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Measuring Entrepreneurship from a Gender Perspective: Lessons Learned from the EDGE Project

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“A woman attends her post in a market in zone 3”, Guatemala City. Guatemala. Photo: Maria Fleischmann / World Bank Photo

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PREFACE

Entrepreneurship is recognized as a key element for women's economic empowerment in the 1995 Beijing Platform for Action, the 1995 World Summit for Social Development, and the United Nations General Assembly resolution 67/202,¹ and it is strongly linked to the realization of the 2030 Agenda for Sustainable Development, particularly in terms of achieving gender equality and full and productive employment and decent work for all.

With increased evidence on the fact that entrepreneurship is not a gender-neutral phenomenon, interest in women's entrepreneurship and in gender gaps in entrepreneurship participation and performance has grown among both scholars and policymakers. While the rationale for women's entrepreneurship has traditionally focused on enhancing women's equality, empowerment and social inclusion, its development is now widely accepted to make good economic sense, as women entrepreneurs can be a powerful economic resource. Studies show that women entrepreneurs make significant contributions to economic growth and poverty reduction, not only in developing countries but also in high-income countries². Women entrepreneurs boost employment by creating new jobs for themselves and others. Furthermore, women's entrepreneurship supports the diversification of business, stimulating innovation and diversification in management, in production and in marketing practices as well as in products and services. Women tend to provide different solutions to management, organizational and business problems than men³.

Despite the clear policy relevance of measuring entrepreneurship from a gender perspective, there is a lack of harmonized and regularly produced official data on the nexus between entrepreneurship and gender, in part due to the absence of standards and methods for collecting the required information.

To address these data and methodological gaps, in 2013 the Evidence and Data for Gender Equality (EDGE)⁴ project initiated methodological work to develop and pilot methodologies to integrate a gender dimension into entrepreneurship data. UNSD and UN Women worked closely with national

¹ A/RES/67/202

² World Bank (2014). Supporting high-growth potential women entrepreneurs. *Innovation, technology and entrepreneurship policy note*; no. 5. Washington, DC: World Bank Group.

³ Kelly, L. (2014). *Entrepreneurial women: new management and leadership models*. Westport, CT: Praeger.

⁴ EDGE is a joint initiative of the United Nations Statistics Division (UNSD) and the United Nations Entity for Gender Equality and the Empowerment of Women (UN Women).

statistical offices, the Asian Development Bank (ADB), the International Labour Organization (ILO), the Organization for Economic Cooperation and Development (OECD), the World Bank (WB) and other experts to identify sound statistical concepts, definitions and methods to fill the information gap on women and men entrepreneurs at the national level, and to improve comparability of data internationally. The proposed EDGE methodology was tested and revised based on the results of data collected in six pilot countries- Georgia, the Maldives, Mongolia, the Philippines, South Africa and Uganda, over the period 2014–2016 and multiyear experts' consultations.

This technical report presents the different steps followed under the EDGE project to develop a conceptual framework and related indicators for measuring entrepreneurship from a gender perspective. It also includes a brief review of existing research on gender gaps in entrepreneurship; the EDGE survey instrument; and results of pilot studies as well as feedback received from countries. The report concludes with lessons learned from the implementation of the EDGE project and highlights topics for future research.

Given the adoption in October 2018 of the revised *International Classification of Status in Employment* (ICSE-18), and its implications on the definition of “entrepreneurs”⁵, this report should be used as a starting point for further development of practical guidance on how to measure entrepreneurship, from a gender perspective and in line with ICSE-18.

Throughout this technical report, the terms “business”, “enterprise”, “company” and “firm” are used interchangeably, in line with the OECD’s definition⁶ of an enterprise.

⁵ ICSE-18 was adopted in Resolution I of the 20th International Conference of Labour Statisticians (ICLS) in October 2018. International Labour Organization, document ICLS/20/2018/Resolution I, available at https://www.ilo.org/wcmsp5/groups/public/-ddgreports/---stat/documents/meetingdocument/wcms_648693.pdf According to the adopted definition, entrepreneurs are “persons who own and control an enterprise and seek to generate value through the creation of economic activity by identifying and exploiting new products, processes or markets. In doing so, they create employment for themselves and potentially for others.” The Resolution also noted that “independent workers” in the revised classification of status in employment (ICSE-18) provided the best starting point for the statistical identification of entrepreneurs.

⁶ OECD (1993). Glossary of Industrial Organisation Economics and Competition Law, compiled by R. S. Khemani and D. M. Shapiro, commissioned by the Directorate for Financial, Fiscal and Enterprise Affairs. According to the adopted definition, an enterprise is “a term in the commercial world used to describe a project or venture undertaken for gain. It is often used with the word “business” as in “business enterprise”. Usually, by extension, it refers to the business entity carrying out the enterprise and is thus synonymous with “undertaking”, “company” or “firm”.”

INTRODUCTION

A. Background

1. The role of entrepreneurs in creating jobs, innovation and in stimulating economic growth has received new attention as the development of information and communications technology and other advanced technologies has fostered new breeds of start-ups, and new attitudes toward entrepreneurial activity. Entrepreneurs, and the new businesses they establish, are now seen as an important source of economic growth and as critical in the development and well-being of their societies. As such, there is increased appreciation for and acknowledgement of the importance of new and small businesses in an economy. Fostering entrepreneurship is a key policy goal for governments that expect that high rates of entrepreneurial activity will create sustainable jobs.

2. It is also recognized that, while entrepreneurship is considered as a key element for women's economic empowerment, women are still under-represented among entrepreneurs in many countries⁷: women are less likely than men to become entrepreneurs, and when they do, their enterprises are smaller and concentrated in fewer sectors⁸. Measuring entrepreneurship with a gender perspective will provide an understanding of how women and men contribute to the economy and of how women's entrepreneurial activity can be fostered in order to promote job creation, to reduce poverty and promote gender equality and women's empowerment.

3. Despite the clear policy relevance of measuring entrepreneurship from a gender perspective, official statistics on female and male entrepreneurs and their enterprises are lacking in most countries. The absence of data is partly due to the difficulty of defining "entrepreneurs". As a matter of fact, the word entrepreneur is commonly used to describe very different economic agents, including, for example, the founder of a business, a member of the directing board of a company, a self-employed person in an inherited business, or an innovating manager⁹. Furthermore, even when data exist, they are often not comparable across countries because the methodologies used to collect them differ with respect to the concepts and definitions used to measure

⁷ OECD (2013). *OECD Science, Technology and Industry Outlook and Scoreboard*.

⁸ Coleman S. and A. Robb. (2009). A comparison of new firm financing by gender: evidence from the Kaufman Firm Survey data, *Journal of Small Business Economics*, 33:397.

⁹ Ibid.

entrepreneurship. Finally, only few of the existing data are collected directly by National Statistical Systems¹⁰.

B. Why measuring entrepreneurship from a gender perspective?

4. An increased policy interest in women's entrepreneurship has stimulated a deeper analysis of the gender gap in entrepreneurship. The media have challenged the existence of this gap, showing evidence on the rise of women-owned businesses and portraying stories of highly successful women entrepreneurs. Some research has questioned the existence of performance gaps between women- and men-owned businesses and explored different explanations for the lower propensity of women to engage in business ventures ^{11,12,13}.

5. However, a growing body of research finds that gender is relevant to the determinants of entrepreneurial participation and to the characteristics and performance of enterprises. On average, in both developing and developed countries, women are less likely than men to become entrepreneurs and more likely to be motivated by necessity-based "push factors" such as poverty, divorce, unemployment, or perception of limited opportunities for entering into the labor market, rather than market opportunities (pull factors), when starting an enterprise^{14,15,16}. Further, women-owned enterprises tend to be smaller, operating with less capital, more family-owned/run and less sustainable than men-owned enterprises. For example, women-owned firms in Australia and the United States are significantly more likely than men-owned firms to close, especially during the first years after their start-up¹⁷.

¹⁰ Availability of official entrepreneurship statistics for countries on a comparable basis is limited to only OECD/Eurostat Entrepreneurship Indicators Programme within the framework of the OECD Gender Initiative which started in 2006. Two other data sources on entrepreneurship data in the private sector include the Kauffman Firm Survey and the Global Entrepreneurship Monitor (GEM)- annex 3 for additional information.

¹¹ Robert Fairlie and Alicia Robb (2009). Gender differences in business performance: Evidence from the Characteristics of Business Owner Survey, *Journal of Small Business Economics*, vol. 33(4), 375-395.

¹² Gallaway, J. H., & Bernasek, A. (2002). Gender and informal sector employment in Indonesia. *Journal of Economic Issues*, vol.36(2): 313-321

¹³ Gottschalk, S. and M. Niefert. (2011). Gender Differences in Business Success of German Start-up Firms, *ZEW Discussion Paper*, No. 11-019.

¹⁴ Alstete, W. (2002). On becoming an entrepreneur: an evolving topology, *International Journal of Entrepreneurship Behaviour and Research*, 8 (4), 222-234.

¹⁵ Hughes, K. (2006). Exploring motivation and success among Canadian women entrepreneurs, *Journal of Small Business Entrepreneurship*, 19 (2), 117-120.

¹⁶ Kirkwood, J. (2009). Motivational factors in a push-pull theory of entrepreneurship, *Gender in Management: An International Journal*, 24 (5), 346-35.

¹⁷ Robb, A. and J. Watson (2010). Comparing the Performance of Female- and Male-Controlled SMEs: Evidence from

6. In addition to the push and pull factors, research has shown that women are more likely than men to start their ventures for non-pecuniary reasons, such as satisfaction with their work, possibility of making a difference in their community, or search for better work-family life balance^{18,19,20}. For example, married women are more likely to be entrepreneurs than single women, and women with children are more likely to start their own business than those without because self-employment gives the former groups more time flexibility²¹. In contrast, men are more motivated by financial success, opportunities in the market, preferences for independence, social status and power²².

7. There is a wide literature assessing the existence of significant differences in financial structure between women- and men- owned enterprises. In particular, women-owned enterprises tend to start their business with less external funding than male-owned enterprises^{23,24}; they are less likely to raise capital even in matured phases of their business life cycle²⁵; they are more likely to borrow from family and friends²⁶ and are less leveraged^{27,28}. Moreover, some sources of finance, such as venture capital, are used only to a very limited extent by women-owned enterprises²⁹.

Australia and the US, *Frontiers of Entrepreneurship Research*, Vol. 30, No. 8, pp. 1-12.

¹⁸ Piacentini, M. (2013). Women Entrepreneurs in the OECD: Key Evidence and Policy Challenges, *OECD Social, Employment and Migration Working Papers*, No. 147, OECD Publishing, Paris.

¹⁹ Mas-Tur A., Soriano D.R., Roig-Tierno N. (2015). "Motivational Factors of Female Entrepreneurs". In: Ramadani V., Gërguri-Rashiti S., Fayolle A. (eds) *Female Entrepreneurship in Transition Economies*. Palgrave, Macmillan, London

²⁰ Carter, S., Anderson, S., & Shaw, E. (2001). Women's Business Ownership: A Review of the Academic, Popular and Internet Literature. London, UK: Small Business Service.

²¹ OECD (2010). Open for Business: Migrant Entrepreneurship in OECD Countries, OECD Publishing. Available at <http://dx.doi.org/10.1787/9789264095830-en>

²² Ibid.

²³ Carter C. and E. Shaw. (2006). Women's business ownership: recent research and policy developments", *Report to the Small Business Service*, UK Minister of State for Industry and the Regions.

²⁴ Coleman S. and A. Robb (2009). A comparison of new firm financing by gender: evidence from the Kaufman Firm Survey data", *Journal of Small Business Economics*, 33

²⁵ Ibid.

²⁶ Ibid.

²⁷ Robb, A., and Walken, J. D.(2002). Firm, owner, and financing characteristics: Differences between female- and male-owned small businesses. Federal Reserve Working Paper, No. 2002-186

²⁸ Constantinidis, C., Cornet, A., & Asandei, S. (2006). Financing of women-owned ventures: The impact of gender and other owner- and firm-related variables. *Venture Capital*, 8(2), 133–157.

²⁹ Aspray W. and J. McGrath Cohoon (2007). Access to Finance Capital: A Review of Research Literature on Women's Entrepreneurship in the Information Technology Field, *Entrepreneurial Report Series*, National Centre for

8. The available evidence demonstrates that there are structural differences between women- and men-owned businesses (in terms of firm size, firm age, area of economic activity and legal status) which affect borrowers' creditworthiness. Women-owned businesses are on average younger and smaller than men-owned businesses, less growth-oriented and in less capital-intensive sectors (more concentrated in the commerce and service sectors) and more likely to be organized as sole proprietors rather than corporations. Women-owned businesses thereby may be considered riskier by banks^{30·31·32·33·34}. Besides these structural differences, women-owned businesses, independent of their credit riskiness, may suffer from a gender-based bias exercised by loan officers due to gender-related favoritism and thus have limited access to finance³⁵. Furthermore, gender inequality in the law and regulations may put women-owned businesses at a legal disadvantage, reducing women's ability to engage in entrepreneurial activities and access to finance. Evidence on gaps in sales and profits between women- and men-owned firms suggests that many women entrepreneurs are not yet able to fulfil their productive and innovative potential³⁶.

9. However, designing support policies is not straightforward. Various national and local programmes offer loans at preferential rates, preferential treatments in public procurement and privileged access to training to nascent or established women entrepreneurs. The economy-wide returns of these targeted policies are difficult to quantify given the scarcity of monitoring and

Women and Information Technology.

³⁰ Cole R A, Mehran H. (2009). Gender and the Availability of Credit to Privately Held Firms Evidence from the Surveys of Small Business Finances, Federal Reserve Bank of New York, Staff Reports No. 383

³¹ Fabowale, L., Orser, R. & Riding, A. (1995). Gender, structural factors, and credit terms between Canadian small businesses and financial institutions. *Entrepreneurship Theory and Practice*, 19(4), 41-65.

³² Shaw, E., Carter, S. & Brierton, J. (2001). *Unequal Entrepreneurship: Why Female Entrepreneurship is an Uphill Business*. London: Industrial Society

³³ Marlow, S, Patton, D. (2005). All Credit to Men? Entrepreneurship, Finance and Gender, *Entrepreneurship Theory and Practice*, 29(6), 717-35

³⁴ Lee S, Denslow D. (2005). A study on the major problems of US women-owned small businesses, *Journal of Small Business Strategy*, 15 (2)

³⁵ The World Bank (2018). Project Appraisal Document for Inclusive Access to Finance Project in Turkey. Report No: PAD2768. Available at <http://documents.worldbank.org/curated/en/510621527219081674/pdf/Turkey-IncAFP-PAD-05032018.pdf>

³⁶ Piacentini, M. (2013). Women Entrepreneurs in the OECD: Key Evidence and Policy Challenges, *OECD Social, Employment and Migration Working Papers*, No. 147, OECD Publishing, Paris.

evaluation efforts³⁷, evident by the lack of national and international data on gender gaps in both entrepreneurship participation and performance.

10. To respond to these data needs, the Evidence and Data for Gender Equality (EDGE) project (see box 1) initiated the development of a conceptual framework to measure entrepreneurship from a gender perspective and tested methodologies based on a model survey instrument in six pilot countries³⁸ over the period 2014- 2016. This technical report describes the development of the EDGE conceptual framework and indicators for measuring entrepreneurship from a gender perspective, the questionnaire design, the results and the lessons learned from pilot surveys, and it provides some recommendations for future research.

Box 1. The EDGE project³⁹

The Evidence and Data for Gender Equality (EDGE) initiative aimed at improving the integration of gender issues into the regular production of official statistics, with a view to better inform evidence-based policies. Building on the work of the Inter-Agency and Expert Group on Gender Statistics, the multi-year initiative was jointly executed by the United Nations Statistics Division (UNSD) and UN Women in collaboration with national statistical offices, the Asian Development Bank (ADB), the Food and Agriculture Organization (FAO), the International Labour Organization (ILO), the Organization for Economic Cooperation and Development (OECD) and the World Bank (WB). The project was guided by a steering committee composed of members of the donor community, members of the Inter-Agency and Expert Group on Gender Statistics, regional commissions and regional development banks. EDGE received funding from the Governments of Australia, Canada, Germany, Ireland, the Republic of Korea, and the United States of America.

³⁷ OECD/European Union (2016). Policy Brief on Women's Entrepreneurship. Available at <https://www.oecd.org/cfe/smes/Policy-Brief-on-Women-s-Entrepreneurship.pdf>

³⁸ The module on entrepreneurship was not included in the pilot study in Mexico.

³⁹ <https://unstats.un.org/edge/> for additional information on the EDGE project and to access/download the Guidelines and supporting material, developed under the project.

From 2013 to 2018, EDGE aimed, specifically, to accelerate existing efforts to generate internationally comparable gender indicators on health, education, employment, entrepreneurship and asset ownership by: (a) contributing to the development of the Minimum Set of Gender Indicators (available online at genderstats.un.org), disseminating gender-relevant data and metadata on education, employment, health, public life and decision-making, and human rights; (b) developing methodological guidelines on measuring asset ownership from a gender perspective; and (c) developing an initial conceptual framework to measure entrepreneurship for gender analysis.

To develop methods on measuring asset ownership and entrepreneurship from a gender perspective, the EDGE project consolidated technical inputs over a multi-year process from a wide range of stakeholders, including national statistics offices, regional and international agencies, and researchers with expertise in gender analysis and asset ownership. The project then tested the proposed methodology in seven pilot countries – Georgia, the Maldives, Mexico (only assets), Mongolia, the Philippines, Uganda, and South Africa – and refined the methodology based on the lessons learned from the pilots.

Consistent with a clear imperative for evidence-based policymaking, the ultimate aim of the EDGE initiative was to build a cost-effective and sustainable model for integrating gender issues into regular statistical production while strengthening countries' capacities to produce gender data in all policy areas.

C. Organization of the Report

11. This report is organized into three chapters:

- **Chapter one** presents a summary of the literature on entrepreneurship to identify potential dimensions that should be included in a definition of entrepreneurs that is gender sensitive. This is followed by a description of the *EDGE conceptual framework for measuring entrepreneurship from a gender perspective*, including proposed indicators of entrepreneurship that resulted from extensive consultations with experts from national and international organizations and academia.

- **Chapter two** presents how the EDGE conceptual framework was translated into a survey module on entrepreneurship which was tested in selected pilot surveys. It also provides feedback received on the questionnaire by pilot countries. Finally, for illustrative purposes, this chapter presents key findings on gender gaps in entrepreneurship from the pilot surveys.
- **Chapter three** summarizes the lessons learned from implementing the EDGE survey module in pilot countries and identifies areas for future development and further testing.

The final EDGE model questionnaire on entrepreneurship, reflecting feedback received from pilot countries and other experts, is available as annex 1.

CHAPTER ONE: A CONCEPTUAL FRAMEWORK FOR MEASURING ENTREPRENEURSHIP FROM A GENDER PERSPECTIVE

12. This chapter reviews several definitions of entrepreneurs used in the literature over time that were considered under the EDGE project to identify common dimensions and/or “traits” of entrepreneurs and guide the development of the EDGE statistical definition of entrepreneurs and their identification in measurement. This is followed by a summary of key deliberations and conclusions of meetings of experts who convened under the EDGE project to discuss concepts, definitions and methods to produce entrepreneurship statistics that are relevant for gender analysis. Finally, this chapter presents the conceptual/theoretical framework and related indicators recommended by experts for measuring entrepreneurship from a gender perspective and for testing in the EDGE pilot countries.

1.1. Literature review

13. French economist Richard Cantillon (1697-1734) is often credited with being the first to coin the term *entrepreneur*. He defined the entrepreneurs as risk takers in the sense that they purchased goods at certain prices in the present to sell at uncertain prices in the future. The term came into much wider use after John Stuart Mill popularized it in his 1848 classic, *Principles of Political Economy*.

14. Jean Baptiste Say (1767-1832) regarded the entrepreneur as a manager of a firm, an input in the production process, and viewed the entrepreneur as the main agent of production in the economy. Rather than emphasizing the risk-bearing role of the entrepreneur, he stressed the entrepreneur’s principle quality as an organizer. His concept of entrepreneurship is associated with the functions of coordination, organization and supervision.

15. Many eminent economists and scholars including Adam Smith, Alfred Marshall and Frank Knight elaborated on Cantillon’s contribution, adding leadership to the functions of entrepreneurs, but the key tenets of risk-taking and profit were nearly always retained as important features of entrepreneurship.

16. Schumpeter (1934) defined entrepreneurship from the economics perspective by focusing on the perception of new economic opportunities (invention) and the subsequent introduction of new ideas in the market (innovation). Schumpeter's entrepreneur is an agent of change. S/he introduces a new good or a new method of production, opens a new market or discovers a new source of supply, or carries out a new organization of an industry. Schumpeter's definition therefore equates entrepreneurship with innovation in the business sense, i.e. identifying market opportunities and using innovative approaches to exploit them.

17. Some researchers including Drucker (1985) argued that entrepreneurship reflects merely the creation of a new organization and that any individual who starts a new business venture is an entrepreneur- even those that fail to make a profit.

18. In summary, there is no single definition of an entrepreneur in the economic literature. Although, among the various definitions available, there seems to be an agreement on the key entrepreneurial traits, such as: willingness to take risk, innovation, problem solving, value addition etc. These elements in the definitions hitherto employed are, however, difficult to operationalize and statistically measure on a uniform basis across countries.

19. The OECD-Eurostat Entrepreneurship Indicator Programme (EIP), which developed internationally-comparable and policy-relevant indicators of entrepreneurship and its determinants, elaborated on a "conceptual definition" of entrepreneurs, defining them as *'those persons (business owners) who seek to generate value, through the creation or expansion of economic activity, by identifying and exploiting new products, processes or markets'*⁴⁰. This definition emphasizes "value creation" and "innovation" as the two distinguishing features of entrepreneurial activity. It also makes a clear connection between entrepreneurship and business ownership as entrepreneurs are business owners who bear the risks and face the uncertainties associated with their market activity. The OECD's "operational definition" of entrepreneurs is as follows: *"Entrepreneurs are persons that have a direct control over the activities of an enterprise,*

⁴⁰ Ahmad, Nadim and Anders N. Hoffmann (2008). A Framework for Addressing and Measuring Entrepreneurship. OECD Statistics Working Paper.

*by owning the totality or a significant share of the business. Employer entrepreneurs are those entrepreneurs who employ at least one other person.”*⁴¹

20. In October 2018, the 20th International Conference of Labour Statisticians (ICLS) adopted a new resolution concerning statistics on work relationships and updated the International Classification of Status in Employment (ICSE-93) (see box 2). Particularly relevant to this report is the fact that ICSE-18 identifies entrepreneurs defined as “*persons who own and control an enterprise and seek to generate value through the creation of economic activity by identifying and exploiting new products, processes or markets*”⁴². Furthermore, “independent workers” in the revised classification (ICSE-18) are considered the best starting point for a statistical identification of entrepreneurs.

21. Further work, however, will be needed to operationalize the ICSE-18 definition of an entrepreneur and to identify optimal methods to collect entrepreneurship data. By providing an overview of the lessons learned under the EDGE project, this report will help with integrating a gender perspective into future initiatives aiming at producing entrepreneurship data relevant for gender analysis.

