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A Market for Abdu

Creating a Commodity Exchange in Ethiopia

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Cover photo: The Addis Ababa grain market with an ECX electronic price display.

A Market for Abdu

Creating a Commodity Exchange in Ethiopia

Eleni Gabre-Madhin

Eleni Gabre-Madhin, chief executive officer of the Ethiopia Commodity Exchange (ECX), was a research assistant at the International Food Policy Research Institute in 1987–88, rejoining as postdoctoral fellow in 1998–2003, and rejoining again as Ethiopia Strategy Support Program leader in 2004–07. She has also worked for the World Bank as a senior economist and at the United Nations Conference on Trade and Development (UNCTAD) as a commodity trading expert. She holds a BA from Cornell University, an MSc from Michigan State University, and a PhD in applied economics from Stanford University. She received the Outstanding Dissertation Award from the American Agricultural Economics Association in 1999 for her doctoral research on Ethiopian grain markets. She is a founding fellow and board member of the Ethiopian Academy of Sciences and has served on the Stiglitz Task Force on Africa, the Expert Development Group for the Government of Sweden, the Nike Foundation's Advisory Panel on Girls in Rural Economies, and ONE's African Advisory Board. She was named Ethiopian Person of the Year in 2009 by Jimma Times, nominated Outstanding African Businesswoman by African Business in 2010, and selected among The 50 Women Shaping Africa by The Africa Report in 2011. The ECX was the first company in Africa awarded the CIO100 Award for ICT excellence by *CIO* magazine in August 2011 and was recognized as the Agricultural Commodities Initiative of the Year by Africa Investor.

I first met Abdu Awol in 1996 in the town of Nekempt in the heart of western Ethiopia's fertile maize belt. Abdu Awol was a typical trader in the grain wholesalers' section of the Nekempt market, where on any given day of the week, traders, farmers, laborers, housewives, and donkeys would be jostling in front of rows of stalls, white polypropylene sacks of maize, sorghum, wheat, barley, and teff, Ethiopia's indigenous staple grain, would be piled high in the back, and in front of each stall a trader would be weighing all sales and purchases on an old Italian-made scale. At the ends of the muddy lanes between the stalls, truck horns would be honking as diesel fumes filled the air, drivers would lean out of their windows to buy a cob of roasted maize to munch on as they waited to load or unload crops, and goats would stand by to nibble the fallen grain as the sacks were hoisted in the air.

Nekempt, a town of about thirty thousand inhabitants in an area known as Wollega, is at a crossroads. Dirt roads link the town to a network of smaller towns and villages in the countryside, where good rains produce an abundance of maize. An asphalt road leads to Ethiopia's capital city of Addis Ababa some 335 kilometers away. I was conducting a survey of 12 grain markets across Ethiopia for my doctoral thesis, and I had come to Nekempt because it was here that, 12 years before, during the terrible Ethiopian famine of 1984, farmers produced a grain surplus while a million people perished in the northern regions of Tigray and Wollo.

Abdu was young, enthusiastic, and interested in talking to me about his grain-trading business, which he had inherited from "the old man," his father, who had inherited it from Abdu's grandfather. So I sat on a sack in a corner of his stall, trying not to pay attention to the little bugs coming out of the sacks to bite my legs. I watched as he haggled with the farmers who came by with a few bags of grain and the rural traders who arrived by truck from the weekly markets nearby. He would slap them on the back and ask about their families with a big smile as he shrewdly evaluated the quality of the grain, sniffing it, squinting at it, sometimes even taking a bite of a kernel or two. He would shout to his staff to move bags, pay out cash to the farmers, give them a small bag of lentils or chickpeas to seal the deal, answer a call on his old black telephone, and turn to me to explain what he was doing, all in the same breath it seemed. Somehow, between his deals and phone calls, we got through my questionnaire, and I was on my way.

It was six years before I saw Abdu again. This time, armed with a doctoral degree and a nice job as a researcher at the International Food Policy Research Institute in Washington, DC, I was in Nekempt to conduct a national grain and coffee market survey spanning 45 markets and hundreds of traders. I found Abdu in the same stall doing the same thing. Again he was happy to talk to me about his grain trading, though he was somewhat less enthusiastic than before. As I had the first time, I asked him how he found out what prices were in far-off markets and where he sold the grain he bought from the farmers. He gave me the same answer he had given in 1996: he had no good way of learning prices, and he only knew traders in Addis Ababa, so that was where he, along with all the other wholesale traders from Nekempt, sold his grain. I asked if he knew there was a shortage of grain in the country and that prices were rising. A bit impatient, I pressed him further and asked why he didn't think of selling his good maize in the markets of Tigray and Wollo in the north and Dire Dawa in the east, where prices were high.

He looked at the ground, then looked at me, and said yes, he had thought of it. After a pause, he told me that a few months before, he had done something that no trader in Nekempt had ever done: he went looking for a new market. He had decided he could make a lot of money if he could find a buyer for his maize in Mekele, a town in Tigray. After a lot of asking around, he found the phone number of a buyer and called to arrange a deal. He told the trader in Mekele that he had good-quality maize, and they agreed on a price. Then, with great excitement, he loaded up a truck and started the trip of 900 kilometers, crossing three regional boundaries. Things started going wrong immediately. He was stopped over and over—more than a dozen times along the way—at road checkpoints where he paid bribe after bribe. The trip he thought would take three days took two weeks. When he finally arrived in Mekele, the buyer, to Abdu's dismay, claimed that the quality of

the maize was poor and that prices had gone down. He was no longer interested in Abdu's maize. Abdu could hardly afford to take the maize back to Nekempt, so he had no choice but to sell at a terrible loss and return home. He told me his story quietly, a bit angry as he recalled the bribes and the trader who turned on him. He would never try that idea again, he said.

