on farming as the main source of income in her home, located in the Mchinji district of Malawi. As she sought to improve her farming techniques, she joined the National Smallholder Farmers' Alliance of Malawi (NASFAM), the largest independent smallholder-owned membership organization in the country. During the next planting season, she benefited from NASFAM's farmer-to-farmer training program and learned good agricultural practices to improve crop quality and yields. Her membership benefits went beyond increased productivity. Thanks to NASFAM's capacity to procure in bulk the members' produce and transport them to points of sale domestically and abroad, Livinesi found more profitable commercial outlets for her production and her earnings increased substantially. Through her membership, Livinesi was able to improve her farming operation's production and marketing prospects.1

Livinesi Mateche has always depended

Identifying and analyzing the direct and indirect regulatory barriers to women's full participation in the agricultural sector are essential to increasing productivity among women. Underlying constraints include unequal access to finance, land and agricultural inputs such as improved seeds, fertilizer and machinery. In addition, traditional norms may impact the utility of agricultural resources for women. The private sector has a role to play in addressing some of those constraints, and examples abound of agricultural and agribusiness companies that have designed creative initiatives to lift certain obstacles (box 11.1). In addition to those private sector-led efforts, regulatory initiatives are needed to secure land tenure for women, provide financial inclusion and market access, and increase women's access to crucial agricultural inputs.2

In Sub-Saharan Africa, for example, although women make up around 40% of the agricultural labor force, their agricultural productivity lags far behind.3 Controlling for plot size and geographic factors, the gender productivity gap is estimated to be 66% in Niger and 23% in Tanzania.4 Not only does the gender productivity gap carry direct social and economic consequences for women farmers, but it also has a significant impact on the economy. In Malawi and Tanzania, for example, lower female productivity is estimated to cause annual losses of \$100 million and \$105 million, respectively. For those same countries, experts also estimate that closing the gender productivity gap could increase crop output up to 8.1% and 3.9%, respectively.⁵ Research conducted in Burkina Faso further suggests that, at the household level, reallocating some agricultural inputs, and notably fertilizers, from the plots farmed by men to those farmed by women could lead to a 6% increase in output.6 Finally, closing the gender gap in agricultural productivity could lift tens of thousands of people out of poverty.7

A 2015 report indicated that \$12 trillion could be added to global income by 2025 by advancing women's equality through the public, private and social sectors acting to close the gender gap. Correspondingly, agribusinesses have been engaged in numerous projects targeting women, including their role and influence in agriculture. For example, one project aims to help women overcome barriers in cocoa farming communities in Côte d'Ivoire, where only 4% of the cocoa farmers are women. The project provides female-only training to farmers to help them improve their agriculture and business skills, as well as offering gender-sensitive trainings for rural development agents. In Zambia, another project runs a training program for female tractor

drivers in the coffee estates. In Mali there is a program that seeks to address women's participation in agricultural leadership roles, by offering women's producer organizations farming tools and additional training free of charge.^a

Food conglomerates and other food companies are increasingly demanding that the raw materials they purchase are produced sustainably and in a gender-sensitive manner. For example, one project reviewed women's role in the cocoa value chain in Côte d'Ivoire and Ghana. The project was based on the recognition that women's leadership at all levels is required to achieve transformative change in the sector.^b

a. Woetzel et al. 2015; http://www.cargill.com/connections/empowering-women-cocoa-farmers-in-Cote-dlvoire/index.jsp; http://olamgroup.com/sustain-ability/gender-hub/agri-employment-women/just-jobs-boys/; http://www.louisdreyfusfoundation.org/en/what-we-do/micro-farming-initiatives-africa/program-support-female-smallholders-their-daily-farming-providing-them-training-and-equipment/.

b. http://insights.careinternational.org.uk/publications/women-s-leadership-in-cocoa-life-communities.

How can the EBA indicators help female farmers?

