Future Agricultures

Policy Brief

The Political Economy of Ethiopian Cereal Seed Systems: State Control, Market Liberalisation and Decentralisation

Introduction

This FAC Policy Brief examines the political and economic processes governing Ethiopian cereal seed systems by analysing the overall policy context, including the main interests driving seed policy formulation and implementation, and the roles and interaction of the different public and private actors. It also investigates how these interests and interactions are related to the actual performance of the system on the ground.

By focusing on three key political economic drivers of change within the seed system – state control, market liberalisation and decentralisation – the article asks: How are seed-related policies and implementation guidelines created? How do ideas about what makes 'good' policy and implementation guidelines evolve and change over time? Whose voices and views are taken into account in the policy process? What are the key arguments for the choice of actions? What spaces exist for new ideas, actors and networks, and how can these be opened up? And finally, what urgent national/regional seed policy issues and processes need to be considered for creation of a vibrant seed system within the country?

Ethiopia's seed systems

Ethiopia's informal and formal seed systems play a dominant role in the country's economy, as the agricultural sector represents about 45 percent of Gross Domestic Product (GDP) and 85 percent of export earnings, and provide livelihoods for 85 percent of the population (estimated 79 million people). Ethiopian farmers are highly reliant on informal seed provision and local varieties (with no legal certification), which includes seed retained by farmers, farmer-to-farmer seed exchange, and cooperative or Non Governmental Organisations (NGO)-based seed multiplication and distribution. The formal seed system, on the other hand, involves the production and distribution of basic seed by the research system and certified seed by licensed multipliers (e.g. the Ethiopia Seed Enterprise (ESE), regional seed enterprises and private seed companies).

Current Ethiopian seed policy thinkers are pushing to 'modernise' and strengthen the formal seed system, encouraging the uptake of new seed varieties. Seed policy is also influenced by donors who are interested in strengthening the national seed system through programmes providing technical support and investment.

These include the Program for Africa's Seed System (PASS) of the Alliance for a Green Revolution in Africa (AGRA) and the Agricultural Growth Program (AGP) (World Bank 2009). At the regional level, Ethiopia has joined neighbouring countries in efforts to foster seed policy harmonisation and problem-solving through the Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA). This association represents the National Agricultural Research Systems, together with the Common Market for Eastern and Southern Africa (COMESA), which promotes regional trade and investment.

The remainder of this brief explores the political–economic dynamics which shape these policy discussions around the Ethiopian seed system, focusing on three themes: (1) the central role of the public sector in maintaining strategic control over the seed sector through top-down, state-led initiatives and coordination; (2) the policy consequences of economic liberalisation and the opening up of the seed sector to private actors; and (3) the challenges and opportunities associated with decentralised political administration and efforts to establish a truly decentralised seed system.

The analysis is based on information generated from secondary data sources and from primary key informant interviews from a diverse group of actors in the system, including farmers, researchers, experts at ESE and regional seed enterprises, the Ministry of Agriculture and Rural Development (MoARD) and the Bureau of Agriculture and Rural Development (BoARD).

The Ethiopian cereal seed system: policies and politics

The Ethiopian seed system is governed by policies stipulated in the public proclamations and regulations that were put in place in the early 1990s (Dawit Alemu et al. 2010). The main responsibility of implementing these policies is given to MoARD at the federal level and to BoARDs at the regional level. This section looks at two contrasting policy initiatives: one driven centrally by the federal government and the other guided at the local level centred on farmer-based seed multiplication programmes.

The Crash Seed Multiplication Programme (CSMP)

CSMP was launched during the 2008/09 production season.

- The main objective of CSMP: to alleviate the serious supply shortage of improved seeds, particularly hybrid maize.
- CSMP characteristics: top-down, centrally driven.
- CSMP is run by: the National Seed Multiplication and Distribution Committee (NSMDC) comprised of members from the Ethiopian Institute of Agricultural Research (EIAR), the Ethiopian Seed Enterprise (ESE) and the Marketing Directorate of MoARD.

All relevant public sector institutions (MoARD, EIAR, ESE and state farms) are mobilised in the multiplication of hybrid maize varieties. A target is set for the production of 730,000 quintals of certified hybrid maize seed to be distributed by the 2010 production season (MoARD 2009).

The Bako Agricultural Research Centre (focusing on maize research) is assigned to improved seed production (breeder, pre-basic seed) and to strengthen the capacity of improved seed research centres (to produce breeder, pre-basic and basic seed).

State farms are deployed for basic seed and certified seed multiplication during both the primary production season and the off-season.