The grain that could not move to save lives in 1984 still could not make that journey nearly 20 years later, in 2002.

Starting at the Beginning: The Problem

I went back to Washington with that sobering story replaying in my mind. Despite the tremendous progress Ethiopia had made—expanding fertilizer use by some 200 percent over the past decade, more than doubling agricultural production, and increasing road density by 137 percent—so little had changed. Researchers, including myself, had done studies showing weak market integration and high transaction costs, stark realities that nobody was doing anything about. Abdu's story was not an isolated case of one trader and one market. It was the story of thousands of traders and farmers and end buyers I had come to interview over more than a decade of research on agricultural markets in Benin, Cameroon, Ethiopia, Kenya, Malawi, Mali, Senegal, and Uganda.

Here is what I had learned spending hundreds of hours sitting on sacks and stools all over rural Africa: Most traders rarely grew their businesses or their investments. Trade was limited to short distances, involved very short storage periods, and was confined to networks of family members, friends, or ethnic connections. Those with access to more contacts and better information were better off. Traders faced a high risk that they would not get paid after a trade and that the purchased goods would not be delivered in the right quantity and quality. Because there was virtually no legal means of enforcing contracts, defaults were rampant: I found that 67 percent of traders regularly faced contract defaults as my friend Abdu had, and only 4 percent had recourse to legal means of resolving these disputes. Because trade was over short distances, per-kilometer costs of transport were exorbitant. A lack of standards and certification meant that goods had to be reinspected and rebagged at every trade, pushing handling costs to a whopping 26 percent of the final price. Farmers were even worse off than traders, with less information, fewer connections, and little power to negotiate a better deal. I had calculated that, because of the long chains and the buildup of costs due to high risks and inefficiencies, the farmers' share of the final price in most markets was no more than 30 percent—even without any processing or other addition of value to the commodity from one end of the chain to the other. High costs and the inefficient supply chain simply made it unprofitable to invest in processing; as a result less than 5 percent of Ethiopia's grain was industrially processed. These high domestic transaction costs, including the costs of contract enforcement and information search, made agricultural trade within Africa virtually impossible. What to do with all these facts?

An Idea Whose Time Has Come

At the end of 2002, I returned to Ethiopia, this time to speak at a conference prompted by a looming food crisis in the country and attended by senior policymakers who could do something about these facts, including Prime Minister Meles Zenawi. In the two previous years, bumper harvests of grain had led prices in production areas to collapse by 60 to 80 percent. Although the crisis was caused mainly by failed rains in parts of the country, it was also an indirect result of the preceding bumper harvests. The collapse in prices meant that farmers could not repay their input loans in 2001, and they reduced their fertilizer use by 27 percent in 2002, lowering production even in parts of the country that had good rains. Surplus stocks had not been carried over because of a lack of financing. Now, 14 million people were facing starvation. In my view, 2002 was the year Ethiopia's emerging Green Revolution was stopped in its tracks.

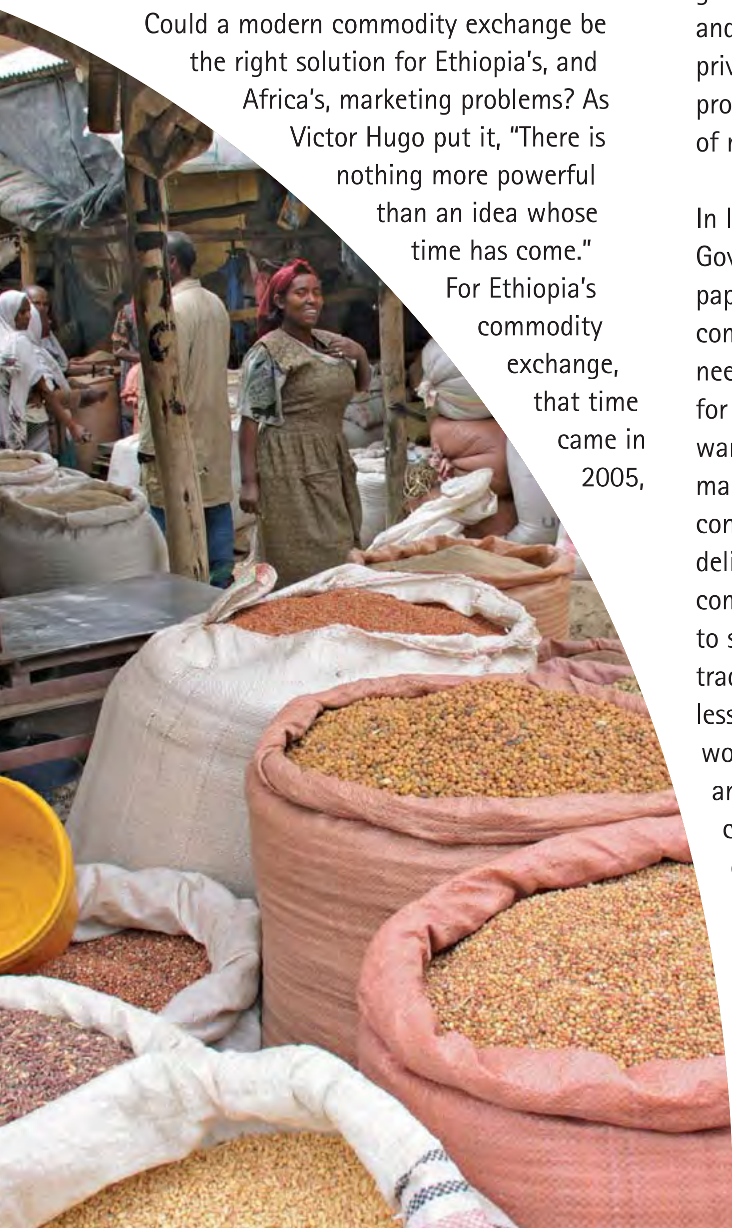
I seized this opportunity to share the facts and tell the stories of Ethiopia's markets and the people struggling to make them work. These stories were likely quite new to the policymakers, whose preoccupation with the urgent challenge of increasing production had not caused them to consider market problems, except to wonder how to keep prices high enough to sustain farmers in bumper years. I spoke about the need for formalized trust in the market and for going beyond infrastructure, such as roads, to put in place the market institutions needed for quality grades and standards, warehouse receipts, market information, coordinated trading, payment systems, and contract enforcement. All of these, I argued, should be established in a holistic and integrated fashion, rather than in the piecemeal approach observed all over Africa in different donor interventions. I pushed further, presenting for the first time the idea that a commodity exchange was precisely the holistic platform that would integrate all of these elements.

