion may not provide room for developing an alternative African framework. Indeed the endorsement of NEPAD's CAADP should not be seen as necessarily as an endorsement of an African way of thinking because it was heavily influenced by donors at the time of its inception and has not been widely accepted in Africa.

Civil society involvement in the decision and implementation of AGRA

Although AGRA claims to have an 'open and participatory' policy (AGRA, FAQ, 2007: 2), there is little evidence of consultation with smallholder farmers and other stakeholders (see ACTIONAID country studies on AGRA). We assume that some NGOs in Kenya, Malawi and Mozambique involved in PASS programmes were consulted on their role in project implementation. More critically,¹³ the overall problem of African agriculture and interventions adopted were clearly formulated by a few agricultural consultants and the lead foundations rather than by consulting small-scale farmers. This shortcoming is reinforced by the fact that it is only now, after having started the implementation of PASS sub-programmes, that the basic issue of agricultural policy and advocacy through civil society and the establishment of a memorandum of understanding and partnership with Regional Economic Communities (RECs)

are being crafted by short-term consultants. Participatory policy design now follows implementation!

Most AGRA consultations have been held at the apex level and are yet to adequately engage the grassroots for their perspective. Thus, it is currently premature to define the position of civil society organizations on AGRA given that they are not fully aware of AGRA programmes which are only now being implemented, in fewer than ten countries. Few farmers' organizations, that are critical to the success of such a programme, have been consulted. Existing civil society responses to AGRA have tended to be sporadic, uncoordinated and lack empirical analysis, perhaps because of limited access to information.

As it stands it appears a silo approach to programme implementation in selected countries is proposed since the inter-linkages amongst the programmes are not clear while consultation processes seem to have been sub-programme specific.

Critical engagement with AGRA is thus still lacking. In Mozambique the Foundation for Community Development hosted a consultative workshop on AGRA. Diverse perspectives on its potential impact were noted, and the FAO representative argued that it had 'potential to directly not only offer food but also prosperity' (Chipeta, 2007). Others (e.g. AIAS, 2007) argued for a more structural assessment of the African agricultural question, land access and resource distribution issues. In 2007 70 Africa civil society organizations participating at the World Social Forum's Dialogue on Food Sovereignty demanded an end to 'the domination of our food and food production systems by private corporations who put profits before people'(WSF, 2007).

The lack of participation by the poorer sections of society, besides the big NGOs, Farmers unions and women's groups, is a general concern among civil society organizations, which fear that AGRA underplays a human-centred approach and limits stakeholders from effective engagement in the design and implementation processes.¹⁴

Yet it seems that most African governments have endorsed AGRA, as hardly any notable dissenting voices are documented. Moreover, AGRA has mainly worked through the cash strapped AU-led CAADP or NEPAD, and a few prominent Africans, to enhance its acceptability.

4.9 Regional integration and the AGRA initiative

It was noted that the current linkages between AGRA and African regional organisations (the AU, AfDB and the regional economic communities) are promising. Weak ties are being forged with the CAADP of NEPAD, which at any rate has been considered ineffectual and is not widely being implemented in various countries.

Moreover, the current vogue of narrowly conceived poverty reduction strategies (including the Millenium Development Goals project) and atomistic African 'livelihoods' programmes (including CAADP of NEPAD), shun the development logic of 'accumulation from below'. Their prescriptions undermine any hope of stimulating demand among the poor, due to their narrow focus and selective social protection schemes (food aid, cash transfers, etc), which limit the potential multipliers from increased non-farm incomes and rural development. It is compression of capital demand among small rural producers and workers (farm and non-farm), which systemically undermines their agricultural production activities, rather than the problem of any single factor (tenure, scale, technology, public finance, state intervention, etc) on its own.

Current negative trends of human deprivation and poverty reflect a trajectory of the neglect of poor rural producers and workers by the state, and their excessive exploitation by capital.