Although not all EBA indicators are specifically designed to capture differences in legal and regulatory treatments between men and women, they all measure aspects of the business environment that matter for all participants along agricultural value chains, regardless of gender. The EBA indicators measure the business environment for farmers and agribusinesses in the context of inputs (seed, fertilizer and machinery), finance, markets, transport, information and communication technology (ICT), water and land, and are relevant to the economic and social advancement of those involved in those sectors. Among them, women can benefit from an improved business environment as measured by EBA indicators, through at least four channels, namely: 1) streamlined procedural and operational requirements for businesses; 2) member-based rural institutions; 3) innovation for financial inclusion; and 4) land use and ownership.

Streamlined procedural and operational requirements for businesses

Streamlining the agribusiness environment, lifting cumbersome procedures and minimizing procedural costs and delays can benefit farmers. Nevertheless, the benefits that could accrue to women are particularly significant due to their proportionately higher numbers in the agricultural sector, and the low-quality capital, information and time resources to which they typically have access.8 EBA markets indicators, for example, measure some of the transaction costs for exporting agricultural goods. Women who wish to export

agricultural products will benefit from streamlined procedures to obtain all the necessary documents, such as phytosanitary and quality certificates, in less time and at a lower cost. Minimizing entry requirements such as export licensing and mandatory memberships will also facilitate women's access to export opportunities. Furthermore, EBA indicators on inputs measure the regulatory constraints for registering new seed varieties, fertilizer products and agricultural tractors. Regulations that ease the burden on importers and dealers can make such inputs more readily available and affordable in remote regions, and thus more accessible to women farmers.

Member-based rural organizations

Rural women can also benefit from and be empowered through member-based organizations such as producer organizations (measured by the markets topic), financial cooperatives (measured by the finance topic) and water users' associations (measured by the water topic), all of which help their members overcome obstacles relating to access to productive capital (seed, fertilizer, machinery and water), access to markets or access to finance. For example, where laws and regulations facilitate the establishment, operations and capitalization of agricultural sales cooperatives, women can benefit from a regulatory environment that enables them to create, join and take leadership positions in such entities.9

Innovation for financial inclusion

Several studies suggest that low financial inclusion rates for women not only constrain agricultural

productivity but also reduce food security, nutrition and education investments.¹⁰ Accessing appropriate finance continues to be a significant challenge for women. For example, in Uganda, although 38% of all registered companies are owned by women, only 9% of credit is accessible to them; and in Kenya, where women own 48% of micro and small enterprises, only 7% of credit is accessible to them. 11 Women generally face legal impediments, discriminatory bank practices and male-favored cultural assumptions that limit their access to suitable financial services. 12 The fact that women usually do not possess assets that could serve as collateral also reduces access to finance, as does the lack of formal credit institutions in rural areas.¹³ Microfinance institutions (MFIs) are a crucial alternative to traditional credit providers and banks, and the majority of MFI clients in many regions of the world are women. 14 Financial cooperatives can also provide an alternative to commercial banks. EBA finance indicators encourage the creation of a regulatory environment for MFIs and financial cooperatives, and they analyze the range of assets that banks accept as collateral.

Land use and ownership

Land is one of the most essential elements for agriculture, and therefore any limitations on land use or ownership by women also restrict the economic autonomy of women and compromise agricultural productivity.¹⁵ Less than 20% of agricultural landholders worldwide are women.¹⁶ Insecure land tenure for women discourages financial and physical investments to improve the quality of land for production, and compromises the ability of women to pledge land as collateral to obtain financing.¹⁷ EBA land data measure leasing of land, public land management, procedural safeguards in case of expropriation, gender disaggregation of land records and relevance of land records—implementing good policies and regulatory practices in these indicators can help improve women's use and access of agricultural land.

What gender-relevant data were collected this year?

