

Ethiopia's Food Reserve Policies and Practice

Christian Häberli

Abstract

Ethiopia has for a long time been one of the world's most food-insecure countries. Efforts by the government and a multitude of sponsors including NGOs have developed an array of institutions and instruments to mitigate the negative impact of production and supply disruptions. Public stockpiles are one such tool, the use of which is rapidly increasing worldwide. This brief field study examines the Ethiopian policies and practice in context, including various instruments operated by farmers, processors and traders.

The study finds that the multiple objectives assigned to food reserves as well as the present management structure may not be well-suited at a time of high world market prices and when international food aid is dwindling, and as the international regulatory trade and investment environment remains a matter of unfinished business from a global food security perspective. A comprehensive study of various options for improvements would lay out policy alternatives for public authorities and stakeholders.

Key words

Food aid, agriculture, trade, investment

JEL classification

F13, K33, Q13, Q15, Q18

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1. Introduction*

This study is based on a short field research on Ethiopian food security, in particular on the food reserve schemes and various stakeholders involved therein (Government e.g. Agricultural Transformation Agency, regional and international organisations e.g. UNECA and WFP, producers, processors, traders, universities, the commodity exchange ECX, insurance companies, Oxfam America and other NGOs). It first recalls the main food security policy instruments (2) and summarises a few initiatives undertaken at the regional level (3). It then reviews the food security policies in Ethiopia, as I have understood them in the short time available, by describing six measures relating to food security in general (4a) and by analysing in more detail the official food reserve strategy (4b). The study concludes with a proposal to analyse further improvement possibilities in the Ethiopian system of food reserves and on how to make food reserves less costly without losing their efficiency as a quick and focused food disbursal system (5).

2. Food Security as a set of policies addressing food production and trade

Before discussing food security instruments, it is perhaps useful to recall Nobel Prize winner Amartya Sen's findings that endemic hunger is not a problem of supply but of distribution, and which can be solved by an *entitlement approach* (Sen, 2009).¹ It should also be noted that "food security" has different meanings at the international, national and household levels.

Just by considering the many policy tools which directly or indirectly impact on food security, one is reminded of the complexity of the challenge facing especially a poor net food-importing country like Ethiopia. Indeed, each of the following instruments can both increase and decrease national food security, depending on the way they are handled, financed, and harmonised:

- *Agricultural and food production*: research & development/extension, vocational and management training, investment and production finance/credits, insurance schemes for production, commercial and investment risks, input subsidies, (small) farmer support, land use legislation and administrative practice, and infrastructure support.
- *Social policies* like (staple) food price guarantees and food aid in various forms.
- *Trade instruments* such as tariffs, safeguards, quotas, market interventions, price risk insurance, commodity exchanges, futures and other hedge instruments, export restrictions, various forms of food reserves, and trade and export promotion.
- *Investment policies* e.g. multilateral trade and bilateral investment agreements, foreign investment legislation and agreements including fiscal incentives, concessional finance, investor protection and *stabilisation clauses* ("regulatory chill"), with biofuels and biotech technologies demanding special regulatory attention.

This is not the place for a detailed examination of these instruments and their interaction and respective food security impact. However, it goes without saying that each of these instruments can play an important role and, therefore, any proposal for improvements must take into account the present regulatory framework and the dynamic interactions between the different tools.

* This is a slightly edited version of a report from a 2 days visit to Addis Ababa on the subject of Ethiopian food reserve policies and practice (26+27 November 2012). Numerous documents, recent literature studies and further discussions completed my field research which, however, must remain fragmentary and possibly fraught with errors, as is to be expected for any short-time visitor. As I will continue research in this field, comments remain welcome.

¹ The entitlement approach concentrates on each person's entitlements to commodity bundles including food, and views starvation as resulting from a failure to be entitled to any bundle with enough food. For a detailed description see UNDP (2010).

3. Regional initiatives for agricultural trade and investment

The advantages of more regional integration have been recognised at the highest political level (AU, ECA, others). The AU Joint Conference of African Ministers of Agriculture and Ministers of Trade in Addis Ababa held from 29-31 November 2012 reconfirmed the need to boost intra-African trade and investment as a “key to agricultural transformation and ensuring food and nutrition security”, in particular by improving and supporting initiatives fostering private sector development.² Concerted efforts for regional trade and investment have been undertaken in at least three areas relating to food security.