Overall, the supply of certified hybrid seed was increased from about 87,000 quintals in 2008/09 to an estimated 193,000 quintals by the 2010/11 production season (MoARD 2005-2010).

Farmer-based Seed Production and Marketing Schemes (FBSPMS)

In collaboration with the BoARD and as a complimentary programme to CSMP, the Ethiopian Seed Enterprise and Regional Seed Enterprises are implementing the Farmer-based Seed Multiplication Strategy (FBSPMS).

- FBSPMS characteristics: decentralised, locally run and farmer-based.

Purpose of the schemes:

- To improve the possibility of seed production of locally demanded crop varieties for which there is less commercial interest.
- To increase the possibility of producing and marketing seed within communities, so reducing seed costs (Yonas Sahlu et al. 2008).
- Production sites can also serve as demonstration sites, thereby encouraging the adoption of crop varieties.

Outcomes and impacts of FBSM approaches:

- The schemes are playing an important role in the national formal seed system by providing the main source of raw seed for the public seed enterprises.
- All emerging regional seed enterprises now base the production of Open Pollinated Variety (OPV) seed on FBSM.
- Much of the seed produced under FBSM is reused by farmers locally, resulting in low recovery rates by seed enterprises.
- Sustainability of the FBSM strategy remains a challenge as the system relies on external support, intensive training of farmers, and supervision, quality control and overall management.
- Additional challenges include the difficulty of contract enforcement and price risks.

These two initiatives represent the two ends of a spectrum – from a decentralised, local approach, to a centralised, command-oriented approach. Both are seen as routes to addressing the crop production and seed supply gaps, and so respond to an Ethiopian vision of the Green Revolution initiated through state planning and support. What then are the underlying political and economic factors that influence policy outcomes in Ethiopia? The next section explores three competing drivers.

The economic and political drivers of the Ethiopian cereal seed system

In Ethiopia's journey to realising its own Green Revolution, a combination of three political–economic drivers pull Ethiopian seed policy in different directions, strongly influencing the country's efforts at fostering a Green Revolution. These drivers are identified as following: (1) the influence of top-down state-driven (or centrally driven) initiatives; (2) attitudes towards agricultural liberalisation and the private sector; and (3) the dynamics of political–administrative decentralisation in Ethiopia.

Centrally driven state initiatives

Agricultural production and food security are current political priorities, and as such, Ethiopia's seed systems are being driven by political decisions that are seen to enable the continued upward trend of the country's sustainable agricultural growth. A series of centrally driven initiatives have resulted, highlighting the importance of technical and institutional change – and the central role of improved seeds in this.

The national initiative of 'scaling-up of best practices' in the agricultural sector is managed through direct and strong political leadership at all levels (federal, regional, zonal, woreda and kebele) who are responsible for ensuring that

improved technologies (in particular, seeds and fertiliser) reach farmers.

Initiatives involve the wider dissemination of available agricultural technologies (mainly improved crop varieties and fertiliser), the promotion of private sector involvement, and the formation of stronger working ties with donors and development partners.

Centrally driven state initiatives act to align diverse regional differences into a centrally managed planning system. These initiatives reinforce state control over the agricultural system even though they are informed by technical expertise this can also be overshadowed by political imperatives, creating tensions between technocracy and the political system.

Attitudes towards agricultural liberalisation and the private sector

The Ethiopian state has an ambivalent attitude to economic liberalisation and the private sector. As such, while committed to opening the economy and attracting investment, direct state control is evident and the transition is carefully managed. Government-granted incentives are provided to support private agricultural investment, including: preferential access to land; duty-free import of capital goods; and grace periods of up to five years on land rents and tax holidays (MoTI 2007).

The Government supports the organisation of private seed companies through the creation of the Ethiopian Seed Growers and Processors' Association. Although still weak, the association is improving the engagement of emerging private seed companies in the system. Although the private sector is growing it remains poorly integrated into the national seed production and distributions system.

Under the current set-up, national private seed companies are dependent on the public supply of source seed (basic seed) and the requirement of public distribution system alignment, creating disincentives to invest in distribution channels and market outlets and discouragement in establishing private agro-dealerships.

Overall the private sector remains weak and fragmented whilst state interests continue to dominate the formal seed sector, creating real tensions between the state and the emergent private sector.

The decentralised political–administrative system

Agricultural and rural development efforts are decentralised to regional states under Ethiopia's general national policy framework under the constitutional commitment to a decentralised political–administrative system. Following the emergence of the Regional Agricultural Research Institutes (RARIs) (late 1990s) and the Regional Seed Enterprises (RSEs) (2009) – replacing the role of ESE as the sole public seed enterprise – Ethiopia has begun to make steps in decentralising its formal seed system.