Clearly even AGRA's narrowly focused technological agenda could benefit Africa's regional integration agenda, and *vice versa*, regarding African production of, and trade in, the various inputs entailed in the AGRA programmes. The need to optimise scale effects in industries such as fertiliser and seed generation through substantive regional integration strategies is critical. Regional integration is limited by the fact that trade amongst African countries is very poor. A regional programme to enhance agricultural technology development and to broaden input markets (including bulk procurement) is currently lacking.¹⁵ The few existing plants in fertiliser behave monopolistically (e.g. in South Africa, and Zimbabwe),¹⁶ while most African countries import fertilizers. It is worth noting that since March 2009 AGRA has been planning a regional bulk fertilizer procurement initiative.

In general, the AGRA initiative could undermine regional cooperation in agriculture, given its focus only on a few selected countries, and the lack of a regional integration strategy underpinning the green revolution. For now, RECs are seen as playing a policy monitoring role, rather than being involved in the design of capital projects, which need support for the agricultural development to be sustainable. Moreover various regional civil society formations are not yet involved in the AGRA process, limiting the potential to shape such a strategy.

5. CONCLUSIONS

The AGRA concept, programmes and its potential impacts are not adequately understood within civil society and social movements, including in numerous national organizations of the state and farmer. This is primarily due to the selective and poor information and communication on AGRA by its proponents, and its top down approach focused on a few apex organizations in governments, civil society, the research community and the private sector. There is limited monitoring of the AGRA process by civil society and governments, let alone research and policy dialogue on its efficacy and potential impacts. This is exacerbated by the inadequate analytical and advocacy capacity within civil society.

Among those aware of the AGRA process, there are two perspectives on its role: either a blind faith in the potential of AGRA to enhance smallholder productivity or a latent scepticism and/or fear that AGRA has the potential to harm smallholder farming systems. The main fears include loss of food sovereignty, increased dependency on self-interested TNCs, high cost of the technology packages, and the erosion of local biodiversity, agricultural knowledge systems and institutional capacities. There is also fear that AGRA could enhance environmental damage, especially to African soils through the intensive use of fertilisers.

A significant number of actors are not convinced that the AGRA process is based upon an adequate social process of promoting technological innovation within Africa. The initiative is perceived to be over dependent on the received technological packages of TNCs (such as Syngenta, Yara and Monsanto), and to neglect small farmers' diverse knowledge. Some fear the 'theft' of small farmer's seed technologies. The salient concern is that GMOs might be infiltrated into smallholder farming through AGRA. Underlying this conclusion is the perception that AGRA processes are negatively integrated into the unfair world agricultural trade systems and the crisis prone food, energy and financial system.

Most civil society actors are not convinced that AGRA, in its present form, is people centred. Their call is for the search of more suitable people-driven agricultural technological system based on principles of sustainable agriculture and food sovereignty. Such an alternative has to be pursued through farmers' and social movements, possibly through critical engagement with more inclusive national agricultural research systems. This should embed activities such as the promotion of crop rotation for improving soil fertility, development of open pollinated varieties, support for water harnessing, promotion of community seed banks and local breeding systems that guarantee that farmers conserve and utilise their own seeds as well as adopting available green technologies.

It is acknowledged that increasing food supplies in Africa will require both expanding the area of land under farming and intensification, through irrigation and various technological changes which improve yields and soils. Well regulated agricultural technology generation and application, driven by African knowledge and local control, rather than by monopoly capital, is one of the instruments required to address the food needs of poor and working people.

This could be achieved without any further land expropriation and preferential resource transfers to larger farmers at the expense of peasant farming, as well as without the continued unequal extraction of surpluses by external agricultural capital (including African capital). For this to take place the African state must become developmental. Already, the transfer of land for biofuel production in Africa raises the chance of renewed land alienation and the ecologically unregulated opening up of the land frontier, at the expense of rural working people. The food 'crisis', as conceived by large capital and some experts, could spur further land expropriations by the large capitalist farmer agricultural related corporate industry, instead of addressing the problems facing small producers.