- **Agricultural and food reserve policies:** on 16 April 2010 the Second African Ministerial Conference on Disaster Risk Reduction adopted an “Extended Programme of Action for the implementation of the Africa Regional Strategy for Disaster Risk Reduction (2006-2015)”³. After the East African drought in 2010, a document entitled “Emergency in the Horn of Africa” the FAO, IFAD and WFP advocated “cash for work, non-conditional cash transfers and vouchers-for-work”.⁴ In West Africa, a “*regional agricultural policy*” also addressing food security is emerging; however, at this stage, it looks more like a replica of national policies and declarations of intent.⁵ Beyond that level and apart from preliminary studies and discussions for the proposed *West African Food Reserve*, no concrete action seems to have been undertaken except of course at the national level.⁶ The only regional model presently available as a blueprint is the (not yet operational) *ASEAN Plus Three Emergency Rice Reserve Agreement* (APTERR) signed on 7 October 2011 in Jakarta (Indonesia).⁷ There are no comparable plans for the Horn of Africa, and the COMESA Regional Investment Agency (RIA) has not yet extended its services to regional food projects (COMESA/RIA, 2012). Interestingly, ECOWAS is apparently trying to emulate this regional food security agreement (UNCTAD 2011, and ICTSD 2011).
- Despite the recentness of the so-called ‘*land grab*’ phenomenon, numerous attempts to better **regulate agricultural land use** have already been undertaken at a regional level. For instance, the ECA-based *African Land Policy Initiative* (LPI) has recognised *inter alia* that small and medium scale enterprises create more jobs per invested dollar.⁸ There is a *Framework to Strengthen Land*

² See the Concept Note for the conference at <http://au.int/en/dp/rea/sites/default/files/Concept%20Note%20of%20AU%20Joint%20Conference%20of%20Ministers%20of%20Agriculture%20and%20Ministers%20of%20Trade%20-%20Final.pdf> accessed on 10 December 2012.

³ Cf. <http://au.int/en/dp/rea/sites/default/files/Report%20of%20the%20Second%20Ministerial%20Conference%20on%20DRR%20Nairobi.pdf> accessed on 10 December 2012 (see Annex II).

⁴ See http://au.int/en/dp/rea/sites/default/files/AU%20-%20Emergency%20in%20HoA_August2011.pdf, accessed on 10 December 2012. This text also recalls the “Inter Agency Standing Committee (IASC) Plan of Action for the Horn of Africa including the development of functional strategic food reserves that can buffer the shock of acute food shortages and the avoidance of large-scale food crises.” For Ethiopia, cf. IBRD 2011 “graduation [out of poverty and PSNP] is a long term goal requiring long term resources.” (p.34). See also FAO (2012) p.38.

⁵ See, for instance, CEDEAO (2009) (in French).

⁶ Ghana, for example, is setting up a *National Food Buffer Stock Company* (NAFCO) which is to provide a “minimum guaranteed price and ready market” for Ghanaian staple food farmers, with farm gate prices determined by the post harvest committee. Whether the objective is farmgate price support or consumer price stabilisation is unclear: http://mofa.gov.gh/site/?page_id=705 (information dated 2011; accessed 07/12/12)

⁷ Cf. <http://www.asean.org/news/asean-secretariat-news/item/11th-amaf-plus-three-countries-conclude-agreement-on-rice> (draft agreement available on file), and Trethewie (2013).

⁸ Main website maintained at ECA, accessed 10 December 2012 at http://new.uneca.org/lpi/home_lpi.aspx, reports that the Eighth African Development Forum (ADFVIII) recommended “equity, improved skills, domestication of policies and attention to small investors” as the main components of the LPI (ECA Press Release

Rights, Enhance Productivity and Secure Livelihoods as part of the LPI (AU, AfDB, ECA). Also, the *Virtual African Land Policy and Administration Facility (VALPAF)* is yet to become operational.⁹ In July 2011, the Committee on Rural Economy, Agriculture, Natural Resources and Environment of the Pan African Parliament Committee called for a “moratorium on new large-scale land acquisitions pending implementation of land policies and guidelines on good land governance”.¹⁰ Furthermore, the *Nairobi Action Plan to Promote Land-Based Investments that Benefit Africa* which was adopted in October 2011, advocated “a monitoring and reporting mechanism for tracking large-scale land based investments with a view to ensuring that these ventures are beneficial to national economic development and local communities.”¹¹ There are many more statements on political governance for agricultural land use, plans for a peer review mechanism, and a programme for more concrete development studies. However, for the time being, decisions on policy reform and in respect of structural adjustments remain a national responsibility.

- The **African Legal Support Facility (ALSF)** was set up on 30 April 2008 in the sovereign debt context by the African Development Bank (AfDB) as a pre-judiciary instrument to address the “growing problem of vulture funds”. It is also supposed to serve as an instrument “especially in the Natural Resources Sector” but, again, only if and when it is called upon and allowed to work at the national level.¹² No ALSF activities have been reported for Ethiopia.