Box 2: Revision of the International Classification of Status in Employment (ICSE-18)⁴³

The International Classification of Status in Employment (ICSE-18) classifies jobs in employment for pay or profit into ten detailed categories based on the concepts of type of authority (ICSE-18-A) and type of economic risk (ICSE-18-R). The detailed categories in employment aggregate according to alternative hierarchies, one based on the type of authority and the other on the nature of the economic risk to which the worker is exposed. This allows the production of separate statistics on dependent and independent workers and on those employed for pay and for profit (in line with the current distinction between paid employment and self-employment).

⁴¹ OECD (2013). *OECD Science, Technology and Industry Outlook and Scoreboard*. OECD Publishing, Paris

⁴² International Labour Organisation (2018), document ICLS/20/2018/Resolution https://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/meetingdocument/wcms_647343.pdf

⁴³ Ibid.

The type of authority (ICSE-A) refers to the nature of the control that the worker has over the organization of his or her work, the nature of authority that he or she exercises over the economic unit for which the work is performed (including its activities and transactions), and the extent to which the worker is dependent on another person or economic unit for organization of the work and/or for access to the market. The type of authority is used to classify workers as *independent* or *dependent* as follows:

Independent workers own the economic unit in which they work and control its activities. They are classified into the following groups:

A. Employers

11- Employers in corporations

12- Employers in household market enterprises

B. Independent workers without employees

21 - Owner-operators of corporations without employees

22 - Own-account workers in household market enterprises without employees

Dependent workers are workers who do not have complete authority or control over the economic unit for which they work. They are classified into the following group:

C. Dependent contractors

30 - Dependent contractors

D. Employees

41 - Permanent employees

42 - Fixed-term employees

43 - Short-term and casual employees

44 - Paid apprentices, trainees and interns

E. Contributing family workers

51- Contributing family workers

The *type of economic risk (ICSE-R)* refers to the extent to which the worker may be in employment for profit and employment for pay.

Workers in employment for profit are classified into the following groups:

F. Independent workers in household market enterprises

12 – Employers in household market enterprises

22 – Own-account workers in household market enterprises without employees

C. Dependent contractors

30 – Dependent contractors

E. Contributing family workers

51 – Contributing family workers

Workers in employment for pay are classified into the following groups:

G. Owner-operators of corporations

11 – Employers in corporations

21 – Owner-operators of corporations without employees

D. Employees

41 – Permanent employees

42 – Fixed-term employees

43 – Short-term and casual employees

44 – Paid apprentices, trainees and interns

The classification hierarchy is helpful in the identification of entrepreneurs. The category ‘independent workers’ is the best starting point for the identification of entrepreneurs since it excludes helpers in family businesses and dependent contractors, while including independent workers without employees and employers in both incorporated and unincorporated enterprises. However, additional information relevant to the national context, such as the size and nature of the enterprise, is needed to accurately identify the entrepreneurs.

1.2. Expert consultations to develop the EDGE conceptual framework for measuring entrepreneurship from a gender perspective

22. As part of the process to develop a conceptual framework and indicators for measuring entrepreneurship from a gender perspective, the EDGE project in collaboration with key partners including the OECD, established a multi-year consultation process with stakeholders and organized two expert group meetings on the topic in 2013 and 2014. The outcomes of these meetings, along with advice and guidance received regularly from the Inter-agency and Expert Group on Gender

Statistics and other experts, informed the development of a conceptual framework to collect entrepreneurship data from a gender perspective.

23. The two Technical Meetings on Measuring Entrepreneurship from a Gender Perspective were attended by representatives of national statistical offices of China, Fiji, Georgia, Ghana, India, Japan, Republic of Korea, the Maldives, Mexico, Mongolia, the Philippines, South Africa, Swaziland, Uganda, and the United States; representatives of the Asian Development Bank (ADB), the African Development Bank (AfDB), ILO, the OECD, the World Bank, the United Nations Economic Commission for Africa (UNECA), the United Nations Economic Commission for Latin America and the Caribbean (UNECLAC), UNSD, UN Women, the United States Agency for International Development (USAID), the United Nations Statistical Institute for Asia and the Pacific (UN/SIAP), and researchers in the field of gender and entrepreneurship. The objectives of the meetings were: to take stock of existing data and research on gender and entrepreneurship; to review and agree on the proposed EDGE methodology on measuring entrepreneurship from a gender perspective, including a draft conceptual framework developed initially with the OECD; and to discuss (in the 2014 meeting) the entrepreneurship questionnaire which had been piloted in the Methodological Survey Experiment on Measuring Asset Ownership (MEXA) from a Gender Perspective, implemented in Uganda under EDGE by the World Bank.

24. Key deliberations and conclusions that emerged from the technical meetings highlighted the need to agree on a measurable/operational definition of entrepreneurship that is relevant to both developing and developed countries and that also reflects key policy questions about gender and entrepreneurship. In particular, experts agreed on the following:

25. Experts acknowledged the difficulty of identifying and agreeing on a single definition of entrepreneurs given the multidimensionality of entrepreneurship (such as ownership and controlling of business, risk taking, innovation and generation of value etc.). However, for operational purposes and pilot testing activities under the project, the following *EDGE statistical definition of entrepreneurs* was first agreed in the meeting in 2013 and then confirmed in 2014: *entrepreneurs are persons who have direct control over the activities of an enterprise they own alone or with other individuals*. Further details are provided in the next section of the report.

26. It was agreed that the definition of entrepreneurs should exclude the “dependent” self-employed as they usually not take risks, innovate or have other entrepreneurial characteristics. There was also an agreement about having a definition not restricted to the main job only and as such it was recommended that pilot test questions capture entrepreneurs engaged in an enterprise both as their main job as well as only as a secondary activity. Most experts felt that imposing an upper bound on the ownership share of enterprises, while theoretically relevant, would be challenging to operationalize. However, for large corporations, it was suggested to also look at the sex of the enterprise’s founder(s), rather than just the owner(s).

27. Experts also agreed to build the EDGE methodology on existing national data collection instruments to ensure the sustainability of data collection, and to focus on household-based surveys since most women entrepreneurs are concentrated in micro or small enterprises, which are often household-based.

28. As for data collection strategies, experts from NSOs involved in the development of a conceptual framework to measure entrepreneurship for gender analysis expressed a preference for adding a few questions or appending a module on entrepreneurship to an existing labor force or other relevant household surveys to reduce costs.

1.3. EDGE Operational definition and classification of entrepreneurs-key variables of interest

29. As a result of the two technical meetings described above and additional expert consultations, it was agreed for EDGE to pilot test data collection on entrepreneurship according to the following operational broad definition:

Entrepreneurs are defined as persons who have direct control over the activities of an enterprise they own alone or with other individuals.

The measurement of entrepreneurs according to this broad EDGE definition was operationalized as follows⁴⁴:

- The participation of women and men in entrepreneurship can be measured by the number of individuals who are business owners and also participate in managing the enterprise (control over enterprise activities);
- Both those working for their own business as their main job and those who own a business in a subsidiary capacity (secondary activity) are considered entrepreneurs; ⁴⁵
- No size threshold of the enterprise is established in the definition;
- All enterprises privately owned are included in the scope of the study; ⁴⁶
- It is not necessary for the business to be founded by the entrepreneur;
- Managers who do not own the enterprise are excluded;
- Owners of own-account enterprises producing goods and services intended mainly for own final use are excluded;
- Helpers in the family businesses and dependent contractors are excluded^{47,48}. However, they are included if they are entrepreneurs as a second job.

30. It was also recognized that measuring women's "participation" in entrepreneurial activity is critical for informing evidence-based policies but is not sufficient. Drivers of gender gaps in entrepreneurial participation as well as in "performance" need to be measured. Therefore, a full set of entrepreneurship indicators were discussed including in terms of definition/scope and

⁴⁴ The International Classification of Status in Employment (ICSE) has been revised at the 20th International Conference of Labour Statisticians (ICLS) in October 2018. A new definition (to be operationalized) of entrepreneurs has been adopted (see box 2).

⁴⁵ A person owning the enterprise in terms of investment only and who does not control/participate in operating the enterprise may not be treated as an entrepreneur but rather as a capitalist earning return on his/her investment as a property income.

⁴⁶ The criterion for distinguishing between privately and publicly owned units should be based on whether the ownership of the enterprise to which the establishment belongs rests with public authorities or private parties. Public units are owned or controlled by government units. By contrast, privately owned units are owned or controlled by private parties. Public authorities or private parties are considered to be the owners of a given enterprise if they own all, or a majority, of the unit's shares, or of its other forms of capital participation.

⁴⁷ Dependent contractors are workers who are employed for profit but do not have full control over the activities of the economic unit for which they work. In other words, dependent contractors are dependent for access to the market, determination of price of the goods and/or services produced, raw material or capital items, on another economic unit that directly benefits from the work performed by them.

⁴⁸ Owner-operators of incorporated enterprises are included even though they are not considered as self-employed in many statistical datasets, especially in economic statistics and according to the SNA.

measurability. The EDGE indicators that were agreed are presented together with the conceptual framework later in this chapter.

31. Furthermore, a classification/breakdown of entrepreneurs based on a set of key variables of interest, for gender analysis, was identified and added to the conceptual framework and to the elements to be tested in pilot countries to gather evidence on their measurability.

Classification of entrepreneurs

a. Necessity vs. Opportunity Based Entrepreneurs

32. The 2008 Report on Women and Entrepreneurship based on data collected by the Global Entrepreneurship Monitor⁴⁹ observed that the percent of women entrepreneurs is higher in countries where the general income per capita is small and where women have no other option for making a living (such as Angola, Bolivia and Peru) and lower in countries where the general income per capita is high (such as Israel, Germany and the UK). This has been explained as a result of the difference between ‘necessity’ and ‘opportunity’ entrepreneurship, with necessity entrepreneurship found to be more prevalent among women^{50,51,52}.

33. The necessity entrepreneurship is associated with entrepreneurship as a last resort i.e. due to impossibility of finding other sources of income while the opportunity entrepreneurship represents a profitable opportunity as perceived by an individual. The former manages microbusinesses that do not grow beyond providing employment for the owner, or at most, for his/her family. The latter type of entrepreneurship is the real engine of growth for the economy, since these entrepreneurs start businesses that grow and create jobs and innovation in the economy.

⁴⁹ Bosma, N., Acs, Z., Autio, E. and Levie, J. (2009). Global Entrepreneurship Monitor – 2008 Executive Report, Babson College and Universidade Desarrolo.

⁵⁰ Allen, I.E., Langowitz, N. and Minniti, M. (2006). Global Entrepreneurship Monitor Report on Women and Entrepreneurship, Babson College, Babson Park, MA and London Business School, London.
Reynolds et al., 2003; Bosma et al., 2009.

⁵¹ Allen, I.E., Elam, N., Langowitz, N. and Dean, M. (2007), Global Entrepreneurship Monitor Report on Women and Entrepreneurship, Babson College, Babson Park, MA and London Business School, London

⁵² Reynolds, P.D., Bygrave, W.D., Autio, E., Cox, L.W. and Hay, M. (2003), Global Entrepreneurship Monitor (GEM) Executive Report, Babson College, Babson Park, MA, London Business School, London, Ewing Marion Kaufman Foundation, Kansas City, MO.

34. Related terms used in the entrepreneurial literature are ‘push’ vs ‘pull’ factors, where ‘push’ factors force people to become entrepreneurs, while ‘pull’ factors attract them to entrepreneurship⁵³. Women in poor countries seems to be more influenced by ‘push’ than by ‘pull’ factors.

35. Necessity entrepreneurship is an important feature of both developing and high-income countries. It deserves special consideration both as a signal of vulnerability of the entrepreneurial eco-system and as a resource for household adjustment to poverty and economic shocks.

b. Main job versus secondary activity entrepreneurs

36. The main job entrepreneurs include those pursuing entrepreneurial activity in their primary job. The secondary activity entrepreneurs are those who pursue entrepreneurial activities as a secondary job.

c. Own account versus employer entrepreneurs

37. Own-account entrepreneurs are those managing businesses that do not employ any worker on a regular basis while employer entrepreneurs are those who employ one or more workers on a regular basis⁵⁴.

1.4. Conceptual framework and relevant indicators

38. After expert consultations, EDGE proposed the following conceptual framework that defines the objectives of the data collection for measuring entrepreneurship from a gender perspective as two main sets of outcomes, namely, entrepreneurial participation and entrepreneurial performance, disaggregated by sex (figure 1). It followed the framework of the OECD-Eurostat Entrepreneurship Indicators Programme,⁵⁵ adapting it to yield a more nuanced

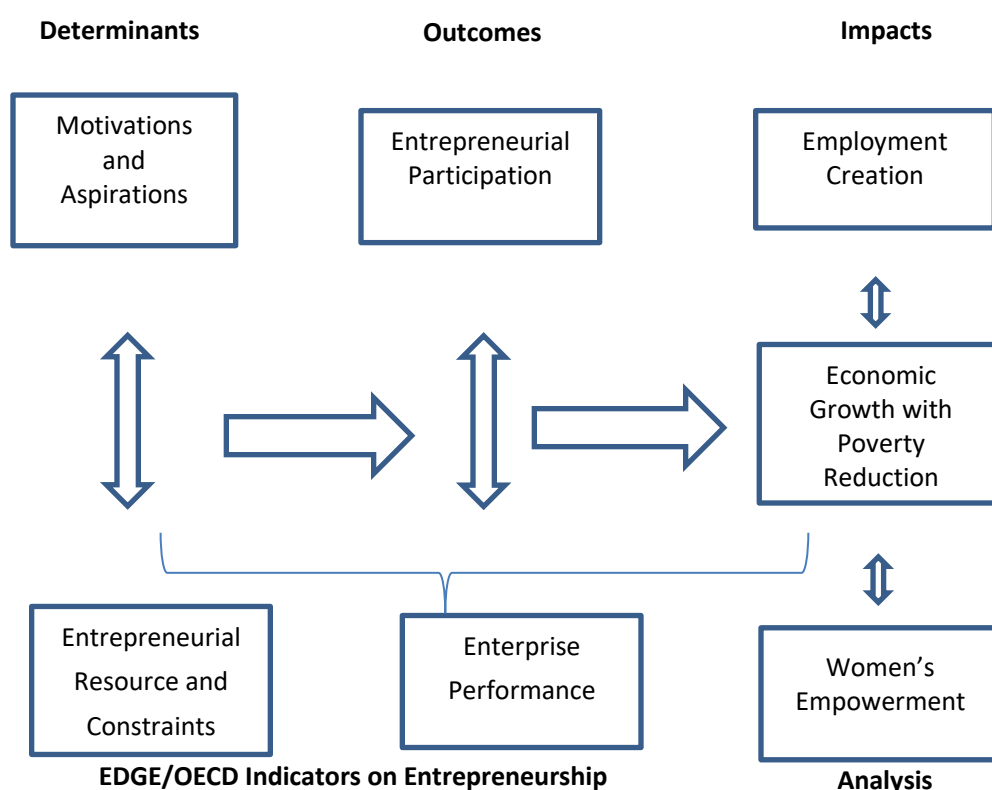
⁵³ Orhan, M. & Scott, D. (2001). Why women enter into entrepreneurship: An explanatory model, *Women in Management Review*, Vol. 16, pp.232-43

⁵⁴ International Labour Organisation (2018), document ICLS/20/2018/Resolution https://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/meetingdocument/wcms_647343.pdf

⁵⁵ Ahmad, Nadim and Anders N. Hoffmann (2008). A Framework for Addressing and Measuring Entrepreneurship. OECD Statistics Working Paper.

view on the drivers/determinants of differences in the entrepreneurial behavior and outcomes of women and men.⁵⁶ Furthermore, experts recommended for countries to also assess the presence/impact of an “enabling environment” for entrepreneurship (i.e. the socio-cultural and political environment such as existing laws or policies that give incentives to female entrepreneurs), when adapting the EDGE framework to their own country context.

Fig 1: Conceptual Framework for entrepreneurship indicators



39. In particular, the framework identifies three separate but inter-connected flows, which are important in the formulation, assessment and appraisal of policy measures, namely ‘determinants’, ‘outcomes’, and ‘impact’. ‘Determinants’ reflect the key factors that affect entrepreneurship like motivations and aspirations for undertaking entrepreneurial activities. ‘Outcomes’ reflect the target indicators that may be used by policy makers to assess and monitor the results of their policies. Finally, ‘Impacts’ reflect the contributions of entrepreneurs and entrepreneurship to the economy

⁵⁶ See Annex 2 for additional information.

as well as to overall better lives, and these can be identified in a number of ways including through economic growth, job creation, poverty reduction and women's empowerment.

40. More specifically, a set of indicators were identified to provide a comprehensive description of gender differentials in entrepreneurial outcomes and help policy-makers understand the main individual and contextual drivers of these differentials. As gender gaps in entrepreneurship manifest themselves either in a relatively low number of female entrepreneurs or in a relatively low business size and dynamism of women-owned businesses, two main sets of outcome variables were targeted: (i) variables describing gender differences in entrepreneurial participation, and (ii) variables describing gender differences in entrepreneurial performance. As for the determinants of gender gaps, they were divided into (i) those linked to motivation and aspiration differences, and (ii) those related to gender-unequal availability of entrepreneurial resources and constraints, such as access to training and credit.

41. The collection of gender-sensitive indicators on entrepreneurial determinants and outcomes is expected to pave the way to new research and analyses on the economic and social impact of women's entrepreneurship. The framework highlights three likely impacts of a reduction of gender gaps in entrepreneurship: (i) sustained creation of new jobs, with improved quality of employment especially for the vulnerable, micro-entrepreneurs, (ii) poverty-reducing economic growth, supported by increased diversity of the business population and higher levels of competition and; (iii) women's empowerment, through higher individual earnings of women, and higher control over family enterprises and related decisions. Such analyses would help build a constructive dialogue on the importance of women's entrepreneurship as a policy target and unlock public and private initiatives that can reduce gender-specific constraints in the start and growth of businesses.

42. It should be noted that the different elements of the framework are strongly interconnected and sustain each other. Although, economic growth and women's empowerment are classified as 'impacts' of women's entrepreneurship, they also act as drivers in many contexts, relaxing for example, liquidity constraints that hinder the creation of women-owned enterprises.

KEY DIMENSIONS OF ENTREPRENEURSHIP

1.4.1. *Determinants of entrepreneurship*

Motivations and aspirations

43. The relatively low number of female business owners in many countries is partly explained by gender differences in aspirations or preferences for entrepreneurship. The evidence on gender differences in aspirations to become an entrepreneur is abundant in the OECD countries. For example, the 2012 Eurobarometer Survey on Entrepreneurship shows that in almost all European countries, fewer women than men would work as self-employed, were they free to choose.

44. There are also considerable differences in the motivation of men and women who become entrepreneurs. Several studies examining the OECD countries demonstrate that women, more than men, start their ventures for non-pecuniary reasons such as satisfaction with their work, possibility of making a difference in their community or search for a better work-family life balance. This last motive is particularly relevant for women, as business ownership offers more flexibility to combine work and family life. Furthermore, more women than men start a business out of “necessity” because of lack of other options in the labor market.

45. Gender differences in preferences for an entrepreneurial career, in the motivations leading an individual to start a business, and in the organization of working life affect the way a business is managed, its chances of survival and its growth. Some women might lack the motivations, be risk averse or lack the resources to start a new activity. Evidence also suggests that women have different risk preferences than men, as well as different perceptions about the risk of starting and running a business.⁵⁷

46. It is important to study gender differences by type of acquisition of ownership, shedding light on a possible driver of uneven growth of women and men-owned businesses. The innovative action to establish a business that did not exist before is for many scholars a necessary feature of

⁵⁷ Rachel Croson and Uri Gneezy. (2009). Gender Differences in Preferences. *Journal of Economic Literature*. Available at <https://rady.ucsd.edu/faculty/directory/gneezy/pub/docs/gender-differences-preference.pdf>

true entrepreneurship, distinguishing entrepreneurs from the broader population of business owners.

47. Difference in training creates a barrier for women to gain the needed experience and build networks in many of the industries in which scientific and technological progress creates new entrepreneurial opportunities.

48. Furthermore, having access to information represents the starting point to be able to identify an entrepreneurial opportunity: the more unique and exclusive the information that a person has, the higher the probability that a viable and profitable opportunity will be identified by the said person. Equal access to information is crucial if women and men want to create, manage and expand new independent firms. However, access to information is not equal in all countries partly because in many countries, women and girls do not have equal access to education⁵⁸.

Indicators on Motivations and Aspirations

49. The table below provides a set of indicators to measure and monitor *motivations to start a business and aspirations about business management and size*. These and other subsequent indicators were discussed and agreed with national and international experts at the EDGE technical consultation organized in 2014 in Japan⁵⁹. All the indicators shall be tabulated/disaggregated by sex.

Focus area	Indicators	Rationale	Proposed questions in model questionnaire (Annex 1) ⁶⁰
	A1. Percentage of necessity entrepreneurs among women and men	This indicator provides information on how many entrepreneurs started their businesses out of necessity. Necessity entrepreneurs are those individuals who have no other viable option for earning	Question 736 with codes 3, 6 and 9

⁵⁸ UNESCO (2018). One in Five Children, Adolescents and Youth is Out of School. Available at <http://uis.unesco.org/sites/default/files/documents/fs48-one-five-children-adolescents-youth-out-school-2018-en.pdf>

⁵⁹ United Nations (2014). Evidence and Data for Gender Equality (EDGE) Midterm Review Technical Meeting. Available at https://unstats.un.org/edge/meetings/Dec2014/final_report.pdf

⁶⁰ See proposed set of questions in the model questionnaire in annex 1.

Motivations and Aspirations		an income than to start a small business activity.	
	A2. Percentage of entrepreneurs who were unemployed before they started working on the business	This indicator complements indicator A ₁ by providing information on gender differences in transitions from unemployment to business ownership.	The indicator is sourced from questions often included in household surveys
	A3. Percentage of business founders who are women	This indicator allows studying gender differences by type of acquisition of ownership, shedding light on a possible driver of uneven growth of women- and men-owned enterprises.	Question 708 with code 1
	A4. Percentage of entrepreneurs satisfied with the size of their business	This indicator provides a possible way to measure gender difference in aspirations for business growth. The decision of entrepreneurs of whether or not to pursue a growth objective in their operations involves trade-offs between financial and non-financial factors including: financial realization versus increased personal demands; personal and social accomplishment versus increasing organizational tensions; and, the risk of losing spousal support.	Question 732 with code 1

Entrepreneurial resources and constraints

50. EDGE focused on the following self-reported “soft” and “hard” resources for starting/growing an enterprise and constraints faced during start-up/management process:

Skills and management experience of entrepreneur

- Income available to invest in enterprise and the financial resources they can obtain through external credit or public support
- Access to credit
- Time available to invest in enterprise
- Support networks

51. The importance of measuring entrepreneurial experience cannot be overstated. All stages in entrepreneurship are dependent on relevant experience, from the identification of opportunities to the execution of running a business. Individuals differ in their ability to discover and exploit opportunities. People have access to different information and process it differently depending on idiosyncratic knowledge and preferences⁶¹. Therefore, the ability to discover and exploit opportunities depends largely on previous education and work experience. It has been shown that because of both demand and supply factors, women lack the experience needed to identify and exploit opportunities⁶².