While recognising some positive technical interventions of AGRA (e.g. in conventional breeding, the initial efforts to promote organic fertilizers and green manure, support for farmers conservation of indigenous germ-plasma materials), ACTIONAID believes that if in the long term the structural causes of agricultural decline are not addressed in a holistic manner, the programme may not be sustainable. There is a need to address the key issues at the local, national, regional and international level if the constraints on the eradication of hunger are to be redressed. There is a need to think globally and strategically in the effort to transform African agriculture.

The AGRA projects' focus on agricultural technological transformation through small producers could make a serious contribution to efforts to address some of the numerous obstacles to Africa's agricultural development. This potential can only be realized if appropriate state interventions are established and if social movements organize to influence AGRA's direction and content (as enumerated above) towards sustainable development. However, by neglecting the wider systemic issues which affect agrarian transformation while dealing with only some of the aspects of Africa's agricultural technological deficits, even if done in an ecologically sensitive manner, will neither be adequate or sustainable. Specifically, it is unclear how AGRA might contribute to addressing the wider and more formidable obstacles facing small producers or whether AGRA would reinforce these obstacles.

AGRA still needs to address adequately the question of small farmer's participation in its programmes, and be better linked to national development strategies, particularly around issues of Intellectual Property Rights, international trade regimes and the emerging agrarian questions

(such as foreign land grabs and access to land, particularly by women). Wider approaches to agrarian reform are required to reverse the fact that African agricultural production remains predominantly export-oriented, with declining prices and limited value addition, impacting negatively on local incomes. Africa's poor integration into the predatory mass agricultural production on a global scale and trade system production and the existence of debilitating structures of domestic agricultural remain critical challenges.

The overall goal should be to reverse the current dependence on global agricultural technological and commodity markets, which submerge local knowledge and technologies and deepen the extraction of farming surpluses (through the unfair pricing of food and inputs). Action is required to prevent the negative ecological consequences of the currently unregulated technological paradigm. Balanced analysis should inform the technological options chosen and the 'food sovereignty' framework desired. It would be futile however to reject technology induced productivity growth among the poor small scale farmers.

Any response to food shortages or for increasing food supplies must be done under a right to food framework, including observing the FAO voluntary guidelines in support of the progressive realisation of the right to food, within the context of national food security.

6. RECOMMENDATIONS

ActionAid suggests that rather than rejecting AGRA, social movements should learn to engage critically with it and allied African initiatives, on the basis of their principles and experiences, in order to influence the AGRA process and content towards sustainable agriculture (as yet not clearly defined and realistically conceptualised). The principle of 'food rights' and clearly formulated concepts of food sovereignty would inform such critical engagement.

Social movements should rigorously define the choice of the commodities to be produced and for what social purpose, and the [re]distribution of production resources and benefits. The choice of the nature and sources of the agricultural inputs required (technologies etc), relates to the choices made in relation to who is in control of domestic markets and the conditions for participation in external markets. Social movements and NGOs should demand from national governments, international institutions and donors an increase in the financing for sustainable agriculture under the right to food framework.

Such an advocacy project would organize to fight against the continued dispossession of peasant land and water rights, through their commoditization; the continued weakening of their production systems, via the deflation of their incomes, through the monopolistic practices of agricultural capital, the existing situation of unequal commodity and inputs markets; the limitations placed on state interventions by international finance and aid, including reversing low public support to small producers' production and incomes; the absence of (import) regulations to protect their agricultural production activities from global dumping; and the ineffectiveness of existing technological and environmental regulations related to agriculture.

