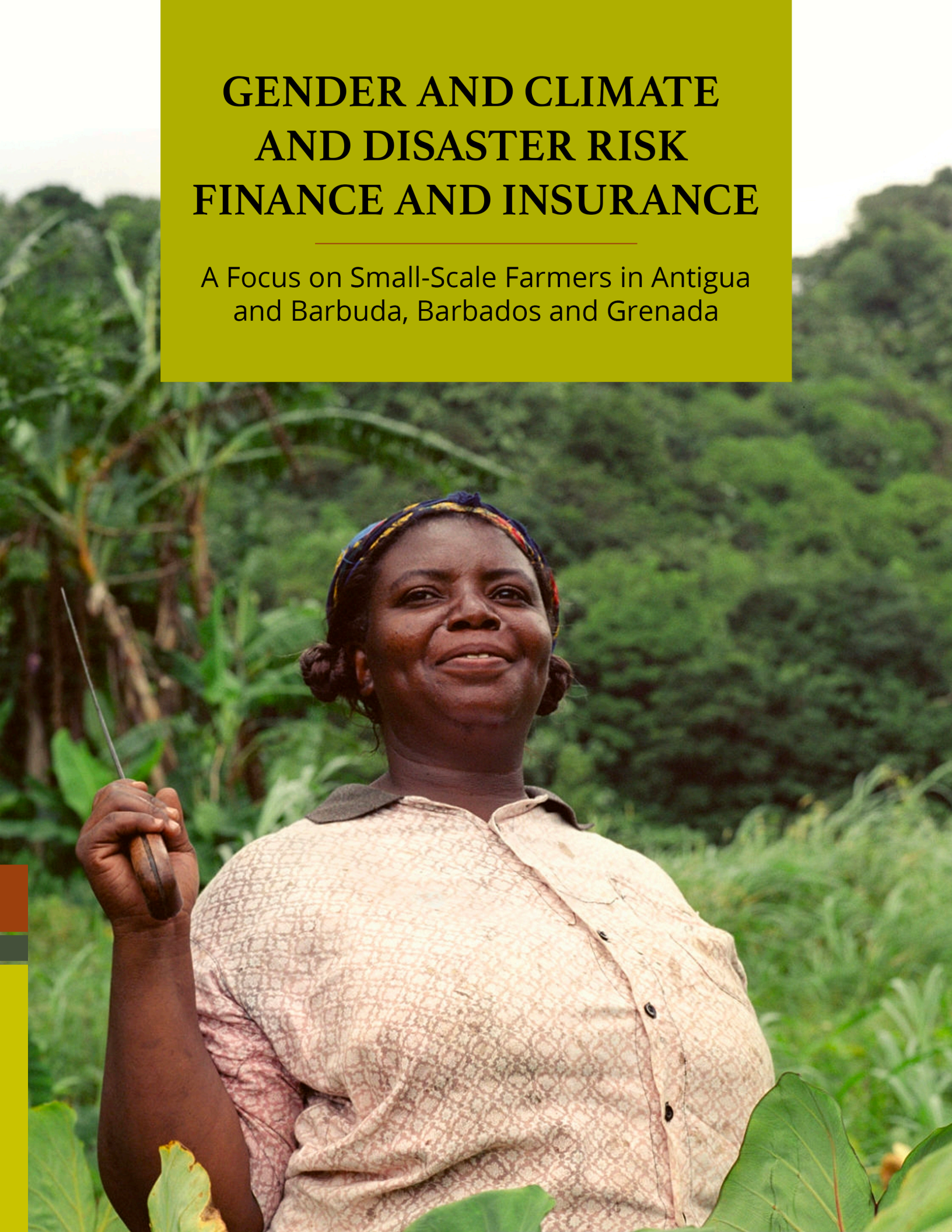


# **GENDER AND CLIMATE AND DISASTER RISK FINANCE AND INSURANCE**

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A Focus on Small-Scale Farmers in Antigua  
and Barbuda, Barbados and Grenada





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## ABBREVIATIONS AND **ACRONYMS**

ARC: African Risk Capacity
BERT: Barbados Economic Recovery and Transformation
BFA: Banco de Fomento Agropecuario
CCRIF SPC: Caribbean Catastrophe Risk Insurance Facility
CDB: Caribbean Development Bank
CEDAW: Convention on the Elimination of All Forms of Discrimination against Women
CGA: Country Gender Assessment
COAST: Caribbean Oceans and Aquaculture Sustainability Facility
CONRED: Coordinadora Nacional para la Reducción de Desastres de Guatemala
CRAIC: Climate Risk Adaptation and Insurance in the Caribbean Programme
CSA: Climate-Smart Agriculture
FGDs: Focus Group Discussions
GAP: Good Agricultural Practices
GDP: Gross Domestic Product
GRMs: Grievance Redress Mechanisms
ILO: International Labour Organization
LPC: Loan Portfolio Cover
LPP: Livelihood Protection Policy
MiCRO: Microinsurance Catastrophe Risk Organisation
NGOs: Non-Government Organization
PCRAFI: Pacific Catastrophe Risk Assessment and Financing Initiative
PI: Parametric Insurance
SEADRIF: South-East Asian Disaster Risk Insurance Facility
WBL: Women, Business and The Law report

# 1. INTRODUCTION

This paper seeks to contribute toward researches on Gender and Climate and Disaster Risk Finance and Insurance to increase the local knowledge base of indigenous sources of information to inform national and regional level strategies for the inclusion of marginalised groups. More specifically, the aim is to explore to what extent small-scale farmers – with a focus on women farmers in Barbados, Grenada, and Antigua and Barbuda – have access to parametric insurance (PI) and to provide recommendations on the types of additional actions and research needed to improve access and uptake. By extension, this also involves identifying barriers to accessing PI and to what degree gender is mainstreamed into PI programmes offered in the identified Caribbean countries, including the CCRIF SPC activities (formerly the Caribbean Catastrophe Risk Insurance Facility).

Drawing on a review of relevant literature and other sources of information, the following sections explore the concept of PI, how it works, its role in the agriculture sector in the face of climate change, and its emergence in developed and developing countries (section 1.1); how gender may be integrated, depending on the insurance approach (section 1.2); and existing PI facilities in the Caribbean, with specific emphasis on CCRIF SPC and its scope, members, products, and the extent to which gender is mainstreamed within it (section 1.3).

## 1.1 Parametric Insurance: Role and Emergence in Developed and Developing Countries

Over the last twenty years, the use of PI – having emerged as part of climate-smart agriculture (CSA) practice – has increased in the area of insuring against extreme weather risks in the Caribbean, Latin and Central America.<sup>1</sup> As the terminology suggests, ‘parametric’ insurance is a category of insurance based on the use of specific measured ‘parameters’, such as rainfall amount, wind speed or seismic activity linked to an insured’s loss. The claims payment amount is fixed in advance in the insurance contract and comes into effect when threshold conditions (i.e. parameters) are exceeded.<sup>2</sup> In the agricultural sector, PI plays a key role as a risk management tool that affords small-scale farmers a financial safety net, especially those facing risks associated

with climate change<sup>3</sup> and can give farmers greater investment security, therefore allowing them to invest in agricultural inputs in order to expand production.<sup>4</sup> The use of PI to provide financing and liquidity in the face of climate-related disasters in the agricultural sector has been explored in the literature,<sup>5</sup> and a common argument is that PI can be an effective mechanism for transferring risk, catalysing investment and in turn economic growth.

In developed countries, agriculture or crop insurance markets date back to the early 1800s in Germany (and in Europe generally); however, only within the last 50 years has there been an exponential development in the type of insurance products offered due to the proactive support of governments in

1 Insuralex, "2020 Parametric Insurance in Latin America: An Overview," <https://insuralex.com/parametric-insurance-latin-america-report>.

2 Tom Markovic and Steve Harry, "Parametric Insurance: A Tool to Increase Climate Resilience," Marsh & McLennan Companies, <https://www.mmc.com/insights/publications/2018/dec/parametric-insurance-tool-to-increase-climate-resilience.html>.

3 Sonia Akter et al., "The Influence of Gender and Product Design on Farmers’ Preferences for Weather-Indexed Crop Insurance," *Global Environmental Change* 38 (2016); Lorna Born, Charles Spillane, and Una Murray, "Integrating Gender into Index-Based Agricultural Insurance: A Focus on South Africa," *Development in Practice* 29, no. 4 (2019).

4 Born, Spillane, and Murray, "Integrating Gender into Index-Based Agricultural Insurance: A Focus on South Africa."



the form of subsidies to insurers via public-private partnerships or direct support to producers. Index-based insurance products specifically were only widely introduced in the early 2000s (e.g. in America and Canada) as a result of the increased availability of weather station and satellite information, as well as government support. One perspective is that the range of agricultural insurance products offered in a country is a function of a government's willingness to subsidise insurance.<sup>6</sup> Affordability for individual farmers remains a potential downside of PI, pointing to the government's continued role in these schemes (especially for vulnerable groups).

Governments of developing countries, especially those where the agricultural sector significantly contributes to Gross Domestic Product (GDP) such as Nicaragua, India and Mexico, also sought out and continue to adopt PI facilities to promote rural welfare and economic stabilisation.<sup>7</sup> The impact value of PI in developing countries has been documented at the individual, regional, national and institutional level.<sup>8</sup> Furthermore, according to multilateral institutions, access to PI could improve the ability of stakeholders in lower-income countries, including small-scale farmers, to adapt to climate change.<sup>9</sup> Examples of PI facilities for small-scale farmers in developing countries include the Indian National Insurance Programme (*30 million farmers*), the East African Agriculture and Climate Risk Enterprise (*200k farmers*), the R4 Rural Resilience Initiative in Ethiopia, Senegal, Malawi, and Zambia (*40k small-scale farmers*), the Mongolia Index-Based Livestock Insurance Project (*15k herders*) and the Kenya/Ethiopia Index-Based Livestock Insurance.<sup>10</sup>

<sup>5</sup> Benjamin Collier, Jerry Skees, and Barry Barnett, "Weather Index Insurance and Climate Change: Opportunities and Challenges in Lower Income Countries," *The Geneva Papers on Risk and Insurance - Issues and Practice* 34, no. 3 (2009); Barry J. Barnett and Olivier Mahul, "Weather Index Insurance for Agriculture and Rural Areas in Lower-Income Countries," *American Journal of Agricultural Economics* 89, no. 5 (2007); Michael Carter et al., *Index-Based Weather Insurance for Developing Countries: A Review of Evidence and a Set of Propositions for up-Scaling* (France: Foundation for studies and Research on International Development (FERDI), Development Policies Working Paper 111, 2014); Victor A. Ogurtsov, Marcel A.P.M. van Asseldonk, and Ruud B.M. Huirne, "Purchase of Catastrophe Insurance by Dutch Dairy and Arable Farmers," *Review of Agricultural Economics* 31, no. 1 (2009).

<sup>6</sup> Vincent H. Smith and Joseph W. Glauber, "Agricultural Insurance in Developed Countries: Where Have We Been and Where Are We Going?," *Applied Economic Perspectives and Policy* 34, no. 3 (2012).

<sup>7</sup> Mario Miranda and Dmitry V. Vedenov, "Innovations in Agricultural and Natural Disaster Insurance," *American Journal of Agricultural Economics* 83, no. 3 (2001).

<sup>8</sup> Carter et al., *Index-Based Weather Insurance for Developing Countries: A Review of Evidence and a Set of Propositions for up-Scaling*; Born et al., "Integrating Gender into Index-Based Agricultural Insurance: A Focus on South Africa"; Greatrex, H., A. Tettey, and A. Yeboah, *Commercial Farmer Training Report*. CCAFS Capacitating African Smallholders with Agricultural Advisories and Insurance Development (2016); SVRK Prabhakar et al., "Promoting Risk Insurance in the Asia-Pacific Region: Lessons from the Ground for the Future Climate Regime under Unfccc," in *Climate Change Adaptation in Practice: From Strategy Development to Implementation*, ed. Philipp Schmidt-Thomé and Johannes Klein (John Wiley & Sons, 2013); Xavier Giné, Dean Karlan, and Muthoni Ngatia, *Social Networks, Financial Literacy and Index Insurance* (Washington, DC: World Bank, 2013), <https://openknowledge.worldbank.org/handle/10986/21814>; Clara Delavallade et al., *Managing Risk with Insurance and Savings: Experimental Evidence for Male and Female Farm Managers in West Africa* (Washington, DC: Policy Research Working Paper; No. 7176. World Bank Group, 2015), <https://openknowledge.worldbank.org/handle/10986/21393>.