52. In general, women have lower personal financial assets than men. This means that for a given opportunity and equally capable individual, women must secure additional resources compared to men in order to exploit the opportunity because they control less capital. Four areas have been identified as potential or real problems for women when it comes to financing: (a) women may be disadvantaged in raising the initial capital to start a new firm; (b) collateral required for external financing may be above the wealth level of many women; (c) finance for an existing firm may be less available, because women are less likely than men to penetrate formal financial networks; (d) women entrepreneurs' relationship with different financial institutions might suffer because of gender stereotyping and/or legal discrimination⁶³. Evidence indicates that women still perceive a negative attitude from financial institutions such as banks and other lending institutions. This negative attitude, according to the literature, arises due to two possible reasons: (a) women are not viewed as entrepreneurs due to the attitudes formed by traditional gender roles; (b) women engage in industries that the financial institutions are not extensively familiar with (as personal services, care, etc.).

53. Another recurring obstacle for women to engage in entrepreneurship is the perceived lack of time or competing demands on time⁶⁴. Because women are more likely to be responsible for

⁶¹ Shane, S. (2000). Prior knowledge and the discovery of entrepreneurial opportunities. *Organization Science*, 11(4), 448-469.

⁶² OECD (2004). Women's Entrepreneurship: Issues and Policies. Paper presented at the 2nd OECD conference of ministers responsible for small and medium-sized enterprises (SMEs). <http://www.oecd.org/cfe/smes/31919215.pdf>

⁶³ Carter, S., Anderson, S., & Shaw, E. (2001). Women's Business Ownership: A Review of the Academic, Popular and Internet Literature. London, UK: Small Business Service,

⁶⁴ OECD (2004). Women's Entrepreneurship: Issues and Policies. Paper presented at the 2nd OECD conference of ministers responsible for small and medium-sized enterprises (SMEs)

domestic chores and childrearing, they may not have enough free time to develop either their entrepreneurial skills to become entrepreneurs or to develop an existing business. The lack of free time may not allow them to seek support from financial institutions for advice and information on credit, to attend training programmes to acquire skills, or to seek out better customers or suppliers.

54. The importance of the entrepreneur's social network has been acknowledged in the literature⁶⁵. Entrepreneurs draw on social networks to make key decisions along all the phases of entrepreneurship and social networks have been recognized as an essential factor for entrepreneurial success⁶⁶. Formal and informal networks useful for business development are often composed prevalently of men, while women's personal networks, based on friends and family members, are less effective to find financial resources to start or grow a business.

Indicators on entrepreneurial resources and constraints

55. The table below presents a set of indicators on *entrepreneurial resources and constraints*. These indicators build on the previous set of indicators by focusing on self-reported 'soft' and 'hard' resources that entrepreneurs rely on for starting and growing their activity, and on revealed difficulties during the start-up and management process. All the indicators shall be tabulated/disaggregated by sex.

Focus area	Indicators	Rationale	Proposed questions in model questionnaire (Annex 1) ⁶⁷
Entrepreneurial resources and constraints	B1. Percentage of entrepreneurs with completed secondary education or higher	This indicator is useful for an overview of the skill composition of entrepreneurs by gender, given the complexity of building finer measures of entrepreneurial skills.	From the information regularly collected in household surveys

⁶⁵ Ibid.

⁶⁶ Ibid.

⁶⁷ See proposed set of questions in the model questionnaire in annex 1.

B2. Percentage of entrepreneurs who received training or education on how to start up a business	This indicator measures participation in entrepreneurial education, defined as any training or course targeting individuals who wish to start a business.	Question 734 with codes 1, 2, 3 and 96
B3. Percentage of founders who used credit from banks to start enterprise	This indicator provides information about source of finance obtained from commercial banks used by entrepreneurs to start their enterprises. When appropriate, informal credit sources should also be considered.	Question 709 with codes 11, 12 and possibly 96
B4. Percentage of entrepreneurs identifying access to finance as a major constraint for business growth	This indicator provides a simple description of the extent to which difficult access to credit is an obstacle for business operation. The indicator is however not sufficient to evaluate gender gaps in access to credit because women business owners have often a lower demand for external finance and might thus report lower concerns regarding financing.	Question 733 with code 3
B5. Percentage of entrepreneurs who used credit from banks to finance investments	This indicator provides the description of the percentage of entrepreneurs who used credit from banks to finance operating investments of their enterprises. When appropriate, informal credit sources should also be considered.	Question 725 with codes 12, 13 and 16.
B6. Percentage of entrepreneurs identifying lack of time as a major constraint for business growth	This indicator helps understanding whether observed differences in invested time between women and men are due to preferences or to conflicting obligations.	Question 733 with code 15
B7. Average hours spent working on the business per week	The time spent working on the business is a key determinant of success of business ventures. Female entrepreneurs have often “double works”: they run an enterprise and a household at the same time. These “double assignments” help explain the concentration of women in ‘part-time’ business activities, that are less demanding in time but also yield lower financial returns and have lower chances to grow.	Question 710

	B8. Percentage of entrepreneurs who regularly receive managerial advice, by source of advice (family, individuals outside family, publicly provided)	This indicator measures the share of entrepreneurs who use advice and help from people in their household, outside the households or from public sources. Professional advising services such as banks, accountants, lawyers are of particular interest.	Question 735 with codes 4 and 96
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1.4.2. Outcomes of entrepreneurship

Entrepreneurial Participation

56. The single most important objective of international data collection on women's entrepreneurship is to produce an accurate and comparable measure of the number and characteristics of women and men entrepreneurs. Participation in entrepreneurship is not a well-established concept in statistics, and issues around the definition of entrepreneurs make the production of this measure particularly challenging. An operational definition was agreed in 2014 and piloted in 2015 and 2016 under the EDGE project. However, in October 2018, a new definition of entrepreneurs was adopted at the 20th ICLS within the revision of the International Classification of Status in Employment (ICSE-18). Further research and testing will be needed to operationalize ICSE-18 (see section 1.1).

57. Evidence on entrepreneurial participation indicates that individuals who personally know an entrepreneur are more likely to participate in entrepreneurial activities at any venture stage. However, women entrepreneurs, compared with their male counterparts, are less likely to be acquainted with an entrepreneur. Taken together, it suggests that one of the reasons why women are less likely to become entrepreneurs is that they lack entrepreneurial resource providers or role models in their social networks.

58. Women have been shown by many studies to be heavily engaged in family businesses, often taking an invisible role. When spouses have a business together, business and private lives are mixed and intertwined. In such situations, women tend to take a back-seat position engaging in those tasks that are in line with traditional female roles. In addition, in countries where the

government provides incentives for women to start businesses, evidence suggests that in many cases, women are owners only on paper and the real control of the business actually rests with their spouses. With a view to identify women entrepreneurs having actual control on their enterprises, the EDGE project piloted specific questions as described in chapter two of this report.

59. Furthermore, “main job entrepreneurs” are those pursuing entrepreneurial activity in their primary work. The “secondary activity entrepreneurs” are those who pursue entrepreneurial activities in their secondary work. They can be identified separately following the majority time criterion on their time spent in operating their enterprises.

60. For meaningful study of entrepreneurial participation, it is useful to classify entrepreneurs by the size (number of employees) and economic activity of their enterprises. The size of the enterprise based on employment should be defined primarily in terms of the average number of persons employed in that unit during a reference period. If the average number of persons employed is not available, the total number of persons employed in a single period may be used as the size criterion.

61. The statistical identification of the entrepreneur in enterprises with legal forms other than sole-proprietorship requires the establishment of rules defining a “significant share of ownership”. According to the operational definition, significant means high enough to grant influence and control over the key strategic decisions concerning the functioning and the development of the business. The distribution of ownership by gender in enterprises with more than one owner can be evaluated following the model of the U.S. Survey on Business Owners: (a) Business ownership is defined as having 51 percent or more of the shares/stock or equity in the business; (b) For jointly owned enterprises, information on gender, relationship (family member or not), and ownership shares for the four main owners of the business should be collected. Women (men)-owned businesses are those businesses where one or more women (men) hold 51 percent or more of the shares. Mixed-owned businesses are those with equal participation in ownership by women and men, and where women and men together hold at least 51 percent of the shares. This identification

strategy generates a residual category of businesses for which non-physical persons, such as other businesses or corporations, hold the majority of the business.⁶⁸

62. For complex organizations, gender issues are more related to imbalances in access to management roles, rather than to entrepreneurship. Even if gender issues in entrepreneurship and senior management are closely interrelated, it is important to keep a distinction between the two domains in measurement and in policy advice. The measurement problem of large corporations that are neither women- nor men-run might be circumvented by limiting the population of interest to certain legal categories of firms (e.g. sole-proprietorships, partnerships and limited liability companies). One caveat is that legal categories are defined in different ways in different countries. Other operational rules can be evaluated, such as the restriction of the relevant universe to companies whose shares are controlled for the majority by physical persons.

Indicators on entrepreneurial participation

63. The following set of indicators of *entrepreneurial participation* is the result of many meetings and consultations with stakeholders to accommodate different understanding of what makes an entrepreneur and evaluate gender gaps in particular ‘types’ of entrepreneurship.

Focus area	Indicators	Rationale	Proposed questions in model questionnaire (Annex 1) ⁶⁹
Entrepreneurial Participation	C1. Percentage of business owners who are women	The indicator measures the percentage of business owners who are women.	Questions 705-706f
	C2. Percentage of women who are the main owners of and control	This indicator refers to the subset of business owners who control the operations and finances of the business by holding a majority	Questions 718-721c

⁶⁸ United Status Census Bureau. *U.S. Survey of Business Owners*. Available at <https://www.census.gov/programs-surveys/ase/about.html>

⁶⁹ See proposed set of questions in the model questionnaire in annex 1.

	businesses, by presence of employees	share and having responsibility for the management. This more restrictive definition of entrepreneurs requires additional screening questions on the activities of the individual owner. An owner is also a manager when he has responsibility for managing day-to-day operations, and/or holds the financial and development control of the business, having the ability to sign contracts, loans, hire or dismiss employees	
	C3. Percentage of enterprises owned by women, by size of enterprise and activity	'The percentage of firms owned by women, by size' is included in the Minimum Set of Gender Indicators.	Questions 724
	C4. Percentage of women among owners of unregistered businesses	Gender differences in entrepreneurship are magnified by the greater incidence of informality among women owners. Producing good quality information on the distribution by sex of the ownership of informal firms is essential to inform about the economic vulnerability of women entrepreneurs.	Questions 722 and 723 with code 2
	C5. Percentage of women-owned businesses that are registered		At least one of questions 722 and 723 with code 1

Entrepreneurial Performance

64. The concept of entrepreneurial performance can include financial as well as non-financial measures. EDGE considered the following aspects for measuring entrepreneurial performance namely:

- Enterprise profit/ income and expenses
- Employment growth
- Job satisfaction of entrepreneurs
- Nascent, new, and established enterprises (average age of enterprises)

65. Although the evidence is mixed, there is some suggestion that the financial rewards from self-employment are lower than those from wage employment. The evidence is more conclusive on the fact that women-owned businesses realize significantly lower profits than men-owned businesses. Good measures of gender differences in business profits matter both for evaluating the welfare effects on women of changes in entrepreneurial participation, as well as for examining the relative market performance of women-owned businesses.

66. For measuring the gender gap in earnings from business ownership, the main issue is to identify a single concept of business earnings that can be applied to the heterogeneous population of business owners as earnings from business ownership tend to mean different things for incorporated enterprises and unincorporated enterprises. Owners of incorporated enterprises earn their income by drawing a salary, by collecting dividends accruing to shareholders or through capital gains, while owners of unincorporated units receive an income that is directly dependent upon the surplus accruing from the production process. Moreover, in small businesses with negligible capital, the profits of the enterprise approximate well the returns from the labor input of the entrepreneurs, while in larger businesses, the enterprise's income and profits reflect the returns from the capital invested and its consumption. Producing a single measure of the returns from entrepreneur's employment for both contexts would thus require deducting the consumption of fixed capital (or depreciation) as well as the income retained and reinvested in the enterprise.

67. Another issue that is particularly relevant for gender analysis is the sharing of the enterprise profits in multi-owner enterprises, and particularly in family enterprises. The measure of business earnings should correspond to the share of profits accruing to each partner in order to assess the economic welfare of individuals. A possible solution would be to ask about total enterprise profits and share these profits among the owners according to self-declared ownership shares. However, there is no empirical evidence that the net income from family businesses is distributed between men and women according to their ownership share or to their actual contribution to production and management.

68. The decision of entrepreneurs of whether or not to pursue a growth objective in their operations involves trade-offs between financial and non-financial factors including: financial realization versus increased personal demands; personal and social accomplishment versus increasing organizational tensions; and, the risk of losing spousal support.⁷⁰ Some studies have found that women entrepreneurs are less interested in growing their business than their male counterparts^{71,72,73}. On the other hand, when women and men entrepreneurs have equally growth aspirations, women more often establish size thresholds which they do not wish to exceed⁷⁴, achieving the level of business operations that enables them to maintain full control and balance work-family life.

Indicators on Entrepreneurial Performance

69. A set of indicators is proposed to measure *entrepreneurial performance*. These indicators are relevant for monitoring gender differences in entrepreneurial performance.

Focus area	Indicators	Rationale	Proposed questions in model questionnaire (Annex 1) ⁷⁵
Entrepreneurial Performance	D1. Gender gap in earnings from the business	The main issue with this indicator is that it is difficult to identify a single concept of business earnings that can be applied to the heterogeneous population of business owners. The EDGE pilots have canvassed a single question about the self-reported earnings from the entrepreneur instead of collecting detailed data on gross output, operating expenses and	Question 730.

⁷⁰ Piacentini, M. (2013). Women Entrepreneurs in the OECD: Key Evidence and Policy Challenges, OECD Social, Employment and Migration Working Papers, No. 147, OECD Publishing, Paris, <http://dx.doi.org/10.1787/5k43bvtkmb8v-cn>

⁷¹ Welter, F. (2001). Who wants to grow up? Growth intentions and growth profiles of (nascent) entrepreneurs in Germany. *Frontiers of Entrepreneurship Research*, 91-100.

⁷² Isaksen, E and Lars Kolvereid (2005). Growth Objectives in Norwegian Start-up businesses. *International Journal of Entrepreneurship and Small Business*. 2(1), 17-26.

⁷³ Cliff, J.E. (1998). Does one size fit all? Exploring the relationship between attitudes towards growth, gender, and business size. *Journal of Business Venturing*. 13(6), 523-542.

⁷⁴ Ibid.

⁷⁵ See proposed set of questions in the model questionnaire in annex 1.

		consumption of fixed capital, allowing the calculation of implicit profits by subtracting costs from revenues ⁷⁶ .	
	D2. Gender gap in business turnover	When the interest mainly lies in comparing the economic weight and size of women and men-owned enterprises, it is more convenient to use a simpler indicator on turnover disaggregated by the gender of the entrepreneur.	Question 729
	D3. Percentage of business with employment growth	The growth dynamics of enterprises owned by women and by men can be approximated through simple questions on changes in the number of paid continuous employees over a certain interval (i.e. over the last year, since the beginning of the business activity). Indicator D3 calculates the percentage of businesses owned by women and by men whose owner/manager reports an increase in the number of paid continuous employees over the last three years of operation.	Question 731
	D4. Average age of enterprises owned by women and by men	There is some evidence that women's enterprises tend to be smaller and to be less sustainable than men's enterprises. For example, women-owned firms in Australia and the United States are significantly more likely than men-owned firms to close, especially during the first years after start-up (Robb and Watson, 2010).	Question 707
	D5. Job satisfaction of entrepreneur	This question will measure two aspects of job satisfaction among women entrepreneurs: first, the overall satisfaction rate among all entrepreneurs, by gender; second, the key factors affecting job satisfaction, by gender	Question 737

⁷⁶ De Mel, McKenzie, and Woodruff (2009) show that there are often important differences between directly reported profits and the profits calculated from reported revenues and costs. This gap is largely due to the fact that the majority of micro-enterprises do not keep regular accounts. Their conclusion is that a direct question on "net revenue" is a good proxy for profits.

CHAPTER TWO. DEVELOPMENT OF A MODEL QUESTIONNAIRE ON ENTREPRENEURSHIP AND ITS ADAPTATION IN THE EDGE PILOT COUNTRIES

70. The conceptual framework to measure entrepreneurship presented in the previous chapter provided the theoretical structure that was later tested through household surveys in six of the EDGE pilot countries. Household surveys were considered the most appropriate source of data for most dimensions of entrepreneurship that are of particular interest from a gender perspective. Furthermore, women entrepreneurs in micro/small home-based enterprises may not be adequately covered in an enterprise survey or business register⁷⁷.

71. This chapter presents the entrepreneurship questions, which were tested in the EDGE pilot surveys. It introduces the initial model questionnaire proposed by EDGE, its national adaptations and lessons learned from the first group of pilot surveys. It then presents the revised questionnaire which was used in the sixth and final pilot survey on entrepreneurship, in South Africa (adapted and presented as the EDGE model questionnaire on entrepreneurship in Annex 1). The chapter concludes with a presentation of key findings from the pilot data for illustrative purposes.

2.1. Pilot Surveys

72. Under the EDGE project, national statistical offices in seven countries piloted the proposed methodology on measuring asset ownership from a gender perspective and six of them also included the EDGE module on entrepreneurship⁷⁸. The pilot studies provided an opportunity to test and refine key aspects of the methodology, including conceptual and measurement issues related to questionnaire design, respondent selection interview protocols and indicator constructs.

⁷⁷ In fact, business registers are not exhaustive enough to contain the small and micro enterprises operating in countries due to scope and threshold restrictions. Further, the sampling frames for enterprise surveys, drawn from business registers, are affected by the same shortcomings.

⁷⁸ The selection of pilot countries was based on three criteria. First, given the limited scope of the project, countries had to possess adequate statistical capacity to contribute to the development of new methodologies. Second, countries had to have plans in place to either conduct a survey that could accommodate a module on asset ownership and control or be willing to implement a stand-alone survey during the project time frame. Third, countries had to express interest in producing better gender statistics, including on asset ownership and control. The selected seven countries offered a variety of contexts that could influence asset ownership/entrepreneurship at the individual level, including in terms of economies, gender norms, legal frameworks and rights to property.

In Uganda, in 2014, the EDGE project partnered with the World Bank LSMS team to conduct a methodological survey experiment assessing the relative effects of interviewing different household members about individual-level asset ownership and control, the findings of which informed the EDGE pilots implemented over the next two years. In 2015, Mexico appended a module on a “core” set of assets to a national household survey, while Georgia, Mongolia and the Philippines implemented stand-alone surveys on the full range of financial and physical assets and entrepreneurship. In 2016, the Maldives appended a module on a core set of assets and entrepreneurship to a national household survey and South Africa piloted a stand-alone survey. (see table 1 for an overview of the EDGE pilots).

73. The main objective of the EDGE pilot surveys was to test the EDGE methodology for measuring individual level asset ownership and control and entrepreneurship from a gender perspective. This included quantitative and qualitative assessments of: (1) the design of the EDGE questionnaire to ensure that questions were clear, response categories were adequate for the survey population, difficult/sensitive questions/modules were identified, and concepts were well-operationalized; (2) the feasibility of interviewing the household members selected for interview according to the EDGE field protocols; and (3) the relevance of the proposed EDGE global indicators to the country context.

74. The sampling units were the household and its members, the individuals. Data were collected using two questionnaires: (a) a household questionnaire to gather household level information, and (b) an individual questionnaire for data at the individual level, obtained from the person(s) selected for the interview. The respondent for the household questionnaire was the most knowledgeable/reference person in the household, i.e., the person most likely to have information related to assets owned by household members. The household questionnaire was administered to only one respondent per household. In the individual questionnaire, self-reporting rather than proxy-reporting was adopted⁷⁹.

⁷⁹ United Nation (2018). The *United Nations Guidelines for Producing Statistics on Asset Ownership from a Gender Perspective*. https://unstats.un.org/edge/publications/docs/Guidelines_edited.pdf

75. As presented in table 1, in all pilot countries with exception of Uganda, the first pilot/experiment, data on asset ownership and control were collected at the individual level from a maximum of three respondents (aged 18 and above) from each selected household. The entrepreneurship module, however, was asked to every household member identified initially in the household roster as a “potential” entrepreneur (explained in more detail in section 2.2). Interviews with household members were done independently and simultaneously (or at least consecutively) in order to mitigate the possible contamination of data that may result when household members discuss sensitive questions such as asset ownership and wealth.

Table 1. Overview of EDGE pilots⁸⁰

Country	Dates of data collection	Data collection strategy	Asset coverage	Sample size	Within household respondent selection
Uganda (MEXA)	June-August 2014	Stand-alone survey	Principal dwelling, agricultural land, livestock, agricultural equipment, non-farm enterprises, real estate, consumer durables, financial assets and liabilities, valuables	2,720 households	<p>5 interview settings were tested:</p> <ol style="list-style-type: none"> 1. Self-identified most knowledgeable household member, interviewed alone, asked about assets owned, exclusively or jointly, by any household member; 2. Randomly selected member of the principal couple - interviewed alone, asked about assets owned, exclusively or jointly, by any household member; 3. Principal couple - interviewed together, asked about assets owned, exclusively or jointly, by any household member; 4. Adult (18+) household members - interviewed alone and simultaneously, asked about assets owned, exclusively or jointly, by any household member, and; 5. Adult (18+) household members - interviewed alone and simultaneously, asked about assets owned, exclusively or jointly, by individual respondent.
Mexico	June-October 2015	Modules appended to National Household Survey (ENH)	Principal dwelling, agricultural land, livestock, agricultural equipment, non-farm enterprises, real estate, financial assets and liabilities	An ENH subsample of 8,204 households	Principal couple; self-reported and proxy data collection. In households without couples, the household member most knowledgeable about the assets belonging to the household and a household member of the opposite sex were interviewed.

⁸⁰ For more information of the survey methodology and implementation in Georgia, Mongolia and the Philippines, see <https://www.adb.org/sites/default/files/publication/419781/measuring-asset-ownership-gender-perspective-report.pdf>, also available at <https://unstats.un.org/edge/pilot/georgia/georgia.cshtml>; <https://unstats.un.org/edge/pilot/mongolia/mongolia.cshtml>; <https://unstats.un.org/edge/pilot/philippines/philippines.cshtml>

Country	Dates of data collection	Data collection strategy	Asset coverage	Sample size	Within household respondent selection
Georgia	September- October 2015	Stand-alone survey	Principal dwelling, agricultural land, livestock, large agricultural equipment, non-farm enterprises, real estate, consumer durables, financial assets and liabilities, valuables	2,783 households, nationally-representative	Principal couple plus a third randomly selected household member; self-reported and proxy data collection. In households without couples, the household member most knowledgeable about the assets belonging to the household and two randomly selected respondents were interviewed.
Philippines	September-October 2015	Stand-alone survey	Principal dwelling, agricultural land, livestock, agricultural equipment, non-farm enterprises, real estate, consumer durables, financial assets and liabilities, valuables	1,536 households, representative for Cavite province	Principal couple plus a third randomly selected household member; self-reported and proxy data collection. In households without couples, the household member most knowledgeable about the assets belonging to the household and two randomly selected respondents were interviewed.
Mongolia	September- November 2015	Stand-alone survey	Principal dwelling, agricultural land, livestock, agricultural equipment, non-farm enterprises, real estate, consumer durables, financial assets and liabilities, valuables	2,983 households, nationally representative	Principal couple plus a third randomly selected household member; self-reported and proxy data collection. In households without couples, the household member most knowledgeable about the assets belonging to the household and two randomly selected respondents were interviewed.
Maldives	May 2016	Module appended to Household, Income and Expenditure Survey (HIES)	Principal dwelling, agricultural land, enterprises, real estate, financial assets and liabilities	An HIES subsample of 272 households on 3 islands	1 randomly selected adult household member; self-reported data collection

Country	Dates of data collection	Data collection strategy	Asset coverage	Sample size	Within household respondent selection
South Africa	August-September 2016	Stand-alone survey	Principal dwelling, agricultural land, livestock, agricultural equipment, non-farm enterprises, real estate, consumer durables, financial assets and liabilities, household decision-making module	1,568 households in KwaZulu-Natal province	In half of the sample, 1 randomly-selected adult household member; self-reported data collection. In the other half of the sample, 1 randomly-selected adult household member and his/her spouse/partner; self-reported data collection.