The following areas of research were chosen for coverage in EBA 2017: availability of gender-disaggregated data, restrictions on women's employment and activity, women's participation and leadership in collective groups and nondiscrimination legal provisions. These questions build on findings from the *Women, Business and the Law* dataset, which already identifies many relevant constraints.¹⁸

Availability of gender-disaggregated data

Regulation can ensure banks and MFIs collect gender-disaggregated data by including such requirements in their reporting obligations. In only 6 of the 62 countries studied, however, are commercial banks required to disaggregate their loan portfolio information by gender. The same obligation applies to deposit-taking MFIs in 14 of the 33 countries where MFIs are allowed to take deposits (figure 11.1).

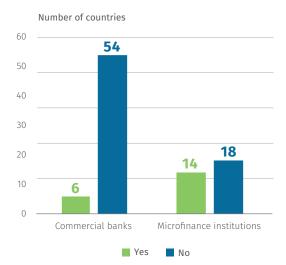
The land topic provides information on the availability of gender-disaggregated data on land ownership across 38 countries. In 18 of those countries, land registries gather gender-disaggregated data for individually and jointly-registered land.

Restrictions to women's employment and activity

Regulations restricting women's participation in certain professions actually deny income-generating opportunities to women and shrink the pool of workers that firms can employ. Identifying employment restrictions in the agricultural and agribusiness sector can complement the sectors already identified by the *Women, Business and the Law* dataset, including construction, factory work, metalworking and mining. EBA collected data on employment restrictions in the context of handling pesticides or fertilizers, driving trucks and using agricultural tractors.

Among the countries surveyed, Kyrgyz Republic and Vietnam both prohibit women from handling fertilizers and operating tractors. Egypt, and the Russian Federation also impose restrictions on handling fertilizer and tractor use, respectively.

Figure 11.1 | Are commercial banks and MFIs required to collect gender-disaggregated data?

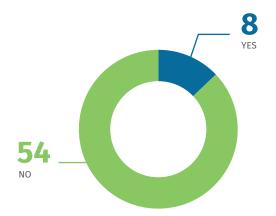


Source: EBA database.



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Figure 11.2 | Do quotas or other mechanisms exist to promote women's leadership in member-based institutions?



Source: EBA database.

Note: Member-based institutions cover producer organizations, financial cooperatives, and water user organizations. All of the 62 countries covered have enacted specific legislation to govern producer organization or have at least some mention of producer organization in their broader legal framework, 56 have done so for financial cooperatives, and 44 have done so for water user organizations. In addition to quotas, other mechanisms to promote women's leadership include general mentions of gender balance for board selection and composition. A country is considered to have such quota or other mechanism in place if any of those applies to at least one of the three member-based institutions under consideration.

Women's membership and participation in producer organizations

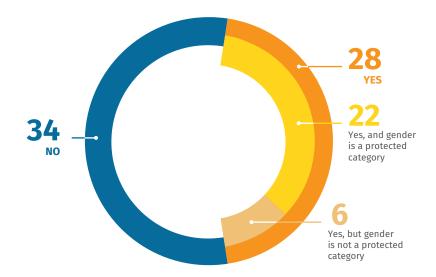
Limitations on the ability of women to become members of organizations such as agricultural cooperatives compromise their ability to capitalize and commercialize their produce, and turn smallholdings into profitable agribusinesses.

Strong laws and regulations stipulate mandatory membership criteria that cooperatives apply to all member applicants, to avoid the development of bylaws that may restrict women's participation. Membership criteria requiring land ownership or full-time farm employment, or restricting membership to heads of household or to one member per household, have a tendency to limit women's access to member-based institutions on a *de facto* basis.¹⁹ Of the 62 countries surveyed, only 4 countries (India, Russian Federation, Rwanda and Serbia) require that producer organization membership be limited to one member per household. In Nigeria, cooperative members must have legal ownership over land. On the other hand, a new agricultural cooperative law adopted in Greece in April 2016, now allows women-only cooperatives to be established with only 5 female founding members, compared to regular cooperatives where 20 members are required.

Encouraging women to hold leadership positions in local organizations also plays an important role in



Figure 11.3 | Do producer organizations have to comply with the principle of nondiscrimination?