<sup>9</sup> Collier, Skees, and Barnett, "Weather Index Insurance and Climate Change: Opportunities and Challenges in Lower Income Countries."

<sup>10</sup> Born et al., "Integrating Gender into Index-Based Agricultural Insurance: A Focus on South Africa."



## 1.2 Integrating Gender

Studies have shown that there may be gender disparities in purchasing insurance or benefiting from insurance on agriculture investments. It is hypothesised that the former (*purchasing insurance directly*) may be due to traditional gender roles and the perceived value of insurance by women, which may be lower compared to men since women face additional risks that are uninsured, but that can also directly impact their yields or income, such as caring for sick children,<sup>11</sup> limiting their ability to work. Evidence suggests that the latter (*benefiting from insurance*) could be an issue of what crops are grown by men and women and whether or not insurance facilities or payouts exist for crops predominantly grown by women.<sup>12</sup> Therefore, it is important that when designing insurance products, an inclusive approach is adopted so that products can be tailored to local needs and conditions, including gender aspects.<sup>13</sup>

The importance of integrating gender in climate and disaster risk finance and insurance, including PI, is underlined by the fact that ‘gender-blind’ insurance schemes may actually reinforce power differentials between women and men, and as a result, increase vulnerability (as well as potential losses) to those most exposed and most impacted by disasters and the adverse effects of climate change.<sup>14</sup>

Overall, gender may be integrated into insurance schemes in different ways depending on the approach, namely macro-, meso- and micro-level insurance. Macro-, meso- and micro-level insurance

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<sup>11</sup> Delavallade et al., Managing Risk with Insurance and Savings: Experimental Evidence for Male and Female Farm Managers in West Africa.

<sup>12</sup> Born et al., "Integrating Gender into Index-Based Agricultural Insurance: A Focus on South Africa."; Delavallade et al., *Managing Risk with Insurance and Savings: Experimental Evidence for Male and Female Farm Managers in West Africa*.

<sup>13</sup> Munich Climate Insurance Initiative (MCII), Success Factors: Agricultural Insurance for Development: Advancing Climate Risk Insurance Plus (Acri+) (Germany: The Munich Climate Insurance Initiative, 2019).

<sup>14</sup> K. Miles and M. Wiedmaier-Pfister, Integrating Gender Considerations into Different Models of Climate Risk Insurance (CRI) (Bonn, Germany: InsuResilience Global Partnership, 2019).



approaches vary based on who provides the insurance coverage, who pays the premium, who the policyholder is, and who receives the payouts, with each level involving different and sometimes overlapping stakeholders.<sup>15</sup>

Macro-level insurance schemes can be regional (where risk is pooled across multiple member countries) or national/sub-national. In both instances, the policyholder is a government entity. Integrating gender at the macro-level thus involves considering the way gender may or may not be mainstreamed in government's disaster risk reduction strategies and responses (including how inclusive and participatory the process for developing such plans is), and the extent to which data on disasters is disaggregated by sex (and thus able to support government action that is responsive to gender-differentiated needs and impacts). Additionally, since donor governments may support premium payments, donors' gender policies can also be an important entry point for ensuring gender-responsive macro-level insurance schemes. Gender challenges at this level could include national policies or lack thereof of gender policies and strategies, institutional structure and lack of gender expertise at the level of key interlocutors, lack of capacity to understand and promote gender equality, among others.

In meso-level insurance, the policyholder is usually an intermediary at the firm level that either aggregates risk or demand. The first type is insurance products tailored for firms, often financial service providers (credit unions, (cooperative) banks, microfinance institutions) that function as "risk aggregator," i.e. banks that aggregate the risk of hazard-related loan defaults of its clients or firms (e.g. input providers, off-takers) that protect themselves against hazard-related business risks in their value chain. The main aim is to insulate businesses and ensure business continuity after a climate-related disaster. Indirectly this means some benefits or risk mitigation trickles down to non-policyholders, such as clients, members and employees. The second type is insurance products designed to address aggregate individual-level demand targeting, for example, the needs of farmer groups, cooperatives or community organisations (e.g. women's savings groups).<sup>16</sup> Similar to macro-level insurance, gender impacts can be associated with the level of gender-diversity and leadership at the level of the policyholder and investment policies and conditionalities at the level of the funders of meso-level insurance schemes.

The micro-level insurance represents the most direct insurance model where people, micro and small business are the policyholders. At this level, insurance products are introduced through distribution channels such as financial institutions, agri-lenders, microfinance institutions, and local insurance companies and their agents. At this level, how insurance products are marketed and targeted can influence the extent to which persons of different genders may or may not be able to access and effectively make use of them.<sup>17</sup> Product design should account for gender-differential risks and impacts of disasters and gender differences in financial access.<sup>18</sup> For example, in Ghana, small-scale farmers identified groundnuts as more often grown by women, but there was a gap in insurance products to cover such agriculture investments.<sup>19</sup> See Box 1 below for an example of how gender is being integrated into Latin America at the micro-level.

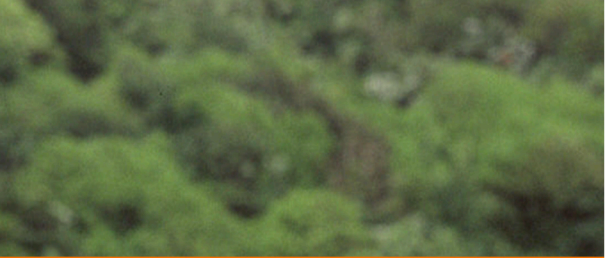
<sup>15</sup> Ibid.

<sup>16</sup> For further information see: <https://climate-insurance.org/wp-content/uploads/2020/09/EB2-Meso-insurance-and-Aggregation.pdf>

<sup>17</sup> For example, disaggregated gender data or consultations with men and women can be used to inform product design to ensure gender differentiated needs are addressed and different barriers to access considered.

<sup>18</sup> Miles and Wiedmaier-Pfister, Integrating Gender Considerations into Different Models of Climate Risk Insurance (CRI).

<sup>19</sup> Greatrex et al. Commercial Farmer Training Report.



## Box 1: Case Study – Micro-Index Insurance Schemes in Latin America

### Case Study – Micro-Index Insurance Schemes in Latin America

**Background:** Founded in the wake of the 2010 Haiti earthquake by the international NGO, Mercy Corps, and the largest microfinance institution (MFI) in Haiti, Fonkoze, the “Microinsurance Catastrophe Risk Organisation” (MiCRO) is a reinsurance company specialising in the design and implementation of natural hazard risk transfer solutions for vulnerable and low-income segments of the population.

MiCRO’s current client portfolio is composed of 40% women, and the target is to reach 55%. This objective is important, given the fact that women play a significant role in strengthening the resilience of their households against adverse events, and is also driven by the strategic focus of its funders’ on gender. It should be noted, while most of these target clients are poor, they are not exclusively poor, nor the poorest of the poor.

**Guatemala:** In November 2016, MiCRO launched Esfuerzo Seguro in Guatemala, an index-based product offering protection against earthquakes, drought and excess rainfall. Esfuerzo Seguro is distributed by the insurer Aseguradora Rural, offered with loans provided by bank Banrural – the country’s leading bank focused on rural finances. The product was the first index-based insurance product offering protection against business interruption to rural populations in Guatemala, specifically economically vulnerable individuals engaged in smallholder farming or entrepreneurial activities. In addition to the insurance product, clients receive information and incentives to help them adopt measures that reduce risk and strengthen resilience against natural disasters. This is offered in collaboration with the National Coordination Agency for Disaster Risk Reduction of Guatemala, Coordinadora Nacional para la Reduccion de Desastres de Guatemala (CONRED). Currently, 57% of clients protected by Esfuerzo Seguro are women, and 70% are dedicated to agricultural activities. Almost half (49%) had received at least one payout, mainly due to drought.

**El Salvador:** In June 2018, MiCRO launched a similar product called Produce Seguro (‘Produce Safely’) in El Salvador in collaboration with the insurance company Seguros Futuro and a government bank, Banco de Fomento Agropecuario (BFA). While the majority of the bank’s clients are men (63% overall, 79% of those dedicated to agricultural activities and 41% of those in non-agricultural activities), the bank partner has been strongly advocating its outreach to women. The clients who have bought insurance have a similar gender distribution (63% overall, 78% in agricultural activities and 33% in non-agricultural activities).

**Future Plans:** Additional index-linked insurance products are in development – two in Guatemala and one in Colombia. In Guatemala, one of the products was developed in collaboration with insurer Seguros Columna, Anacafe, (the National Association of Coffee Growers) and the Inter-American Development Bank. For this product, MiCRO conducted a gender-analysis on the sector to understand the different roles women and men play in the coffee chain. In Colombia, MiCRO designed an index-based product with SBS, which will be distributed through one of the largest microfinance banks in the country. The launch of this product is imminent (May 2020). <sup>20</sup>

### Gender-responsive approaches

» **Data:** To understand the gender-breakdown of the client base, MiCROs partners provide sex-disaggregated data on policyholders, including the amount of the loan activity.

<sup>20</sup> <http://www.microrisk.org/insuresilience-solutions-fund-to-support-micro-and-sbs-seguros-colombia-s-a/>



## Box 1: Case Study – Micro-Index Insurance Schemes in Latin America

» **Partners:** A key gender-response and intentional approach by MiCRO is its choice of insurance partners to support the distribution and servicing of its underserved and vulnerable target client, and primarily women. In its selection of partners, MiCRO requests sex-disaggregated client data from potential distributors to assess the gender profile of its client base. For example, Banrural in Guatemala primarily serves women and has taken proactive steps to make their branches accessible to indigenous women, for example, having staff that speaks the local indigenous languages and allowing them to wear their typical dress.

» **Gender-sensitive market research:** Together with local partners, MiCRO ensured gender-balanced participation in focus groups and interviews to inform product design and collected the gender of survey respondents to allow for an analysis of the responses, including on the vulnerability on risks, shocks and coping mechanisms experienced by potential clients during previous climatic events. This approach has provided insights, including that women were more realistic in their ability to pay for index insurance coverage.

» **Marketing:** MiCRO works with distribution partners to ensure that women are adequately represented in its financial education and marketing materials in order to ensure a balanced portrayal of women clients. This is to ensure that potential and existing women clients can relate to the insurance product.

Source: Miles and Wiedmaier-Pfister (2019)<sup>21</sup>

### 1.3 A Focus on the Caribbean

Caribbean countries are highly vulnerable to climate risks.<sup>22</sup> Wide-scale adoption of PI emerged in 2007 through the establishment of the CCRIF SPC (formerly the Caribbean Catastrophe Risk Insurance Facility), which can be classified as regional macro-level type insurance. CCRIF SPC represented the first multi-country risk pool in the world and currently has 22 members.<sup>23</sup> It offers earthquake, tropical cyclone, and excess rainfall policies to the Caribbean and Central American Governments. Other risk pools include the African Risk Capacity (ARC), the Pacific Catastrophe Risk Assessment and Financing Initiative (PCRAFI) and the South-East Asian Disaster Risk Insurance Facility (SEADRIF).

Payouts to policyholder government entities over CCRIF SPC's 13 years in operation are approximately US\$152 million<sup>24</sup> (see Table 1), which represent an average payout of US\$11.69 million per annum.

<sup>21</sup> Miles and Wiedmaier-Pfister, Integrating Gender Considerations into Different Models of Climate Risk Insurance (CRI).

<sup>22</sup> Caribbean Catastrophe Risk Insurance Facility (CCRIF), The Caribbean Catastrophe Risk Insurance Facility Annual Report 2018-19 (Grand Cayman, Cayman Islands: CCRIF SPC, 2019),

<sup>23</sup> Caribbean: Anguilla, Antigua & Barbuda, Bahamas, Barbados, Belize, Bermuda, British Virgin Islands, Cayman Islands, Dominica, Grenada, Haiti, Jamaica, Montserrat, St. Kitts & Nevis, Saint Lucia, St. Maarten, St. Vincent & the Grenadines, Trinidad & Tobago and Turks & Caicos Islands. Central America: Nicaragua, Guatemala, Panama.