All these regional initiatives certainly go into the right direction. Nonetheless, it seems clear that the attempts to build a regional perspective into the food security conundrum are yet to produce tangible results in Ethiopia.

For the time being and as far as Ethiopia is concerned, the old vision of “Black Gold for Blue Gold” combining the oil and the water potential of Sudan and Ethiopia – or even the whole Horn of Africa – remains a far-fetched vision (Verhoefen 2011). For its food security, Ethiopia still has to rely on its own natural and human resources and policies – and on the goodwill of its international donors.

4. Ethiopian food security policies

Despite the fact that it is one of Africa's largest grain producers (USDA 2012) and has Africa's highest livestock population (Haile, p.28), Ethiopia has been food-insecure for decades. Data vary according to definitions and agencies, with the official figure of food-insecure people presently standing at over 7 million, the biggest number in Sub-Saharan Africa; another 40 million are considered as “recurrently hungry”.¹³ The main emergency food reserve EFSR has disbursed food aid in each year between 1994 and 2011, in a range from 80'000mt (1996) to 1 Million mt (2003). As will be shown below not all uses were made for emergency reasons; moreover, high levels of disbursements and production shortfalls did hardly ever correlate.

Policy coordination takes place under the lead of the MoA, in coordination with a large number of agencies from the same and from other ministries. On top of the hierarchy is the *Disaster Risk Man-*

177/2012 at <http://new.uneca.org/ArticleDetail/tabid/3018/ArticleId/2208/ADF-VIII-recommends-equity-improved-skills-domestication-of-policies-and-attention-to-small-investors.aspx>.

⁹ Cf. Decision A/DEC/01/05 (in French) and Annex dated January 2005 accessed on 12 December 2012 at http://www.comm.ecowas.int/dept/index.php?id=p_p1_commission&lang=en

¹⁰ See <http://new.uneca.org/Portals/lpi/Documents/Recommendation-Committee-on-agriculture.pdf> accessed on 10 December 2012.

¹¹ See <http://www.afdb.org/en/news-and-events/article/nairobi-action-plan-to-promote-land-based-investments-that-benefit-africa-8421/> accessed on 10 December 2012.

¹² For areas of present ALSF intervention see <http://www.afdb.org/en/topics-and-sectors/initiatives-partnerships/african-legal-support-facility/areas-of-intervention/> accessed at 10 December 2012.

¹³ Source: Interview with Mr. Mathewos Hunde (DRMFSS, 27 November 2012).

agement and Food Security Sector, also acting as an early warning and response directory. It records production and consumption data, and availability of food reserves, including stocks and supplies from other than the MoA-controlled food reserves. All relevant agencies are represented in the DRMFS,¹⁴ including the Health Ministry, the National Meteorological Agency,¹⁵ and the Central Statistical Agency. It also conducts multi-agency needs assessments with the help of a working group called ENCU.¹⁶ In case of insufficiency of domestic resources it can appeal to the international community.

a. Six food security measures

Remindful of the past decades with several years of massive famine and political upheavals, the Government of Ethiopia is focusing its efforts in three ways: on *food production*, *food aid*, and *price stabilisation*. Two more instruments have been set up by private operators: different *production insurance schemes* and the *Commodity exchange* have attracted international attention and are now part of the Ethiopian food security equation. The last instrument, *production credit*, so far remains embryonic, and limited to a few pilot schemes. The donor community supports all six sets of measures in various ways.

1. In order to increase local food production, the *Agricultural Transformation Agency* (ATA) has been set up with the explicit and ambitious mandate to modernise Ethiopian agriculture. Examples of measures so far taken include reversal of soil depletion (EthioSIS/ISFM), fertiliser production and use optimisation (fertiliser-blended facilities), productivity promotion programmes for the basic staple cereal teff (said to reach as of next year 500'000 farmers)¹⁷, pilot credit schemes, biotech studies¹⁸ and farmer's (re-)organisation.¹⁹
2. Emergency situations (and chronic hunger) are addressed by various measures, in particular by the *Productive Safety Net Program* (PSNP) which has formed the backbone of safety net activities in Ethiopia (IBRD 2011, p.33).²⁰ It is a disaster risk early warning and management programme, operating through cash for work by the government together with the donor community.²¹ The PSNP also claims a positive impact on agricultural productivity.²² The main PSNP instrument is the *EFSR* which will be described below.