I had studied the concept of commodity exchanges for my doctoral dissertation on Ethiopia's grain market, having come upon it almost by accident. I had described to my adviser how the traders and brokers in the Addis Ababa grain market gathered at dawn every morning to assess the supply that had come in during the night from the surplus areas in the northwest, west, and southern regions of the country and the buyers that had come in from the northeast and east. The day's trading would start precisely at 6 a.m., almost as if announced by a bell. Frenzied

2002 was the year Ethiopia's emerging Green Revolution was stopped in its tracks.

bidding would occur, and deals would be made to clear the market, until it abruptly stopped exactly three hours later, every day. All of this happened by tradition, with no government involvement at all. My adviser was startled by this description, exclaiming that it sounded like a commodity exchange in a basic form, with donkeys and laborers instead of polished trading floors and electronic screens.

Could a modern commodity exchange be the right solution for Ethiopia's, and Africa's, marketing problems? As Victor Hugo put it, "There is nothing more powerful than an idea whose time has come." For Ethiopia's commodity exchange, that time came in 2005, several years after that important conference in 2002 when the seed of the idea was first planted. By then, I had been swept up in the momentum of Ethiopia's rising economic agenda and I had returned to my homeland to establish and lead IFPRI's Ethiopia country program after 30 years of living abroad. It was a big move, and this time, in contrast to my student days, I was well placed to interact with government leaders, the donor community, and my oldest friends in Ethiopia—the private traders like Abdu Awol whose problems and constraints I had spent most of my career trying to understand.



In late 2005, at the request of the Government of Ethiopia, I produced a paper summarizing the earlier ideas: a commodity exchange would build the needed institutions from the ground up for grading and certifying quality, issuing warehouse receipts, trading, relaying market information to all actors, enforcing contracts, and ensuring payment and delivery. But that was not all. Ethiopia's commodity exchange would be designed to serve smallholder farmers and small traders, it would not exclude those with less education or less capital, and it would balance the interests of all actors and of the public and private sectors. A commodity exchange would not aim to eliminate traditional markets around the country, but rather to build up these informal markets by adding technology and systems to bring more transparent, more efficient, and more reliable trading to all concerned.

Taking the First Steps

In early 2006, the ideas in the paper were accepted and the green light was given by the prime minister. Almost immediately thereafter, Deputy Prime Minister Addisu Legesse, who was also the minister of agriculture, appointed a task force to start the work in earnest with a new sense of urgency. I was invited to chair the task force, which included nine members from the Ministry of Agriculture, the Quality Standards Authority, the Ethiopian Grain Trade Enterprise, the Ethiopian Institute of Agricultural Research, and the Ethiopian Development Research Institute. Intense consultations were also conducted with a panel of private-sector market actors. The first report of the task force, produced in just 35 days, recommended including foodgrains, oilseeds, pulses, and coffee in the exchange, creating a legal framework, and addressing constraints in financial-sector policies. These recommendations were reviewed and accepted almost immediately.

Before starting work on a detailed design document, I organized a study tour with six senior government officials, including the deputy prime minister, and six private-sector industry leaders, including representatives of the Coffee Exporters Association, the Oilseeds and Pulses Association, the Grain Traders Association, and private banks. We were to visit India's rapidly growing commodity exchanges in Mumbai: the Multi-Commodities Exchange (MCX) and the National Commodities and Derivatives Exchange (NCDEX).

This week-long study tour in May 2006 stands out as a landmark in our journey to establish Ethiopia's exchange. First, it took us from the realm of theory to a real-life exchange in an emerging market with challenges much like ours: small farmers, small traders, weak infrastructure, and a starting base of disorganized informal markets. Second, we saw how the power of technology applied to the market gave small actors around this large country an almost inconceivable degree of information and market access. Third, our delegation—equally composed of private- and public-sector participants—represented the first opportunity for both sides to interact openly on a common agenda. Electricity was in the air as our group of 16 started the week with a meeting to review a checklist of what we planned to learn. Our nightly meetings ran late, long past dinner, as we discussed and debated what we had observed and what it meant for Ethiopia. We refined our model during those debates and made important decisions together.

Although we learned greatly from the experience of India, we made important decisions that significantly departed from what we had observed there. For example, we believed that starting with an electronic trading system would exclude many market actors, given Ethiopia's weaker Internet penetration, so we decided to start with a physical trading floor in Addis Ababa. We agreed that it was important to start with spot trading (for immediate delivery) to build up the discipline and understanding of the formal trading system and to avoid speculation early on. Futures trading would come later. And we thought our exchange should start with a nonprofit orientation, like the traditional exchanges in the United States and Europe, and later transition to a for-profit entity. Not only did we debate these ideas within our group, but we also engaged in deep discussions with our Indian hosts, in both government and the exchanges, exemplifying the best of South-South cooperation.