<sup>24</sup> Caribbean Catastrophe Risk Insurance Facility (CCRIF), *The Caribbean Catastrophe Risk Insurance Facility Annual Report 2018–19; CCRIF Strategic Plan 2018–2021* (Grand Cayman, Cayman Islands: CCRIF SPC, 2020) <https://www.ccrif.org/en/publications/strategic-plan/ccrif-strategic-plan-2018-2021>.

# Table 1:

## CCRIF Member Countries and Payouts 2007 – 2019

No.	Country	Event	Date	Payout (US\$)
1	Anguilla	Tropical Cyclone Excess Rainfall Excess Rainfall Tropical Cyclone Excess Rainfall	August 2010 October 2014 November 2014 September 2017 September 2017	\$4,282,733 \$493,465 \$559,249 \$6,529,100 \$158,823
2	Antigua & Barbuda	Tropical Cyclone	September 2017	\$6,794,875
3	Bahamas	Excess Rainfall Tropical Cyclone Excess Rainfall	September 2017 September 2019 September 2019	\$163,598 \$11,527,002 \$1,297,002
4	Barbados	Tropical Cyclone Excess Rainfall Tropical Cyclone Excess Rainfall Excess Rainfall Excess Rainfall	October 2010 November 2014 September 2016 October 2016 September 2017 October 2018	\$8,560,247 \$1,284,882 \$975,000 \$753,277 \$1,917,506 \$5,813,299
5	Belize	Excess Rainfall	August 2016	\$261,073
6	Bermuda	-	-	-
7	British Virgin Islands	-	-	-
8	Cayman Islands	-	-	-
9	Dominica	Earthquake Excess Rainfall Tropical Cyclone Excess Rainfall	November 2007 August 2015 September 2017 September 2017	\$528,021 \$2,402,153 \$19,294,800 \$1,054,022
10	Grenada			
11	Haiti	Earthquake Tropical Cyclone Excess Rainfall	January 2010 September October	US\$7,753,579 US\$20,388,067 \$3,020,767
12	Jamaica	-	-	-
13	Montserrat	-	-	-

# Table 1:

## CCRIF Member Countries and Payouts 2007 – 2019

No.	Country	Event	Date	Payout (US\$)
14	St. Kitts & Nevis	Excess Rainfall Tropical Cyclone	November 2014 September 2017	\$1,055,408 \$2,924,603
15	Saint Lucia	Earthquake Tropical Cyclone Excess Rainfall Excess Rainfall	November 2007 October 2007 October 2016 September 2017	\$418,976 \$3,241,613 \$3,781,788 \$671,031
16	St. Maarten	-	-	-
17	St. Vincent & the Grenadines	Tropical Cyclone Tropical Cyclone Excess Rainfall	October 2010 September/October September 2017	\$1,090,388 \$285,349 \$247,257
18	Trinidad & Tobago	Excess Rainfall Excess Rainfall Excess Rainfall	October 2017 October 2018 October 2019	\$7,007,886 \$2,534,550 \$362,982
19	Turks & Caicos Islands	Tropical Cyclone Tropical Cyclone Excess Rainfall Tropical Cyclone	1–Sep–08 September 2017 September 2017 September 2017	\$6,303,913 \$13,631,865 \$1,232,769 \$419,372
20	Nicaragua	Earthquake Tropical Cyclone	June 2016 November 2016	US\$500,00 US\$1,110,193
21	Guatemala	-	-	-
22	Panama	-	-	-
Total for Tropical Cyclone (15) =		US\$106,443,920		
Total for Earthquake (4) =		US\$9,200,576		
Total for Excess Rainfall (22) =		US\$36,358		

Source: Extracted from CCRIF SPC Annual Report 2018–2019 <sup>25</sup>



It is worth noting that payouts made to the territories under focus (Barbados, Antigua and Barbuda, and Grenada) represent approximately US\$26.1 million or about 23% of total insurance pay-outs made to governments over the period, with Barbados receiving US\$19.3 million or about 74% of total payments made to these territories.

In 2011, in partnership with CCRIF SPC, the Munich Climate Insurance Initiative (MCII) and the International Labour Organization's Impact Insurance Facility began to roll-out the first phase (2011–2014) of its Climate Risk Adaptation and Insurance in the Caribbean (CRAIC) programme in five pilot countries: Jamaica, Grenada, Saint Lucia, Trinidad and Tobago, and Belize. CRAIC introduced two parametric microinsurance products: the Livelihood Protection Policy (LPP) and the Loan Portfolio Cover (LPC).<sup>26</sup> The latter was designed for lending institutions such as credit unions and insurance companies, and the former to protect low-income individuals against extreme events. Currently, the LPC and the LPP are undergoing a re-design process to better meet individuals' protection needs. The fundamentals of the LLP are as follows:

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>• Provides payouts after extreme wind and rain events that policyholders are free to use as needed, for example, to repair damage to physical assets or loss of livelihoods ;</li> <li>• Provides insurance protection for vulnerable persons such as farmers and tourism workers against extreme weather;</li> <li>• Is triggered based on the values of wind speeds and rainfall levels;</li> <li>• The trigger values are calculated using satellite data and are different for policyholders depending on where they live to reflect their different levels of exposure;</li> <li>• Insurance payout amount is calculated as a percentage of the amount of coverage that was purchased - the more extreme the event, the larger the payout:                         <ul style="list-style-type: none"> <li>◦ Saint Lucia is divided into two zones: North and South;</li> <li>◦ In Jamaica, each of the 14 parishes is in a separate zone.</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>• Premium costs are ~13% of the maximum policy payout;</li> <li>• Premiums can be paid weekly, monthly or annually;</li> <li>• In Saint Lucia, an annual premium of US\$48 (one unit) will provide coverage up to US\$370, the lowest level of coverage offered. In Jamaica, an annual premium of US\$53 (one unit) will provide coverage up to US\$400;</li> <li>• The maximum coverage available is US\$4,000, depending on how many units an individual buys (Note: Individuals can purchase up to ten units). <sup>27</sup></li> </ul> |
|--|---|

<sup>26</sup> For more information on the latter please see: <https://www.ccrif.org/projects/crai/about-the-climate-risk-adaptation-insurance-programme>

<sup>27</sup> <https://www.ccrif.org/projects/crai/livelihood-protection-policy-lpp>

Phase two of CRAIC (2016–2019) focused on deepening and refining efforts in the initial pilot countries. Now, in its third phase, CRAIC is looking to strengthen its expansion and work to re-design the LPP.<sup>28</sup>

Although CCRIF SPC is considered to be successful, specifically in its efficiency, fairness, and attentiveness to the needs of the Caribbean region,<sup>29</sup> there are views that CCRIF SPC insurance payouts are inaccurate and that to address this, more grassroots solutions requiring input and participation of the Caribbean people are needed.<sup>30</sup> CCRIF-SPC has begun to address these concerns through initiatives such as the CRAIC project and the launch of its Caribbean Oceans and Aquaculture Sustainability (COAST) Facility, tailored to support fisherfolk and the fishing industry. In the pilot countries of Grenada and St. Lucia, the COAST Facility provides coverage for losses caused by adverse weather on fisherfolk and for direct damages caused by tropical cyclones to fishing vessels, fishing equipment and fishing infrastructure.

Additionally, the literature suggests that there is scope to strengthen how gender is integrated into the CCRIF SPC. For example, while data is reported on the use of payouts by sectors, it is not disaggregated by persons, meaning that gender analysis on who benefits from how governments use the payouts is limited.<sup>31</sup>

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<sup>28</sup> <https://www.ccrif.org/projects/crai/about-the-climate-risk-adaptation-insurance-programme>

<sup>29</sup> Prabhakar et al., "Promoting Risk Insurance in the Asia-Pacific Region: Lessons from the Ground for the Future Climate Regime under Unfccc."; Carter et al., *Index-Based Weather Insurance for Developing Countries: A Review of Evidence and a Set of Propositions for up-Scaling*; Born et al., "Integrating Gender into Index-Based Agricultural Insurance: A Focus on South Africa."

<sup>30</sup> Lauren Brooks, "The Caribbean Catastrophe Risk Insurance Facility: Parametric Insurance Payouts without Proper Parameters," *Arizona Journal of Environmental Law & Policy* 2 (2011).

<sup>31</sup> Miles and Wiedmaier-Pfister, Integrating Gender Considerations into Different Models of Climate Risk Insurance (CRI).



## 2. COMPARATIVE DEVELOPMENT CONTEXTS AND INSTITUTIONAL FRAMEWORKS: ANTIGUA AND BARBUDA, BARBADOS, AND GRENADA

Government policies and institutional frameworks are fundamental to the effective mainstreaming of gender across industries and sectors. In the context of PI, this is particularly the case when it comes to macro-level type insurance, such as CCRIF, where gender integration challenges can manifest mainly at the level of government policy (see section 1.2).

The following sections review development contexts and comparative country gender assessments (*section 2.1*); national gender frameworks, including policies and mechanisms (*section 2.2*); gender, law, and business development as well as gender and labour force participation (*section 2.3*); and gender and insurance in selected countries (*section 2.4*). In so doing, they provide the background for contextualising the gender analysis in section 3 and for establishing the current baseline on which recommendations to strengthen gender mainstreaming in climate and disaster risk finance and insurance can build on.

## 2.1 Comparative Development Context and Country Gender Assessments

The Country Gender Assessment (CGA) reports – facilitated by the Caribbean Development Bank (CDB) in partnership with Governments – provide gender analysis of economic, social and government sectors for select CARICOM member states. Antigua and Barbuda, Barbados, and Grenada, as borrowing member countries of the CDB, benefit from the CGA analyses. The analyses include the current legal, political, and institutional frameworks for gender equality in each country; assess national capacity for mainstreaming gender equality across key sectors (*such as agriculture*); and identify the opportunities, constraints and risks for CDB in promoting gender equality in its economic growth and poverty reduction development programmes.<sup>32</sup> Table 2 below captures a general comparative analysis for gender and economic growth of the three focus countries and CGA country-level recommendations.

Table 2: Synthesis of CGAs for Select Countries

Country	General Economic Context (CDB's Country Economic Reviews)	Country Gender Assessment (CGA, 2016) (Recommendations)
Antigua and Barbuda	<p>Economic growth in Antigua and Barbuda decelerated to 5.0%, following a robust performance in 2018.</p> <p>Real gross domestic product (GDP) grew by 5.0%, relative to 7.4% in 2018.</p> <p>The number of employed persons grew. The Social Security Board estimates a 2%-rise in active employment, coinciding with the increase in economic activity.</p> <p>Central Government's overall fiscal deficit widened due largely to higher recurrent and capital spending and a slowdown in recurrent revenue collection.</p> <p>Antigua and Barbuda's outlook has become clouded by the outbreak of COVID-19, which has significantly affected developed and developing economies.</p>	<p>The Antigua and Barbuda CGA notes that the wage freeze in the public sector will have a greater negative impact on women than men, while further failing to consider the rising cost of living due to increased taxation on food and the reduction of social security expenditure, costs which would particularly affect women heads of households in the lower-income groups, the poor and unemployed.</p> <p>Technical Assistance to review fiscal-restructuring strategies would be useful in analysing the mid- to long-term gender and development impacts of transaction-based taxes to enable the Government to reconsider whether its current macro-economic strategy promotes growth that is pro-poor and gender-equitable.</p>

<sup>32</sup> Rawwida Baksh and Associates, *Country Gender Assessments (Cgas) Synthesis Report* (Willey, St. Michael, Barbados: Caribbean Development Bank (CDB), 2016).