2.2. Questionnaire design

76. The conceptual framework described in the previous chapter was translated/operationalized into a survey questionnaire, developed by the EDGE team and was customized with partner agencies and pilot NSOs, according to the country context. The questionnaire was pre-tested in each pilot country and further revised as needed. As mentioned above, the overall questionnaire consisted of two parts: (a) the household questionnaire and (b) the individual questionnaire.

(a) The **Household Questionnaire** included the roster of all household members and asked for demographic and economic information including the employment status of each household member. The modules embedded within the household questionnaire were:

Module	Description of Module
Household information	Gathered information on items that helped identify a surveyed household such as the stratum name, district, and enumeration area.
Staff Details	Recorded information on enumerator and supervisor assigned, as well as interview particulars, such as starting time and date of interview.
Household Roster	Listed household members. This included detailed demographic information on each member such as their age, sex, relationship to household head, education and employment status.
Household Dwelling Characteristics	Gathered information on physical characteristics of household such as the materials used. Also, included some indicators for sanitation and water supply.

(b) The **Individual Questionnaire** was designed to collect information about the assets and businesses owned by member(s) of the household. Several modules were included in the EDGE individual questionnaire (below), including one on non-agricultural enterprises:

Module	Description of Module
Principal dwelling	Included questions on the plot of land and dwelling in which the household lived. Only included the primary dwelling unit.
Agricultural land	Determined whether household members owned agricultural parcels, either exclusively or jointly with someone else. Questions also included parcel area, primary use of parcel, and tenure status.
Livestock	Determined whether members of the household owned any livestock, either exclusively or jointly with someone else. List of livestock was tailored to the country's context.
Agricultural equipment (large and small)	Asked whether household members owned any large or small agricultural equipment, either exclusively or jointly with someone else. Options for both were listed and individually inquired.
Non-agricultural enterprises and enterprise assets	Collected detailed information on all non-agricultural enterprises owned by members of the household at the time of survey. These enterprises had to be operating, closed temporarily, or operating seasonally.
Other real estate	Determined if members of the household owned any other real estate, either exclusively or jointly with someone else. Categories of other real estate were provided, including non-agricultural land.
Consumer durables	Collected information on consumer durables owned by the household. Items that were neither working nor functional, and which the owner had no intention of having repaired for consumption were not listed.
Financial assets	Included questions on financial assets owned, either exclusively or jointly with someone else. Apart from financial assets in financial institutions, money loaned by the respondent to someone else were also considered a financial asset.
Liabilities	Identified loans incurred by the respondent either from private individuals or financial institutions.
Valuables	Determined if household members owned valuables. List of valuables included in the questionnaire was tailored to the country context.

Decision-making	Included questions on the decision-making powers of women and men within the household. Essential for intra-household analysis of the relationship between women's and men's asset ownership and intra-household decision-making.
End of Questionnaire	Collected information on completion status, ending time, and date of interview, and other relevant comments.

HOUSEHOLD QUESTIONNAIRE: « FIRST PILOTS » OF ENTREPRENEUR PARTICIPATION QUESTIONS

77. In order to identify the broader “universe” of entrepreneurs and their gender in the selected households, EDGE initially piloted a filter/screening question (**Qx2** below) in the **household questionnaire** in Georgia, Mongolia and the Philippines. The purpose of this question was to estimate the proxy target population of entrepreneurs from whom to discount the “dependent self-employed”, through a set of follow-up questions included in the individual questionnaire, described below.⁸¹

78. The screening question was adapted from the Labour Force Survey of the UK Office for National Statistics and was asked for the household members identified as “own account workers” according to question Qx1 (employment status):

Qx1: In what kind of status of employment did [NAME] spend most of his/her time in any economic activity in the last 7 days? This question should be asked for all household members aged 15 years or above.

- Hired/employee.....1
- Employer (farmer with hired workers).....2
- Employer (entrepreneur in non-agriculture with hired workers).....3
- Own account worker in their own peasant farm.....4

⁸¹ Dependent self-employed are an increasingly relevant category of workers, as a consequence of a growing share of outsourced activities by firms. These workers are often considered at high risk of vulnerability. Employed workers who shift to a self-employment status often lose their rights under labour law, receive less favourable benefits from social security protection and are often beyond trade union representation and collective bargaining.

Own account worker(except those employed in their own peasant farm).....	5
Member of producers' cooperative.....	6
Contributing family worker.....	7
Not classified by employment status....	.8
Not engaged in economic activity (those who have worked for less than one hour during the last 7 days).....	9

Qx2: Is [NAME], in his/her primary work? READ ALL CATEGORIES.

A sole director of one's own limited-liability company.....	1
A partner/associate in one's own limited-liability company.....	2
Running alone one's own enterprise (non LLC).....	3
A partner in an enterprise (non LLC).....	4
Other (describe activity).....	96

79. In addition, the following question was asked to identify those who regardless of employment status pursued entrepreneurial activities as a secondary job:

Qx3: In addition [to this primary status in employment], is [NAME] owning and operating a non-agricultural enterprise in subsidiary capacity?

Yes.....	1
No.....	2

LESSONS LEARNED

80. Important lessons were learned from the implementation of the first pilots:

- (a) The screening questions at household level (Qx1 on status in employment and Qx2 above) proved to be too simplistic to allow the identification of the target population to whom follow up questions on entrepreneurship had to be asked. Question Qx2 “*Is ____ in his/her primary work: A sole director of one's own limited-liability company; a partner/associate in one's own limited-liability company; running alone one's own enterprise (non-LLC) or a partner in an enterprise (non-LLC)*” proved also to be difficult to understand by both respondents and interviewers.

(b) Furthermore, results of data analysis undertaken on the initial pilots confirmed that the question on employment status was not sufficient/did not adequately identify potential entrepreneurs. For example, in Georgia, 31% of men and 46% of women who were identified as entrepreneurs in the detailed screening questions (see below) in the individual questionnaire/module on entrepreneurship, had not been identified as entrepreneurs based on questions (Qx1 and Qx2).

81. Therefore, in the last pilot in South Africa in 2016, a more detailed list of questions was adopted in the household questionnaire, and information was gathered, from the respondent, for all household members aged 15 years and older, to identify the broad universe of business owners (see the Annex on South Africa - EDGE Household questionnaire).

INDIVIDUAL QUESTIONNAIRE: MODULE ON ENTREPRENEURSHIP

82. The individual questionnaire (entrepreneurship module) aimed to collect detailed information on owners of enterprises operated by any member of the sample household. Thus, the first task was to identify whether any member of the selected household owned and operated an enterprise (business, in a common parlance) during the reference period with the main intention of earning income.

83. An enterprise is an undertaking which is engaged in the production and/or distribution of some goods and/or services meant mainly for the purpose of sale whether fully or partly no matter how small. Enterprises of interest were those that were currently operating, closed temporarily, or operating seasonally. Enterprises once owned by the household that had been closed permanently were not covered. They could be an informal enterprise or a formal one of any size. For instance, one-person operations providing goods/services for other non-household members/groups, i.e. working independently on their own-account, were classified as enterprises.

84. Capturing information on agricultural enterprises was operationally more challenging especially with respect to separating agricultural activities for own consumption from activities

mainly for the purpose of sale. Therefore, the EDGE module collected only information on *non-agricultural enterprises*.

85. The following definitions were used to distinguish between agricultural and non-agricultural enterprises. Agricultural enterprises were enterprises engaged in the production and sale of non-processed agricultural goods (such as milk, wool, fruits, vegetables) produced on own farm. Non-agricultural enterprises were enterprises engaged in the production and/or sale of goods and services other than own-produced, non-processed agricultural products. It should be noted that the sale of by-products of agricultural goods (such as cheese, beer, jam, wool) was considered a non-agriculture enterprise in the manufacturing sector. The sale or trade of agricultural products purchased from non-household members was also a non-agricultural enterprise, in the trade sector. Other examples of non-agricultural enterprises were: making mats, crafts and bead jewellery, bricks, or charcoal; working as a builder or carpenter; selling firewood; metalworking; running a street corner stall; providing services such as haircuts or massages; making local drinks, carpets or baskets; trading in any form (in food, clothes or various articles), offering services for payment in cash or in-kind, including for professional activity (like that of a private lawyer, a doctor, etc.).

<i>Enterprise screening questions in the individual questionnaire</i>
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86. The EDGE entrepreneurship individual module started with the following screening questions to determine whether the respondent owned an enterprise. In particular, these questions aimed to capture the small and informal enterprises where women are more likely to be engaged. If the respondent did not own an enterprise, this module was skipped.

Do you currently engage in any of the following activities with the main intention of earning income?

Q301...own a non-agricultural enterprise or provided a non-agricultural service from home or a household-owned shop, as a carwash owner, metal worker, mechanic, carpenter, tailor, barber, etc.?

Q302 ... process and sell any agricultural by-products, including flour, starch, juice, beer, jam, oil, seed, bran, etc.?

Q303...own a trading enterprise on a street or in a market?

Q304...offer any service or sold anything on a street or in a market, including firewood, home-made charcoal, curios, construction timber, wood poles, traditional medicine, mats, bricks, cane furniture, weave baskets, thatch grass etc.?

Q305...own a professional office or provided professional services from home as a doctor, accountant, lawyer, translator, private tutor, midwife, mason, etc.?

Q306...drive a household-owned taxi or pick-up truck to provide transportation or moving services?

Q307...own a drinking place (ex. bar) or eating place (ex. restaurant)?

Q308 ...own any other non-agricultural enterprise not mentioned above, even if it is a small enterprise run from home or on a street?

Q309. ENUMERATOR: IS THERE A "1" FOR ANY OF THE QUESTIONS 301 THROUGH 308?

A “yes” answer to any of these questions would suggest presence of an enterprise owner in the sample household.

CUSTOMIZATION IN PILOT COUNTRIES

87. As examples of customization of the EDGE entrepreneurship model questionnaire, Mongolia added the reference to “*yogurt, cheese*” in the screening question Q302 “...*process and sell any agricultural by-products, including flour, starch, juice, beer, jam, oil, seed, bran, wine, other dairy products, etc.*?”, given that many households in the rural areas sell milk products in the market. While, in the Maldives, since fishing is one of the main income-generating activities in the country, the screening questions (Q301-Q309) were revised and an additional question “*Selling own-produced agricultural products or own caught/raised fish or sea products*” was included. The screening questions also included minor changes to be more relevant to the Maldivian context.

Description of enterprise and economic activities undertaken by the enterprise

88. Reliable information on entrepreneurial resources and constraints, entrepreneurial participation and performance can only be collected from the owner of the enterprise and not necessarily by the head of the household who is often the respondent in a household questionnaire. Therefore, the following questions were only asked in the individual questionnaire to household members who were identified as entrepreneurs.

Q701: Name and address of enterprise

89. The name and address of all enterprises owned by members of the household were asked and recorded before proceeding to the remaining questions in the module, in order to help with identifying enterprises owned by household members who were administered the enterprise module. If there was no locational address, the enumerator was instructed to record landscapes or any features near the enterprise that could have served as an identifier.

Q702: Where is this [ENTERPRISE] located?

Home, inside the residence.....	1
Home, outside the residence....	2
Industrial site.....	...3
Traditional market...4
Commercial district shop...	.5
Roadside.....	..6
Transport vehicle.....	..7
No fixed location (mobile, door-to-door, street w/o fixed post.....	8
Other.....	...96

90. The objective of this question was to evaluate the physical location where the business was carried out, also allowing for the distinction between “fixed location” and “non-fixed location” (improvised or moving business place). Any activity that was carried out in a specific place/room was classified as being in a “fixed location” (e.g. shop on the first floor, workshop of tailoring).

Otherwise, the activity was considered as being carried out in a non-fixed location (e.g. a hairdresser without a salon providing his/her services at the client's home).

Q703: Please describe the kind of main activity each enterprise is engaged in

91. This question requested a brief description of the type of activity the enterprise was engaged in. The description had to be succinct, sufficient for enumerators to classify the enterprise by economic activity according to ISIC Rev. 4. Examples include: vegetable seller in market, bicycle repair, palm mat weaving, furniture or coffin making, used clothes trading, beer brewing, charcoal making.

Q704: How many months was this enterprise operational during the last 12 months?

92. This question recorded the number of months that the enterprise had been in operation during the previous 12 months. If the enterprise operated less than a month, '00' was coded and appropriate remarks were recorded.

Q705: Who are the owners of this enterprise? Record % of ownership [for each joint owner]

93. The household ID of the person who owned the enterprise was recorded. If the enterprise was owned jointly by more than one person in the household, IDs of up to 4 owners were recorded. It was also recorded if the enterprise was owned jointly with a person(s) outside of the household. For enterprises that were owned jointly, self-reported percentage ownership of each owner of the enterprise was recorded.

LESSON LEARNED:

In Georgia, Mongolia and the Philippines, respondents had difficulty in understanding the term “enterprise” as this generally applies to registered enterprises in these countries⁸². The enumerators had to explain that enterprise refers to any activity intended for income generation, including small-business operated by household members.

⁸² Asian Development Bank. (2018). Measuring Asset Ownership and Entrepreneurship from a Gender Perspective: Methodology and Results of Pilot Surveys in Georgia, Mongolia, and the Philippines. <https://www.adb.org/publications/measuring-asset-ownership-entrepreneurship-gender-survey>

Q710: What was the average number of hours per week that each owner spent managing or working on this enterprise in the last operational month?

94. Average number of hours per week spent by each owner working on the enterprise during the last operational month was recorded. The last operational month was used as the reference period. Operational month is the month in which the business last conducted business activity. This is affected by seasonality of businesses. For example, an enterprise that sells Christmas decorations might only be operational around Christmas time.

LESSON LEARNED:

Entrepreneurs who were not working continuously found it difficult to estimate the average number of hours per week.

Q716: Who has the main responsibility for providing services and/or producing goods?

95. In case of jointly owned enterprises, it was assessed who had the main responsibility for providing services and/or producing goods. For this purpose, ID code of the person who had the main responsibility for providing services and/or producing the goods in the enterprise was recorded. If more than one person had the main responsibility, IDs of up to 4 household members were entered. If a non-household owner or a hired manager had this responsibility, it was recorded as “99”.

Q718: Who has the main responsibility for managing day-to-day operations?⁸³

96. The ID code of the person who had the main responsibility for managing the day-to-day operations of the enterprise was recorded. If more than one person had the main responsibility, up

⁸³ An accurate measurement and evaluation of management practices of men and women business owners is outside the scope of this report. Countries that are interested in extending the data collection to include measures of management or organizational practices can refer to the experience of the World Management Survey (http://worldmanagementsurvey.org/?page_id=481). The survey has been collecting data and developing management quality scores for 10 years in more than 20 countries.

to 4 household members' IDs were entered. If a non-household owner or a hired manager had this responsibility, it was recorded as "99".

Q720: Who has the main financial control, including the ability to sign loans, leases and contracts?

97. The identification code of the person who had the main financial control of the enterprise, including the ability to sign loans, leases, and contracts on behalf of the enterprise was recorded. If more than one person had the main responsibility, up to 4 household members' IDs were recorded. If a non-household owner or a hired manager has this responsibility, it was recorded as "99".

<i>Acquisition of the enterprise</i>

Q708: How was this enterprise acquired?

Founded.....	1
Purchased.....	2
Inherited after the death of a family member.....	3
Allocated by family.....	4
Acquired through marriage.....	5
Gift from a non-household member.....	6
Government Program.....	7
Other(specify).....	96
Don't know.....	98

98. This question asked how the owner(s) acquired the enterprise. The mode of acquisition of the enterprise is one of the important characteristics for studies on entrepreneurship. If the enterprise had more than one owner, the owners may have acquired the enterprise in different ways. For example, one owner could have inherited the enterprise and his/her partner could have purchased, or bought into, the enterprise. Multiple modes of acquisition were recorded if the enterprise had more than one owner with their corresponding IDs.

<i>Source of start-up capital</i>

Q709: What was the main source of funding used for founding this enterprise?

Own/household's savings.....	1
Friends and relatives.....	2
Private money lender.....	3
Commercial and development bank....	4
Microfinance institution.....	5
Credit institution.....	6
Trader/shop keeper.....	7
NGO.....	8
Government.....	9
Other (specify).....	96
Don't know.....	98

99. This question aimed to find out the main source of capital used for purchasing or starting the enterprise. The sources/categories of funding were not prompted to the respondent while collecting the information. Respondents were allowed to specify the source of funding. In case the respondent mentioned several sources of funding, he/she was asked to rank them in order of importance and only the main source was recorded.

Q707: In what year was this enterprise established or acquired by the owner(s)?

100. This question asked the year in which the respondent established or acquired the enterprise.

<i>Registration status</i>

Q722: Is this enterprise registered?

Government	1
Not registered	2
Registration in process.....	3
Other (specify).....	96

Refuse to respond97

Don't know.....98

This question is intended to check if the enterprise is registered.

LESSON LEARNED:

Procedures, time, cost and paid-in minimum capital requirements for registering an enterprise may discourage entrepreneurs from registering their businesses. Inclusion of an additional category for “Registration withdrawn or cancelled” could provide more granular information on the complexity of registration processes if informality is a prioritized concern. A follow-up question to Q722 could then be developed to inquire about possible reasons why an enterprise is not registered.

Q722a: What type of records or accounts this [ENTERPRISE] maintained?

No written account kept1

Informal record for personal use2

Simplified accounting format required for tax payment ...3

Detailed formal account.....4

Refuse to respond97

Don't know.....98

The categories for recording and accounting practices should be those prescribed in existing laws and regulations of the country.

LESSON LEARNED:

This question was piloted in Georgia, the Philippines and Mongolia but was not retained in South Africa.

Number of paid employees

Q724: How many paid employees does this enterprise currently employ on a continuous basis, excluding the owner(s)?

101. This question aimed to find out the size of the enterprise. The number of paid employees that worked for the enterprise on a regular basis excluding the owner(s) was recorded. If the number of paid employees fluctuated, the number of paid employees during a “normal” month when the enterprise was operating was recorded.

LESSON LEARNED:

Respondents and interviewers were unclear on the meaning of “continuous basis”. On a “*continuous basis*” implies a period of employment which is longer than a specified minimum determined according to national circumstances. (If interruptions are allowed in this minimum period, their maximum duration should also be determined according to national circumstances.) In the last EDGE pilot in South Africa, “on a continuous basis” was replaced by “on a regular basis”.

Source of operating/expanding capital

Q725: During the last 12 months, what was the primary source of funding used to finance expansion and capital improvements or to face unexpected expenses for this enterprise?

Didn't expand enterprise, make capital improvements or face unexpected expenses.....	1
Own/household's savings.....	2
Friends and relatives.....	3
Private money lender.....	4
Commercial and development bank.....	5
Microfinance institution.....	6
Credit institution.....	7

Trader/shop keeper.....	8
NGO.....	9
Government.....	10
Other (specify).....	96
Don't know.....	98

102. This question aimed to find out the main source of capital used to expand or improve the enterprise or to pay for unexpected expenses. The sources/categories of funding were not prompted to the respondent while collecting the information. Respondents were allowed to specify the source of operating capital. In case the respondent mentioned several sources of operating capital, he/she was asked to rank them in order of importance and the main one was recorded.

<i>Loans/lines of credit</i>

Q726: During the last 12 months, did the [ENTERPRISE] apply for loans or line(s) of credit?

Yes.....1
No.....2 (skip to Q728)

Q727: Was the loan application accepted?

Yes.....1
No.....2

103. This question was only asked if the enterprise applied for a loan or a line of credit in the past 12 months. It was recorded whether the loan application was accepted. If the enterprise applied for more than one loan in the past year, only the most recent loan was considered.

LESSON LEARNED:

It was pointed out that loan applications are not always approved in full. Inclusion of additional categories such as “Accepted partially/not accepted in full” or “Application withdrawn or cancelled” could provide more granular information if entrepreneurs’ access to finance is a prioritized concern.

Q728: What was the main reason your enterprise did not apply for a line of credit or a loan during the last 12 months?

- No need for a loan-enterprise has sufficient capital..... 1
- Application procedures for loans or line of credit are complex..... 2
- Interest rates are not favourable.....3
- Collateral requirements for loans or line of credit are unattainable. .4
- Size of loan and maturity are insufficient.....5
- Did not think it would be approved.....6
- Other (specify).....96

104. This question asked the reasons for not applying for loan or a line of credit. The respondent was asked to report the main reason why the enterprise did not apply for a loan or a line of credit in the 12 months without reading out the reasons. If the respondent mentioned several reasons s/he did not apply for a line of credit/loan, he/she was asked to rank them in order of importance and the main one was recorded.

<i>Monthly turnover</i>

Q729: What was the approximate monthly turnover from the enterprise?

105. Turnover is the gross revenue that is generated from the sale of goods and services produced without deducting expenses. In case of enterprises working in the service sector, it is the gross revenue receivable from the services provided. In case of trading enterprises, it is defined as the value of sales. The gross revenue without deducting cost of purchases of goods for resale should be recorded. For the non-financial enterprises, turnover does not include receipts on account of interest and dividends. For financial sector enterprises engaged in financial intermediation, the turnover is equal to the net interest earned or accrued to the enterprise plus other earnings like fees, brokerage on trading, commission, costs of financial advice, etc.

LESSON LEARNED:

There seemed to be no common understanding of what the question was asking for.

Monthly income

Q730: What was the total income the enterprise earned last month after paying all expenses, including wages of employees, but not including any income paid to yourself and other owners?

106. This question aimed to gather information on total monthly income in local currency of the enterprise after paying all expenses. Respondents considered an average over the last operational 3 months for reporting the monthly income. Expenses included purchase of raw material and wages of employees but did not include any remuneration paid to the respondent or other owners if the enterprise was jointly owned.

LESSON LEARNED:

Information on income of self-employed was acknowledged as an important proxy indicator of entrepreneurial performance. However, it was difficult to collect an estimate average monthly income by self-employed persons whose enterprise was not operating on a continuous basis. For some own-account workers (such as processing of milk from own production into dairy products), it was difficult to recall all expenses for the last three months.