We returned home invigorated and ready to develop a model tailored to Ethiopia's needs, declaring that our exchange would be an Ethiopian exchange for Ethiopia, not a copy of any particular model. Both policy-makers and private-sector actors had a new confidence in what we were trying to do, and new bonds had been forged between the two sides. We remained committed to exploring and learning from global best practices, later visiting exchanges in Chicago, Johannesburg, Buenos Aires, and Dalian, China. In mid-2006, the final task force report spelled out a complete model for the operational design of the exchange, including the setup of the corporate entity, the sequencing of commodities, a legal and regulatory framework, membership structure and requirements, and training needs. The report was submitted and discussed with government officials, including the prime minister himself, and it was rapidly accepted with revisions.

The Ethiopia Commodity Exchange Project was quickly established, and donor funding commitments were in place by August 2006. Until then, the role of donors had been minimal. Country ownership of the initiative was a guiding principle of the task force. Donor consultation would begin only once Ethiopian actors had decided upon the design framework. When the decision on the final task force report was made, the government approached its development partners with a sense of urgency and clear direction. Five initial donors—the US Agency for International Development, the Canadian International Development Agency, the World Bank, the International Fund for Agricultural Development, and the United Nations Development Programme—committed US$9.2 million in just two weeks. This figure grew over the years as commitments increased. The World Food Programme and the European Union joined the list, and donor funding eventually reached US$29 million.

Getting to the Solution: The Real Work Starts

I was asked to lead the project and was granted permission from IFPRI to do so, after some discussion. This step was a first for IFPRI—it was venturing from policy analysis and institutional research to downstream institutional design, albeit directly related to the recommendations of the research. Over the first few months, I canvassed far and wide to find a team of qualified professionals drawn from private industry—banking, information technology (IT) consulting, management, finance, and law—in the United States, Europe, and elsewhere. I looked for outstanding skills, if possible among top-qualified Ethiopians abroad. But I was also looking for heart—the deep commitment and passion to go the extra mile when the going got tough, as I knew it inevitably would.

As the project started, we made a conscious decision to build all of the elements of the exchange simultaneously rather than sequentially. Lawyers, warehouse and quality experts, IT developers, finance experts, business professionals, trainers, and communications experts were thrust together, creating momentum and a relentless sense of energy. We worked into the small hours of the night for months on end.

For 18 months, the project team drafted, negotiated, and passed two laws to establish the Exchange and its regulator; designed and implemented quality-control and warehouse operations, an electronic warehouse receipts system, a central depository, a financial clearinghouse, an electronic market data system, quality standards, and standard trading contracts; recruited and trained members and regulators; developed the rules of the exchange and a market surveillance system; and launched a nationwide awareness-raising campaign. In addition, the project made a decision early on to design and develop an in-house suite of IT applications for all the various elements and to integrate the IT network infrastructure with all warehouses and partner banks. All of this was done with a project team of just 17 people. This period passed in a blur of momentum, energy, and the conviction that we were making history.

Alongside the technical work, we were involved in continuous policy dialogue and interaction with a private-sector Market Council in an approach that has become a hallmark of the exchange: the careful balancing of technical knowledge with policy and market interests. Another hallmark of our management style was our ability to work across disciplines. Crossing boundaries of function, we engaged in tremendous cross-fertilization and learning in a team environment characterized by speed, innovation, and flexibility, without compromising excellence in performance.

Because we had committed to an exchange that would include smallholder farmers and small traders, recruiting members was particularly challenging. On the one hand, we aimed for a world-class level of performance, using quality standards, standard lot sizes and trading parameters, formal rules and processes, and electronic operations. On the other hand, we needed to serve a diverse set of actors, many of whom had not completed high school,

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had never used a computer, were not comfortable working in English, and had always functioned in the informal economy. With our membership recruitment campaign titled "Grow with Us," we promised that our exchange would embrace small actors whose businesses we would help grow. But this approach required great flexibility without cutting corners on principles. Our membership certification exam, first intended as a computer-based examination, was then offered on paper, then orally, then orally with translation into any of the major national languages. But the test was administered all the same. Bridging this gap and persuading our members to accept modern ways was as difficult as the nuts and bolts of developing an IT-based system in a country with weak telecommunications infrastructure and a limited financial sector. Our project adopted the motto "*Yichalal!*"—"It can be done!"—an expression first used by Ethiopia's famous runner, Haile Gebre Selassie, long before Barack Obama made it his campaign theme. *Yichalal!* became the buzzword used in project meetings when we got bogged down in challenges, the signoff to our emails, and our conclusion in all our public awareness forums before skeptical audiences.

The Finish Line in Sight

On October 10, 2007, just after the start of the year 2000 according to Ethiopia's unique calendar, President Girma Wolde Giorgis gave his traditional opening address to the first Parliament of Ethiopia's new millennium. To my astonishment, he spoke to 25 million television viewers of the country's aspiration to establish a commodity exchange to help resolve the age-old problems faced by farmers. As expectations rose in the country, the Ethiopia Commodity Exchange (ECX), the first of its kind in Africa, was registered as a commercial entity in March 2008, six months ahead of schedule. In keeping with global trends, the exchange was established as a demutualized entity, meaning that the owners, members, and management were separate by law, and set up as a unique public-private partnership balancing the interests of its promoter, the Government of Ethiopia, with those of the private traders who were the members of the exchange and who held permanent, exclusive, and freely transferable membership seats. Earlier, in February 2008, we had recruited 67 of the target 100 founding members of the exchange, who had each bought a membership seat for the equivalent of US$5,000. The first member assembly in March enabled the members to elect five directors to the Board of Directors. The government for its part appointed six directors. At its first meeting in late March, the first step taken by the ECX Board was to appoint me as chief executive officer, on secondment from IFPRI and later from the United Nations Development Programme. Despite our team's exhaustion after two years of nonstop effort and little sleep, we felt heady excitement as a national institution was born. At this juncture, I too came to an important crossroads with the decision to resign from my job as international researcher and head of IFPRI's country program in Ethiopia by mid-2008 and to take up the helm of a business operation, with all the personal challenges and risks that would entail. This was as momentous a decision as it was to resign from the World Bank and move to Ethiopia some years earlier, but it seemed the only and right choice.