<b>Barbados</b>	<p>The Government entered the second year of implementing the Barbados Economic Recovery and Transformation (BERT) programme, with key performance indicators pointing to positive results.</p> <p>The average unemployment rate remained unchanged at 10.1% at the end of December 2019. According to the CBB, this was mainly due to a decline in the labour force participation rate, a continuation of the trend observed since 2016.</p> <p>Real gross domestic product (GDP) declined marginally by 0.1% (see Chart 1). Tourism activity increased modestly by 2.9%.</p> <p>As with Antigua and Barbuda, Barbados has been affected by COVID-19. Given the uncertainty of how long this situation will persist, it is difficult to forecast how the economy will perform.</p> <p>In early 2020 the tourism sector has seen mass cancellations. Construction activity has slowed, and government finances have come under increasing pressure. Some of the BERT targets have had to be adjusted.</p>	<p>The Barbados CGA recommended that gendered employment patterns be considered during the Government's current economic restructuring period.</p> <p>The CGA further recommends that the Government adopt a gender-responsive development strategy, which is important in stimulating growth in sectors that increase employment.</p>
<b>Grenada</b>	<p>Economic growth in Grenada remained robust. The increase in the real gross domestic product (GDP) was estimated at 3.0% in 2019. Unemployment declined, and average inflation remained low.</p> <p>Although there was a slowdown in construction, a recovery in private education and strong agriculture output supported growth (despite difficulties related to pests and diseases, and extreme weather conditions, agriculture production of major crops rose in 2019)</p> <p>As with Antigua and Barbuda and Barbados, COVID-19 makes it very difficult to forecast how Grenada's economy will perform going forward</p>	<p>The Grenada CGA recommends that the Government revisit its economic policy goals to include gender equality and social justice and promote the equitable and sustainable economic and social development of men, women, and youth.</p> <p>Further, it recommends that the Government promote gender-responsive, long-term economic growth and poverty reduction strategies that are based on the natural and human resources of Grenada; examine the potential impacts of trade arrangements on men's and women's capacity to access the benefits of regional and international trade; introduce gender-responsive budgeting to ensure that all Government sectors are promoting gender equity, and ensure that sex-disaggregated statistics are included in national data collection systems related to the economy.</p>

Sources: Extracted from *Country Economic Review* (CDB, 2019) and *Country Gender Assessments, Synthesis Report* (CDB, 2016).<sup>33</sup>

<sup>33</sup> Caribbean Development Bank (CDB), *Country Economic Review Mid-Year Update 2019* (St. Michael, Barbados, 2019) <https://www.caribank.org/publications-and-resources/resource-library/economic-reviews/country-economic-review-mid-year-update-2019>; Rawwida Baksh and Associates, *Country Gender Assessments (CGAs) Synthesis Report*.

While CGAs recommendations are specific to country-level conditions, a cross-cutting theme that can be inferred from the CGAs is the need to include further gender considerations (mainstreaming) when developing policies and sector strategies if long-term sustainable economic growth is to be achieved.

## 2.2 National Gender Frameworks

At the national level, the various countries' constitutions guarantee equal status and protection to men and women. For example, Antigua and Barbuda's Constitution Order (1981),<sup>34</sup> subsection 14(1) states: "No law shall make any provision that is discriminatory either of itself or in its effect." The constitution further defines "discriminatory" as "affording different treatment to different persons attributable wholly or mainly to their respective descriptions by race, place of origin, political opinions or affiliations, colour, creed, or sex whereby persons of one such description are subject or are accorded privileges or advantages that are not accorded to persons of another such description." The Grenada constitution specifically prohibits discrimination based on sex. In Barbados' constitution, Chapter 3, section 11 provides protection from discrimination based on sex.

Table 3: National Gender Policies

Country	National Policies and Plans
Antigua and Barbuda	<p><b>Medium Term Development Strategy (2016–2020)</b> <sup>35</sup></p> <p>To achieve social cohesion, this strategy recognises that the nation must cater to the well-being of all and provide equal treatment irrespective of gender, religion, age, social and economic status, race, abilities and health. In order to achieve this, the strategy outlines the following actions:</p> <p>Action 1: Sensitise senior public sector officials about the impact of gender discrimination on national development.</p> <p>Action 2: Develop a gender strategic plan which will reflect, among other areas, approaches for reducing negative gender attitudes that fuel discrimination and violence against women; reversing adverse trends regarding the achievement of males academically and in the workplace, and encouraging greater participation of women in politics.</p> <p><b>Related Gender National Policies and Legislation</b></p> <ul style="list-style-type: none"> <li>• Labour Code (1975);</li> <li>• Domestic Violence Act (1999);</li> <li>• Sexual Offences Act (1995);</li> <li>• The Social Security Act;</li> <li>• The Offences Against the Persons Act; The Infant Life (Preservation) Act;</li> <li>• The Trafficking in Persons (Prevention) Act (2010);</li> <li>• Maintenance and Access to Children Act (2008).</li> </ul>

<sup>34</sup> UN Women, "Constitution Order of Antigua and Barbuda 1981," <https://constitutions.unwomen.org/en/countries/americas/antigua-and-barbuda>.

<sup>35</sup> [https://www.oneplanetnetwork.org/sites/default/files/antigua\\_barbuda\\_medium\\_term\\_development\\_strategy.pdf](https://www.oneplanetnetwork.org/sites/default/files/antigua_barbuda_medium_term_development_strategy.pdf)

<b>Grenada</b>	<p><b>Gender Equality Policy and Action Plan 2014–2024</b> <sup>36</sup></p> <p>The Gender Equality Policy and Action Plan is premised on the following: the differences between men and women based on biological and physiological realities as well as social constructs, equality and its accompaniment by equity, a developmental approach with the involvement of all stakeholders, rights approach and social justice, and identification of the linkages between gender and economic and social factors.</p> <p>The Policy and Action Plan has the following aims:</p> <ul style="list-style-type: none"> <li>• the full and equal participation of men and women in the development process;</li> <li>• assessing the different realities, needs and interests, challenges and opportunities of women/girls and men/boys, through gender analysis;</li> <li>• identifying the male and female ‘gender gaps’ in areas of political, economic, social and cultural life, and putting in place policies, plans and programmes to address these imbalances;</li> <li>• allocating the necessary financial and human resources to address gender gaps in all sectors and at all levels through gender-responsive budgeting and planning; and the equitable, effective and sustainable outcomes of programmes/actions undertaken by Government, civil society and the private sector.</li> </ul> <p>The priority areas of the plan are as follows:</p> <ul style="list-style-type: none"> <li>• Culture and socialisation;</li> <li>• Education and human resource development;</li> <li>• Labour and employment;</li> <li>• Agriculture and tourism;</li> <li>• Economic growth and poverty reduction;</li> <li>• Climate change, natural disasters and natural resource management;</li> <li>• Health and well-being;</li> <li>• Violence and security;</li> <li>• Leadership and decision-making.</li> </ul>
<b>Barbados</b>	<p><b>National Strategic Plan of Barbados (2005–2025)</b> <sup>37</sup></p> <p>This is Barbados’ blueprint for realising the country’s vision of becoming a fully developed society that is prosperous, socially just and globally competitive.</p> <p>Sectoral Objective 1.4 of the Social Sector in Barbados is to achieve gender equity and equality recognising that the participation of women as equal partners with men in all aspects of human life and development and the achievement of a just and equitable society.</p> <p><b>Medium-Term Growth and Development Strategy (2013-2020)</b> <sup>38</sup></p> <p>Chapter 6.1.4 identifies the development of a gender policy integral in achieving human and social development. As such, the following strategies are outlined in this regard:</p> <ul style="list-style-type: none"> <li>• Creation of gender policies on crime and violence and domestic violence.</li> <li>• Reduction in the sexual division of labour allows for equal participation of both males and females in all forms of employment and guarantees equal pay for equal work.</li> <li>• Advocating for the disaggregation by sex of statistical data to facilitate a comprehensive analysis of information.</li> </ul> <p>Establishment of a fund to assist female victims of domestic violence.</p> <p><b>Related Gender National Policies and Legislation</b></p> <ul style="list-style-type: none"> <li>• The Sexual Offences Act (1993);</li> <li>• Domestic Violence (Protection Orders) Act (1992) amended (2016);</li> <li>• Offences against the Person Act Cap 141;</li> <li>• Employment Sexual Harassment (Prevention) Act (2017);</li> <li>• Employment Rights Act (2012);</li> <li>• National Employment Policy.</li> </ul>



## 2.3 Gender, Law and Business Development

According to the Women, Business and The Law (WBL) report,<sup>39</sup> which analyses laws and regulations affecting women's economic opportunities, the countries in focus scored comparatively well,<sup>40</sup> with Antigua and Barbuda, Barbados and Grenada scoring 66.3, 76.9 and 80.6 respectively (see *Table 4 below*). Based on a series of indicators (see *Box 2 below*), these scores give a snapshot of the extent to which gender is mainstreamed in the selected countries. Notably, in two years, from June 2017 to September 2019, WBL recorded 62 reforms aimed at improving gender equality, including for Barbados, that improved the protection of women in the workplace by adopting legislation and criminal penalties for sexual harassment, and for Grenada, that made international travel easier for women by allowing them to apply for a passport in the same way as men, with no need for additional documentation.

Table 4: Legal Differences between Men and Women for Select Countries (scores out of 100)

Country	Mobility	Work place	Pay	Marriage	Parenthood	ENTR	Assets	Pension	WBL Score
Antigua & Barbuda	75	50	75	100	0	75	80	75	66.3
Barbados	75	75	50	100	40	75	100	100	76.9
Grenada	100	50	100	100	20	75	100	100	80.6

Source: Extracted from *Women, Business and The Law 2020* <sup>41</sup>

<sup>36</sup> [https://oig.cepal.org/sites/default/files/2014\\_gender-equality-policy-action-plan\\_grd.pdf](https://oig.cepal.org/sites/default/files/2014_gender-equality-policy-action-plan_grd.pdf)

<sup>37</sup> See [www.sice.oas.org/ctyindex/brb/plan2005-2025.pdf](http://www.sice.oas.org/ctyindex/brb/plan2005-2025.pdf)

<sup>38</sup> Barbados, Ministry of Finance and Economic Affairs (2013) Barbados Growth and Development Strategy 2013–2020.

<sup>39</sup> International Bank for Reconstruction and Development / The World Bank, *Women, Business and the Law 2020* (Washington, DC: World Bank Group, 2020) <https://wbl.worldbank.org/en/wbl>.

<sup>40</sup> Belgium scoring 100 on the top end and West Bank Gaza scoring 26.3 on the lower end. The regional average – Latin America and Caribbean – is 78.7 for 2017 and 79.2 for 2019.

<sup>41</sup> International Bank for Reconstruction and Development / The World Bank, *Women, Business and the Law 2020*.

## Box 2: Indicator Description

### Indicator Description

*The Mobility indicator* measures constraints on women's agency and freedom of movement, both of which are likely to influence their decision to enter the labour force and entrepreneurial activity.

*The Workplace indicator* analyses laws affecting women's decisions to enter the labour market, including women's legal capacity and ability to work, as well as protections in the workplace against discrimination and sexual harassment.

*The Pay indicator* measures laws affecting occupational segregation and the gender wage gap. Restrictions on certain jobs have been found to be negatively correlated with female employment.

*The Marriage indicator* measures legal constraints related to marriage. Legal discrimination against women, including limits on their ability to be head of household, has been found to be negatively correlated with labour force participation.

*The Parenthood indicator* examines laws affecting women's work during and after pregnancy. Women are more likely to return to work if the law mandates maternity leave.

*The Entrepreneurship (ENTR) indicator* measures constraints on women starting and running a business. Having access to bank accounts is strongly correlated with women's labour supply.

*The Assets indicator* examines gender differences in property and inheritance law. Improving property and inheritance rights is positively associated with female earnings and employment.

*The Pension indicator* assesses laws affecting the size of a woman's pension. Early retirement can widen the potential gender gap in pension levels and increase women's risk of poverty in old age (World Bank Group, 2020).

## 2.3.1 Gender and Labour Force Participation in Agriculture and Land Ownership

According to CGAs for Barbados<sup>43</sup> and Antigua and Barbuda,<sup>44</sup> approximately 3,500 persons (2,200 males and 1,300 females) and 1,078 persons (851 males and 227 females) respectively participate or are involved in the agriculture sector (*including in forestry and fishing*). For Grenada, according to the


<sup>42</sup> International Bank for Reconstruction and Development / The World Bank, *Women, Business and the Law 2020*.

<sup>43</sup> Rawwida Baksh and Associates, Country Gender Assessments (CGAs) Synthesis Report.

<sup>44</sup> Baksh, Rawwida, Country Gender Assessment - Grenada 2014. Caribbean Development Bank (CDB), 2014.

country's CGA,<sup>45</sup> the total number of persons involved in the agriculture sector is approximately 3,389 (2,785 males and 604 females).

Regarding land ownership, according to the CGA Synthesis Report<sup>46</sup> in Antigua and Barbuda, the Ministry of Lands and Agriculture does not collect sex-disaggregated data on land ownership. However, a survey conducted for this paper's purposes provides some insight on this (see Box 3).