It was noted that obtaining good estimates of enterprise earnings is very challenging, as it is consistently underreported, and asking a single direct question on reported earnings may be insufficient. However, while asking a detailed set of accounting-related questions on revenues and costs is an alternative approach to calculating earnings, this approach would require the addition of several questions to an already lengthy module. Further, many micro and small enterprises covered in household surveys do not keep formal accounting records.

Changes in number of paid employees

Q731: Over the past three years, has the number of paid employees increased, decreased or remained the same?

Increased..... 1

Decreased.....	2
Remained the same.....	3
Not applicable.....	95
Don't know.....	98

107. This question assessed whether the enterprise had grown in size during the last three years.

LESSON LEARNED:

The code “not applicable” was recommended to identify enterprises with no paid employees.

Desired size of enterprise

Q732: Is the enterprise your desired size or did you wish to grow it and weren't able to?

Enterprise is the size I prefer.....1 (skip to Q736)

I wanted to grow the enterprise but did not succeed.....2

108. This question sought information from the respondent if the enterprise was of his/her desired size or he/she wished to grow it but was not able to.

Constraints on enterprise

Q733: What factors have constrained the business owner's ability to increase the size of the enterprise to the desired size?

Did not make efforts to grow it.....1

Lack of demand..... . .2

Lack of inputs..... 3

Lack of finance..... ...4

Poor quality of supply of electricity and phone.....5

Lack of trained employees..... ...6

Cost of hiring new employees..... ..7

Legal regulations.....	..8
Poor quality roads.....	...9
Lack of market information.....	...10
High tax rates.....	11
Lack of clear ownership of land.....	12
High crime rates.....	13
Economic policy uncertainty.....	14
Corruption.....	15
Lack of time to work on the enterprise.....	16
Other (specify).....	96
Don't know.....	98

109. This question sought information on factors that have prevented the owner from expanding his/her business to desired size. The respondent was asked to report the main factor impeding the growth of business. If the respondent mentioned several factors, all were recorded.

LESSON LEARNED:

Though the EDGE pilot studies were conducted exclusively in developing regions, it should be noted that online sales via e-stores, particularly in developed regions with higher internet penetration rates, are vital for micro businesses seeking to grow without having to invest in a network of physical stores. Therefore, an additional category for “Lack of internet or online presence” could be considered for this question if deemed relevant for the local context. Other suggested additional categories include “Difficulty of finding new customers”, “Cost of purchasing new fixed assets” and “Poor internal management quality”. Economic research has been increasingly using quality of management to explain differences in enterprise performance and productivity in addition to capital-labor ratios.

Participation in training activity

Q734: Have you ever taken part in any course or training activity, whether formal or informal, on how to start an enterprise, such as training on how to develop a business plan, assess market opportunities, identify and access start-up capital, develop business networks, etc.?

Yes, as part of my regular education at school.....	1
Yes, at my initiative.....	2
Yes, as a condition for receiving a loan/for participating in a program....	3
Training from Government.....	4
Training from NGO.....	5
No.....	6
Yes, other (specify)	96

110. This question sought information from the respondent if s/he had ever participated in any course or training activity, whether formal or informal, on how to start an enterprise. Participation in the training of any length (e.g. one hour or several months) was included.

LESSON LEARNED:

An additional category formulated as “Yes, informally from my support network (other entrepreneurs, mentors in my professional circle)” would capture informal training activities while excluding self-training activities such as e-learning courses conducted at one’s own initiative.

Receipt of advice

Q735: Various people may give you advice on managing your enterprise. Do you regularly (once or more per month) receive managerial advice from any of the following people?

Yes, spouse/partner.....	1
Yes, other family members/relatives.....	2
Yes, friends.....	3
Yes, a public advising service (bank, lawyer, accountant).....	4
Yes, other(specify).....	5
No.....	6
Refuse to respond	97

111. This question aimed to gather information from the respondent on whether he/she received managerial advice regularly. The types of advice received may include advice on identifying new clients, investment opportunities, diversifying goods or services, managing employees, etc.

LESSON LEARNED:

Some respondents found this question difficult to understand. It was suggested that the response categories could be read to the respondents. An additional category formulated as “Yes, other entrepreneurs, professional contacts, mentors, angel investors” could be added to this question to identify possible divergences between women and men entrepreneurs in their access to advice received from formal and personal networks to manage business development.

Motivations for starting enterprise

Q736: What is the main reason why you started this enterprise?

To fill a need seen in the market for an entirely new product/service or for an improvement in an existing product/service.....	1
Because the owner identified a very profitable area for enterprise (low wages, cheap inputs, new fashion, etc.).....	2
To make more money.....	3
To gain greater flexibility, control of time.....	4
To fulfill a dream, realize a passion.....	5
To supplement the family income.....	6
Because it is the family enterprise (it is what is expected)	7
To make a positive contribution to life in the community.....	8
Because the owner did not have any other choice/lost job, laid off/to feed family.....	9
Other (specify).....	96
Don't know.....	98

112. The list of reasons for starting the new business was not prompted to the respondent. Respondents were allowed to specify the reasons on their own. If the respondent mentioned several reasons for starting the enterprise, she/he was requested to rank them in order of importance and identify the main one.

LESSON LEARNED:

Feedback received pointed out that the EDGE operationalization of necessity-based versus opportunity-based entrepreneurship, through a question asking respondents their main motivation for starting an enterprise, was too subjective. However, it was noted that this question had been tested by, and is now routinely included in, the Global Entrepreneurship Monitor (GEM) (see annex 3) and the Flash Eurobarometer Survey on Entrepreneurship, two of the most cited sources of entrepreneurship data, as well as official surveys in Mexico and Ghana.

Happiness/ satisfaction as entrepreneur

Q737: What factors would increase your happiness/satisfaction as an entrepreneur?

- More money at the end of the month for me and my family.....1
- More support from my spouse/partner/family and community.....2
- Having more time to spend with my family.....3
- Having less problems complying with public regulations/spend less time to fill paperwork, get authorizations, obtain permits and pay taxes.....4
- Feeling less concerned about my personal security and the security of my assets.....5
- Having capable and motivated help (from my paid and unpaid employees)6
- Nothing, I am fully satisfied with my work as enterprise owner...7
- Other (specify).....96

113. Factors that would increase happiness or satisfaction of the business owner was not prompted to the respondent while collecting the information. The respondent was asked to report all factors that apply. If the respondent mentioned several factors, all were recorded.

LESSON LEARNED:

Behavioral and labor economists recognize that in addition to monetary motivation, prosocial preferences, labelled also as intrinsic motivation or altruism, motivate people substantially to undertake certain jobs and participate in the labor market. Especially true for opportunity-based entrepreneurship and possibly more relevant in developed regions, an additional category for “Increased visibility and (peer/social/government/media) recognition” could be added to this question as a factor that would increase utility gained from entrepreneurial activity.

2.3. Revised entrepreneurship questionnaire

114. One of the objectives of the pilot surveys was to test the proposed EDGE model questionnaire. After feedback was received from the pilot countries, the model questionnaire was revised in collaboration with ILO. The EDGE methodology and model questionnaire was finally tested in South Africa, the last pilot study under the EDGE project. The survey instrument underwent several modifications from February 2016 with final changes undertaken during the South Africa enumerator training which was held in July/August 2016. The survey instrument was customized to the South African context in relation to content (including concepts and relevance of different modules) as well as to conform to protocols and processes adopted by Statistics South Africa in consultation with UNSD.

115. The main changes in the questionnaire, the assessment of the questionnaire and the qualitative remarks provided by the enumerators and supervisors for the pilot study in South Africa are described below.

116. The final entrepreneurship module provided in Annex 1 reflects the lessons learned from all the pilot studies conducted under the EDGE project from 2014 to 2016. In particular, the last pilot in South Africa in 2016 demonstrated that proxy reporting in a household-level questionnaire is not sufficient to identify and capture potential entrepreneurs in the household and called instead for self-reporting in an individual-level questionnaire. It should be considered as a starting point for future research on how to operationalize and collect data on the new definition of an

entrepreneur, adopted at the 20th ICLS in October 2018. It should also guide data collection on determinants and outcomes of entrepreneurship, relevant for gender analysis, in line with the conceptual framework developed under the EDGE project.

Household questionnaire (Roster) – “proxy” responses provided by most knowledgeable or reference person in the household.

EDGE initial questionnaire	EDGE revised questionnaire used in South Africa	Assessment in South Africa’s pilot	Suggestions for future research/testing
Qx1. “In what kind of status of employment did [NAME] spend most of his/her time in any economic activity in the last 7 days? “	Q215. In the last week (Monday to Sunday), did (NAME) work for a wage, salary, commission or any payment in kind (including paid domestic work), even if it was for only one hour? Examples: a regular job, contract, casual or piece work for pay.’	Respondents had difficulty assessing whether another household member (proxy responses) engaged in any work for a wage, salary, commission or payment in kind. However, they had no difficulty in providing information about themselves. It was also noted that the use of the time reference ‘In the last week’, eliminated certain activities (especially seasonal or contractual work)	Self-reported information in the individual questionnaire (below) is recommended for the collection of entrepreneurship data (see conclusions).
	Q216: ‘Was this work (or any of this work) in farming, forestry, raising animals or fishing?’	Respondents had difficulty identifying whether another household member’s work was in farming, forestry, raising animals, or fishing as per concern raised in Q215. However, they had no difficulty in providing information about themselves.	Self-reported information in the individual questionnaire (below) is recommended for the collection of entrepreneurship data (see conclusions).

<p>Qx2. “Is ____ in his/her primary work: A sole director of one's own limited-liability company; a partner/associate in one's own limited-liability company; running alone one's own enterprise (non-LLC) or a partner in an enterprise (non-LLC)”;</p> <p>Qx3: In addition [to this primary status in employment], is [NAME] owning and operating a non-agricultural enterprise in subsidiary capacity?</p> <p>Yes.....1</p> <p>No.....2</p>	<p>Q217: In the last week (Monday to Sunday), did (NAME) run or do any kind of business, big or small, for him/herself or with one or more partners, even if it was for only one hour? Examples: Commercial farming, selling things, construction, repairing things, guarding cars, brewing beer, collecting wood or water for sale, hairdressing, creche businesses, taxi or other transport business, having a legal or medical practice, performing in public, having a public phone shop, etc.</p>	<p>Respondents did not have difficulties in assessing whether an economic activity they were engaged in classified as a business.</p> <p>However, respondents had difficulty responding on behalf of another household member as per Q215.</p> <p>Similar to Q215, ‘In the last week’ overlooked seasonal businesses.</p>	<p>Self-reported information in the individual questionnaire (below) is recommended for the collection of entrepreneurship data (see conclusions).</p>
	<p>Q218: ‘Does (NAME) have a business that he/she will definitely return to? Examples: Commercial farming, selling things, making things for sale, construction, repairing things, guarding cars, brewing beer, collecting wood or water for sale, hairdressing, creche businesses, taxi or other transport business, having a legal or medical practice, performing in public, having a public phone shop, etc.’</p>	<p>Respondents had difficulty assessing if other household members had a business they would return to. However, they had no difficulty in providing information about themselves.</p>	<p>Self-reported information in the individual questionnaire (below) is recommended for the collection of entrepreneurship data (see conclusions).</p>
	<p>Q219: Is (NAME's) business in:</p>	<p>Fieldworkers shared that this question was</p>	<p>Self-reported information in the individual</p>

	<p>Farming, forestry, raising animals or fishing.....1</p> <p>A sector other than agriculture or fishing.....2</p>	<p>interpreted as a repetition of Q216.</p> <p>Also, respondents had difficulty identifying whether another household member's business was in farming, forestry, raising animals, or fishing OR a sector other than agriculture or fishing as per previous questions. However, they had no difficulty in providing information about themselves.</p>	<p>questionnaire (below) is recommended for the collection of entrepreneurship data (see conclusions).</p>
	<p>Q220: 'Did (NAME) help without being paid in any kind of business run by your household, even if it was for only one hour in the last week? Examples: Commercial farming, help to sell things, make things for sale or exchange.'</p>	<p>Respondents had difficulty identifying or recalling whether another household member had helped without being paid in any kind of business run by their household in the last week. However, they had no difficulty in providing information about themselves.</p> <p>'In the last week' also eliminated assistance that is provided seasonally.</p> <p>Fieldworkers also raised that the question was poorly phrased.</p>	<p>Self-reported information in the individual questionnaire (below) is recommended for the collection of entrepreneurship data (see conclusions).</p>
	<p>Q221: 'Was this work (or any of this work) in farming, forestry, raising animals or fishing?'</p>	<p>Accommodate option when respondent cannot provide a proxy response since respondents had difficulty identifying whether another household member's unpaid help was in</p>	<p>Self-reported information in the individual questionnaire (below) is recommended for the collection of entrepreneurship data (see conclusions).</p>

		farming, forestry, raising animals, or fishing.	
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Individual questionnaire – EDGE Module 7: Non-agricultural enterprises, « self-reported » responses provided by all members 15 years of age or older

117. This module was substantially changed after feedback received from the pilot studies and other experts, as indicated below.

EDGE initial questionnaire	Customization/ILO inputs	Assessment from South Africa's pilot	Proposed EDGE "model" individual questionnaire and suggestions for future research/testing
Q301-Q309. 'Does any member of your household currently engage in any of the following activities with the main intention of earning income?'	The filter questions (Q301-Q309) initially used in the ADB pilots were not retained in South Africa. However, questions Q217 to Q219 (previous table) in the household questionnaire were used to identify potential entrepreneurs to whom the individual module was administered.	Respondents did not have any difficulty assessing whether an economic activity they were engaged in classified as a business. Self-reported information for Q217 to Q219 worked well. 'In the last week' was considered to be restrictive given the seasonal nature of some of the activities	The original questions Q301-Q309 tested in ADB countries are retained at the beginning of the individual questionnaire as they worked well in identifying "potential" entrepreneurs.
Q703. Please describe the kind of main activity each enterprise is engaged in.	Q702: No change	Enumerators did not have any difficulty categorizing the respondents' enterprises by industry code	None

		(ISIC). They have been involved in data collection in other Stats SA surveys and have experience with this question.	
Q702. LOCATION OF THE [ENTERPRISE]	<p>Q702 added: 'Where is this enterprise located?'</p> <p>Home inside the residence..1 Outside the residence.....2 Industrial site.....3 Traditional market.....4 Commercial district shop....5 Roadside.....6 Transport vehicle.....7 No fixed location (mobile, door-to-door, street w/o fixed post....8 Other (specify).....96</p>	No problems encountered.	None
Q704. 'How many months was this [ENTERPRISE] operational <i>during the last 12 months?</i> operational?'	No change.	No problems encountered.	None
Q714. 'Who are the owners of this enterprise? '	Q705: 'Do any household members jointly own this [ENTERPRISE] with you?'	No problems encountered.	None
NAME	Q706a: 'Which household members jointly own this [ENTERPRISE] jointly with you?'	No problems encountered.	None
RECORD % OF OWNERSHIP FOR EACH JOINT OWNER. RECORD 98 IF DO NOT KNOW.	Q706b: 'How much (in percentage) of this [ENTERPRISE] do you own?'	Respondents did not have any difficulty estimating, or sensitivity to estimating, the	None

		percentage of the enterprise owned by each owner.	
	Q706c: 'Do any non-household members jointly own this [ENTERPRISE] with you?' Yes.....1 No.....2	No problems encountered.	None
	Q706d: 'How many persons outside the household own this business?'	No problems encountered.	None
	Q706e: "Please name the non-household member who owns this [ENTERPRISE] jointly with you:"	No problems encountered.	None
	Q706f: 'Sex of the owner from outside of the household.	No problems encountered.	None
Q707. 'What year was this [BUSINESS] established or acquired 'by the owner(s)'	Q707 'In what year was this [ENTERPRISE] established or acquired by YOU'?	No problems encountered.	None
Q708. 'How was this [BUSINESS] acquired?'	Q708: 'How did you acquire this [ENTERPRISE]?' with the inclusion of the following codes: Founded/started.....1 Purchased.....2 Inherited after the death of a family member.....3 Allocated by family.....4 Acquired through marriage.....5 Gift from a non-household member.....6 Government program.....7 Other(specify).....96 'Don't know' deleted 'Refuse to respond' added	No problems encountered.	None
Q709. 'What was the main source of funding used for	Q709: options/codes for 'What was the main source of funding/purchasing	No problems encountered.	None

<p>founding [ENTERPRISE]?’ this</p>	<p>used for founding/purchasing this [ENTERPRISE]?’ changed to:</p> <p>Previous and/or present wage employment.....1 Other business.....2 Sale of livestock/crops.....3 Sale of other assets.....4 Inheritance.....5 Pension from work.....6 Retirement/severance pay.....7 An investment policy that has matured.....8 Friends/relatives.....9 Own/ household's savings.....10 Commercial/development bank...11 Deposit taking microfinance institutions.....12 NGO.....13 Gift from a non-household member.....14 Government funds....15 Other (specify).....96</p>		
<p>Q710. ‘What was the average number of hours per week that each owner spent managing or working on this [ENTERPRISE] in the last operational months?’</p>	<p>Q710: amended question ‘What was the average number of hours per week that YOU spent managing or working on this [ENTERPRISE] over the past three operational months?’</p> <p>None.....1 Less than 20.....2 20-39 hours.....3 40 hours.....4 41-59 hours.....5 60 hrs and more....6</p>		None
	<p>Q711: added question ‘Was this the job/business in which you spend the most hours last week?’</p> <p>Yes.....1 No.....2</p>	<p>Respondents did not have any difficulty assessing whether the business was the economic activity in which they spent the most</p>	None

		hours in the last week.	
	<p>Q712: added question 'Who decides on your regular working schedule, is it...?'</p> <p>Yourself.....1 Yourself in agreement with your client(s).....2 Your client(s).....3 Your spouse/ partner.....4 Your business partner.....5 You and your business partner. 6 Other family members.....7 Other (specify).....96</p>	<p>Question was clearly understood by respondents and response categories were adequate.</p>	None
	<p>Q713: added question 'In this business activity, do you generally work for one or more clients?'</p> <p>One client only.....1 Two or more clients or the public in general.....2</p>	<p>Question was clearly understood by respondents.</p>	None
	<p>Q714: added question 'Do you sell your goods/ services yourself?'</p> <p>Yes, alone.....1 Yes, through a hired manager or other employee..2 No.....3 SKIP to 716</p>	<p>Question was clearly understood by respondents.</p>	None
	<p>Q715: added question 'Whom do you sell your goods/ services to?'</p> <p>Open market.....1 Contractor.....2 Other (specify).....96</p>	<p>Question was clearly understood by respondents and response categories were adequate.</p>	None

<p>Q716. 'Who has the main responsibility for providing services and/or producing goods?'</p>	<p>Q716:' Do you have the main responsibility for providing services and/or producing goods in this [ENTEPRISE]?' Yes, alone..... 1 Yes, through a hired manager...2 Yes, jointly with someone else...3 No, someone else has this responsibility.....4</p> <p>Additionally, the following questions were added (initially changed to 'Who else (or who) has the main responsibility for providing services and/or producing goods in this [ENTEPRISE]?' and then revised):</p>	<p>Q716-Q721c, Main responsibility Concepts of "providing good/services," "managing day-to-day operations," and "main financial control" were clear</p>	<p>None</p>
	<p>Q717a:'Do any other household members have the main responsibility for providing services and/or producing goods in this [ENTEPRISE]?' Yes.....1 No.....2 Refuses to respond.....97</p> <p>Q717b:'Which other household members have the main responsibility for providing services and/or producing goods in this [ENTEPRISE]?' </p> <p>Q717c:'Do any non-household members have the main responsibility for providing services and/or producing goods in this [ENTEPRISE]?' Yes.....1 No.....2 Refuses to respond.....97</p>	<p>Question was clearly understood by respondents and response categories were adequate.</p>	<p>None</p>

Q718. 'Who has the main responsibility for managing day-to-day operations?'	Q718: 'Do you have the main responsibility for managing day-to-day operations of this [ENTERPRISE]?' Yes, alone..... 1 Yes, through a hired manager...2 Yes, jointly with someone else...3 No, someone else has this responsibility.....4		None
	Q719a: 'Do any other household members have the main responsibility for managing day-to-day operations of this [ENTERPRISE]?'		
	Q719b: 'Which other household members have the main responsibility for managing day-to-day operations of this [ENTERPRISE]?'		