Building on our public campaign "A Market for All," the new Ethiopia Commodity Exchange organized a historic national forum on April 4 and 5 at the United Nations Conference Center. Fourteen hundred people attended, and hundreds more had to be turned away at the gate. Participants came from near and far, representing farmer cooperatives, traders, processors, banks, insurance companies, chambers of commerce, government ministries, local governments, academia, donor agencies, embassies, and the membership and staff of the new exchange itself. Prime Minister Meles Zenawi opened the forum, flanked by our champion since 2006, Deputy Prime Minister Addisu Legesse.

This forum established another hallmark of "the ECX way": transparency and open dialogue on every aspect of the envisaged ECX operation, which was presented to the gathered crowd. We unveiled the ECX vision ("to transform the Ethiopian economy by becoming a global market of choice") along with the mission statement

("to connect all buyers and sellers in an efficient, reliable, and transparent market by harnessing innovation and technology, and based on continuous learning, fairness, and commitment to excellence"). And we realized a longtime dream of mine: we organized a mock trading game that was played by hundreds of the country's stakeholders right in the conference hall, with mock trading screens and assigned market positions—all captured on television for the country to see.

As the start date of operations approached, I asked about my old friend Abdu Awol in Nekempt. I wanted to invite him to join this new opportunity. I wanted him to know that from now on, he could sell his maize to anyone in the country simply by depositing it in the ECX warehouse at Nekempt, trade it without a single bribe or delay, and get paid in full at the agreed price the next day. But he had left the business, perhaps because the costs and risks had driven him away or because he had found something better. Ironically, we issued the very first warehouse receipt on April 18, 2008, in our Addis Ababa warehouse, to a man called Hagos Worku, who deposited 324 bags of maize. Hagos happened to be a grain trader from Nekempt, Wollega.

On the morning of April 24, 2008, the opening bell of the exchange sounded for the first time, ringing in a new era of transparency and aspiration for Ethiopia's agricultural economy. That day, as the Lumme-Adama Farmers' Cooperative Union based in Mojo, 100 kilometers to the

south, made the very first sale of maize to a private trading company, Seid Yassin PLC, hundreds of people crowded the trading floor. Television cameras rolled, trading tickets were autographed, and group photographs were taken because everyone knew that day was history.

In the months following our launch of trading maize, wheat, and beans on the exchange, the food price crisis swept across the world, and Ethiopia. Domestic grain prices on and off the exchange spiked by 200 percent by June 2008 amid rumors that exchange trading would create further hikes. Our infant exchange was nearly brought to a halt. The slowdown of trading in foodgrains accelerated our push to introduce new commodities with more assured market liquidity. We turned to coffee, an export commodity we had planned to introduce in a later phase, as well as sesame seed, another important export commodity. After intensive policy discussions on coffee, in July 2008 a law was passed to replace the legislation that had governed Ethiopia's coffee auction since the 1960s. Henceforth, all Ethiopian coffee not directly exported by farmers would be traded not in the old auction, but rather in the Ethiopia Commodity Exchange.

The day the coffee law passed, our management team met in the lobby of the Hilton Hotel—ostensibly to celebrate, though in truth we were somewhat stunned. One team member impulsively held out his mobile phone and snapped a group picture to record the moment. We had expected and even negotiated this decision, but it now seemed so sudden and even overwhelming for our fledgling exchange. Could we handle the dramatic increase in operational volume from a few hundred tons to more than a hundred thousand tons in the coming year? Could we face the tremendous pressure from the vested interests that had corrupted the coffee trade over the past 40 years? Were our systems and in-house technology resilient enough to take this on without a major glitch? We fretted, strategized, and talked ourselves into a game plan, late into the night.

What's in a Bean?

They say that ignorance is bliss. There was some truth to that in our approach to introducing coffee on the exchange. Had we known the complexity of the coffee plant, grown indigenously in Ethiopia for the past 3,000 years, with hundreds of varieties and flavor profiles, had we predicted the strong emotions aroused among specialty coffee roasters and consumers all over the world, had we estimated the power behind the political economy of coffee in our country, we would likely have given ourselves four years rather than four months to prepare to launch coffee trading in the ECX. But we had not.

As we had done in our project phase, we blinded ourselves to all that could go wrong and got on with the business of virtually rebuilding every operation in preparation for coffee trading in December 2008. We met repeatedly with representatives of the coffee industry to establish standards and classifications by origin for the country's many unique coffees, we increased our warehouse capacity fourfold, we hired staff, we added partner banks, we added and trained a new class of 400 limited members, and we amended our rules and revamped our data systems and software.

But this careful and intense preparation did not ready us for the onslaught of resistance by the powerful coffee exporters. They were happy to continue in the old auction, where getting past the auctioneer's rules, writing blank checks to small rural suppliers, under-invoicing export contracts, and colluding on bid prices had been the norm. Nor had we anticipated the controversy that would arise among international buyers of Ethiopia's high-quality, niche market, or "specialty" coffee, who denounced the exchange as the end of history for Ethiopian coffee.