Civil Society should also fight against the marginalisation of small producers in policy processes, given their weak social and political (collective) organisation. This would mean reversing the capture of policy advocacy space by neoliberal civil society and key donors, in collaboration with national elites seeking rapid accumulation. A regional (REC) approach to such advocacy in Africa, based upon a focus on 'real' regional integration, rather than

regionalisation for global integration, would be an effective addition to the struggle for agrarian transformation.

Specific Actions Proposal

The preliminary set of actions recommended with regard to AGRA at this stage includes:

- That progressive civil society organisations promote the enhancement of analytic and advocacy capacities of small scale farming in Africa and related movements on agrarian reform and ‘green revolution’ initiatives in order to:
 - Improve their institutional capacity for disseminating information and increase awareness about the nature of market led agricultural reforms and technological change
 - Monitor AGRA’s activities and other related initiatives and promote an ‘early warning’ system related to its potentially negative impacts, including access to critical knowledge about farming
 - Resist new TNC strategies and trade initiatives by demanding that governments appropriately regulate technology and trade systems which negatively integrate African small farm producers into the world agricultural system
 - Review and continuously monitor government policies and activities intended to fast track food production in terms of their costs and benefits to African societies and small producers and demand AGRA to be accountable to National Food Security Councils or other *fora* with civil society participation
 - Support analytical capacity of umbrella social and farmer’s movements in Africa
 - Promote the design of alternative agrarian reform strategies, based on the principles of sustainable agriculture, food rights and food sovereignty and effective adaptation to climate change
 - Promote national legislation to exclude GMO crop seed varieties and the patenting of local genetic resources
 - Promote the further development of networks of African farmers’ organizations, related social movements and progressive civil society organizations to ensure and enhance the participation of small producers in the design of policies and programme implementation, as part of sustainable farming systems.
 - Ensure that governments and AGRA are made accountable through a right to food framework
 - Engage with AGRA for monitoring the activities and influencing strategic documents and positions such as the AGRA policy strategy, budget allocations, and operational modalities.

Specifically, ActionAid demands that AGRA:

- Develop other criteria such as labour and capital investments in addition to size of landholding to ensure that the poorer small farmers are the actual beneficiaries.
- Promote a diverse approach to plant breeding and promote inter- and mixed cropping.
- Advocate for balanced (re)distribution of land and water resources and the security of women’s land rights to ensure that benefits are not captured by the larger scale male farmers, with more secure land rights.
- Maintain its current focus on staple food crops and refrain from promoting biofuels and other export crops.

- Develop a clear strategy for ensuring technological improvements do not cause indebtedness and social dislocation among tenant sharecroppers.
- Train and employ social scientists as well as crop scientists.
- Undertake research on the potential impact of its interventions on rural and agricultural employment.
- Support the local small and medium private companies that are producing improved seeds that originate from the farmer's locality and assist agro-dealers to provide those seeds to the communities, in order to avoid dependence on large TNCs and expensive credit.
- Specify how many of the 1000 seeds to be improved will derive from small holder farmer's local seed banks and breeding systems.
- Fund research on the potential impacts of GMOs vis-à-vis conventional breeding and household seed banks in Africa and advise African countries on the negative consequences of adopting GMOs.
- Support governments to introduce effective national environmental regulations and mitigation strategies to limit environmental damage caused by chemical inputs.
- Conduct research on the benefits of reviving parastatals which guarantee agricultural markets and prices above the costs of production for smallholder surplus production, extend affordable credit to farmers and maintain strategic food reserves.
- Support the establishment of a farmers' platform for monitoring and evaluating progress towards the achievement of sustainable agriculture.