Source: FBA database

promoting gender equality. Quotas can establish the necessary critical mass of women as members and leaders to engender change in policy and the institutional culture and lead to more productive, profitable organizations. Eight of the 62 countries surveyed (Greece, India, Kenya, Korea, Nepal, Nicaragua, Rwanda, and Spain) have proactive policies to promote women's participation in the leadership of such groups (figure 11.2). In most cases, a guota is used and set out in applicable legislation. This is the case in India, where most state cooperative laws have a legally mandated minimum requirement regarding the number of women to be included in cooperative managing committees. Similarly, in Kenya, the 2010 Constitution mandates that no more than two-thirds of the members of elective or appointive bodies, including cooperatives boards, shall be of the same gender.

Nondiscrimination

EBA also collected data on whether specific laws on producer organizations, financial cooperatives and water user organizations require them to adhere to principles of nondiscrimination and if gender is specified as a protected category.²⁰

In the laws directly applicable to producer organizations, legal protection against discrimination is provided in 28 of the countries studied. Among those, 22 specifically provide that gender-based discrimination is prohibited (figure 11.3). For example, Mexico's Law on Cooperatives provides that cooperatives must guarantee equality in rights and duties among members and equality for women. Similarly, Nicaraguan and Bolivian laws establish the principle of gender equality as applicable to cooperative operations. Nicaragua requires cooperatives

to promote the integration of women in cooperatives through specific programs and campaigns.

In other countries the constitution contains a nondiscrimination clause. According to the *Women, Business and the Law* database, 42 countries from the EBA sample have legal protection against discrimination, 28 of which mention gender as a protected category.²¹

Conclusion

As they assess the overall business environment for agriculture and agribusiness, EBA indicators cover a range of regulatory and procedural aspects that have a direct impact on women working as producers and at other levels of the agricultural value chain. New data were collected this year to highlight some areas where regulations can have a more direct impact on women's productivity and opportunities for advancement. Those areas include the availability of sex-disaggregated data with regard to banking and land transactions, the existence of legal restrictions to women's employment in agriculture-related activities and the existence of legal obstacles to women's participation in membership-based organizations such as producer organizations, financial cooperatives and water users' associations. Progress on these areas as well as across EBA indicators in general can improve women's prospects and participation in agricultural value chains and ensure that women are on an equal footing with men. It is hoped that through a mix of existing agricultural policies becoming more gender-inclusive, and the designing of new policies that are gender-targeted, constraints will be lifted and the particular needs of women in agriculture will be better met.

NOTES

- 1 http://www.wfo-oma.com/women-in-agriculture/case-studies/the-story-of-livinesi-mateche.html.
- 2 UN Women 2016.
- 3 Palacios-Lopez, Christiaensen and Kilic 2015.
- 4 O'Sullivan et al. 2014.
- 5 FAO 2011.
- 6 Duflo 2012; Udry 1996.
- 7 World Bank 2015.
- 8 Simavi, Manuel and Blackden 2010.
- 9 http://www.fao.org/gender/gender-home/gender-insight/gender-insightdet/en/c/164572/; Clugston 2014.
- 10 World Bank 2015; African Development Bank Group 2015
- 11 African Development Bank Group 2015.
- 12 OECD 2016.
- 13 World Bank 2009.
- 14 Almodovar-Reteguis, Kushnir and Meilland 2011.
- 15 OECD 2014.
- 16 UN Women 2016.
- 17 OECD 2016; African Development Bank Group 2015.
- 18 The Women, Business and the Law indicator, using property, is extremely useful in determining some constraints women face related to land use and ownership. For example, according to this dataset, in about 20% of the EBA sample countries, the law does not give men and women equal inheritance rights.
- 19 Prakash 2003.
- 20 A nondiscrimination provision is based on the principle of fairness and equality under the law. It prohibits discrimination in the treatment of members in regardless of gender, profession, income and so on. For instance, it may include language requiring fair terms for women and men when joining as a member or applying for a loan.
- 21 See wbl.worldbank.org.

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