Throughout 2009 we went through a painful and painstaking process of consulting with hundreds of industry buyers from Germany, Japan, Saudi Arabia, Switzerland, the United States, and elsewhere. We conducted "road shows" around the countryside addressing thousands of coffee farmers, coffee suppliers, and coffee exporters, as well as regional and district-level government officials, all bewildered by the implications of the new system that enforced standards, required compliance with rules about competition and orderly trading, and brought transparency where there had been none.

One of the lowest points in my career came while I was speaking at an international coffee event in Atlanta in April 2009. I was confronted by a hostile crowd of a couple hundred coffee buyers and roasters who were angry at the changes brought by ECX and who would not even let me finish what I had to say. On the long flight home, I could not sleep, deeply worried about the negative interaction. I decided to do something radical. I wrote an open letter to all buyers of Ethiopian coffee to explain to them, with as much respect and patience as I could muster, why a coffee-producing country like ours would choose to create a transparent and fair system to benefit our farmers, who deserved better than the grinding poverty in which they lived. I wrote that we were joint stewards of our precious coffee—they as consumers and we as producers—linked through the global value chain. I committed to listen to their concerns and asked for their partnership. I sent the letter as soon as I landed, and in a matter of days it had spread across cyberspace, posted on websites, coffee blogs, and email lists around the world. In the following months, slowly, the tide began to turn. We engaged in dialogue with the Specialty Coffee Association of America (SCAA), and, after intense technical consultations, in October 2009 we invited all buyers to a specialty coffee event in Ethiopia to introduce our new specialty coffee-trading system, later acknowledged by the SCAA as "the most sophisticated specialty coffee quality discovery system for arrival coffees in the world."

What did we learn from the coffee experience? That flexibility, humility, and willingness to learn and to respond quickly and effectively had saved us from a serious threat; that transparency bites on both sides of the Atlantic; that vested interests cannot be ignored; that one cannot overinvest in public relations; and that people, relationships, and trust were far more important than the modern electronic systems and processes we had created. As we moved to introduce sesame seed and white pea beans into the exchange in 2010, we approached the people side of the equation more cautiously and perhaps more systematically.

Whose Market and How Free?

As challenging as coffee was, it was not the most contentious issue I faced. Rather, it was the perception that because the Government of Ethiopia sponsored ECX and fully owns it, ECX cannot be a free market, that it must be an instrument of control and a typical, bureaucratic, state-owned enterprise, and that it must be a monopoly. As someone who has published on market reforms and been outspoken on the need for market liberalization, I found these perceptions especially troubling.

Rather than avoid these issues, I preferred to address them directly. In my view, we have moved from the era of African marketing boards in the 1960s and 1970s, when governments tried to do everything, to the period of structural adjustment in the 1980s and 1990s, when governments were told to do nothing, to an emerging "third wave," when governments and the private sector are forging a path together. This is an interesting and creative time. In the case of the ECX, while the government owns the exchange entity, the private members own their membership seats on the exchange. The exchange is set up on a nonprofit basis, but members gain significant profits from the exclusive trading rights

conferred by their seats, as on any exchange in the world. In other words, the government has, with its financing partners, put up the money to sponsor the entity for social welfare reasons, while the members get the private benefits of its existence. Ours is thus a unique public-private partnership, now considered pathbreaking for others in Africa.

Ultimately, concerns about ownership are really concerns about control and who calls the shots. Early on, I started humorously explaining in my public speeches and briefings to visitors that there is no red phone on my desk where I receive orders from above. In fact, we had put in place several legal mechanisms to prevent such a thing from happening. Our model of demutualization, for example, goes beyond the separation of ownership and membership to also require a separation of management from the other two. The law is explicit that the exchange's management is independent and autonomous, and the corporate governance structure requires a Board of Directors made up nearly equally of private and public actors. Our first Board Chairman, Mekonnen Manyazewal, a highly respected economist and the state minister of finance, was unequivocal in his respect for the autonomy of the management and for our unique status as a public-private undertaking. Finally, also by law, the exchange does not pay any dividends, or earnings, to its owner, meaning that the government's Treasury neither allocates any recurrent budget to the exchange nor receives any earnings. So, although the government is the owner, it shares governance and control of management with private stakeholders, bears the risks associated with the entity, and receives no financial returns. This seems like a good example of an enabling environment.

The other concern about government ownership relates to efficiency and responsiveness to the market. In practice, the ECX functions like any professional, commercial business: the bottom line is based on performance and results. We have a strong member-client relations team whose sole function is to ensure customer satisfaction with our services and products. We have many points of interaction with the government on policies and regulation, but key management and operational decisions—such as our salary structure, staffing, public relations and branding, procurement, member management, and the day-to-day running of our market—are entirely independent. Over the years a few regulatory crises have occurred within our market, and the ECX took a public stand to defend our members' rights and to safeguard the principles on which the market functions. This is no different from what occurs in other countries, where markets and regulators occasionally have differences.