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Annexes

Annex 2-1: AGRA programme areas

Issue Area	Programme	Objectives	Activities
1. Inadequate access to new improved varieties of local food crops ¹⁷	Programme for Africa's Seeds Systems (PASS) Sub-Programmes Seed Production for Africa Initiative (SEPA) Fund for the Improvement and Adoption of African Crops (FIAAC)	-Increase income, improve food security and reduce poverty by promoting the development of seed systems that deliver improved crop varieties to small-scale farmers in an efficient, equitable and sustainable manner	- Supporting the production and distribution of improved crop varieties through private and public channels (including seed companies, public community seed systems and public extension) so that farmers can adopt these varieties.
		-Release new improved crop varieties; promote the adoption of improved crop varieties by including smallholder farmers and other stakeholders, such as seed companies, in the plant breeding process through 'participatory breeding.'	- Fund crop breeding in Africa to improve African crop varieties and promote their distribution and adoption by small holder farmers.
2. Decreasing agriculture incomes and weak markets	Agro-dealer Development programme (ADP)	- Provide training, capital and credit to establish certified agro-dealers who are a primary conduit of seeds, fertilisers and knowledge to smallholder farmers to increase their productivity and incomes.	-identifying and nurturing new entrepreneurs as they try to establish retail stores or distributorships in areas that are poorly served with farm supply outlets. Other efforts will be directed at existing dealers who could benefit from improved technical and business skills
3. Inadequate agric knowledge	Education for African Crop Improvement (EACI),	-Invest in Education of a new generation of agricultural scientists across Africa.	- provides training for the new generation of crop breeders and agricultural scientists upon which the seed system depends for growth and productivity
4. Increased soil depletion	Programme Pending	-Improving soil management practices.	
5. Weak water management systems	Programme Pending	-Provide farmers with greater access to water	
6. Weak government agric policies	Programme Pending	-To address issues on policies of high taxes and tariffs that raises the prices of agric inputs. -Promotion of safe use of agric inputs and the development of rural infrastructure.	-Strong Advocacy and support of policy change

Annex 2-2 AGRA Funding by Country

Region/ Country	Total grant USD	Total in Numbers	Region/ Country	Total grant USD	Total in Numbers
West Africa			East Africa		
Ghana	\$11,434,973	13	Kenya	\$10,599,666	19
Mali	\$3,834,234	9	Tanzania	\$7,522,354	14
Nigeria	\$4,770,725	7	Uganda	\$4,627,899	13
Burkina Faso	\$465,965	4	Ethiopia	\$1,085,010	5
Niger	\$324,748	3	Rwanda	\$515,761	5
Sub-total	\$20,830,645	36	Sub-total	\$24,350,690	56
Southern Africa			OTHERS	5,103,624	10
Malawi	\$5,089,278	7	WACCI	8,069,016	2
Zambia	\$3,404,662	4	ACCI	584,819	3
Mozambique	\$1,484,161	8	Regional Grants	\$15,219,216	5
Sub-total	\$9,978,101	19	Sub-total	\$28,976,675	20
GRAND TOTAL	\$84,136,111	131			

Annex 2-3: AGRA grants by sub-programme

Sub-programme	Approved grant in USD	Nº of projects
Agro Dealer Programme -ADP	\$31,162,201	13
Education for African Crop Improvement – EACI	\$18,610,737	13
Fund for the Improvement and Adoption of African Crops -FIAAC	\$8,681,130	46
Seed Production for Africa -SEPA	\$17,147,462	34
Soil Health Research	\$2,930,330	1
Building Output Markets	\$1,345,578	2
Programme Administration	\$4,258,673	5
TOTAL	\$84,136,111	114

Approved Grants 2007-2009

Nr	Organization Name	No of Grants	Grant Amount in USD
1	African Agricultural Capital	1	\$12,000,000
2	Ahmadou Bello University	1	\$363,390
3	Alfredo Azarias Dique	1	\$129,300
4	Aline Funk	2	\$364,230