<p>Q720. 'Who has the main financial control, including the ability to sign loans, leases and contracts?'</p>	<p>Q720: 'Do you have the main financial control, including the ability to sign loans, leases and contracts of this [ENTERPRISE]?' Yes, alone.....1 Yes, through a hired manager. Yes, jointly with someone else.....3 No, someone else has this responsibility.....4</p> <p>The following questions were added:</p> <p>Q721a: 'Do any other household members have the main financial control, including the ability to sign loans, leases and contracts of this [ENTERPRISE]?' Q721b: 'Which other household members have the financial control, including the ability to sign loans, leases and contracts of this [ENTERPRISE]?' LIST ALL HOUSEHOLD MEMBERS WHO HAVE THIS RESPONSIBILITY. Q721c: 'Do any non-household members have the main financial control, including the ability to sign loans, leases and contracts of this [ENTERPRISE]?'</p>		<p>None</p>
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Q722. 'Is this [ENTERPRISE] registered?'	<p>Q722: In questions 'Is this [ENTERPRISE] registered for VAT?' 'Don't know' deleted from option.</p> <p>Q723. Is this [ENTERPRISE] registered for income tax?</p> <p>Is this [ENTERPRISE]</p>	No problems encountered.	<p>Include an additional category for "Registration withdrawn or cancelled" to receive more granular information on the complexity of registration processes if informality is a prioritized concern.</p> <p>Consider a follow-up question to inquire about possible reasons why an enterprise is not registered.</p>
Q724. 'How many paid employees does this [ENTERPRISE] currently employ on a continuous basis, excluding the owner(s)?'	Q724. Changed to "on a regular basis".	No problems encountered.	None
Q725. 'During the last 12 months year, what was the primary source of funding used to finance expansion and capital improvements or to face unexpected expenses for this [BUSINESS]?'	Q 725. No change	No problems encountered.	None
Q726-Q728. Loans/line of credit	Q726-Q728: No change	No problems encountered.	<p>Include additional categories for "Accepted partially/not accepted in full" or "Application withdrawn or cancelled" to receive more granular information if entrepreneurs' access to finance is a prioritized concern.</p>

Q729. 'What was the approximate monthly turnover from the [ENTERPRISE] (the total value of sales of goods or services; consider an average over the last three operational months)?'	Q729: No change	No problems encountered.	None
Q730. What was the approximate total monthly income earned from the [ENTERPRISE] after paying all expenses, including wages of employees, but not including any income paid to yourself and other owners (consider average of last three operational months)	Q730. 'What was the average monthly income the [ENTERPRISE] earned last month after paying all expenses, including wages of employees, but not including any income paid to yourself and other owners?'	Fieldworkers indicated that the question was confusing. It was also difficult to collect this information from self-employed respondents whose enterprises are operating on an irregular basis.	Consider rephrasing and simplifying the question
Q731. 'Over the past three years, has the number of paid employees increased, decreased or remained the same?'	Q731. 'don't know' as an option was changed to 'not applicable'	Some confusion regarding 'paid continuous workers'	Suggested change to 'employees paid for the last three months on a full-time basis'

<p>Q732. 'Is the [ENTERPRISE] your desired size or did you wish to grow it and weren't able to?'</p> <p>Q 733. What factors have constrained your ability to increase the size of the [ENTERPRISE] to the desired size (list all that apply)? DO NOT READ LIST</p>	<p>Q732-Q733. No change</p>	<p>Some confusion in relation to desired size (is it number of workers, space take, profits generated, etc.).</p>	<p>Specify which aspect of 'size' of business is being referred to in the question</p> <p>Include an additional category for "Lack of internet or online presence" if deemed relevant for the local context. Other suggested additional categories are "Difficulty of finding new customers", "Cost of purchasing new fixed assets" and "Poor internal management quality".</p>
<p>Q734. 'Have you ever taken part in any course or training activity, whether formal or informal, on how to start an enterprise, such as training on how to develop a business plan, assess market opportunities, identify and access start-up capital, develop business networks, etc.?' ALLOW > 1 RESPONSE</p>	<p>Q734. No change</p>	<p>No problems encountered.</p>	<p>Include an additional category formulated as "Yes, informally from my support network (other entrepreneurs, mentors in my professional circle)" to capture informal training activities while excluding self-training activities such as e-learning courses conducted at one's own initiative.</p>

	<p>Q735 Added question:</p> <p>‘Does anyone regularly (once or more per month) gives you managerial advice?’</p> <p>Yes, spouse/partner.....1</p> <p>Yes, other family members/ relatives2</p> <p>Yes, friends.....3</p> <p>Yes, a public advising service (bank, lawyer, accountant).....4</p> <p>No.....5</p> <p>Yes, other (specify).....96</p>		<p>Include an additional category formulated as “Yes, other entrepreneurs, professional contacts, mentors, angel investors” to identify possible divergences between women and men entrepreneurs in their access to advice received from formal and personal networks to manage business development.</p>
<p>Q736. ‘What is the main reason you have started this [ENTERPRISE] (pick the main reason)?’</p>	<p>Q736: no change</p>	<p>Respondents did not have any difficulty in identifying the main reason for starting the enterprise.</p>	<p>The response category “to make more money”, which was the most common reply given to the question on why starting a business in all pilot countries, was not considered accurate as it does not necessarily signal necessity. See chapter on conclusions</p>
<p>Q737. ‘What factors would increase your happiness/satisfaction as an entrepreneur?’</p>	<p>Q737: no change</p>	<p>Question was clear, unambiguous and easily understood by respondents. However, some fieldworkers were confused that more than one factor could be chosen.</p>	<p>Emphasize that multiple responses are permitted during training.</p> <p>Include an additional category for “Increased visibility and (peer/social/government/media) recognition” as a factor that would increase utility gained from entrepreneurial activity.</p>

2.4. Data Analyses from the Pilot Studies

118. Chapter 1 presented the conceptual framework and relevant indicators for data collection on entrepreneurship from a gender perspective, developed under the EDGE project in consultation with countries and other experts. These indicators provide a comprehensive description of gender differentials in entrepreneurial outcomes and should assist policy-makers and researchers in understanding the main individual and contextual drivers or determinants of these differentials.

119. This section illustrates the type of data analysis that can be obtained based on the results of EDGE pilot household surveys in Georgia, Mongolia, Cavite province in the Philippines, and KwaZulu-Natal province in South Africa, exploring some of the indicators pertinent to entrepreneurial motivations and aspirations, entrepreneurial participation and enterprise performance.

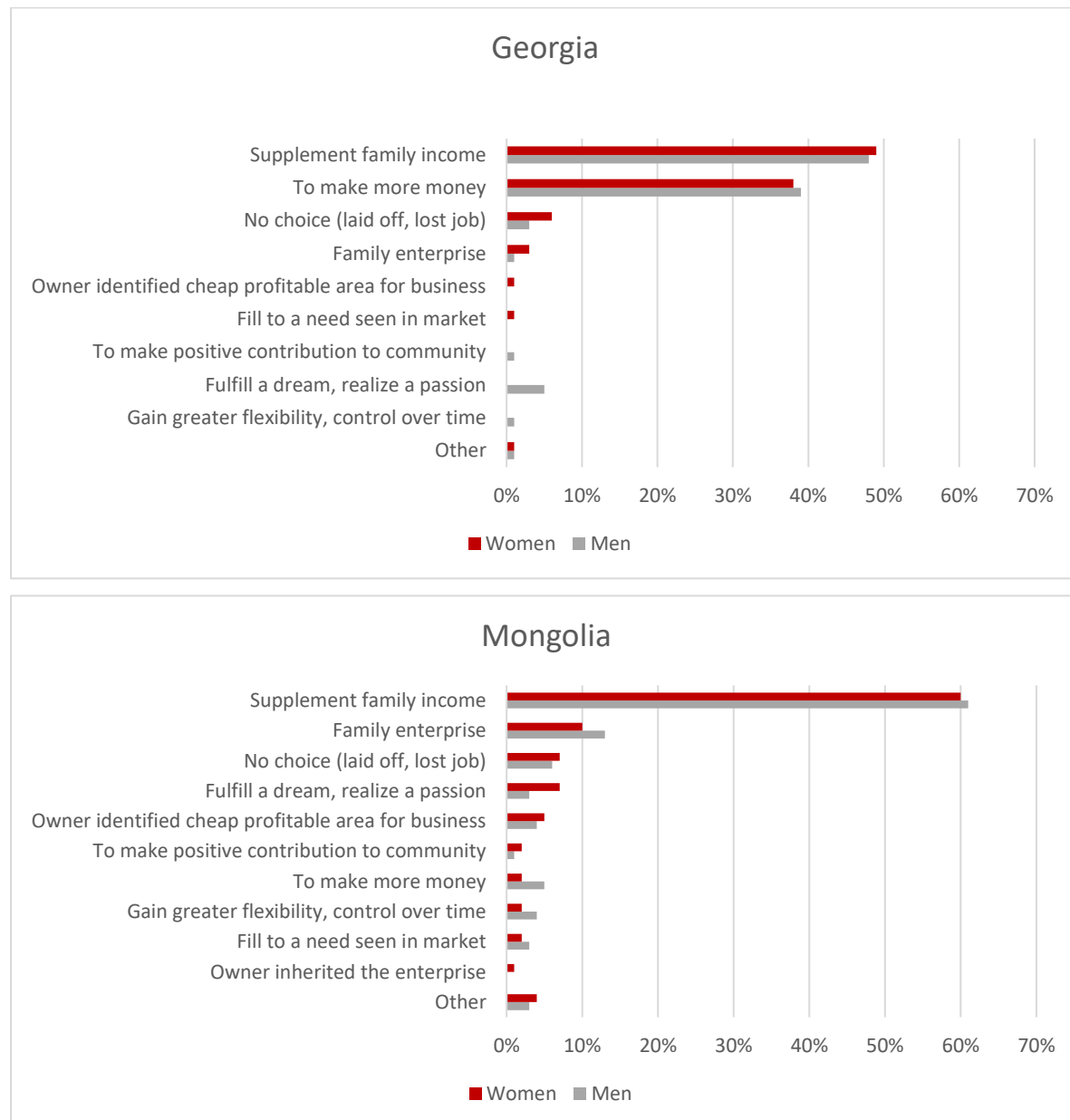
120. It should be recalled that the EDGE pilot studies were undertaken to test the EDGE methodology, including the design of the questionnaire and the feasibility of interviewing the household members according to the EDGE field protocols. As a result, the findings presented in this section, for illustrative purposes only, are not fully comparable across countries and should be interpreted with caution. Pilot data from Georgia and Mongolia are based on nationally representative samples while the pilot data from the Philippines and South Africa are representative only of Cavite province and KwaZulu-Natal province, respectively.

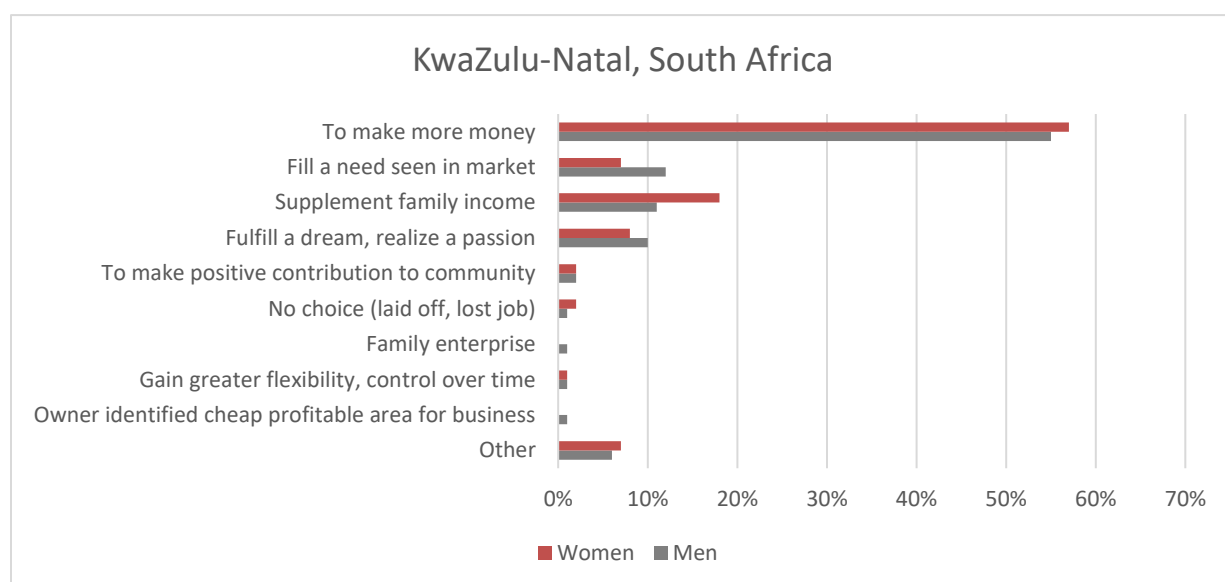
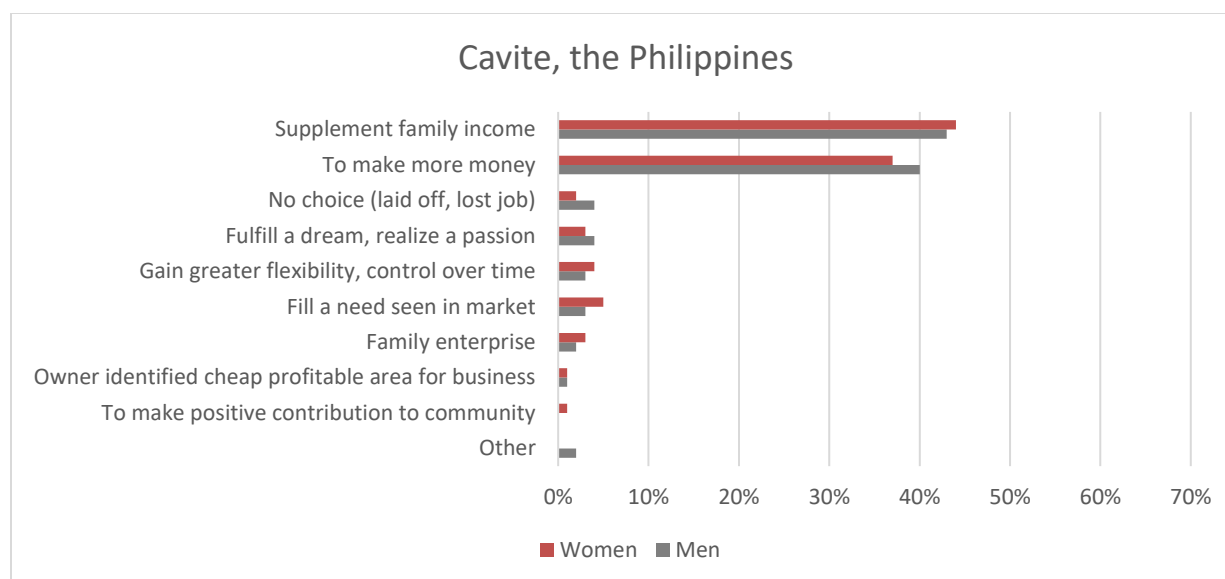
Motivations and aspirations

121. The literature has pointed out some differences in motivations between women and men entrepreneurs. Studies have suggested that women's motivations to engage in entrepreneurial activities are rooted largely in push factors, such as dissatisfaction in the labor market, financial difficulties and the need for greater income, rather than pull factors such as looking for more autonomy and independence, personal satisfaction and achievement. The results from the pilot studies show that the main motivation that led women and men entrepreneurs to start their business was to "supplement their family income" and/or to "make more money". However, some noticeable differences exist: In Georgia and Cavite province, women were more likely to be

owners of a family business (3 percent vs 1 percent, and 2 percent vs. 1 percent, respectively), while in Mongolia, they were less likely to be owners of a family businesses (10 percent vs 13 percent, respectively). In Georgia, women are more likely than men to report “having no choice (laid off, lost job)” as the main reason behind starting the business, while more women in Mongolia reported “fulfil a dream, realize a passion”.

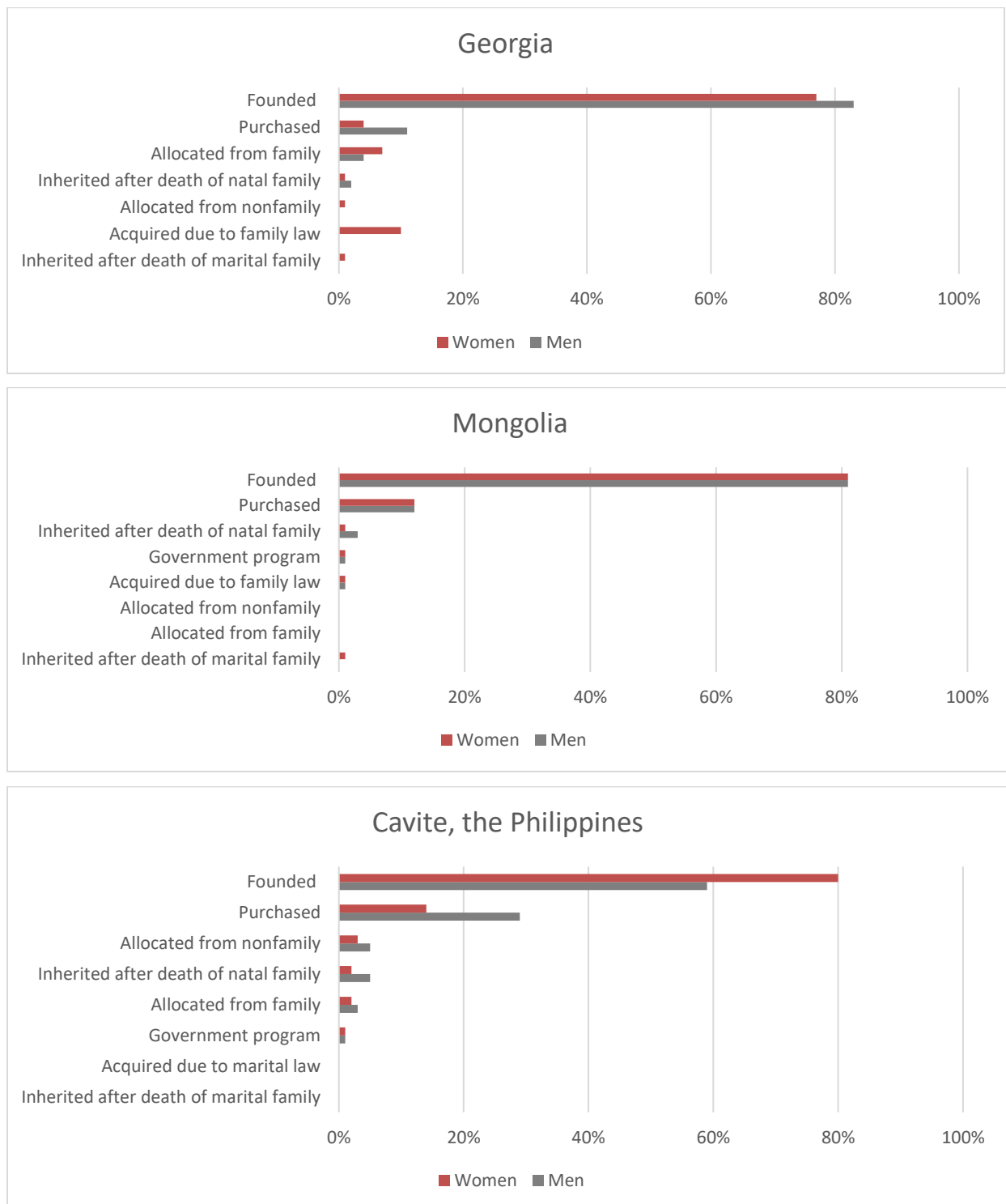
Figure 1. Main reason for starting the business, by sex of the entrepreneur

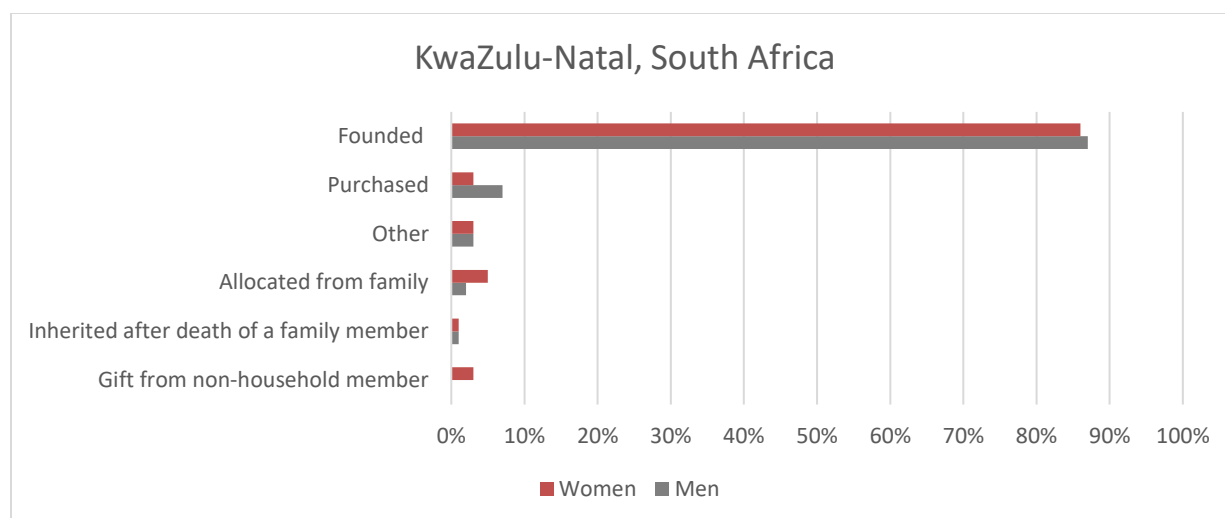




122. Turning to the indicators on acquisition of the enterprise, it is interesting to examine whether women and men acquired their business in different ways. This information is important for designing policies and interventions aiming to promote equal opportunities for entrepreneurship. In four of the countries, the majority of both women and men entrepreneurs founded/set up their own business (figure 2). For other entrepreneurs in Georgia, Cavite province, and KwaZulu-Natal province, men were overall more likely than women to have purchased their business, while women, except in Cavite province in the Philippines, were more likely to acquire it/inherit it from family. In Mongolia, both women and men acquired their business equally (13 percent, respectively).

Figure 2. Mode of acquisition of business according to the self-reported owner





123. The sources of financing used to start the business are similar for women and men business owners. The majority of the enterprise founding owners used their own household savings to start up their business. In Georgia and Cavite province, women were more likely than men to use their own savings (81.0 percent of women vs. 71.4 percent of men, and 88.6 percent of women vs. 85.0 percent of men, respectively), while in Mongolia, more men than women used their own savings (64.4 percent of women vs 67.3 percent of men, respectively). This is an expected result given that the population of business owner captured in the sample, was composed almost exclusively of micro-businesses with little or no need for start-up capital.

Entrepreneurial participation

124. Although it is premature to provide a definition of entrepreneurs due to the revision of ICSE-93, and the related identification of “independent workers”⁸⁴, this section provides the calculation of two key EDGE participation indicators based on data from the EDGE pilot surveys: (a) the prevalence (proportion) of women (or men) entrepreneurs among women (men), which measures how frequently women and men own a business; and (b) the share of women among entrepreneurs, which measures whether women and men are equally represented among the entrepreneurs. Prevalence indicators are useful for representing gender differences in entrepreneurship across time and countries while share indicators are useful for highlighting gender disparities among entrepreneurs. The gender gap is usually calculated as the

⁸⁴ Adopted at the 20th ICLS in October 2018.

differential prevalence, that is, the proportion of men who are entrepreneurs minus the proportion of women who are entrepreneurs, expressed in percentage points.

125. The results from EDGE pilot surveys show an existing gender gap in the prevalence of enterprise ownership among women and men. With the exception of Cavite province, entrepreneurship prevalence rates were lower among women than men in three countries. For example, in Georgia (table 1), of 3,438 female respondents, 6 percent reported being an owner⁸⁵ of an enterprise ($206/3438 \times 100$), compared to 11 percent of men ($267/2499 \times 100$), resulting in an estimated gender gap of 5 percentage points. Using the same calculations⁸⁶, the gender gap on entrepreneurship was 4 percent in Mongolia, and minus 4 percent in Cavite province, respectively.

Table 1: Prevalence of non-farm enterprise ownership, by sex of self-reported respondent, Georgia

	Number of respondents			Prevalence of ownership			
	Total	Men	Women	Total	Men	Women	Test of means
Own any enterprise	473	267	206	8%	11%	6%	***
Own any enterprise exclusively	279	170	109	5%	7%	3%	***
Own any enterprise jointly	200	101	99	3%	4%	3%	**
Number of self-reported respondents	5,937	2,499	3,438	5,937	2,499	3,438	

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

126. As for the share of women among entrepreneurs⁸⁷, of 473 self-reported owners of any enterprise in Georgia, 44 percent were women ($206/473 \times 100$) and 56 percent were men. Thus, women represent 44 percent of entrepreneurs in Georgia. For exclusive or sole owners of any enterprise, 36 percent were women and 64 percent were men, while for joint owners of any enterprise, 46 percent were women and 54 percent were men.

127. Another indicator of entrepreneurial participation is the percentage of women who are the main owners as well as the managers of their businesses. An owner is considered a manager when

⁸⁵ This refers only to ownership (without checking for “managing/controlling the business”). Although the overwhelming majority of the enterprises identified in the EDGE pilots are microenterprises and the owner had full financial and managerial control of his/her business.

⁸⁶ These unweighted calculations were made for illustrative purposes.

⁸⁷ The numerator is the number of women business owners while the denominator is the total number of business owners (both men and women).