## Box 3: Survey of Small-Scale Farmers in Antigua and Barbuda

### Survey of Small-Scale Farmers in Antigua and Barbuda

Approximately 48% and 75% of women and men farmers respectively indicated that they were the head of their households;

Results indicate that almost half of all farmers (49%) cultivate crop or rear livestock on one acre of land or less, and approximately 9.5% cultivate on five acres of land and above.

Disaggregating the data by gender show that 85% of women farmers cultivate or rear livestock on one acre or less compared to 46% of men farmers. Further, men farmers represent 100% of all farmers that cultivate on five acres of land and above;

Only 31% of all farmers own the land used for farming, and while the majority of women farmers farm on one acre or less, approximately 45% of women farmers own the land that they farm on compared to 19% of men farmers;

According to the survey, men and women farmers both grow mainly fruits and vegetables and generally rear the same type of livestock. The survey suggests that men farmers, however, on average, are engaged in both crop cultivation and livestock rearing, while women farmers have more diversity in the crops they grow but are less engaged in livestock rearing.

Gender segregation in the agricultural labour force in Antigua and Barbuda is evident in combined CDB and ILO data, revealing that men represent 71.4% of workers in the agriculture, hunting and forestry sectors compared to 28.6% of women. Further, of the registered farmers with the Central Marketing Cooperation, men comprise 77.5% while women comprise 20% (the sex of two farmers or 2.5% is unknown). One of Antigua and Barbuda's CGA recommendations is that support be provided to develop gender-responsive agriculture, food security and environmental policies and programmes, to promote inclusive and sustainable interventions that would benefit both women and men.

<sup>45</sup> Ibid.

<sup>46</sup> Rawwida Baksh and Associates, Country Gender Assessments (CGAs) Synthesis Report.



In Barbados, the agricultural labour force is highly gender-segregated. According to the CGA Synthesis Report,<sup>47</sup> ownership of farms is predominantly male, with approximately 80% being owned by men. However, based on a PI survey done for this paper, data suggests that among small-scale farmers, women farmers comparatively own more land used for farming than men farmers (see Box 4). The Barbados CGA indicates that men account for 60% of skilled agricultural labourers and 62.9% of employees in agriculture, forestry, and fishing. In comparison, many of the smallest farms and subsistence plots are female-owned. Women's low ownership of land and farms constrains their access to credit in agriculture and other productive sectors.

## Box 4: Survey of Small-Scale Farmers in Barbados

### Survey of Small-Scale Farmers in Barbados

Results indicate that the majority of farmers (62.5%) cultivate crop/rear livestock on at least one acre of land and that approximately 17.5% of farmers cultivate crop/rear livestock on at least five acres of land. Disaggregating the data by gender shows that this picture does not change much for men and women farmers: for both men and women farmers, most cultivate crops or rear livestock on one acre or less of land (56.5% and 47% respectively), and 13% of men farmers and 12% of women farmers cultivate crops/ rear livestock on five to ten acres of land. The main difference is that proportionally more women farmers cultivate crops/ rear livestock on two to five acres of land compared to men farmers on the same acreage of land (41% compared to 26%, respectively);

Approximately 31% of farmers own the land used for farming, with the majority of women farmers (82%) owning the land that they farm on compared to men farmers (35%);

According to the survey, men and women farmers both grow mainly fruits and vegetables and generally rear the same type of livestock. Unlike in Antigua and Barbuda, the survey suggests that women farmers in Barbados, on average, are more engaged in both crop cultivation and livestock rearing (70.6% of female farmers) compared to men farmers (39%).

<sup>47</sup> Ibid.

In Grenada, men comprise the majority of labourers in Government and privately-owned crop farms, accounting for as much as 95% of the total. In contrast, women comprise the majority of workers in cocoa and nutmeg factory houses where sorting and packing take place. Men also dominate livestock farming and fishing, while increasing numbers of women are entering poultry farming. Such gendered segregation impacts men and women's earning capacity in agriculture, as men are positioned in jobs where wages are higher. This translates further into men's and women's unequal access to assets/collateral to engage in agri-business, eco-tourism, etc. However, there is little evidence that the Government and other agricultural agencies are aware of agriculture's gender dimensions. Box 5 provides some insight, based on data collected through a survey conducted for this paper's purposes among small-scale farmers in Grenada. The Grenada CGA recommends that gender equality be promoted in agriculture to increase men's and women's equitable access to productive resources and entrepreneurship opportunities that link agriculture to agri-business and tourism.

## Box 5: Survey of Small-Scale Farmers in Grenada

### Survey of Small-Scale Farmers in Grenada

Approximately 55% of women farmers indicated that they were the head of their households, while all-male farmers indicated that they were the head of their households;

Results indicate that the majority of farmers (72.5%) cultivate crop/rear livestock on at least one acre of land and that approximately 23.5% of farmers cultivate crop/rear livestock on at least ten acres of land. Disaggregating the data by gender shows that 33% of women farmers grow crops or rear livestock on less than half an acre of land compared to 4% of men farmers. In fact, 50% of men farmers cultivate crops or rear livestock on at least five acres of land compared to 25% of women farmers;

Almost 75% of all farmers own farmland, with 78% of women farmers owning the land that they farm on compared to 71% of men farmers;

According to the survey, men and women farmers both generally grow the crops (vegetables, fruits, herbs and spices) and generally rear the same type of livestock. The survey suggests that women farmers, on average, are more engaged in both crop cultivation and livestock rearing (52% of female farmers) compared to men farmers (23%).



## 2.4 Gender and Insurance in the Selected Countries

The countries of Antigua and Barbuda, Barbados and Grenada, as captured in Table 1 (section 1.3), account for 23% or US\$26.1million of disbursements made to CCRIF member countries over its 13 years of operation. However, while payouts to Barbados amount to US\$19.3 million, representing payouts covering six climate-related events (four excess rainfall and two tropical cyclone claims), Grenada has yet to experience a claimable loss. Antigua and Barbuda's payouts over the period are US\$6.8 million representing payouts for one climate-related hazard (tropical cyclone).

## 3. SURVEY RESULTS OF CLIMATE AND DISASTER RISK FINANCE INSURANCE IN COUNTRIES

### 3.1 Methodology

A survey of men and women small-scale farmers was undertaken to collect primary data on the level of PI penetration and the specific needs of men and women in the three focus countries to identify existing barriers to women's access and participation among small scale farmers. Local research assistants surveyed each of the focus countries. The assessment tool was a questionnaire consisting of closed and open-ended questions. The tool was administered utilising a blended approach of in-person by the research assistants or over the phone. In a few cases, the respondents completed the questionnaires themselves online (Google form).

Focus Group Discussions (FGDs) were also conducted with women and men small-scale farmers in Barbados and Antigua and Barbuda. No FGD was conducted in Grenada due to COVID-19 restrictions and persons having limited access to telecommunication technologies. The FGDs consisted of a number of open-ended and closed questions. The main objective of the FGDs was to triangulate some of the themes identified in the survey responses. It also allowed for the gathering of more detailed information on some topics that were in the survey.

## 3.2 Survey Respondents' Characteristics

The survey captured 63 farmers in Antigua and Barbuda (31 women and 32 men), 40 in Barbados (17 women and 23 men) and 51 in Grenada (27 women and 24 men). Table 5 shows the breakdown by gender, age, and country. For Antigua and Barbuda, most women respondents were between 20 and 30 years old (14 out of 31), while most men respondents were between 40 and 50 years old (12 out of 32). For Barbados, seven out of 17 women respondents were 50 years old or over (a higher number than any other age category), and seven out of 23 men respondents were between 30 and 40 years old. For Grenada, most women and men respondents were 50 years old or above (21 out of 27 women, and 19 out of 24 men).

Table 5: Survey Respondents' Characteristics

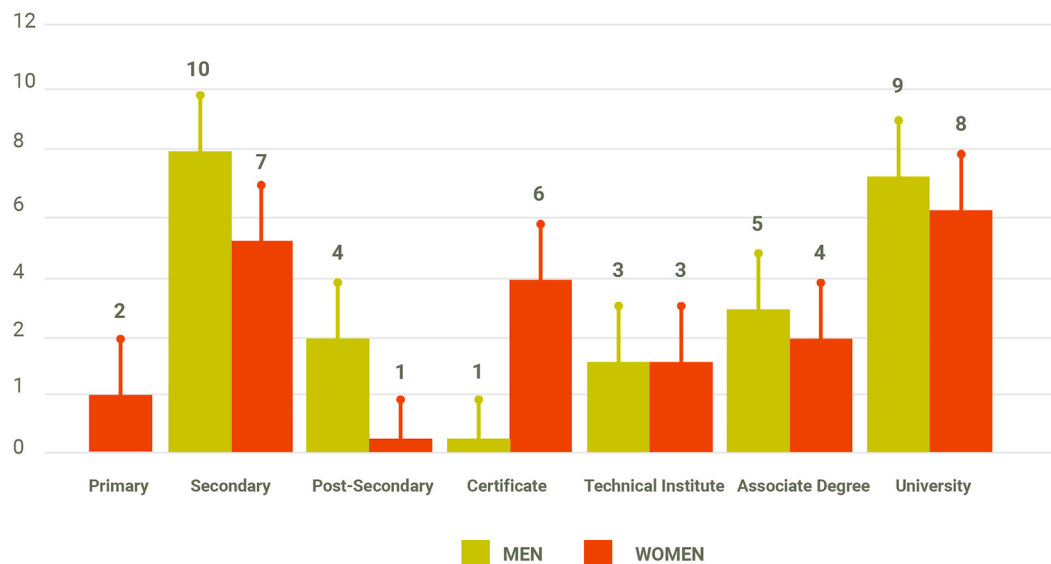
Country	Total number of respondents/farmers	Women				Men			
		20–30 years old	30–40 years old	40–50 years old	50 + years old	20–30 years old	30–40 years old	40–50 years old	50 + years old
Antigua & Barbuda	63	14	8	3	6	8	8	12	4
Barbados	40	4	6	0	7	5	7	5	6
Grenada	51	0	3	3	21	2	2	1	19

Chart 1 shows the highest level of education achieved by survey respondents by gender and country. In Antigua and Barbuda, most women and men respondents had attained either university or secondary level education. In Barbados, the vast majority of women respondents had a university degree (12 out of 17); men respondents were more evenly distributed across categories. In Grenada, half of all men respondents had a university degree (12 out of 24), and most women respondents had either a university degree or a certificate.