5	Alpha Seed Enterprise	1	\$150,000
6	Anno Agro-Industry PLC	1	\$157,600
7	Association of Smallholder Seed Multiplication	1	\$163,450
8	AT Uganda Ltd.	1	\$1,296,323
9	Busia Women Producers Association	1	\$152,073
10	Centro Internacional de Agricultura Tropical	1	\$2,930,330
11	CNFA	5	\$15,770,670
12	Cooperative for Assistance and Relief	1	\$3,053,362
13	CARE	1	\$102,300
14	Cornel University	2	\$2,096,475
15	Council for Scientific and Industrial Research - CRI	5	\$769,385
16	Dave Westphal	1	\$102,400
17	Division of Research and Training, Ministry of Agriculture, Food Security and Cooperatives	6	\$1,089,805
18	Dryland Seeds Ltd.	1	\$150,000
19	Ebonyi State University	1	\$193,270
20	Enterprise Semencière ALHERI	1	\$139,984
21	Equity Bank Ltd.	1	\$2,500,000
22	Ethiopian Institute of Agricultural Research	2	\$484,000
23	Farm Input Promotions Africa Ltd.	1	\$238,600
24	Faso Kaba	1	\$208,500
25	Forum for Organic Resource Management and Agricultural Technologies	1	\$79,666
26	Funwe Farm Ltd.	1	\$138,073
27	Haramaya University	1	\$443,410
28	Institut de L'Environnement et de Recherches Agricole	1	\$184,993
29	Institut des Sciences Agronomiques du Rwanda	2	\$291,561
30	Institut National de la Recherche Agronomique du Niger	1	\$184,764
31	Institute of Rural Economy	6	\$1,110,000
32	Instituto de Investigação Agraria de Moçambique	4	\$741,550
33	International Fertilizer Development Center	2	\$6,000,000
34	International Livestock Research Institute	1	\$449,545
35	International Potato Center	1	\$414,116
36	JIRKUR Seed Producers Cooperative Society	1	\$172,000
37	Kamano Seed Company Ltd.	1	\$166,300
38	Kenya Agricultural Research Institute	8	\$1,457,877
39	Krishna Seed Company Ltd.	1	\$151,000
40	Kwame Nkrumah University of Science & Technology	1	\$387,000
41	Leldet Ltd.	1	\$163,000
42	Makerere University	2	\$584,900
43	Manoma Seeds Ltd.	1	\$148,023

44	Market Matters Inc.	1	\$209,220
45	Ministry of Agriculture & Food Security, Malawi	2	\$361,790
46	Ministry of Agriculture, Food Security and Cooperatives, Tanzania	1	\$246,046
47	Moi University	2	\$423,400
48	National Agricultural Research Organization	6	\$176,955
49	National Microfinance Bank Ltd.	1	\$1,000,000
50	Neema Agricole Du Faso	1	\$143,632
51	Programmes Administration	5	\$4,258,673
52	Rob Tripp	1	\$31,176
53	Rwanda Seed Company Ltd.	1	\$121,900
54	Savanna Seed Services Company Ltd.	1	\$149,973
55	Seed Control and Certification Institute	1	\$185,000
56	Seed-Tech Company	1	\$150,000
57	Semente Perfeita Ltd.	1	\$199,195
58	Societe Agro-Productions	1	\$137,340
59	Sokoine University of Agriculture	1	\$401,945
60	Transeed International Ltd.	1	\$168,843
61	TechnoServe, Inc	1	\$896,033
62	Uganda National Agro-input Dealers Association (UNADA)	1	\$1,295,800
63	University of Ghana	2	\$5,781,859
64	University of Ibadan	1	\$394,042
65	University of Kwazulu-Natal	2	\$8,254,116
66	Victoria Seeds Ltd.	1	\$214,577
67	Zanobia Seeds Ltd.	1	\$154,100
68	Not specified		\$907,271
69	TOTAL GRANTS APPROVED	114	\$84,136,111

End Notes

¹The Food First (Gimenez et al, 2006) were one of the first ones to respond to AGRA, in a ten point policy brief, and many civil society responses repeat their arguments, and to date no evaluation of AGRA has been published.