¹⁴ <http://www.dppc.gov.et/>

¹⁵ Main tasks in respect of food security: present assessments (future) and field assessments (crop performance) in 11 branch offices supporting statistics; improve current knowledge; develop weather-based index together with insurance companies; support water resource: availability forecast for dams, releases and stops; forecasts during planting, harvesting; climate change mitigation: what kind of plants (depending on duration of the rainy seasons). Forecasts are said to be 80% reliable.

¹⁶ The "Joint Government and Humanitarian Partners' Document" dated August 2012, establishes for the period August to December 2012 "total net humanitarian requirements" of \$189'433'303 (or 193'866mt for food only, costing around \$149'276'820).

¹⁷ Teff is gluten-free (and lactose-free) and yet protein-rich. Applications for various target groups in developed countries are being studied. Cf. <http://www.mercur.org/?p=6395&l=0> (in German), accessed 14 December 2012.

¹⁸ According to ATA, the *Africa Biotechnology Network Association* came to Addis Ababa in December 2012 for a study on the use of biotech applications in Ethiopia, the implementation of the Cartagena Protocol and national regulation (as a part of a US\$ 5m grant from USAID and the Bill and Melinda Gates Foundation, committed for Ethiopia).

¹⁹ ATA: "We prepare a strategy to revamp 47 coop unions, then their primary societies in order to bring governance capacity, administration and financing. Open space for private farmers' associations incl. coops, very close cooperation with Government in order to establish a cooperatives' college aided by Coop College (London). The new PM insists on farmer union audits (as a condition to give dividends to members). Now they actually start doing the audits!"

²⁰ Cf. Government of Ethiopia (2006, 2007, and 2009).

²¹ Direct support in cooperation with DRMFS, JEOP and WFP (for Somali region). Plans to replace food aid with cash and vouchers. Cf. IFPRI (2011), a complete study on Food for Work Programmes but without any indication of price depression.

²² FAO (2012) reports that "participation in the PSNP and the Household Asset Building Programme raised the likelihood of using fertilizer by 19.5 percentage points" (p.43).

3. *Price stabilisation*: according to widely held beliefs, albeit with little evidence,²³ the “middlemen” are to blame for both the ever increasing food prices and for the fact that farm gate prices remain below world market levels. As a consequence, price stabilisation measures by way of governmental cereal supplies to millers and bakers enjoy high general support.²⁴ The *EGTE* described below is the main driver of this policy, but there is no information available on intervention criteria, triggers, and quantities. More on this later.
4. The new *Commodity Exchange (ECX)* is the first of its kind in Sub-Saharan Africa. It had been hailed as a big step forward in the fight for transparency and against market power abuse by the “middlemen”. Now the farmers²⁵ can bring their crops to one of the 17 warehouses established by the ECX in the growing regions, agree with the manager on the quality grading and give him their minimum offering price which they can modify after each trading day and for one month (after which there is a penalty). Today ECX handles over 60% of Ethiopian coffee (different schemes, some export directly, or through coops, with a primary market around the warehouse through local traders). The commission is 0.04% of the transaction value. Trading is by ‘open cry’ and the farmer can see all the paid prices on his cell phone.²⁶ Yet there is no price risk hedging.²⁷ At this point in time and to the disappointment of a number of people who had hoped for more, only contracts for three export crops are traded on this spot market: coffee, sesame, and white beans. Nevertheless, according to studies undertaken by ECX (unavailable to me), farmers now obtain on average 65% of the traded price whereas their share was only 35% before its establishment.
5. *Production insurance* operated *inter alia* by Nyala Insurance Company, in cooperation with WFP, Oxfam America, and others.²⁸ Its micro-insurance department is still in a pilot stage. It started in 2006 with 120 farmers/261ha for wheat, teff, and haricot beans; in 2008 there were 827 farmers/778ha, with additional farmers and surfaces joining/insured in 2010. Farmers unable to pay the insurance premium can nevertheless obtain an insurance license through “work for insurance” at a “work for food” project operated by Oxfam or USAID, for instance for environmental protection, forest, or compost.²⁹ After an initial trial and error period with more specific risks insured³⁰, its operation has become much simpler, because compensation is now

²³ An example given to me was for bananas, a non-exported good. Farmers used to get 1 Birr/kg and protested when they found it cost 5 Birr in town. Subsequently the farmgate price apparently doubled to 2 Birr – but in Addis bananas now cost 10 Birr!

²⁴ Sabate-Wheeler and Devereux note that “Most of these mechanisms were abolished under agricultural liberalisation reforms during the 1980s and 1990s, but an argument could be made to retain or revive some of their positive food security features.” (p.15)

²⁵ Ethiopia has 12-15m almost exclusively small farmers.