The decentralisation of the formal seed system has experienced both opportunities and challenges:

- Opportunities include: better research coverage of agro-ecologies; improved possibility of production and marketing expansion of seed for all crops; improving human and physical capacity at regional level; improving the production of locally demanded crop varieties; and the marketing of seed at lower cost due to reduced transportation costs.
- Challenges include: the need for strong national coordination of agricultural research and development, seed production and marketing activities; avoiding unnecessary competition among the three newly-created regional seed enterprises for resources; and

the redefinition of the role of ESE as a national seed enterprise.

Since 2008 centralised approaches have come into tension with the decentralised political–administrative system and the decentralised seed system; parallel efforts may emerge with federal and regional state-level initiatives running side by side. These three drivers – (i) centrally driven state initiatives; (ii) suspicious attitudes towards agricultural liberalisation and the private sector; and (iii) the dynamics of Ethiopia's political–administrative decentralisation – therefore interact to create a unique political–economic setting for policymaking on seeds and agricultural development in the country. The result is a very particular style of 'Green Revolution', one that differs in important respects from other countries in the region. The role of the state remains central, and the private sector, in the context of decentralised political–administrative systems is deployed in line with broad objectives set by the federal government.

Conclusion

Strong central political leadership, committed to growth through agricultural productivity, has pushed a vision of technological innovation generated by state initiative and supported in carefully controlled ways by a partially liberalised private sector. It is argued that this public–private arrangement is the most effective way of stimulating a Green Revolution in Ethiopia and ensuring broad-based agriculture-led growth (MoFED 2006).

As this brief has shown that there are limits to Ethiopia's unique vision of a Green Revolution:

- Market disincentives
- Shortage of improved agro-technologies (especially seed)
- Weak coordination and linkages among actors in the system for seed development, production, multiplication and distribution

Currently, there is no workable national action plan for seed sector development in Ethiopia. The seed quality control system, as well as seed distribution by the National Agricultural Research System, is uncoordinated. Furthermore, there is inefficient demonstration and popularisation of newly released varieties by the national public system. Contracts are poorly enforced within the system, especially those contractual agreements between the public sector and private seed companies, ESE and seed-producing farmers, and seed companies and seed-multiplying farms. These problems are exacerbated by the limited production and storage capacity of the public seed enterprises, and the performance of the private seed companies. The existence of leftover certified seed by some private companies and the sale of seed through the black market by underreporting the amount of seed produced also undermine policy objectives.

Centralised approaches have also come into conflict with the decentralised political–administrative system which has sought to promote a decentralised seed system, in part due to the emergence of parallel and overlapping federal and regional state-level initiatives. These have led to duplication of effort, the wastage of limited resources and unnecessary turf battles. Finally, tensions exist between the state and the emergent private sector as the state seeks to liberalise the sector, while retaining a strong hold over the market. With such a singular vision, supported by a strong coalition of state and external donor and investor interests, there is the danger of narrowing priorities and a potential 'lock-in' to a limited set of technological–managerial solutions serving particular interests to the exclusion of others.

As policy in this area develops we must remember that the political economy of hunger and poverty looms large in Ethiopia. This continues to focus considerable political attention on increasing economic growth and food security through improved agricultural productivity, with seeds playing a central role in that agenda. This is not just a technical agenda – about new seeds and delivery systems – but one that is fundamentally linked to issues of national political economy, and as such, worthy of debate beyond the narrow confines of economic assessments.

References

Beyene Tadesse (2008) *Applying Historical Precedent to New Conventional Wisdom on Public Sector Roles in Agriculture and Rural Development in Ethiopia,* sponsored by FAO, Rome

Bishaw, Z., Sahlu, Y. and Simane, B. (2008) 'The Farmer-based Seed Production and Marketing Schemes: Lessons Learnt', in Thijssen, M., Bishaw, Z., Beshir, A and W. de Boef (eds), *Farmers, Seeds, and Varieties: Supporting Informal Seed Supply in Ethiopia,* Wageningen: Wageningen International: 33–46 http://www.wur.nl/NR/rdonlyres/EF09A9DA-EB08-479F-9799-2D86CD5384C7/71901/TOC_Intro.pdf