# Figure 1: Highest Level of Education Attained by Gender and Country

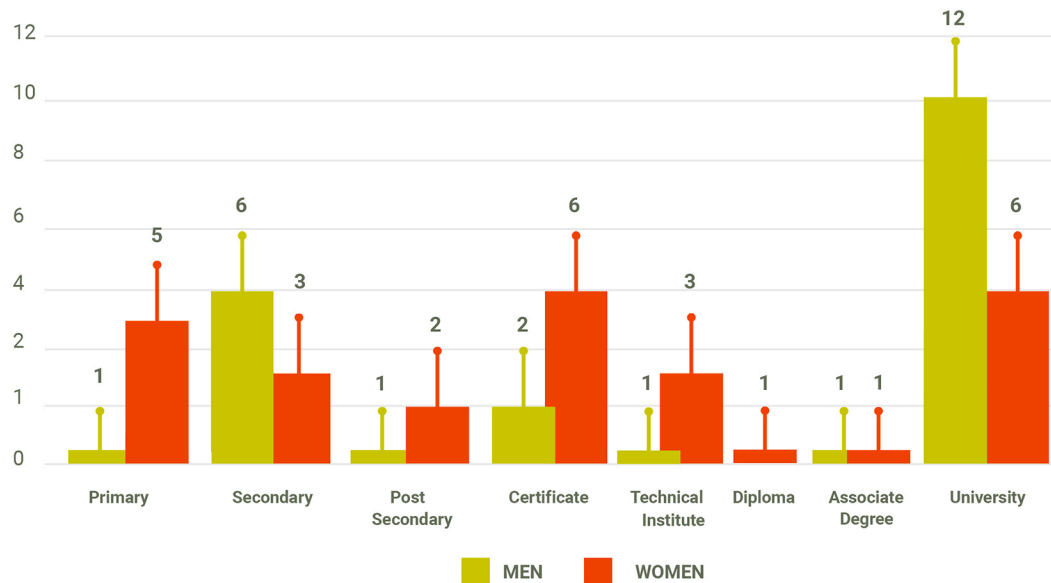
## ANTIGUA AND BARBUDA



## BARBADOS

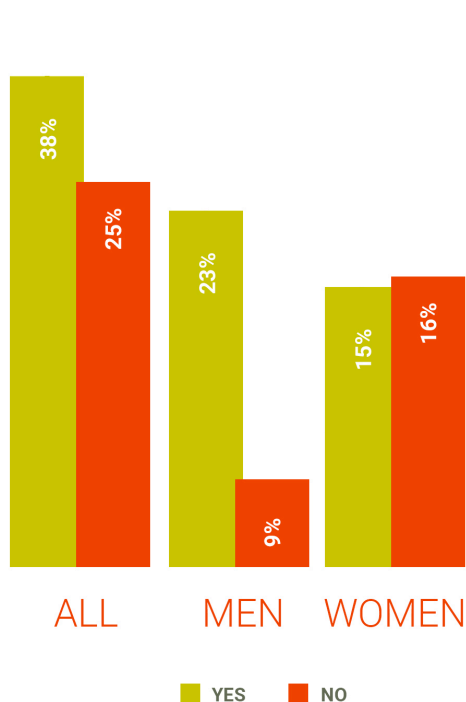


## GRENADA

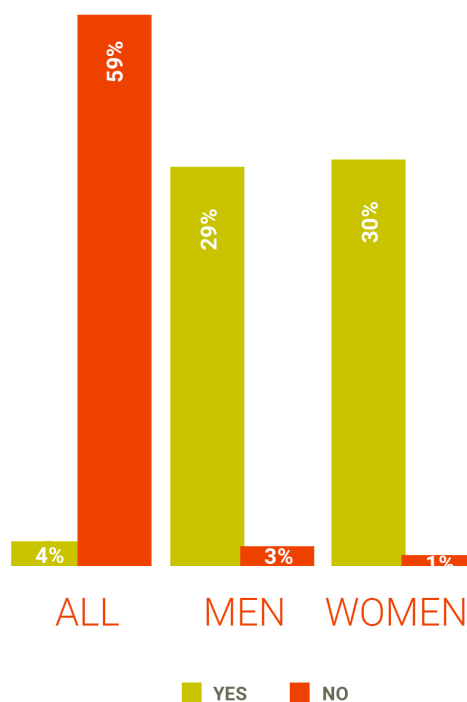


### 3.3 Antigua and Barbuda PI and Gender

The majority of all farmer respondents in Antigua and Barbuda reported that they had lost crop or livestock due to a natural hazard or extreme weather event (60%); however, over 90% of farmers do not presently have insurance or PI, specifically.

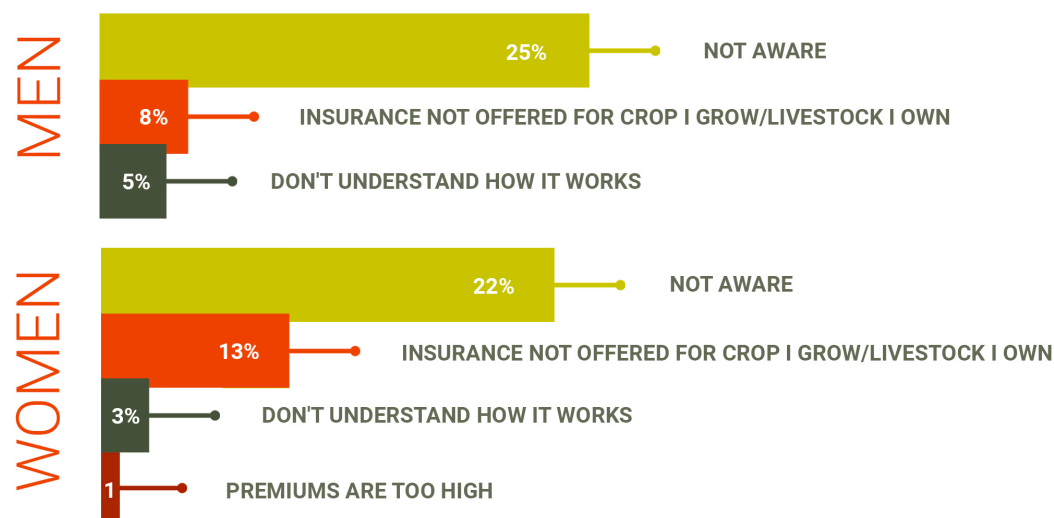


**FIGURE 2: LOSS OF CROPS/LIVESTOCK DUE TO NATURAL DISASTER OR EXTREME WEATHER EVENT**

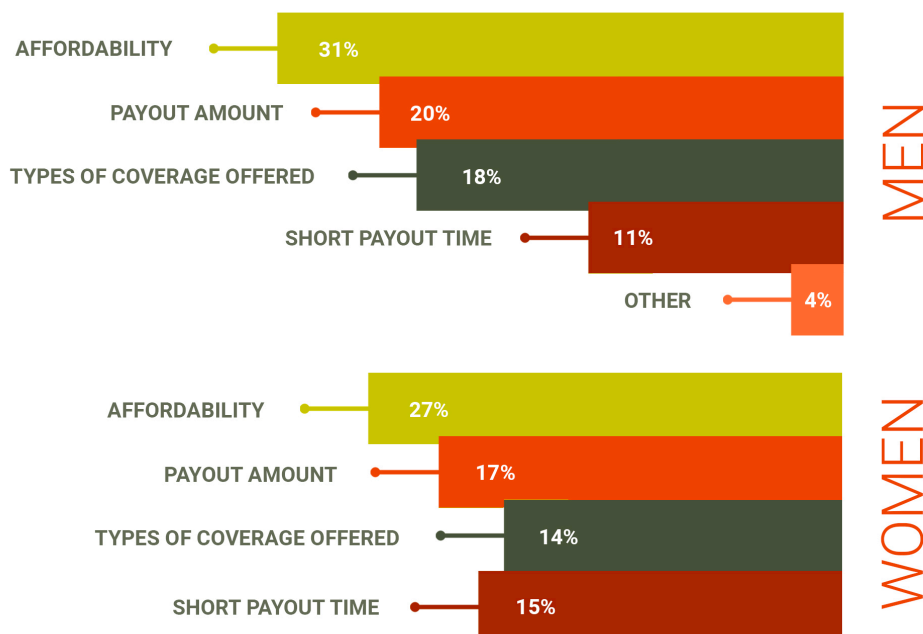


**FIGURE 3: INSURANCE COVERAGE FOR CROPS/LIVESTOCK NOW OR IN THE PAST**

Gender disaggregated data shows that 72% of men farmers reported that they had accrued losses due to a natural hazard or extreme weather event compared to 48% of women farmers (see Chart 2). In terms of insurance coverage for their crops/ livestock, 9% of those men farmers that had accrued losses indicated that they currently have it or have had it in the past, compared to 3% of women farmers (see Chart 3).

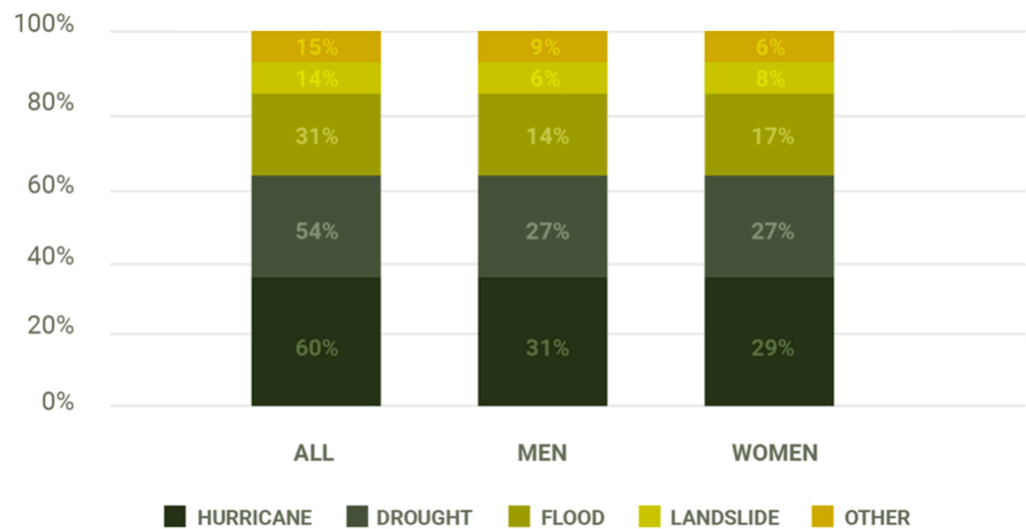
**FIGURE 4: REASONS FOR NOT HAVING PI**

Lack of awareness of PI is the dominant reason for its very limited penetration levels in the country. The share of farmers reporting not being aware of PI being 10% higher among men farmers than women farmers (66% compared to 56%). A third of women farmers also reported the unavailability of insurance for their specific crop/ livestock as a reason for lack of coverage (see Chart 4).

**FIGURE 5: FACTORS INFLUENCING PI PENETRATION**

Factors determining PI's attractiveness to farmers were similar across men and women farmers, with affordability being considered the number one factor, followed by payout amount, the type of coverage offered and payout time (see Chart 5). Over three-thirds of farmers, both men and women, consider a monthly premium of less than US\$50 to be affordable.

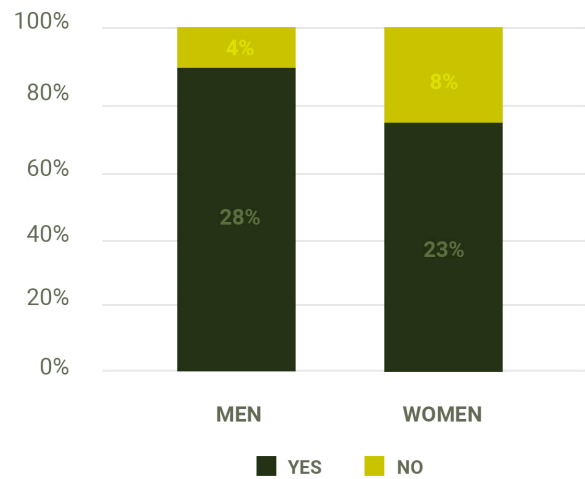
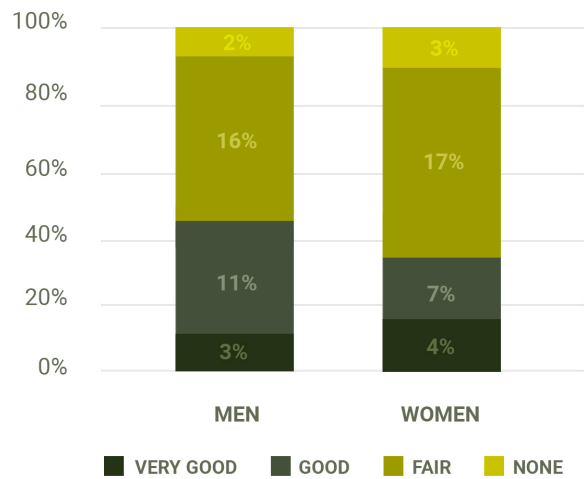
FIGURE 6: TYPE OF INSURANCE MOST DESIRED



The insurance coverage that most farmers (36% of men farmers and 33% of women farmers) are interested in is hurricane coverage, followed by drought, flood and landslide (Chart 6).