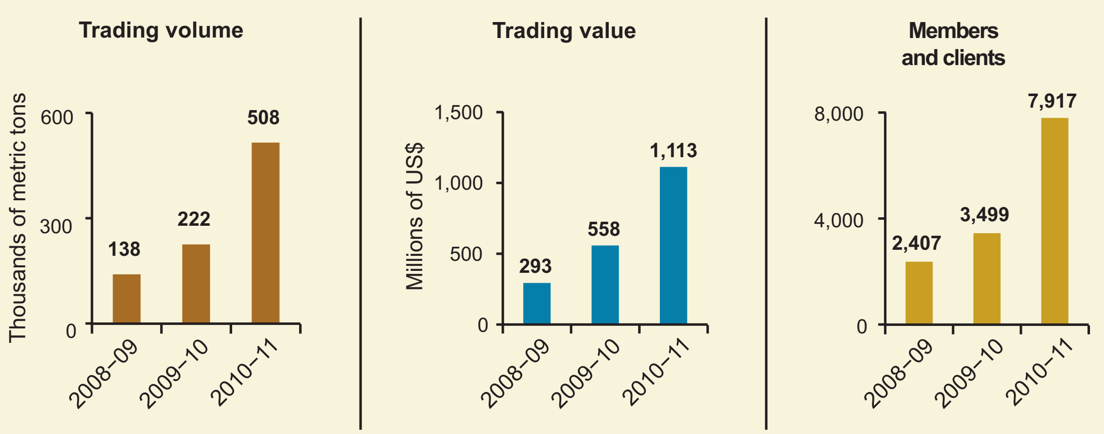
Are we a monopoly? I like to tell skeptics that, as far as I know, there is only one market in the world where one can buy or sell a share of GE or IBM, and that is the New York Stock Exchange. Similarly, only one market lists Brent crude oil—the basis for the trading of two-thirds of the world's traded crude petroleum oil—and that is the Inter-Continental Exchange (ICE), a commodity exchange based in New York. Although there may be thousands of brokerage firms or electronic platforms to facilitate the trading, the connection between buyer and seller occurs in just one marketplace. These exchanges are far from monopolies as the word is commonly understood. They embody the very essence of the free market, where anyone can trade freely with anyone, at any price, at any time. However, they are exclusive markets for the trading of particular commodities or shares. In fact, an article in the U.S. Commodity Exchange Act explicitly prohibits trading a commodity futures contract outside of a licensed and regulated exchange. Why? For one simple reason: price discovery. To discover the true price of a commodity, it is not only efficient but necessary to have all suppliers and all buyers meet in a single market.

Beyond the Opening Bell

At the end of 2009, we held our first auction of membership seats, adding 150 seats to those of the 100 founding members. The auction resulted in a fourfold increase in the average seat price. The highest bid, made by a coffee exporter, was an incredible US$310,000, or 62 times the initial seat price offered just 18 months before—what a report card for the ECX!

In 2010, we returned to trading in foodgrains—our original focus—by negotiating an agreement with the World Food Programme to buy maize through the exchange. This giant food buyer had to bend its procurement policies to accommodate the nontendered, open,

Figure 1—The growth of the ECX



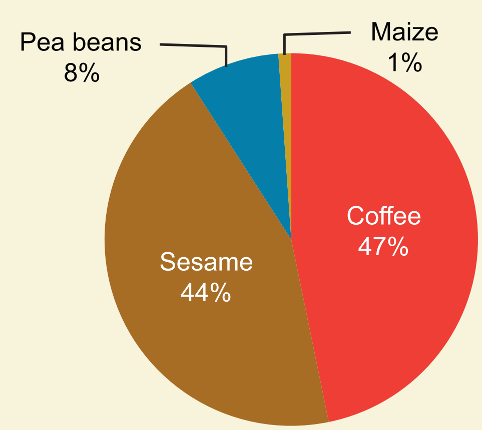
Source: ECX.

and transparent process of buying on an exchange trading floor, with a promising start of 6,000 tons of maize traded in 2010. On February 11, 2011, we celebrated "1,000 Days of ECX," US$1 billion in trades, and zero defaults with an enthusiastic crowd of one thousand, a display of the diverse cultures of Ethiopia, and a band that played into the night.

As we completed our third harvest year of operation in July 2011, we looked back at our ECX journey (Figure 1). Our growth has been phenomenal: we went from trading 138,000 tons in our first year to 222,000 tons, still mostly coffee, by our second, and to 508,000 tons in our third year, with nearly equal shares of coffee and oilseeds and pulses (Figure 2). The value of ECX trades has risen by 368 percent to reach US$1.1 billion in 2010–11. Our storage operations have grown from one warehouse in Addis Ababa to 55 warehouses in 17 regional locations, and from 5,000 tons to a total capacity of 250,000 tons (Figure 3). In 2010–11, we graded, weighed, stored, handled, and delivered 4.7 million bags without a single delivery default. Membership is at 243, and our clients, who trade through our members, number about 7,800. Farmer cooperatives representing 2.4 million smallholder farmers make up 12 percent of our membership. We have electronically linked our clearinghouse to 10 partner commercial banks, and we settle US$20 million or more daily on a "*T* + 1" basis (that is, the day after trade)—the only stock or commodity exchange in Africa to do so. In other words, anyone can sell to anyone in Ethiopia and be assured of payment the next morning. We have not had a single payment default, shortfall, or delay since our start. This is a financial revolution in itself.

Our market data reach far and wide. We "push" price data in real time, in less than 2 seconds, to outdoor electronic ticker boards in 32 rural sites; to our website, which attracts visitors from more than 107 countries daily; to 256,000 mobile subscribers through instant messaging; and to the radio, TV, and print media. Users can also "pull" market data through our toll-free phone-in service, which received more than 1 million calls in September 2011. That's 61,000 calls each trading day, of which 70 percent were from rural users. This is nothing short of an information explosion in Ethiopia, and we are pushing further still.