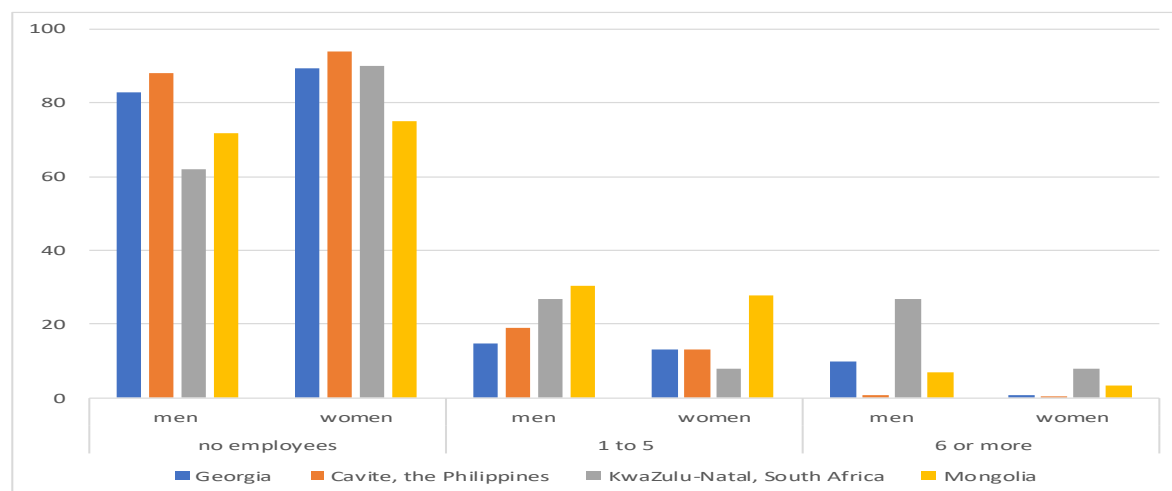
he/she has responsibility for managing day-to-day operations, and/or holds the financial and development control of the business, having the ability to sign contracts, loans, hire or dismiss employees. The results show that there is little gender difference on the prevalence of decision-making. Since most of the entrepreneurs were self-employed on their own account, more than 90% of men and women reported they had the main responsibility for managing day-to-day operations. However, with respect to financial decisions, the results were mixed. For example, in Mongolia, men were more likely to be exclusive financial controllers than women (76 percent versus 66 percent) while in Cavite province, women (68 percent) were more likely than men (39 percent) to have exclusive financial control over the enterprise.

Entrepreneurial performance

128. As already mentioned, the vast majority of women- and men-owned enterprises in the pilot data were micro/small household enterprises concentrated in the informal economy which are seldom captured as part of administrative data or enterprise surveys. Many households operated businesses in easy-to-enter activities, such as sales and retail trade, rather than venturing into activities that require educational investment, such as professional services. In addition, many of women's enterprises were operated from home allowing them to satisfy competing demands for their time as they could balance work for pay with unpaid domestic work and childcare/elderly care responsibilities.

129. The majority of the enterprises were non-employees enterprises, i.e., enterprises with no employees such as self-employed who worked on their own account and did not employ other persons. It is worth to note that not only women had lower business ownership prevalence rates, the size of their enterprises was also smaller than men's. In Georgia, for example, 90 percent of women and 83 percent of men own enterprises without any employee, while 13 percent of women and 15 percent of men have micro enterprises with up to five persons employed. In KwaZulu-Natal, South Africa, the gender gap is even more significant with 90 percent of women-owned versus 62 percent of men-owned enterprises having no employees, while, 8 percent of women-owned enterprises and 23 percent of men-owned enterprises have up to five employees (Figure 3).

Figure 3. Enterprises by size and by sex of the owner



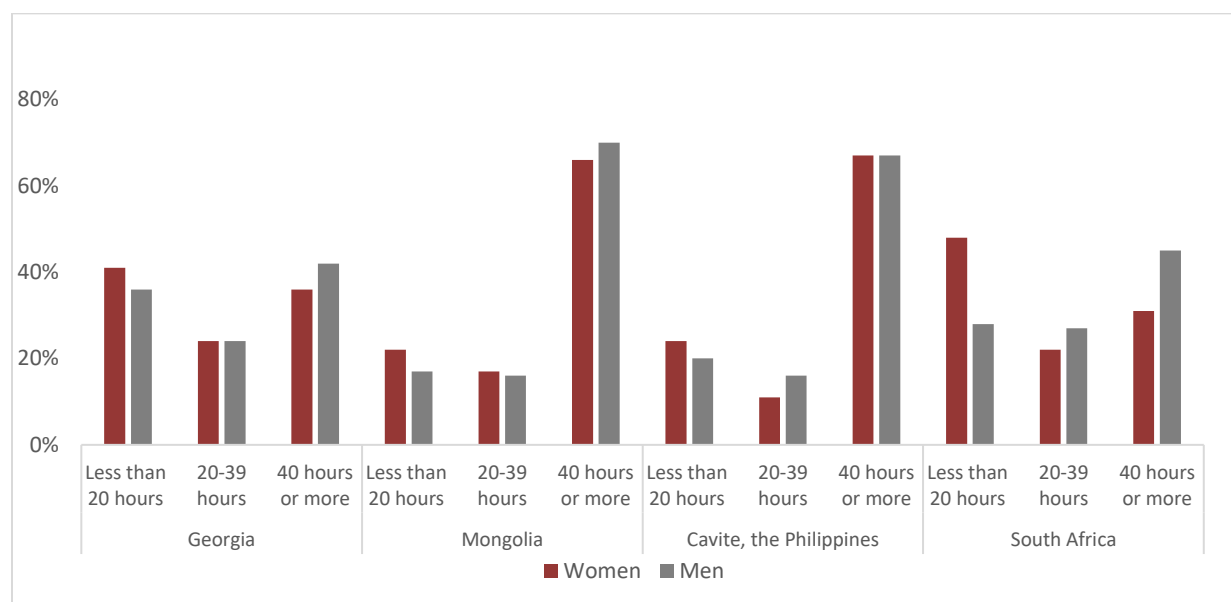
130. As for the main economic sectors where the enterprise operated, wholesale and retail trade were the dominating sector for enterprises owned by both women and men. More specifically, the majority of women's owned businesses operated in the sale and retail trade sub-sectors: 74 percent in Cavite province, 60 percent in Mongolia, 63 percent in KwaZulu-Natal province and 51 percent in Georgia, respectively, followed by the manufacturing sector in Georgia (48 percent) and Mongolia (34 percent) and in KwaZulu-Natal province (9 percent), and the transportation and storage in Cavite province (10 percent). About one third of men-owned businesses was in the sale and retail trade sector in each of the four countries, followed by the manufacturing sector in Georgia and Mongolia (37 percent and 36 percent respectively), the transportation sector in Cavite province (39 percent) and the construction sector in KwaZulu-Natal province (18 percent).

131. Many studies have pointed out that gender differences in entrepreneurship are magnified by the greater incidence of informality among businesses owned by women. Therefore, producing good quality information on the distribution of informal sector firms, disaggregated by sex of the owner, is essential to inform about the economic vulnerability of women entrepreneurs. According to the survey questionnaire used in the pilot counties, "formality" is defined as having the business registered in the "public records" in Georgia, Mongolia and the Philippines, while a business is formal if it is "registered for income tax or VAT" in South Africa. In Georgia, Cavite province and in KwaZulu-Natal province, women were less likely than men to register their business (43 percent

vs 46 percent, 60 percent vs 73 percent, and 7 percent vs 31 percent, respectively). In contrast, in Mongolia, women were more likely to have their business registered than men (47 percent vs. 32 percent).

132. Figure 4 illustrates the working hours of women and men entrepreneurs. With the exception of Cavite province, overall, men are more likely than women to work at least 40 hours per week on their business. In contrast, more women than men work less than 20 hours in the four countries considered. For instance, almost half of women in Georgia (41 percent) and in KwaZulu-Natal province (48 percent) spent less than 20 hours per week working on their business compared to 36 percent and 28 percent of men in these countries, respectively. It would be worth to further examine in future surveys whether this reflects women's double work burden due to their responsibilities in unpaid domestic chores and care activities at home.

Figure 4. Distribution of working hours per week by self-reported entrepreneurs



133. Another indicator to measure gender differences in entrepreneurship is the gender gap in earnings. However, collecting information on earnings from household surveys is very challenging. In particular, it is difficult to identify a single concept of business earnings that can be applied to the heterogeneous population of business owners of both incorporated and unincorporated enterprises. The precise data requirements depend on the approach followed to

define earnings or profits. Several micro-enterprise surveys collect detailed data on gross output, operating expenses and consumption of fixed capital, allowing the calculation of implicit profits by subtracting costs from revenues⁸⁸.

134. As the majority of micro-enterprises do not keep regular accounts, EDGE included a direct question on “net income”. However, self-reported earnings might provide downward-biased estimates of true profit levels, and it is not clear whether under-reporting is more relevant for women or for men. Table 2 shows the gender income gap for illustrative purposes. The gender income gap is defined as the difference between median incomes of women and men entrepreneurs relative to the median income of men entrepreneurs. Women’s monthly income was 33 percent less than men in Georgia, 13 percent less in Cavite province, and 26 percent less in KwaZulu-Natal province. There were no gender income gaps in Mongolia. The reasons for female entrepreneurs earning less than their male counterparts can be explained by several factors, including differences in sectors in which women and men entrepreneurs operate, differences in the number of hours worked, and their individual motivations and aspirations towards growing the business⁸⁹. Adjusted by working hours⁹⁰, the gender income gap narrows in Georgia and KwaZulu-Natal province. The gap increases, however, in Cavite province and remains zero in Mongolia.

Table 2. Median monthly income apportioned to entrepreneurs in local currency

	Men	Women	Gender gap
Georgia (in GEL)	300	200	0.33
Cavite province (in Philippine Peso))	5750	5000	0.13
KwaZulu-Natal, South Africa (in Rand)	5723	1998	0.26
Mongolia (in MNT)	500	500	0

⁸⁸ Both the Mexican National Survey of Micro-enterprises (ENAMIN) and the Brazilian Informal Economy Survey (ECIN) contain detailed questions on business revenues and expenses. ENAMIN also includes a self-reported measure of earnings given by the entrepreneurs answering to the following question “*how much do you obtain as earnings after deducting expenses?*”. According to experimental analysis in de Mel et al. (2009), the simple question on earnings provides a more accurate measure of firm profits than detailed questions on revenues and expenses.

⁸⁹ OECD/ European Union (2017). Policy Brief on Women’s Entrepreneurship.

<https://www.oecd.org/cfe/smes/Policy-Brief-on-Women-s-Entrepreneurship.pdf>.

⁹⁰ The hours are given in intervals in the questionnaire. Therefore, in order to calculate the hourly income, the following middle points of the intervals were used: 10 hours for less than 20 hours, 29.5 for 20-39 hours, 40 for 40 hours exactly, 50 for 41-59 hours and 70 for at least 60 hours.

CHAPTER THREE. LESSONS LEARNED AND THE WAY FORWARD

3.1. Lessons learned from the EDGE pilot studies

135. Chapters 1 and 2 presented the EDGE conceptual framework and indicators for measuring entrepreneurship from a gender perspective; the proposed model questionnaire and the process followed for its development; and key results from the analysis undertaken with pilot data. As discussed in chapter 2, the questionnaire was revised considerably after being piloted in four countries, namely, Georgia, the Maldives, Mongolia, and the Philippines (Cavite province). The final version of the questionnaire was tested in KwaZulu-Natal province in South Africa. This chapter summarizes the major lessons learned while testing the EDGE methods in the countries. It also highlights priorities for future research to improve the production of regular and harmonized statistics on entrepreneurship from a gender perspective.

136. The EDGE module on entrepreneurship was part of a broader survey instrument that also tested how to produce statistics on asset ownership and control, relevant for gender analysis. As a result of pilot data collection and technical consultations, a set of UN guidelines on measuring asset ownership from a gender perspective⁹¹ has been developed. One of the key recommendations of the guidelines is to collect individual-level data on asset ownership from self-reporting rather than proxy (typically the most knowledgeable person in the household) due to large discrepancies in proxy versus self-response.

137. Self-reported information is also recommended for the collection of entrepreneurship data for the following reasons: (a) information on entrepreneurial motivations and aspirations, entrepreneurial resource and constraints and entrepreneurial performance can only be obtained from self-reported data⁹². This is particularly relevant, given that the focus of this technical report is to produce statistics on entrepreneurship from a gender perspective; (b) feedback received from

⁹¹ United Nations (2018). UN Guidelines for Producing Statistics on Asset Ownership from A Gender Perspective

⁹² See explanations on the development of the EDGE model questionnaire and its finalization, in the previous section of the report.

pilot countries stressed the difficulties for proxy respondents to identify or recall whether another household member was a business owner⁹³.

138. The EDGE questionnaire was customized in pilot countries and -together with training manuals- translated from English into national languages. One of the most important aspects of the **translation** process was to identify appropriate technical terms in all languages of the pilot countries.⁹⁴

139. Some respondents had difficulties in understanding the term “**enterprise**”. Given that in Georgia, Mongolia and the Philippines, the term “enterprise” applies to registered enterprises, enumerators had to explain that the word was broadly referring to “income-generating” activities and small businesses operated by household members⁹⁵. In South Africa, the term “**business**” was used instead of “enterprise”. In addition, “business owner” was used interchangeably with the term “entrepreneur”.

140. Turning to the entrepreneurship module, the **reference period** of 7 days (in the last week) was considered to be restrictive given the seasonality of some business activities. Statistics South Africa recommended to revise the timeframe/time reference linked to these questions. Additionally, other questions with a time reference such as the question on the *average number of hours per week an enterprise owner spent managing or working on the enterprise*, over the last operational month were found challenging in particular for those who were not working on a continuous basis.

141. The breakdown of entrepreneurs by “**necessity-based**” versus “**opportunity-based**”⁹⁶ was acknowledged as a key dimension of interest and critically important for gender analysis.

⁹³ Feedback received on the latest version of the EDGE questionnaire, tested in South Africa in 2016, indicated that the household head or the most knowledgeable person had difficulties in identifying or recalling whether another household member (proxy responses) was engaged in any work for a wage, salary, commission or payment in kind, whether another household member was engaged in any kind of business, the business sector, or assessing whether other household members had a business in which they would return to.

⁹⁴ Asian Development Bank (2018), Measuring Asset Ownership and Entrepreneurship from a Gender Perspective: Methodology and Results of Pilot Surveys in Georgia, Mongolia, and the Philippines.

<https://www.adb.org/publications/measuring-asset-ownership-entrepreneurship-gender-survey>

⁹⁵ Ibid.

⁹⁶ The necessity entrepreneurship is associated with entrepreneurship as a last resort i.e. due to impossibility of finding other sources of income while the opportunity entrepreneurship represents a profitable opportunity as perceived by an individual (see chapter 1 for additional information).

However, suggestions were made for a possible revision of the question on motivations proposed in the EDGE module. In particular, the response category “to make more money”, which was the most common reply given to the question on why starting a business in all pilot countries, was not considered accurate as it does not necessarily signal necessity. This response would be quite typical for any business owner and could simply signal the value that the person assigns to making money. It was suggested that to properly classify entrepreneurs into necessity versus opportunity entrepreneurs, information on unemployment status (and if they were searching for a job) before starting the business would be needed. However, it was also noted that, not all businesses created while unemployed will be out of necessity as some unemployed workers might have good opportunities in paid employment, and similarly, not all businesses established by employed people will be created out of opportunity factors as some of these workers may be receiving low pay or facing reduced work hours.

142. One of the key indicators to measure gender gap in entrepreneurship is the gender gap in **earnings**. However, available research and the EDGE project pilots highlight that it is difficult to identify a single concept of business earnings that can be applied to the heterogeneous population of business owners of both incorporated and unincorporated enterprises. For example, earnings from business ownership tend to mean different things for incorporated and unincorporated enterprises. Owners of incorporated businesses earn their income by drawing a salary, by collecting dividends accruing to shareholders or through capital gains, while owners of unincorporated units receive an income that is directly dependent upon the surplus accruing from the production process. Producing a single measure of the returns from entrepreneur’s employment for both contexts would thus require deducting the consumption of fixed capital (or depreciation) as well as the income retained and reinvested in the enterprise. EDGE proposed a single question of the monthly income of the enterprise. Enumerators from pilot countries indicated that the question was confusing. It was also difficult to collect this information from self-employed respondents whose enterprises were operating on an irregular basis. In addition, some business owners refused to disclose their income or could not estimate it properly⁹⁷.

⁹⁷ Asian Development Bank (2018), Measuring Asset Ownership and Entrepreneurship from a Gender Perspective: Methodology and Results of Pilot Surveys in Georgia, Mongolia, and the Philippines.
<https://www.adb.org/publications/measuring-asset-ownership-entrepreneurship-gender-survey>.

143. Measuring “primary/**higher share**” in business ownership may be difficult to measure in informally- and/or family-run businesses (main types of businesses captured through the EDGE pilot surveys). Furthermore, looking for a **single/main owner**, may push respondents to select a single reference person (more often male) for a family-run business, due to social norms/expectations. Provisions should be in place and proper training of interviewers should be adopted to address this issue and to ensure that misclassified contributing family workers who are actually partnering in running a business are counted as entrepreneurs. However, provisions should also ensure that women are not owning a business only “nominally” (on paper) and that they have actual control of business activities.

3.2. Conclusions and the way forward

144. The single most important objective of a study on entrepreneurship from a gender perspective is to produce an accurate measure of the number and characteristics of women and men entrepreneurs. However, participation in entrepreneurship is not a well-established concept in statistics, and the issues around the definition of entrepreneurs make the production of this measure particularly challenging. It is in this context that the EDGE project was initiated in 2013 to address methodological gaps in measuring entrepreneurship from a gender lens.

145. To develop gender indicators on entrepreneurship, two data sources are particularly relevant: 1) data from household surveys, which mostly collects information on micro and small businesses; and 2) firm-level data from registers, enterprise surveys and economic censuses with information on business owners. EDGE focused only on household surveys and its pilot studies revealed that this source capture mainly women and men entrepreneurs operating micro or small home-based enterprises, which primarily operate in sale and retail trade and service industries. Therefore, these entrepreneurs may not be adequately covered in an enterprise survey or business register. Household survey data and firm-level data, as they refer to two different statistical populations, are likely to yield significantly different results when used to produce the same indicator. They are, however, highly complementary and further research should be undertaken to develop methods to combine/integrate these two types of data sources.

146. The UN Guidelines for Producing Statistics on Asset Ownership from a Gender Perspective⁹⁸ recommends the importance of collecting self-reported individual data in order to obtain reliable estimates on asset ownership from a gender perspective. The findings from the pilot data on entrepreneurship also support this recommendation. Therefore, when planning to collect data on entrepreneurship, provisions should be made to gather **self-reported** data only.

147. Recommendations for future research:

- Refine the EDGE operational definition to ensure the initial population identified corresponds to the “independent workers”, the broad universe of potential entrepreneurs, from whom dependent contracts should be discounted and to whom misclassified contributing family workers should be added. Furthermore, based on the evidence that women are less likely than men to perceive themselves as entrepreneurs⁹⁹, the potentially gendered nature of the term “entrepreneur” should be taken into account when formulating screening questions to identify the entrepreneurs.
- Further research and test operational criteria to capture other dimensions of entrepreneurship (innovation,...)
- Expand the scope of data collection to also include agricultural enterprises;
- Conduct further pilot tests on how to measure “motivations” for engaging in entrepreneurial activities;

148. In October 2018, the 20th International Conference of Labour Statisticians (ICLS) adopted a new resolution concerning statistics on work relationships and updated the International Classification of Status in Employment (ICSE-93) (see box 2). Particularly relevant to this report is the fact that ICSE-18 identifies entrepreneurs defined as “*persons who own and control an enterprise and seek to generate value through the creation of economic activity by identifying and exploiting new products, processes or markets*”¹⁰⁰. Furthermore, “independent workers” in the

⁹⁸ United Nations (2018). UN Guidelines for Producing Statistics on Asset Ownership from A Gender Perspective. Available at https://unstats.un.org/edge/publications/docs/Guidelines_edited.pdf

⁹⁸ Ibid.

⁹⁹ Verheul et al. 2002

¹⁰⁰ International Labour Organisation (2018), document ICLS/20/2018/Resolution. https://www.ilo.org/wcmsp5/groups/public/-/-dgreports/-/-stat/documents/meetingdocument/wcms_648693.pdf

revised classification (ICSE-18) are considered the best starting point for a statistical identification of entrepreneurs.

149. Further work, however, will be needed to operationalize the ICSE-18 definition of an entrepreneur and to identify optimal methods to collect entrepreneurship data. In particular, the boundary between independent workers and dependent contractors as well as independent workers and contributing family workers should be tested, and related hands-on guidance for countries should be developed.

150. This technical report described concepts, definitions and methods, tested under the EDGE project, to collect data on entrepreneurship from a gender perspective. It should be reviewed and considered as a starting point for future work on how to develop statistical guidelines to operationalize the new definition of entrepreneurs, adopted in 2018 at the 20th ICLS. Furthermore, the EDGE conceptual framework and the experience gained as well as lessons learned during the pilot phase of the project, which highlight the importance of producing data on gender gaps not simply in entrepreneurship participation but also in entrepreneurs' motivations, constraints and performance, should guide any initiative aiming at producing statistics on entrepreneurship from a gender perspective.

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South Africa - EDGE Household questionnaire

EDGE PILOT SURVEY ON MEASURING ASSET OWNERSHIP AND ENTREPRENEURSHIP FROM A GENDER PERSPECTIVE

HOUSEHOLD QUESTIONNAIRE

[illegible]

STAFF DETAILS									
SUPERVISOR		ASSIGNMENT NO.	DATE CHECKED	d	d	m	m	y	y
2. PQM		ASSIGNMENT NO.	DATE CHECKED	d	d	m	m	y	y
3. NAME OF SURVEY OFFICER:									
4. REMARKS BY SURVEY OFFICER									
5. REMARKS BY SUPERVISOR									

Read the following statement of purpose confidently, and then give time for the respondent to ask questions.

The NSO of _____ is conducting a survey of households in this country/state/province/etc. to better understand asset ownership and entrepreneurship.

The findings from the survey will provide important information to the Government for developing policies and programs to improve the lives of men and women in the region.

Your household was selected as one of those to which the survey questions will be asked. You were not selected for any specific reason. Rather, your household was selected randomly from a list of all households in this area.

All information your household provides is strictly confidential. It will not be shared with any other government agency, and it will only be used for statistical purposes by the NSO of _____ or under its supervision. To ensure that the most accurate information is collected, it is very important that we interview the specific household member selected for the interview and that we interview him or her alone, without family or neighbours present. If, during the interview, any family members or neighbours come within hearing distance of the interview, please ask them kindly to come back later after the interview has been completed.

Please spare some time to answer the questions. We thank you in advance for your time.

[illegible][illegible]

[illegible][illegible]

Annex 1: EDGE « Model » individual questionnaire on entrepreneurship¹⁰¹

NON-AGRICULTURAL ENTERPRISE SCREENING QUESTIONS

Do you currently engage in any of the following activities with the main intention of earning income?

301 ...own a non-agricultural enterprise or provided a non-agricultural service from home or a household-owned shop, as a *carwash owner, metal worker, mechanic, carpenter, tailor, barber, etc.*?

YES...1
NO...2

☐

302 ... process and sell any agricultural by-products, *including flour, starch, juice, beer, jam, oil, seed, bran, etc.*?

YES...1
NO...2

☐

303 ... own a trading enterprise on a street or in a market?