FIGURE 7: KNOWLEDGE OF HOW INSURANCE WORKS

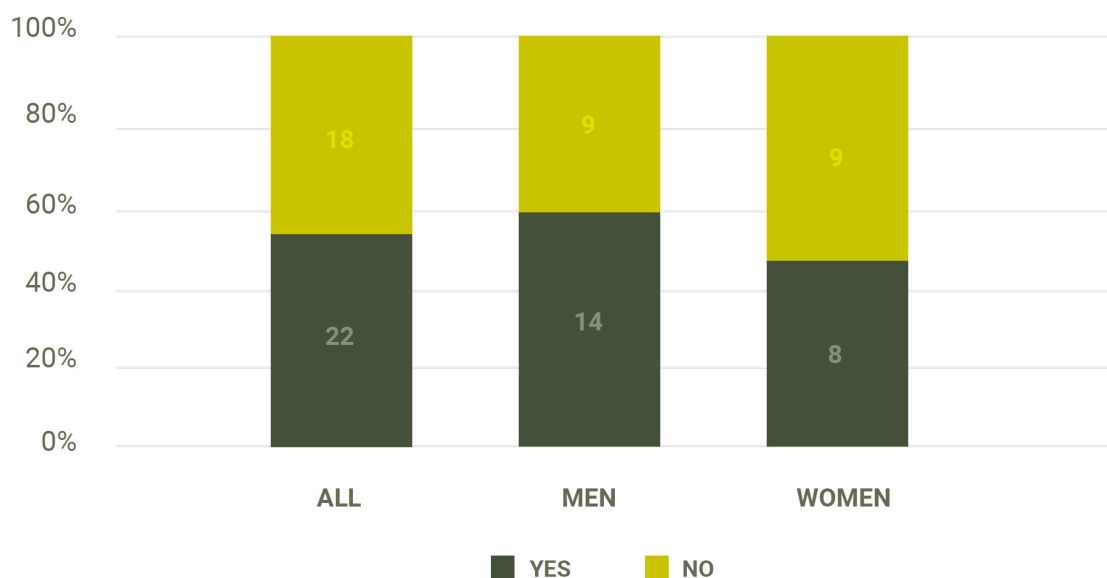
FIGURE 8: ABILITY TO PURCHASE INSURANCE ALONE



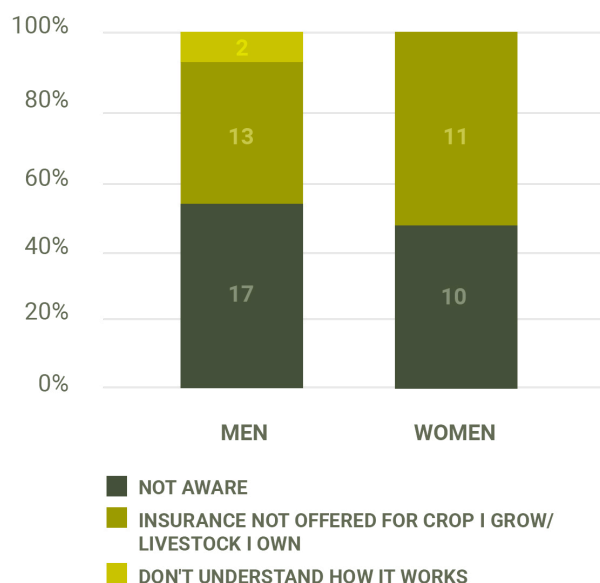
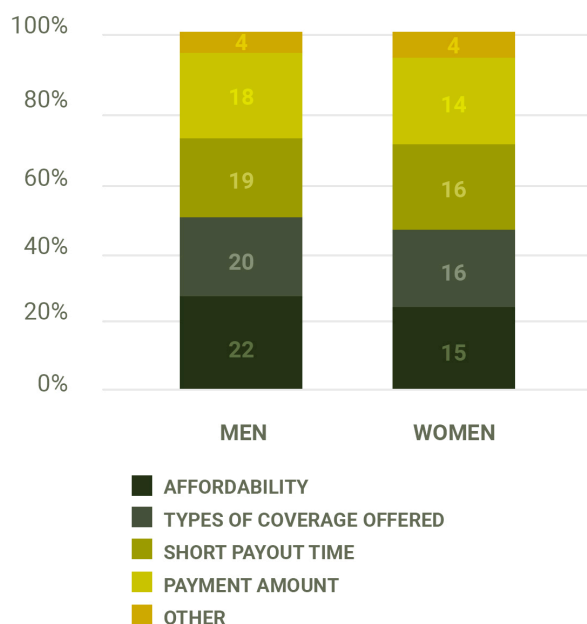


### 3.4 Barbados PI and Gender Survey

**FIGURE 9: LOSS OF CROPS/LIVESTOCK DUE TO NATURAL DISASTER OR EXTREME WEATHER**



According to the survey, 55% of farmers surveyed in Barbados reported that they had lost crops or livestock due to a natural hazard or extreme weather event. Disaggregating the data by gender shows that this share is higher for men farmers compared to women farmers, 61% compared to 47%, respectively (see *Chart 9*). However, none of the farmers has ever had insurance for their crop or livestock, nor currently have PI.

**FIGURE 10: REASONS FOR NOT HAVING PI****FIGURE 11: FACTORS INFLUENCING PI PENETRATION**

Reasons for this lack of penetration, specifically concerning PI, include lack of awareness (*reason number one for men farmers*), lack of availability of PI for the required crop/livestock (*reason number one for women farmers*) and lack of understanding about how it works (*only reported by men farmers*) (see *Chart 10*). Affordability was the number one factor determining PI's attractiveness to men farmers, while types of coverage offered and short payout time were equally reported as most important aspect by women farmers. Another key determining factor is the payout amount (*reported as important by 22% of women and men farmers*) (see *Chart 11*).

In Barbados, farmers seem to be willing to pay a bit more for PI compared to farmers in Antigua and Barbuda (42% indicating US\$50 and less as affordable for a monthly premium and 35% indicating US\$75 and less) (see *Chart 18 below*). The insurance coverage most sought out by women and men farmers is hurricane coverage followed by flood (*especially for men farmers*) and drought coverage (*especially for women farmers*).

**FIGURE 12: KNOWLEDGE OF HOW INSURANCE WORKS****FIGURE 13: APPROACHABILITY OF INSURANCE COMPANIES**

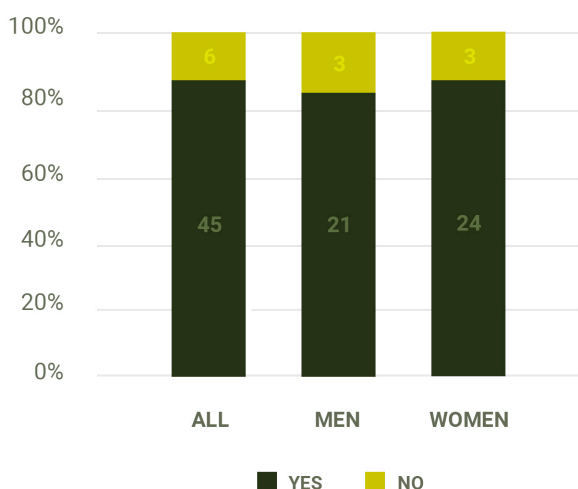
As with Antigua and Barbuda, the majority of farmers have a fair or good understanding of how insurance works, with 29% of women farmers reporting to have 'very good' knowledge of this, compared to 17% of men farmers (see *Chart 12*). However, women farmers were comparatively more unaware of the availability of PI in their country (71% were not sure) compared to men farmers (65% of whom were not sure). The data suggest that more women farmers believe that insurance companies are not approachable (47%) compared to men farmers (26%) (see *Chart 13*) and that a slightly higher proportion of them think that they cannot purchase insurance on their own (29%) compared to men farmers (26%). The gender of the insurance agent bears no significant importance to either group of farmers.

Both women and men farmers believe that more should be done to make PI more accessible. In addition to measures identified by farmers in Antigua and Barbuda, farmers in Barbados indicated that there needs to be more awareness and simplification of the insurance product and a wider variety of insurance coverages, including bespoke coverages. In both countries, farmers believe that their insurance needs are not fully understood, and the PI is poorly communicated.

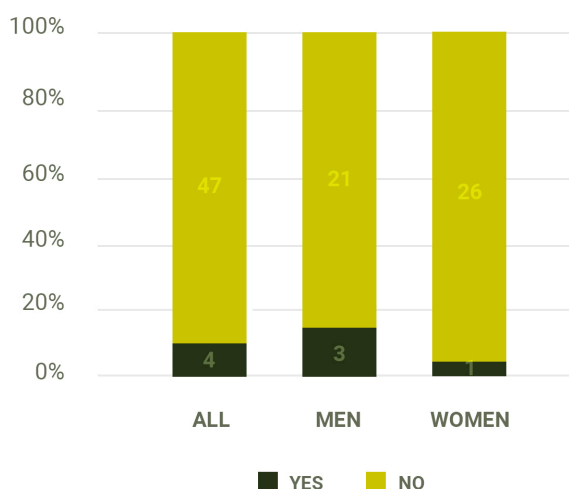
### 3.5 Grenada PI and Gender Survey

The vast majority of farmers (88%) reported that they have lost crops or livestock due to natural hazards or extreme weather events and that they do not have or have ever had insurance for their crop or livestock (92%). One (male) farmer reported being presently in possession of PI specifically. Disaggregating data by gender shows that while the share of women and men farmers that have lost crops or livestock due to natural hazards or extreme weather events is almost the same (89% for women farmers and 88% for men farmers) (see Chart 14), only 4% of women farmers have ever had insurance, compared to 12.5% of men farmers (see Chart 15).

**FIGURE 14: LOSS OF CROPS/LIVESTOCK DUE TO NATURAL DISASTER OR EXTREME WEATHER**



**FIGURE 15: INSURANCE COVERAGE FOR CROPS/LIVESTOCK NOW OR IN THE PAST**

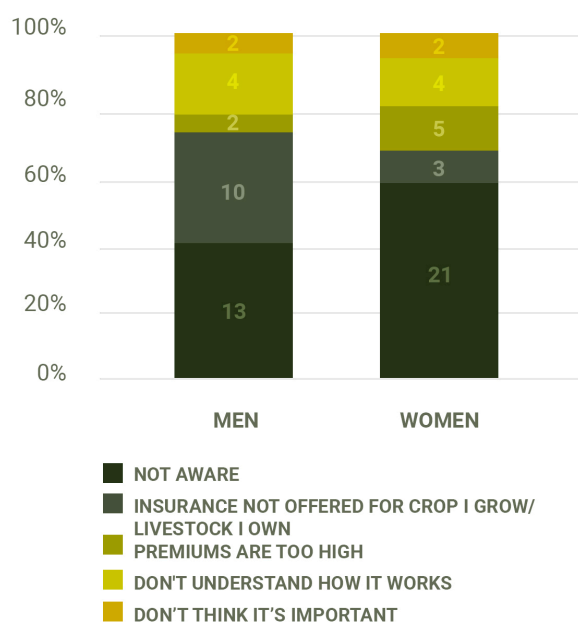




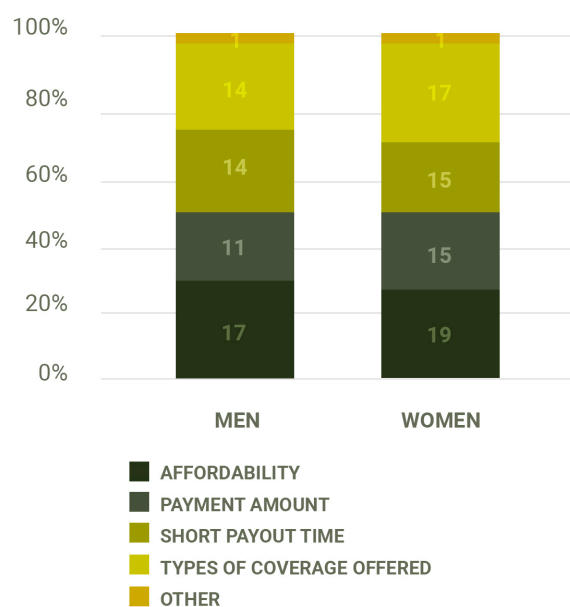
Overall, the very low level of PI penetration is, for the most part, explained by lack of awareness (65% of all farmers reported not being aware of PI), followed by the unavailability of PI for the specific crop grown or livestock owned (according to 25% of farmers) and a lack of understanding on how it works (reported by 14% of farmers). Women farmers (60%) were proportionally less aware of PI compared to men farmers (42%), and 14% of them reported that premiums are too high (compared to 6.5% of men farmers) (see *Chart 16*).