²⁶ Appeal is possible, with third party ruling. Ethiopian not global standards (International reference market, bulk issue), sold to processors, finalise, exporters. Producers sell spot/immediate delivery, to exporters with forward contracts. Partner banks with deposit accounts, warehouse can pay immediately. Buyers with forward contracts get finance, guarantees.

²⁷ An online trading system is being prepared for all market participants to intervene during the sessions. Moreover there are plans for futures trading under review by the regulatory authority.

²⁸ The *Ethiopia Drought Insurance Pilot Project* of the WFP and the IBRD is supported by the LEAP food security early warning tool which converts agro-meteorological data into crop or rangeland production estimates and allows quantifying the financial resources needed to scale up the National Productive Safety Net Programme (cf. WFP/LEAP 2012). For this project, WFP writes that it obtained insurance through a contract with AXA Re, a Paris-based re-insurer using a sophisticated index based on Ethiopia's historical rainfall and agricultural output. Cf. <http://www.hoefsloot.com/en/leap-for-ethiopia>, and <http://www.wfp.org/disaster-risk-reduction/leap> both accessed on 10 December 2012, whereas Oxfam America (2011) considers that the HARITA project “complements disaster risk reduction and long-term, sustainable investments in agriculture”.

²⁹ This particular scheme started in 2009 in the Tigray Region.

³⁰ *Multiperil insurance* (+ livestock insurance for commercial farms). Risks: frost, excessive rainfall, drought, fire/lightning, hail. depending on local situation. Meteo classes insufficient info for risk calculation: on-farm assessment during harvest, calculate yield shortfall. Mostly small farmers up to 1ha, scattered: double trigger (i) occurrence reported by nearby weather station (ii) sample farmers, with local agents/NGO. Base risk plus local risk. Other options are premium-pooling and different time serials (presently 3,3 and 5 years).

triggered by a weather-based index.³¹ In the week before my arrival, compensation of 19'000 farmers was announced at a press conference. Reinsurance for this scheme is guaranteed by the Switzerland-based reinsurance company Swiss Re.³² While it is too early to consider the scheme as a commercial success with a demonstrable impact on farmers' income stabilisation, it is clearly a step in the right direction.³³ At the same time it should be recognised that the scheme covers certain production risks only and, in particular, does not help farmers to gauge and hedge commercial risks such as price fluctuations, or longer-term investment risks. This, incidentally, is just one of the problems accelerating the "land rush" of foreign-based investors benefitting from such insurance (and legal protection). Other problems presently limiting the usefulness of the initial yield-based insurance schemes, especially communication and organisational mistakes, have been pointed out by an evaluation report conducted by Terefe Degefa for Nyala Insurance in May 2010 (p.70); Getaw Tadesse from IFPRI considers that insurance may not work for risk-adverse farmers. In addition, crop insurance is easier to handle than livestock insurance because the latter has a much longer production cycle especially for improved breeds.³⁴

6. For a long time, *production credits* have been available, if at all, for commercial farmers only. More recently, micro-credit schemes have sprung up mainly by way of private initiatives, while the government and its own financial institutions mostly remained passive. Availability is still severely limited, and the pilot schemes now in operation only cover crop production and do not extend to marketing or to other price risks. A number of serious constraints to a development of credit schemes on a comprehensive basis and available to small farmers have recently been analysed by Ali and Deininger (IBRD 2012).³⁵ It has also been pointed out to me that the credit challenge is different in the lowlands with more property rights both for nomads and agriculturalists than in the more secure highlands with more government involvement and different land tenure policies for crop farmers. In Ethiopia, highland agriculture is mostly crop production, with 1-2 cows per farm and communal and protected grazing even for sedentary farmers. On the other side, lowland farming is mostly nomadic and depends more on livestock, with more uncertain tenure, more severely depleted water resources, and heavy overgrazing. This vicious circle which economists call the "tragedy of the commons" is principally due to land state ownership; but even here solutions exist, as has been shown for community forest management.³⁶ The fact that all land belongs to the State is probably a major problem as long as a bank cannot use farmland for collateral. At any rate, without a successful development of a credit system responding to small farmers' needs for production and investment

³¹ Since 2009 pure weather-index insurance operated in 3 regions. Satellite data from Columbia University/IFPRI/WFP/FAO/Oxfam America. "Automatic" (effective area rainfall) compensation 2012 paid to 19'000 insured farmers with drought damage. Also with Africa Insurance Company and Oromia Insurance, in 38 villages. Cheaper premia, good for small farmers. Despite reinsurance (Swiss Re) this is still a loss operation. There is no price risk insurance, only crop and livestock loss due to climate. But Nyala shareholders are from rural areas, and they are CSR-minded. The scheme will be profitable although only in the "very long term".