Bishaw, Z., Sahlu, Y. and Simane, B. (2008) 'The Status of the Ethiopian Seed Industry', in Thijssen, M., Bishaw, Z., Beshir, A and W. de Boef (eds), *Farmers, Seeds, and Varieties: Supporting Informal Seed Supply in Ethiopia,* Wageningen: Wageningen International: 23–33 77 http://www.wur.nl/NR/rdonlyres/EF09A9DA-EB08-479F-9799-2D86CD5384C7/71901/TOC_Intro.pdf

Byerlee, D., Spielman, D., Dawit Alemu and Gautam, M. (2007) *Policies to Promote Cereal Intensification in Ethiopia:* A Review of Evidence and Experience, IFPRI Discussion Paper 707, Washington DC: International Food Policy Research Institute http://www.ifpri.org/sites/default/files/publications/ifpridp00707.pdf

CSA (2009) 'Report on Area and Production of Crops (Private Peasant Holdings, Meher Season), Agricultural Sample Survey 2008/2009 (2001 E.C.)', Central Statistical Agency, *Statistical Bulletin* 446.I http://www.csa.gov.et/surveys/Agricultural_sample_survey/Agricultural_sample_survey_2008/survey0/data/Docs/area%20and%20production%20report%202008-2009.pdf

Dawit Alemu and Spielman, D.J. (2006) 'The Ethiopian Seed System: Regulations, Institutions and Stakeholders', paper presented at the ESSP Policy Conference 2006, Bridging, Balancing, and Scaling up: Advancing the Rural Growth Agenda in Ethiopia, 6–8 June 2006, Addis Ababa, Ethiopia: Ethiopia Strategy Support Program (ESSP)/IFPRI

Dawit Alemu and Tripp, R. (2010) *Seed System Potential in Ethiopia: Constraints and Opportunities for Enhancing Production,* IFPRI Working Paper, Washington DC: International Food Policy Research Institute http://www.ifpri.org/sites/default/files/publications/ethiopianagsectorwp_seeds.pdf

Dorward, A., Kydd, J., Morrison, J. and Poulton, C. (2005) 'Institutions, Markets and Economic Coordination: Linking Development Policy to Theory and Praxis', Development and Change 36.1

FAO/WFP (2008) *Integrating the Crop and Food Supply and the Emergency Food Security Assessments,* special report of FAO/WFP crop and food security assessment mission to Ethiopia http://documents.wfp.org/stellent/groups/public/documents/ena/wfp174279.pdf

Ministry of Agriculture and Rural Development (MoARD) (2009) *The Five Year Seed Plan* (2009–2014), Addis Ababa, Ethiopia: Ministry of Agriculture and Rural Development

MoARD (2005–2010) Annual Reports of the Ministry of Agriculture and Rural Development, Addis Ababa, Ethiopia

Ministry of Finance and Economic Development (MoFED) (2006) *Ethiopia: Building on Progress: A Plan for Accelerated and Sustained Development to End Poverty (2005/06–2009/10),* Addis Ababa: Ministry of Finance and Economic Development, Federal Democratic Republic of Ethiopia

Ministry of Trade and Industry (MoTI) (2007) *Export and Investment Incentives Available for Exporters and Investors in Ethiopia,* Addis Ababa, Ethiopia: Export Promotion Department, Ministry of Trade and Industry

National Seed Production and Distribution Committee (NSPDC) (2009) *Improving Seed Supply and Future Interventions,* Ethiopian Institute of Agricultural Research (Amharic version)

Spielman, D., Byerlee, D., Dawit Alemu and Dawit Kelemwork (2010) 'Policies to Promote Cereal Intensification in Ethiopia: The Search for Appropriate Public and Private Roles', Food Policy 35: 185–94

World Bank (2009) *Assessment of the Formal Seed System in Ethiopia,* report prepared for the Agricultural Growth Program preparation for Ethiopia

i The Oromiya Seed Enterprise (OSE), the Amhara Seed Enterprise (ASE), and the South Seed Enterprise (SSE).

This paper draws on findings from the Future Agricultures Consortium project on 'The Political Economy of Cereal Seed Systems in Africa'. It is based on a FAC Working Paper and an article by the same author published in the *IDS Bulletin* (July 2011, Vol. 42, No. 4) on 'The Politics of Seed in Africa's Green Revolution', entitled: 'The Political Economy of Ethiopian Cereal Seed Systems: State Control, Market Liberalisation and Decentralisation'.

Acknowledgements:

This Policy Brief was written by **Dawit Alemu** of the **Future Agricultures Consortium.** The series editors are **Beatrice Ouma and Elaine Mercer.** Further information about this series of Policy Briefs at: **www. future-agricultures.org**

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

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

FAC appreciates the support of the
UK Department for International Development (DfID)