YES...1
NO...2

☐

304 ... offer any service or sold anything on a street or in a market, *including firewood, home-made charcoal, curios, construction timber, woodpoles, traditional medicine, mats, bricks, cane furniture, weave baskets, thatch grass etc.*?

YES...1
NO...2

☐

305 ... own a professional office or offered professional services from home as a *doctor, accountant, lawyer, translator, private tutor, midwife, mason, etc.*?

YES...1
NO...2

☐

306 ... drive a household-owned taxi or pick-up truck to provide transportation or moving services?

YES...1
NO...2

☐

307 ...own a drinking place (ex. bar) or eating place (ex. restaurant)?

YES...1
NO...2

☐

308own any other enterprise not mentioned above, even if it is a small enterprise run from home or on a street?

YES...1
NO...2

☐

ENUMERATOR: IS THERE A "1" FOR ANY OF THE QUESTIONS 301 THROUGH 308?

☐

YES...1
NO...2>>>END OF
INTERVIEW

1

¹⁰¹ Based only on the questions tested in and the results received from the pilots conducted in six countries

ASK ALL QUESTIONS FOR FIRST ENTERPRISE LISTED THEN PROCEED TO THE NEXT ENTERPRISE IF MORE THAN ONE IS LISTED.

E N T E R P R I S E I D	701. Name and address of the enterprise	702. Where is this [ENTERPRISE] located? HOME, INSIDE THE RESIDENCE...1 HOME, OUTSIDE THE RESIDENCE...2 INDUSTRIAL SITE.....3 TRADITIONAL MARKET.....4 COMMERCIAL DISTRICT SHOP....5 ROADSIDE.....6 TRANSPORT VEHICLE.....7 NO FIXED LOCATION (MOBILE, DOOR-TO-DOOR, STREET W/O FIXED POST.....8 OTHER (SPECIFY)96	703. Please describe the kind of activity each enterprise is engaged in. INDUSTRY CODE	704. How many months was this enterprise operational during the last 12 months? IF ENTERPRISE WAS OPERATIONAL FOR LESS THAN A 1 MONTH, ENTER '00' AND EXPLAIN IN REMARKS SECTION.	705. Do any household members jointly own this [ENTERPRISE] with you? YES...1 NO....2>>706c	706a. Which household members jointly own this [ENTERPRISE] jointly with you?	706b. How much (in percentage) of this [ENTERPRISE] do you own?
				# OF MONTHS			
E1							
E2							
E3							
E4							
E5							

<p>706c.</p> <p>Do any non-household members jointly own this [ENTERPRISE] with you?</p> <p>YES...1 NO...2>>707</p>	<p>706e.</p> <p>Please name the non-household member who owns this [ENTERPRISE] jointly with you:</p>	<p>706f.</p> <p>Sex of the owner from outside of the household.</p> <p>MALE...1 FEMALE..2</p>	<p>707.</p> <p>In what year was this [ENTERPRISE] established or acquired by you?</p>	<p>708.</p> <p>How did you acquire this [ENTERPRISE]?</p> <p>FOUNDED/ STARTED.....1 PURCHASED.....2>>710 INHERITED AFTER THE DEATH OF A FAMILY MEMBER...3>>710 ALLOCATED BY FAMILY..4>>710 ACQUIRED THROUGH MARRIAGE.....5>>710 GIFT FROM NON-HOUSEHOLD MEMBER.....6>>710 GOVERNMENT.....7 >710 OTHER (SPECIFY).....96>>710 REFUSED TO RESPOND..97>>710</p>	<p>709.</p> <p>What was the main source of funding used for founding this [ENTERPRISE]? DO NOT READ LIST</p> <p>PREVIOUS AND/ OR PRESENT WAGE EMPLOYMENT.....1 OTHER BUSINESS.....2 SALE OF LIVESTOCK/ CROPS.....3 SALE OF OTHER ASSETS.....4 INHERITANCE.....5 PENSION FROM WORK.....6 RETIREMENT/ SEVERANCE PAY...7 AN INVESTMENT POLICY THAT HAS MATURED.....8 FRIENDS/RELATIVES.....9 OWN/ HOUSEHOLD'S SAVINGS...10 COMMERCIAL/ DEVELOPMENT BANK.....11 DEPOSIT TAKING MICROFINANCE INSTITUTIONS.....12 NGO.....13 GIFT FROM NON-HOUSEHOLD MEMBER.....14 GOVERNMENT FUNDS.....15 OTHER (SPECIFY).....96</p>
			YEAR		

<p>710.</p> <p>What was the average number of hours per week that you spent managing or working on this [ENTERPRISE] over the past three operational months?</p> <p>NONE.....1 LESS THAN 20.....2 20-39 HOURS.....3 40 HOURS.....4 41-59 HOURS.....5 60 HRS AND MORE..6</p>	<p>711</p> <p>Was this the job/ business in which you spent the most hours last week (Monday to Sunday)?</p> <p>YES...1 NO...2</p>	<p>712</p> <p>Who decides on your regular working schedule, is it...?</p> <p>READ LIST</p> <p>Yourself.....1 Yourself in agreement with your client(s)....2 Your client(s).....3 Your spouse/ partner...4 Your business partner..5 You and your business partner...6 Other family members..7 Other (specify).....96</p>	<p>713</p> <p>In this business activity, do you have one or more clients (persons or companies) who are responsible for paying for the goods/ services supplied by you?</p> <p>One client only....1 Two or more clients or the public in general.....2</p>	<p>714</p> <p>Do you sell your goods/ services yourself?</p> <p>Yes, alone.....1 Yes, through a hired manager or other employee...2 No.....3>>716</p>	<p>715</p> <p>Whom do you sell your finished goods/ services to?</p> <p>Open market.....1 One person/ company, who determines the quantity of goods/ services produced by the respondent, based on a written or verbal agreement....2 Other (specify).....96</p>

<p>716.</p> <p>Do you have the main responsibility for providing services and/or producing goods in this [ENTERPRISE]?</p> <p>YES, ALONE.....1>>718 YES, THROUGH A HIRED MANAGER.....2>>718 YES, JOINTLY WITH SOMEONE ELSE.....3 NO, SOMEONE ELSE HAS THIS RESPONSIBILITY.....4</p>	<p>717a.</p> <p>Do any other household members have the main responsibility for providing services and/or producing goods in this [ENTERPRISE]?</p> <p>YES...1 NO....2>>717c</p>	<p>717b.</p> <p>Which other household members have the main responsibility for providing services and/or producing goods in this [ENTERPRISE]?</p>	<p>717c.</p> <p>Do any non-household members have the main responsibility for providing services and/or producing goods in this [ENTERPRISE]?</p> <p>YES...1 NO....2</p>	<p>718.</p> <p>Do you have the main responsibility for managing day-to-day operations of this [ENTERPRISE]?</p> <p>YES, ALONE.....1>>719 YES, THROUGH A HIRED MANAGER.....2>>719 YES, JOINTLY WITH SOMEONE ELSE.....3 NO, SOMEONE ELSE HAS THIS RESPONSIBILITY...4</p>	<p>719a.</p> <p>Do any other household members have the main responsibility for managing day-to-day operations of this [ENTERPRISE]?</p> <p>YES...1 NO....2>>719c</p>	<p>719b.</p> <p>Which other household members have the main responsibility for managing day-to-day operations of this [ENTERPRISE]?</p>

<p>719c. Do any non-household members have the main responsibility for managing day-to-day operations of this [ENTERPRISE]?</p> <p>YES...1 NO....2</p>	<p>720. Do you have the main financial control, including the ability to sign loans, leases and contracts of this [ENTERPRISE]?</p> <p>YES, ALONE.....1>>722 YES, THROUGH A HIRED MANAGER.....2>>722 YES, JOINTLY WITH SOMEONE ELSE.....3 NO, SOMEONE ELSE HAS THIS RESPONSIBILITY..4</p>	<p>721a. Do any other household members have the main financial control, including the ability to sign loans, leases and contracts of this [ENTERPRISE]?"</p> <p>YES...1 NO....2>>721c</p>	<p>721b. Which other household members have the financial control, including the ability to sign loans, leases and contracts of this [ENTERPRISE]?</p>	<p>721c. Do any non-household members have the main financial control, including the ability to sign loans, leases and contracts of this [ENTERPRISE]?</p> <p>YES...1 NO....2</p>	<p>722. Is this [ENTERPRISE] registered for VAT?</p> <p>YES.....1 NO.....2 REFUSES TO RESPOND...97</p>

<p>723. Is this [ENTERPRISE] registered for income tax?</p> <p>YES.....1 NO.....2 REFUSES TO RESPOND..97</p>	<p>724. How many paid employees does this [ENTERPRISE] currently employ on a regular basis, excluding the owner(s)?</p>	<p>725. During the last 12 months, what was the primary source of funding used to finance expansion and capital improvements or to face unexpected expenses for this [ENTERPRISE]? DO NOT READ LIST</p> <p>DIDN'T EXPAND ENTERPRISE, MAKE CAPITAL IMPROVEMENTS OR FACE UNEXPECTED EXPENSES.....1 PREVIOUS AND/ OR PRESENT WAGE EMPLOYMENT.....2 OTHER BUSINESS.....3 SALE OF LIVESTOCK/ CROPS.....4 SALE OF OTHER ASSETS.....5 INHERITANCE.....6 PENSION FROM WORK.....7 RETIREMENT/ SEVERANCE PAY.....8 AN INVESTMENT POLICY THAT MATURED.....9 MONEY PAID FROM A STOCK/VEHICLE.....10 OWN/ HOUSEHOLD'S SAVINGS.....11 COMMERCIAL/DEVELOPMENT BANK.....12 DEPOSIT TAKING MICROFINANCE INSTITUTIONS.....13 NGO.....14 GIFT FROM NON-HOUSEHOLD MEMBER.....15 GOVERNMENT FUNDING.....16</p>	<p>726. During the last 12 months, did the [ENTERPRISE] apply for loans or line(s) of credit?</p> <p>YES..1 NO...2>>728</p>	<p>727. Was the loan application accepted? IF RESPONDENT APPLIED FOR MORE THAN ONE LOAN, REFER TO THE MOST RECENT LOAN.</p> <p>YES....1>>729 NO.....2>>729</p>	<p>728. What was the main reason this [ENTERPRISE] did not apply for a line of credit or a loan? DO NOT READ LIST</p> <p>NO NEED FOR A LOAN-ENTERPRISE HAS SUFFICIENT CAPITAL.....1 APPLICATION PROCEDURES FOR LOANS OR LINE OF CREDIT ARE COMPLEX...2 INTEREST RATES ARE NOT FAVORABLE.....3 COLLATERAL REQUIREMENTS FOR LOANS OR LINE OF CREDIT ARE ATTAINABLE.....4 SIZE OF LOAN AND MATURITY ARE INSUFFICIENT.....5 DID NOT THINK IT WOULD BE APPROVED.....6 OTHER (SPECIFY).....96</p>
	<p>NUMBER</p>				

<p>729.</p> <p>What Is the average monthly turnover from the [ENTERPRISE] (the total value of sales of goods or services)?</p> <p>CONSIDER AN AVERAGE OVER THE LAST THREE OPERATIONAL MONTHS (RANDS)</p>	<p>730.</p> <p>What was the average monthly income the [ENTERPRISE] earned last month after paying all expenses, including wages of employees, but not including any income paid to yourself and other owners?</p> <p>CONSIDER AN AVERAGE OVER THE LAST THREE OPERATIONAL MONTHS (RANDS)</p>	<p>731.</p> <p>Over the past three years, has the number of paid continuous employees increased, decreased or remained the same?</p> <p>INCREASED.....1 DECREASED.....2 REMAINED THE SAME.....3 NOT APPLICABLE.....95</p>	<p>732.</p> <p>Is the [ENTERPRISE] your desired size or did you wish to grow it and weren't able to?</p> <p>ENTERPRISE IS THE SIZE I PREFER.....1>>734 I WANTED TO GROW THE ENTERPRISE BUT DID NOT SUCCEED.....2</p>	<p>733.</p> <p>What factors have constrained your ability to increase the size of the [ENTERPRISE] to the desired size (select all that apply)?</p> <p>DO NOT READ LIST</p> <p>LACK OF DEMAND.....1 LACK OF INPUTS.....2 LACK OF FINANCE.....3 POOR QUALITY ELECTRICITY AND PHONE.....4 LACK OF TRAINED EMPLOYEES.....5 COST OF HIRING NEW EMPLOYEES.....6 LEGAL REGULATIONS.....7 POOR QUALITY ROADS.....8 LACK OF MARKET INFORMATION.....9 HIGH TAX RATES.....10 LACK OF CLEAR OWNERSHIP OF LAND.....11 HIGH CRIME RATES.....12 ECONOMIC POLICY UNCERTAINTY.....13 CORRUPTION.....14 LACK OF TIME TO WORK ON THE ENTERPRISE.....15 OTHER (SPECIFY).....96</p>
LOCAL CURRENCY	LOCAL CURRENCY			

<p>734.</p> <p>Have you ever taken part in any course or training activity, whether formal or informal, on how to start an enterprise, such as training on how to develop a business plan, assess market opportunities, identify and access start-up capital, develop business networks, etc.?</p> <p>SELECT ALL THAT APPLY</p> <p>YES, AS PART OF MY REGULAR EDUCATION AT SCHOOL.....1</p> <p>YES, AT MY INITIATIVE.....2</p> <p>YES, AS A CONDITION FOR RECEIVING A LOAN/FOR PARTICIPATING IN A PROGRAM....3</p> <p>NO.....4</p> <p>YES, OTHER (SPECIFY).....96</p>	<p>735.</p> <p>Does anyone regularly (once or more per month) give you managerial advice?</p> <p>DO NOT READ LIST</p> <p>YES, SPOUSE/PARTNER.....1</p> <p>YES, OTHER FAMILY MEMBERS/RELATIVES.....2</p> <p>YES, FRIENDS.....3</p> <p>YES, A PUBLIC ADVISING SERVICE (BANK, LAWYER, ACCOUNTANT)...4</p> <p>No.....5</p> <p>YES, OTHER (SPECIFY)96</p>

Annex 2: The EDGE/OECD and the OECD-Eurostat framework for entrepreneurship indicators

The EDGE framework adapted the OECD framework to include a gender dimension and gender differentials on entrepreneurship indicators. Both OECD and the EDGE frameworks identify three separate but inter-connected flows, which are ‘determinants’, ‘outcomes’, and ‘impacts’. ‘Determinants’ reflect the key factors that affect entrepreneurship like motivations and aspirations for undertaking entrepreneurial activities. ‘Outcomes’ reflect the target indicators that may be used by policy makers to assess and monitor the results of their policies. ‘Impact’ reflect the contributions of entrepreneurs and entrepreneurship to the economy and they can be identified in a number of ways including through economic growth, job creation, poverty reduction etc.

Determinants: In the OECD framework, the determinant factors that influence entrepreneurship range from the market conditions to the regulatory framework measurement (for instance, the existence and restrictiveness of anti-trust laws or the administrative costs of setting-up a new business in a country), to the culture or the conditions of access to finance. In contrast, the EDGE framework focuses on the main individual and contextual drivers on gender differences in entrepreneurship.

Outcomes/Performance Indicators:

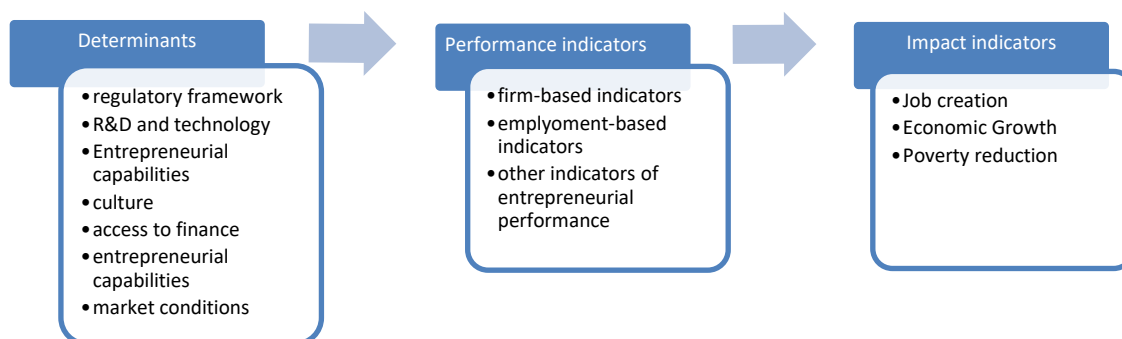
The OECD framework has three themes on performance indicators, namely “firm based”, “employment based” and “other indicators”. Among several indicators proposed by the three themes, 6 are considered core indicators: employer enterprise birth; rate of high-growth firms based on employment growth; rate of high-growth firms based on turnover growth; Gazelle rates¹⁰² based on employment; Gazelle rates based on turnover; and employer enterprise deaths. In contrast, EDGE has two main themes, namely, “entrepreneurial participation” and “enterprise performance”. EDGE proposes a set of indicators of entrepreneurial participation to accommodate different understanding of what makes an entrepreneur and evaluate gender gaps in particular ‘types’ of entrepreneurship. Some indicators suggested for “entrepreneurial participation” are: the proportion and share of business owners who are women; a set of variables to classify

¹⁰² Gazelles represent the young enterprises among the population of high-growth enterprises. Their role in job creation is of particular interest to policy makers. (https://www.oecd-ilibrary.org/industry-and-services/entrepreneurship-at-a-glance-2010/gazelles-rate_9789264097711-16-en)

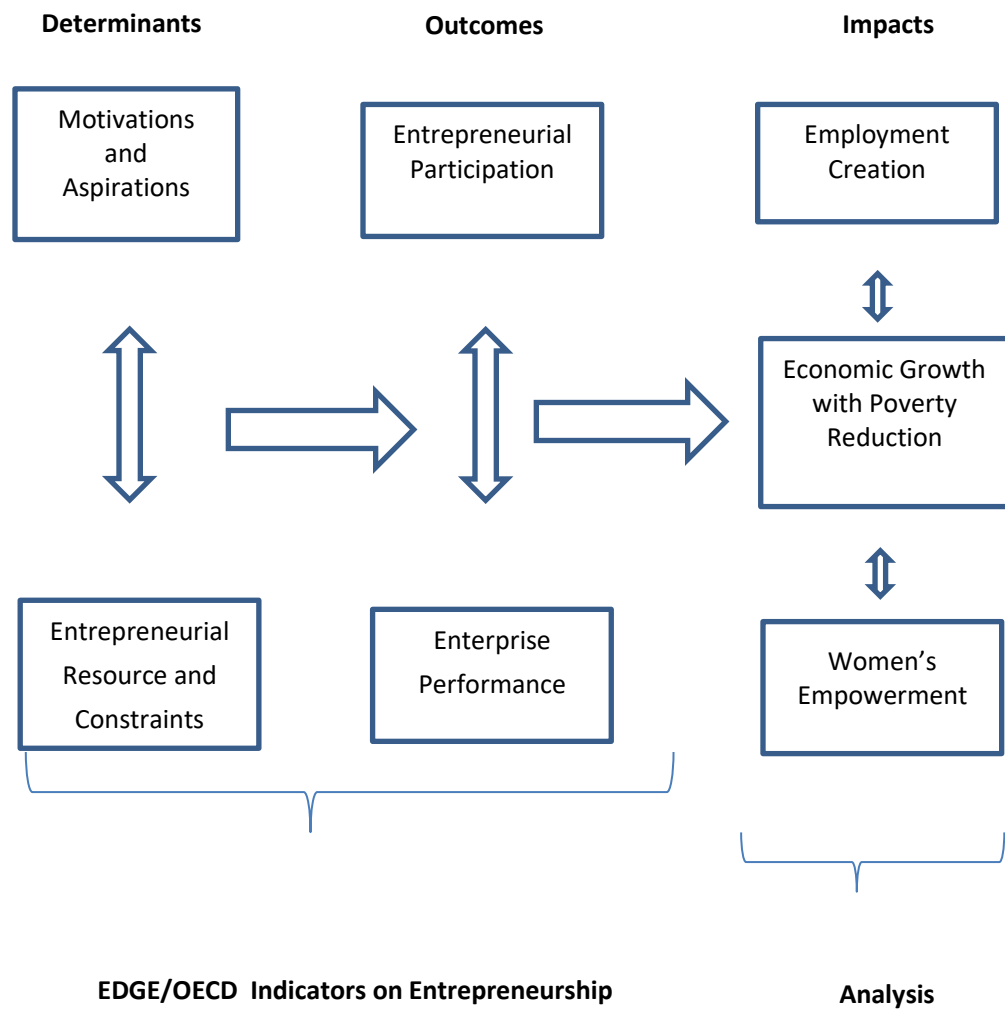
entrepreneurs by size, industry, by percentage of business owners who control the operations and finances of the business by holding a majority share and having responsibility for the management, and the percentage of registered businesses, by sex. “Entrepreneurial performance” is measured by the following indicators: gender gap in business earnings, gender gap in business turnover; percentage of businesses with employment growth, by sex of owner; average age of enterprises owned by women and men; and job satisfaction of entrepreneurs, by sex.

Impacts: Both OECD and the EDGE frameworks highlight economic and social impacts of entrepreneurship which are identified as sustained job creation, economic growth and poverty reduction. Furthermore, EDGE has identified women’s empowerment as an additional impact of entrepreneurship. Since these are macro indicators and usually available, policy makers and analysts should determine whether entrepreneurial “determinants” and “performance” indicators correlate with any potential “impact” indicators that they wish to analyse.

The OECD/EUROSTAT framework for Entrepreneurship indicators



The EDGE/OECD Conceptual Framework for entrepreneurship indicators



Annex 3. Global Entrepreneurship Monitor (GEM)

The GEM was initiated in 1999 as a joint project between Babson College (USA) and London Business School (UK). The aim was to assess the role of entrepreneurship in national economic growth through the development of cross-national harmonized data sets. The first GEM was conducted in 10 developed countries. Currently, the survey has expanded to more than 69 countries¹⁰³.

GEM's conceptual framework depicts the multifaceted features of entrepreneurship, recognizing the proactive, innovative and risk responsive behaviour of individuals, always in interaction with the environment. The GEM survey was conceptualized with regard for the interdependency between entrepreneurship and economic development, in order to:

Uncover factors that encourage or hinder entrepreneurial activity, especially related to societal values, personal attributes and the entrepreneurship ecosystem.

Provide a platform for assessing the extent to which entrepreneurial activity influences economic growth within individual economies.

Uncover policy implications for the purpose of enhancing entrepreneurial capacity in an economy.

The GEM conceptual framework derives from the basic assumption that national economic growth is the result of the personal capabilities of individuals to identify and seize opportunities, and that this process is affected by environmental factors which influence individuals' decisions to pursue entrepreneurial initiatives.

The central indicator of GEM is the Total Early-stage Entrepreneurial Activity (TEA) rate, which measures the percentage of the adult population (18 to 64 years) that is in the process of starting or who has just started a business. This indicator measures individuals who are participating in either of the two initial steps of the entrepreneurial process:

Nascent entrepreneurs – those who have committed resources to starting a business, but have not paid salaries or wages for more than three months, and

¹⁰³ GEM 2016/2017 Global Report. Available at <http://www.gemconsortium.org/report>

New business owners – those who have moved beyond the nascent stage and have paid salaries and wages for more than three months but less than 42 months.