³² Swiss Re (2010). Other countries with similar insurance schemes and Swiss Re participation include Rwanda (http://www.swissre.com/media/news_releases/nr_20121011_micro_rwanda.html), Senegal (http://www.swissre.com/media/news_releases/nr_20110920_CGI_Commitments.html) and Vietnam (http://www.swissre.com/media/news_releases/Vietnams_rice_farmers_to_get_loss_protection.html); information accessed on 14 December 2012.

³³ According to Nyala Insurance and others, future developments could be premia subsidies by the government, or a recently design by the National Bank of a legal framework (tax free). Meteo availability (time series) and quality are said to remain problematic. Training needs in "financial literacy". A big project seems to be contemplated, with lots of support, interlink (input) credit with insurance.

³⁴ There is a pilot scheme by ILRI for livestock insurance (Ethiopia and Kenya), with Oromia Insurance: basic risks, average productivity, weather, average community loss.

³⁵ "The removal of credit constraints is estimated to increase productivity by 11.4 percentage points" (**but** "crop productivity is estimated to be unaffected by credit constraints in a more drought-prone and food insecure zone where loans are used for purposes, mainly purchase of livestock, other than crop production.")

³⁶ According to the economist Garrett Hardin (1968), this is the depletion of a shared resource by individuals, acting independently and rationally according to each one's self-interest, despite their understanding that depleting the common resource is contrary to their long-term best interests). [Quoted from Wikipedia]

domestic production will not be able to take off – and climate change adaptation will be the more difficult (Di Falco et al, p.841). This might even prevent credit schemes for soil conservation and other measures to improve resilience especially during the most important rainfall season, *Meher*), two examples where proper management can solve the collateral issue.

One cannot fail to be impressed by such comprehensive and generally well-structured and coordinated action. Ethiopian food security policies today are based on a courageous and all-out approach, but also an expensive one which depends to a large extent on foreign aid. Of course, almost inevitably and despite considerable efforts of coordination, there are overlaps, and there is competition even though there is little room for non-governmental intervention.

Fortunately, the problem of aid (over-)dependence seems to have been recognised, and different solutions have been advocated by several contacts: to reduce eligible beneficiaries in order to focus on social food security policies (GTP), to reduce in-kind food aid and move instead to cash aid and/or to provide vouchers for a limited number of staple items at least in the non-remote areas of the country on the basis of a cost and nutrition analysis, and to provide financial education for extension workers and farmers.

More importantly, however, it appears that some of these instruments are impairing the positive impact or even defeating objectives of others. Perhaps the most problematic aspect here is the present use of the food reserve schemes which is described in the next section.

b. The food reserve system

A variety of off-farm food reserve schemes exists in Ethiopia, and they follow different objectives. The main instrument is the Emergency Food Security Reserve (EFSR). With a food stock of 410'000mt (mainly wheat, maize and sorghum) the EFSR is the biggest physical food stockpile in the country, with storage sites located in 7 different food insecurity-prone areas. It was set up in 1972 after a very big famine, and it was reorganised in 1982 and 1992, before receiving its present status in 2008 as a relatively independent entity under the ambit of the Ministry of Agriculture. According to publicly known but unverifiable information the EFSR is to be increased to a total quantity of 3 Million mt of government-owned food and non-food³⁷ items by the end of the present Growth and Transformation Period, i.e. 2015/16.

According to its Managing Director, EFSR works very well, with a technically very simple scheme. In case of an emergency the EFSR immediately releases the required quantities on the basis of a formal promissory note by an eligible donor agency³⁸ to replace this quantity within an agreed period of time.³⁹ An equivalent volume of food commodities is then being shipped to Ethiopia, and handed over to EFSR. In this way the overall quantities remain the same over time – and their quality remains good by such a frequent rotation. Moreover, the costs of this scheme to the government are limited because the borrower has to cover all handling and distribution costs.⁴⁰

³⁷ Plastic sheet for shelter, blankets, water bladders, individual water containers, water purification units, generators and rub-hall tents.

³⁸ Current donors are, essentially, CIDA, USAID, EU, WFP, and Catholic Relief Services, also represented in the Technical Committee.

³⁹ The fund manager can release up to 5'000mt, the Technical Committee up to 30'000mt and the Board Chairman up to 50'000mt, provided the stock at hand is above 25% of the total reserve.