² The White Paper entitled, *Africa's Turn; the Green Revolution for the 21st Century* (2006). It broadly defines Africa's agricultural and poverty challenge and a cocktail of interventions necessary to address the constraints. During 2006 it launched a number of programmes such as the programme on improved varieties for Africa, and also helped training of post-graduate studies on crop and plant breeding. The Foundation also helped in the training of local merchants in the basics of retailing farm supplies and in the process cultivating a new market sector that strengthens both small retailers and small farmers. In the course of 2006 the Rockefeller Foundation entered into an agreement with the Bill and Melinda Gates Foundation to establish the Alliance for a Green Revolution in Africa

³ In January 2008 AGRA funded the establishment of the Western African Centre for Crop Improvement (WACCI) at the University of Ghana. This project is funded to the tune of USD\$4.9million and seeks to train 40 students, for a period of five years (Grain, 2007).

⁴ The Rockefeller Foundation is the second largest philanthropic organisation. The bulk of the foundation's wealth comes from the Rockefeller family's endowment in the form of substantial shares. The foundation was involved in the first green revolution in Asia and has since invested about USD\$150 million to establish a beachhead for bringing the green revolution. The Bill and Melinda Gates Foundation is currently the world's richest charity with over USD\$60billion in funds.

⁵ Two telecom entrepreneurs; one from South Africa and another from Zimbabwe, a former minister of finance for Benin and a former Managing Director of the World Bank from South Africa, a former World Food prize winner recipient from Ghana and one of the architects of the MDGs who is also an academic at Wageningen University.

⁶ (see Moyo, 2001; Muir, 2004; Holt-Gimenez, Altieri and Rosset, 2006; Forum for Environment and Development, 2007; Mayet, 2007)

⁷ For example, in Ethiopia, Ghana, Nigeria, Mali, Ivory Coast. (Lasstaria-Cornhiel and Melmed-Sanjak, 1999; Amanor, 2008)

⁸ In Zimbabwe, between 1974 and 1984 about 100,000 jobs were lost in the large scale commercial farming due to capital intensification (Loewenson, 1992). Similar trends were experienced in Kenya, where tractorisation and heavy duty machines during the 1980s, replaced techniques such as ox-drawn ploughs and hand tools (Nkurunziza, 2007). Whilst large capital equipment was exempted from import duty and sales taxes, hand tools and ploughs were subject to high import duties and placed in the most restrictive import category (Nkurunziza, 2007).

⁹ Even some public faces in AGRA have a long association with biotechnology and genetic engineering research. For instance Robert Horsch, the Global Development Officer in the Bill and Melinda Gates Foundation, was a former employee of Monsanto, where he was employed for more than 25 years (Mayet, 2007).

¹⁰ Statement from African Civil Society Organisations at the World Social Forum, 2007.

¹¹ Aid flows to Africa declined from USD\$32 per capita in 1990 to USD\$18 per capita in 1998 (Wolfensohn, 2001), whilst external debt surged in most countries (see World Bank, 2001)

¹² For instance Monsanto, Dupont and Syngenta controlled 46 percent of the total proprietary seed market in the world (ETC Group, 2007) indicating the level of concentration in global input markets.

¹³ There is no evidence of wide consultation within Africa in the authoring of the White Paper and also in designing AGRA related programmes.

¹⁴ See for instance report from a Regional Food Sovereignty Workshop convened by TCOE in Windhoek, April, 2008

¹⁵ Seventy percent of African exports are destined for Northern Europe, North America or Japan (WTO cited in Oxfam, 2002) and thus heavily exposed to unfair trade practices.

¹⁶ Zimbabwe's fertiliser industry while catering for some SADC countries a toll manufacturing basis, is unable to supply national needs, let alone regional ones, and requires resuscitation.

¹⁷ The Programme for Africa's Seeds Systems (PASS) also includes the Agro-Dealer Development Programme and the Education for African Crop Improvement (EACI).