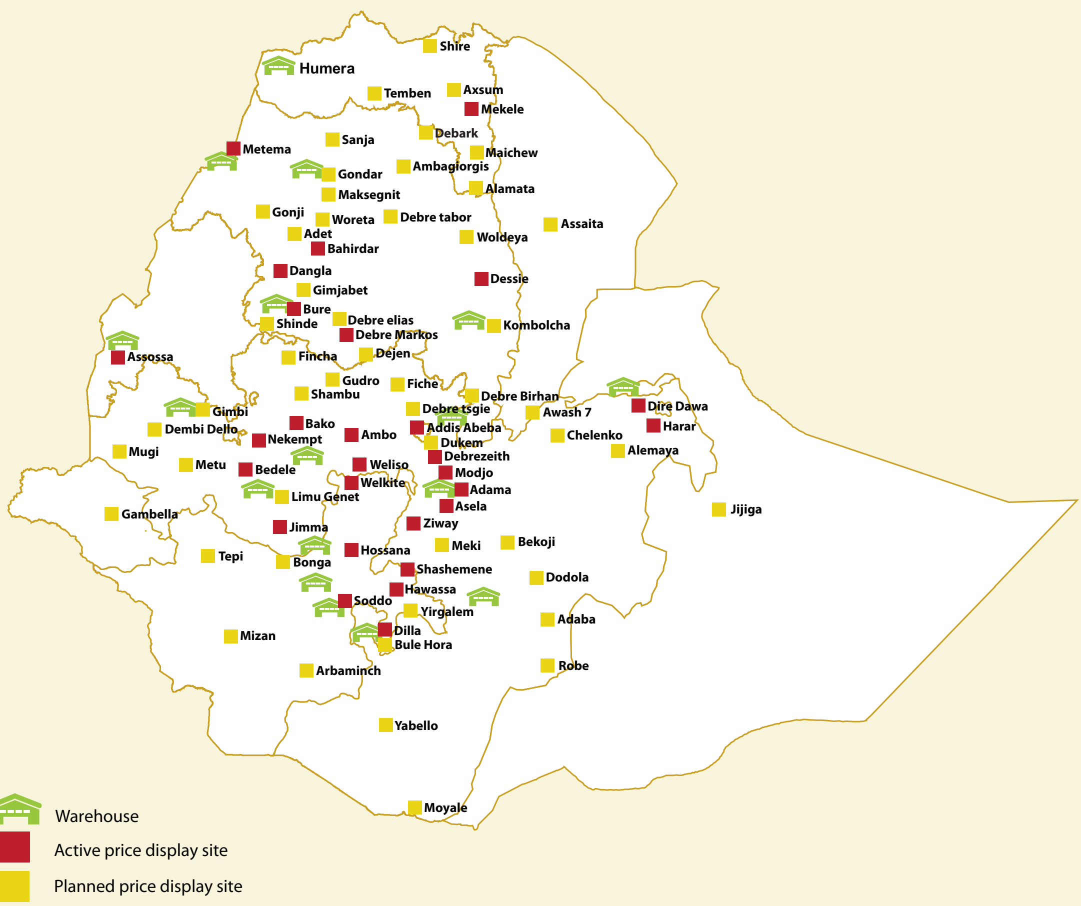
Figure 2—Commodities traded at ECX, 2010–11



Source: ECX.

As farmers gain access to better price information, they see the price differences between different grades of traded commodities. This information encourages them to know what their goods are worth and to bring better-quality goods to market. Over the course of two years, we have seen a tripling of trade volume in the top three grades of coffee. As access to information has become more balanced, marketing costs due to inefficient and lengthy marketing chains have shrunk, and local, national, and even global prices have started to converge. As a result, Ethiopian coffee farmers today receive 70 percent of the final price, rather than the 38 percent that researchers had measured in the years before ECX. Because they are negotiating better prices and

Figure 3—ECX warehouses and display sites, 2011



Source: ECX.

are assured of full payment the next day, they can plan to invest in more inputs and improved farming practices. Last year, we introduced a system for farmers and rural traders to receive bank loans using their warehouse receipts as collateral, opening a whole new world of opportunities in rural finance.

Our members have also evolved. Many have gone from sole proprietor businesses—like Abdu—trading from trucks and market stalls in the informal economy to become consolidated, registered, licensed, and tax-compliant firms that are opening small brokerage offices located not far from our building. Several of our members take night classes to complete high school and in the use of computers in preparation for our electronic trading because, as they often remind us, they really do intend to continue growing with us!

Our exchange itself has become financially sustainable as a company and runs its operations on a tight and cost-efficient basis, with minimal fees charged to the market. Our staff has grown from 34 employees on our first day of trading to nearly 600, with all sorts of incentives to nurture innovation, risk-taking, passion, and a culture of excellence. We pride ourselves on being a knowledge company—we carefully use data and evidence to track our internal performance and enable anyone to obtain large amounts of market data from our website in a matter of seconds, a first for Ethiopia. And there is always more planned at ECX: more products and more services to add value to the livelihoods of those in the markets we serve. We have started designing a system of futures trading to enable price risk management in the coming year. We have created the ECX Institute, a new training, research, and technical advisory arm, to add to the store of knowledge in the market and to respond to more than a dozen African countries that have requested our help to design and launch their country exchanges. Having shown that the improbable can be possible and that a country like ours has not only dared but has achieved a big dream, we have replaced "*Yichalal!*" from our project days with "The Best Is Yet to Come."

In the summer of 2011, as we started the fourth year of our ECX journey, the Horn of Africa was once again hit by the scourge of drought. Yet as famine loomed starkly in neighboring Somalia, the world watched as Ethiopia managed to avert a food crisis, with an effective famine early-warning system in place, a well-run productive safety net program, and yes, a commodity exchange that changes the way farmers and traders behave in the market. I think Abdu would be proud.

IFPRI's series of occasional essays provides thought leaders the opportunity to reflect on food policy changes in their respective countries.

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