⁴⁰ I have tried to collect information on real storage costs. It appears that (private) storage cost is very difficult to calculate, depending on the size of warehouses, credit availability for capital and running costs. In 1998, Tedesse and Guttormsen found a specific cost of 54 Birr per ton per month for storage loss, rent, fumigation, capital cost of private, small warehouses (p.89). The IFPRI study says \$35.40 (14 years later but 7 higher!) vs \$44.30 in Bangladesh, India \$60. The EU estimated the costs to be \$25/mt/year (not counting labour paid by users, only permanent labour/infrastructure, plus preservation cost paid by Gvt, about 10m Birr/yr)

Ethiopia's Food Reserve Policies and Practice

The more recent arrival on the market of EGTE⁴¹ as a borrower of EFSR stocks in order to stabilise market prices e.g. for bread, has changed the nature and objectives of EFSR. In fact, EGTE buys mainly wheat on the world market (with some purchases from local farmers e.g. for pasta flour production). If it estimates that bread prices are too high, it can sell wheat at reduced prices to millers and bakers in order to get the bread prices down. If urgent action is required it borrows the necessary quantities from the EFSR. The losses incurred by the government (and the National Bank) in these operations are considerable.⁴² This also shows that, while school feeding or “food for work” programmes (which are also EFSR-eligible) might serve a *social policy* purpose similar to emergency food aid, as long as it focuses on the most food-insecure population, this is not the case for these EGTE operations which benefit the whole non-farming population regardless of income. Besides, the import quantities are also decreed by the government, based on EGTE's estimate of supply and demand.

Even more importantly it appears that food price stabilisation by EGTE and EFSR has a *price-depressing effect* for domestic producers. As shown by the below table, food aid deliveries often took place during good harvests, thus actually reinforcing farmgate price depression.

⁴¹ EGTE's main task is to create a market for commercial producers (and small farmers), including for exports. It owns warehouses with a total capacity of 800'000mt. Secondly, EGTE is to stabilise staple food markets. Prices are fixed by government decree for EGTE's stocks, as well as for sale to target users (flour and bread factories, household consumers). However, no information was available on the intervention prices and triggers for the market releases operated directly by the EGTE or by EFSR.

⁴² A price example quoted to me in order to explain why private traders do not import wheat even though they theoretically could get a licence mentioned a CIF-world market price of currently 800 Birr per quintal against a local wholesale price of presently 500 Birr.

Production and food aid in Ethiopia, 1996-2008 (IFPRI 2011, p.2)

Year	Total Grain Production (’000mt)	Total Food Aid Deliveries (’000mt)	Food Aid as % of Production	Production per Capita
1996	10,327.9	244	2.4	0.18
1997	10,436.8	228	2.2	0.18
1998	8,102.7	444	5.5	0.14
1999	8,866.9	473	5.3	0.15
2000	9,233.6	1,231	13.3	0.15
2001	11,039.2	980	8.9	0.17
2002	10,371.4	266	2.6	0.16
2003	11,536.3	1,887	16.4	0.17
2004	10,626.9	732	6.9	0.15
2005	12,573.9	1,004	8.0	0.17
2006	14,411.6	552	3.8	0.19
2007	15,572.5	285	1.8	0.20
2008	16,871.9	626	3.7	0.22

For example, Tadesse and Shively argue that “a 1% increase in annual per capita food aid reduces monthly prices by as much as 5%” (p.2). The extent of this negative impact on farm income may vary, and it can be mitigated by limited recourse to reserve use and better timing to food emergencies. As will be shown below, certain food stock management principles and practices may also help.

5. A study to improve the food reserve system in Ethiopia

Food reserves, in Ethiopia and elsewhere, have come to stay as an instrument for more food security, and they are likely to increase over time. Although many studies and data are now available which show the shortcomings of the present system, there is no assessment of the situation with a view to future developments, including climate change and demography, beyond the range of directly concerned parameters such as production, trade, and investments. What is also lacking is the international regulatory framework and ongoing negotiations in the WTO and other fora regarding agricultural border protection and subsidies, including new disciplines on national food reserves, international food aid, and export taxes and restrictions.

Any proposal for improvements of Ethiopian food reserves as one form of off-farm “food savings” schemes should therefore be based on a comprehensive food security risk analysis taking into account not only the present and foreseeable future production, consumption, trade and investment needs in a given country.⁴³ Besides good management practices, cost is a key factor – especially in view of the intention to increase the EFSR from half a million to 3 million metric tons. Obviously depending on their precise (and sometimes multiple) objectives, there is a wide gamut of different possibilities to manage and to finance the costs which can be borne by the government (taxes or levies), foreign donors⁴⁴, importers, or directly by consumers.

Incidentally, the case of Switzerland and its compulsory food stockpile system might serve as an example: the Government decides how large each commodity stock needs to be (generally 3 - 4 months of consumption requirements for the whole population, for sugar, rice, edible oils and fats, coffee, and cereals); it periodically inspects the stocks, guarantees credits, and authorises market releases (only) in case of supply disruptions outside the control of normal trade. All food importers are organised in a stock management organisation called “réservesuisse” which owns the stocks and is responsible for

⁴³ For instance, the export restrictions for cereals imposed by Ethiopia as a response to the food crisis of 2008 is a WTO accession issue which needs to be addressed in a long-term food security strategy (Hailu, p.36).

⁴⁴ The United States of America is Ethiopia's largest bilateral donor today, allocating close to \$800 million in FY2011 (\$570 million plus emergency food aid funding). *Source*: CGD 2012. The worldwide reduction of food aid, mostly and cynically coming as a result of increasing world market prices, is a challenge for food reserve financing even for the special case of Ethiopia.

the warehouse construction, food storage, and rotation. The costs are fully financed by an import levy.⁴⁵ In effect this means that food security in Switzerland, first, is efficient and cheap, and second, that it is paid by the consumer and comes free of cost for the state.

Food reserves as a tool for food security must be analysed together with other instruments, including the rapidly evolving risk management tools available to food producers and processors such as insurance, commodity exchanges, future trading and other hedge instruments, and investment and production credits. Finally, it is clear that a credible proposal must also take into account foreseeable developments in the international field such as overall food production, trade and consumption patterns, climate change, and the above-mentioned evolving regulatory framework for trade and investment in food.

The study proposed here would need to be undertaken in close cooperation with all involved stakeholders. It could address the following questions and options, based on a SWOT analysis of the present system in the national and international context described above:

1. How can the Ethiopian system of food reserves be improved:
 - a. Separate social policies and food price stabilisation (food aid only for people without resources to produce or buy their food; price stabilisation only in periods of external shocks and market disruptions)?
 - b. Separate reserves and schemes according to objectives (food aid, food for work, price stabilisation)?
 - c. Improve relationship with other food security policies and instruments?
 - d. How to reduce or to avoid price depression for Ethiopian farmers?
 - e. Envisage regional (Horn of Africa? COMESA?) and/or virtual food reserves?
 - f. Reduce costs by entrusting some reserves to producers, or private traders?
2. Pros and cons of alternative measures
 - a. Trade liberalisation
 - b. Investment liberalisation (within the present regulatory framework re land ownership and land use, but with new guidelines for agricultural FDI, mandatory food security impact assessments, and monitoring)
 - c. Social policies including food stamps for the needy
 - d. Land reform (long-term leases with performance monitoring)
3. Recommendations for various stakeholders

The formulation of a research project will depend on the interest generated by this report for various stakeholders, the ambitions for smaller or bigger reforms, and on available human and financial resources. A detailed study proposal can be prepared within 3 months after receipt of a concrete request. Implementation in cooperation with one or more local researchers (and their staff for field work) could then start within 3 months of agreement and, depending on the extent of necessary field research, be completed over a period of 6-12 months, starting in the second half of 2013.

Christian Häberli

⁴⁵ Source: <http://www.reservesuisse.ch/index.php?L=1>, and for general information about the National Economic Supply Policy: <http://www.bwl.admin.ch/index.html?lang=en>.

Attachments

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2. List of Acronyms

ATA	Agricultural Transformation Agency
COMESA	Common Market for Eastern and Southern Africa
DRMFSS	Disaster Risk Management and Food Security Sector (http://www.dppc.gov.et/)
ECA	Economic Commission for Africa (here also quoted as CEA, Comm. Éco. pour l'Afrique)
ECOWAS	Economic Community of West African States (here also quoted as CEDEAO / Communauté économique des Etats de l'Afrique de l'Ouest)
ECX	Ethiopia Commodity Exchange
EFSRA	Emergency Food Security Reserve Administration
EGTE	Ethiopian Grain / Coffee Trade Enterprise
ENCU	Emergency Nutrition Coordination Unit (in DRMFSS)
EthioSIS	Ethiopian Soil Information Service
FAO	Food and Agriculture Organization
ha	hectares
IBRD	International Bank for Reconstruction and Development (World Bank)
IFAD	International Fund for Agricultural Development
IFPRI	International Food Policy Research Institute
ISFM	Integrated Soil Fertility Management
MoA	Ministry of Agriculture
mt	metric tons
NDPPC	National Disaster Prevention and Preparedness Committee
PSNP	Productive Safety Net Program
SDC	Swiss Agency for Development and Cooperation
SWOT	Analysis of a strategy's <u>S</u> trengths, <u>W</u> eaknesses, <u>O</u> pportunities and <u>T</u> hreats
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
WFP	World Food Programme
WTO	World Trade Organization

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