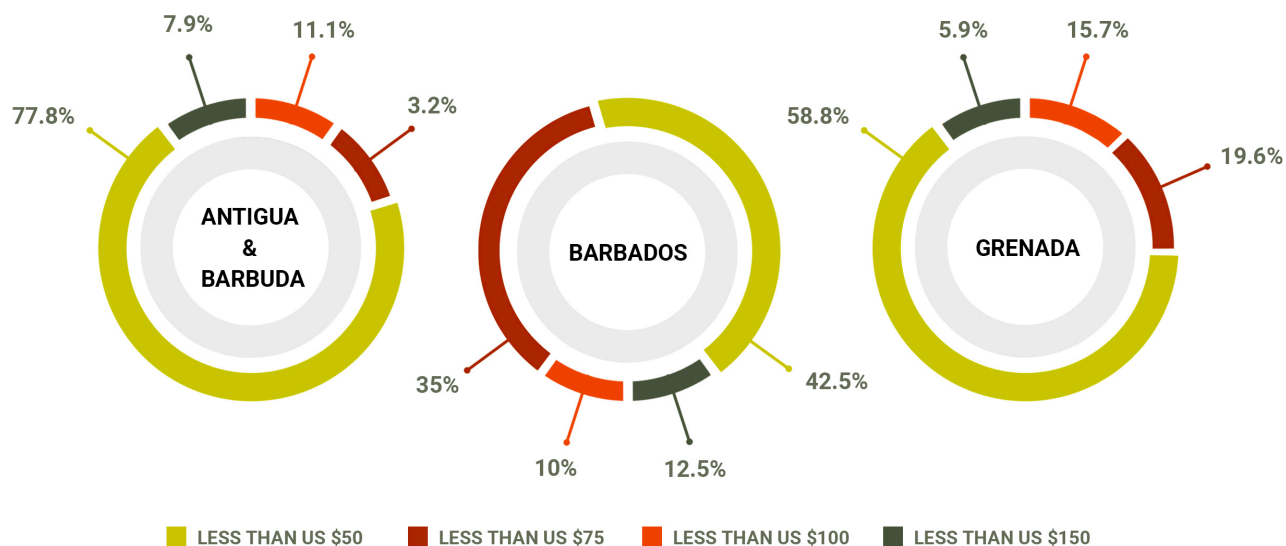
Affordability was the number one factor that would determine PI's attractiveness to both men and women farmers, followed by types of coverage offered, short payout time and payout amount (see *Chart 17*).

**FIGURE 16: REASONS FOR NOT HAVING PI**



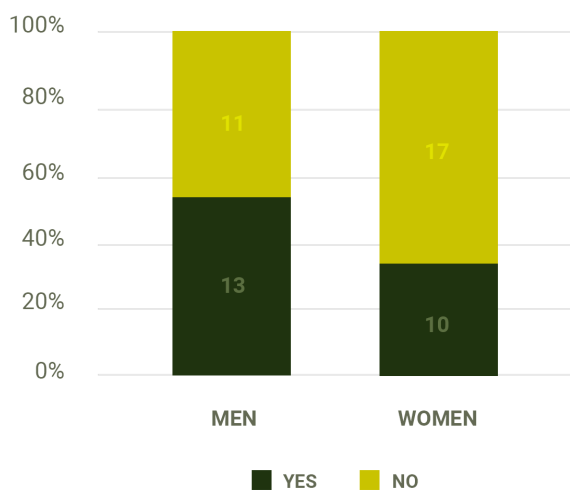
**FIGURE 17: FACTORS INFLUENCING PI PENETRATION**



**CHART 18: AFFORDABLE MONTHLY PREMIUM FOR PI**

Farmers in Grenada seem to be willing to pay a bit more for PI compared to Antigua and Barbuda but a bit less than in Barbados (59% indicating US\$50 and less as an affordable monthly premium, 20% indicating US\$75 and less, and 16% US\$100 and less) (see Chart 18).

Like Antigua and Barbuda and Barbados, the insurance coverage most sought out by women and men farmers in Grenada is hurricane coverage, followed by drought, flood, and landslide coverage.

**FIGURE 19: KNOWLEDGE OF HOW INSURANCE WORKS****FIGURE 20: ABILITY TO PURCHASE INSURANCE ALONE**

The vast majority of both women and men farmers have some understanding of how insurance works, with men farmers mostly reporting a 'very good' knowledge (58%) and women farmers a 'good' or 'fair' knowledge (44% and 41%, respectively) (see *Chart 19*). The data suggest that most men and women farmers believe that insurance companies are approachable (96% and 81%, respectively). While 54% of men farmers think they can purchase insurance independently, most women farmers think they cannot (63%) (see *Chart 20*). The gender of the insurance agent bears no significant importance to either group of farmers.

Both women and men farmers have ideas on what should be done to make PI more accessible, focusing mainly on raising awareness and educating farmers but also ensuring insurance companies are fair and transparent with their clients (*something raised by women farmers*) and that premiums are affordable and policies reinsured with reputable companies (*something men farmers flagged in their responses*).



## 3.6 Focus Group Discussions

### 3.6.1 Antigua and Barbuda

Focus groups were conducted with women and men small-scale farmers separately and with a mixed group of farmers (*women and men farmers together*) in Antigua and Barbuda. The focus groups aimed to triangulate the survey results and further examine specific topics with women and men farmers. The FGDs provided some clarity and further information on the needs of women and men small-scale farmers and their views on and perceived barriers to PI. The views of women and men farmers on PI were somewhat divergent. Men saw the PI as necessary and did not require much clarification or persuasion on the need for PI. Losses incurred due to preceding climate change-related hazards (*such as floods and storms*) were cited as reasons for considering climate risk insurance. Albeit the cost of insurance was a concern for men farmers, it was not a major concern or acted as a substantial deterrent for acquiring climate risk insurance.

Women farmers, on the other hand, were less convinced that PI is worthwhile. They were more predisposed to take the risk of crops being lost or damaged in the event of natural hazards, even if that meant covering the losses themselves ex-post. Women farmers made the point that even though they are aware that fire insurance is important, most of them have no fire coverage. According to one focus group participant:

*“ So, it's about what my priority is. I cannot invest in a “just-in-case” insurance in a pandemic when I have a child to feed, when I have to pay my mortgage, when I have to buy food, et cetera, et cetera. So, when I add another “just-in-case” insurance because I'm already paying all kinds of different “just-in-case” insurances. ”*



Women farmers seem to be cognizant that their views on the need for insurance are different from that of men, and that this may be linked to their multiple roles in the household. Another participant opined that:

*Men's and women's approach to insurance is less about the commodity being planted, [but the] the household or living situation. The demand for money is different for the male and the female. Household obligations are different.*

Though women farmers acknowledge women-owned farms are smaller, and there is a difference in crops cultivated, women did not think these accounted for their higher tolerance for risks.

In addition to affordability, women farmers also mentioned education and awareness as barriers to accessing PI. They believe that the avenues used to promote agricultural information (*including insurance*) to women farmers are often not gender-sensitive. They felt that there should be a more personal approach and one-on-one consultations instead of brochures, handouts, and social media messaging. Their interest in obtaining PI may increase if someone sat and discussed their particular situations and realities.

Women farmers participating in the FGDs did not think that any gender biases in the agriculture sector prevented them from accessing insurance. All of the women said they had one or more bank accounts (*albeit not exclusively for their farming activities*) and *considered themselves financially literate*.

## 3.6.2. Barbados

FGDs were conducted with two women small-scale farmer groups in Barbados, consisting of young (between the ages of 18 and 30) women farmers. Like women farmers in Antigua and Barbuda, women farmers in Barbados also identified cost considerations (affordability) as a major factor in obtaining PI. The main question for women farmers is, “*is it worthwhile?*” The cost factor for insurance was also related in Barbados to women having several other financial responsibilities. From their perspective, not having insurance did not equate to taking a risk, but rather it was part of a well-thought-out plan for managing all of their responsibilities.

Women farmers reported gender biases in the agricultural sector, which may affect their ability to access insurance. They cited access to finance for farming activities as an area where they have experienced difficulties. According to one participant:

“*I guess there are inherent gender biases across the board. And then I guess how persons view agriculture and who works in agriculture and then it usually feels like a male-dominated field. And then when a female like me approaches a financial firm, and I'm not accepted essentially.*”

They also cited the many roles women, including women farmers, have as a reason that others may not consider them serious farmers and as a result, may face barriers in accessing insurance. Women farmers also noted that they have a less business or pragmatic approach to agriculture, which is important when considering insurance. For example, women farmers consider Good Agricultural Practices (GAP) above profits, which influences how they farm, types of crops they grow, and by extension, income earned or lost.

Women farmers noted the need for more information on how the PI works. For that information to be presented in more accessible and appealing formats, including literature, and one-on-one consultations (*with male or female insurance agents*). Consultations should also be conducted at times that consider women's reproductive and productive activities. The young women farmers in Barbados shared similar views to the group consisting of women farmers in general. However, the young women farmers highlighted a dual barrier: one of being a youth and the other related to being a woman farmer. Awareness and affordability of insurance may make acquiring PI more attractive to female farmers. They also faced the challenge of investing in insurance against other needs such as food, clothing and shelter for their families.

They have also noted differences in the approach of men and women to farming in their experiences. Their observations concurred with that of the other women of men being more business-like in their approach to farming than women.

As with women farmers in Antigua and Barbuda, most women farmers in Barbados have bank accounts and consider themselves financially literate.

Table 6: Summary of Main Findings

Country	Main Findings	
	Women	Men
Antigua and Barbuda (FGDs with women and men small-scale farmers separately as well as with a mixed group of women and men farmers)	<ul style="list-style-type: none"> <li>Farmers were less convinced that PI is worthwhile. Farmers were more predisposed to take the risk of crops being lost or damaged in the event of natural hazards, even if that meant covering the losses themselves ex-post.</li> <li>Affordability was a substantial deterrent for acquiring PI.</li> <li>The need for insurance is different from that of men farmers, which may be linked to their multiple roles in the household.</li> <li>Education and awareness were seen as barriers to accessing PI.</li> <li>Avenues used to promote agricultural information (including insurance) often not gender-sensitive</li> </ul>	<ul style="list-style-type: none"> <li>Saw the PI as necessary and did not require much clarification or persuasion on the need for PI.</li> <li>Losses incurred as a result of preceding climate change-related hazards (such as floods and storms) were cited as reasons for considering climate risk insurance.</li> <li>Affordability was a concern but not a substantial deterrent for acquiring PI</li> </ul>
Barbados (FGDs with small-scale men and women farmers only)	<ul style="list-style-type: none"> <li>Identified cost considerations (affordability) as a major factor in them obtaining PI. The main question for women farmers is, “is it worthwhile.”</li> <li>Farmers reported gender biases in the agricultural sector, which may affect their ability to access insurance. They cited access to finance for farming activities as an area where they have experienced difficulties</li> </ul>	
Grenada	Due to COVID-19 restrictions, no FGDs were conducted in Grenada.	

### 3.6.3 Analysis of Gender and Parametric Insurance in Focus Countries

This section applies a gender lens to the survey results. It analyses the results based on the following parameters: decision making, access to resources and barriers, participation and practices, beliefs and perceptions.

## 3.7 Decision Making

Decision making refers to information about men's and women's different formal and informal rights and how these affect differential impacts of policies and rules governing the society and the agricultural and climate risk finance sectors. Data obtained shows that there are no laws that discriminate or de jure barriers to women's participation in the agricultural sector. The national constitutions of the countries offer protection from discrimination based on sex. Some other national policies and Acts bolster the legal status of men and women in the countries, including all of the countries being signatories to international conventions on gender discrimination such as Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) and International Labour Organization (ILO). At the national level, gender is mainstreamed to some extent in the decision-making of the countries' business frameworks, exemplified by their comparatively high ranking in the Women, Business and The Law (WBL) report.<sup>48</sup>

At the household level, women's level of agency and decision making is also high. In all of the countries, there are high numbers of matrifocal households. In Antigua and Barbuda and Grenada, female-headed households are correlated with higher levels of poverty, which has implications for increased vulnerability, ownership of assets and decision making both in the home and in the community. Poor women are also time-poor and preoccupied with reproductive and domestic responsibilities leaving little time for participation in other activities outside of the home. Men and women who are impoverished are also more vulnerable to the effects of natural hazards and climate change events and often lack coping and adaptive capacities. The FGDs indicate that women farmers are forced to choose between insurance and other basic household needs, given their economic status. Insurance may, therefore, be inaccessible to women because of the cost of the premium.

Therefore, whilst women may have equal de jure status, their de facto status and the actualisation of their legal rights and decision-making are affected by social and cultural factors, including poverty. The gender gap in women's de facto lack of agency in their societies' decision-making and the barrier to participation in decision-making mechanisms must be considered in developing climate risk finance instruments to enable them to be gender-responsive.

## 3.8 Assets and Resources

Assets and resources can be divided into tangible and intangible resources. In the three focus countries, women lag behind men in the ownership of productive assets, including land. There is no known legal barrier to female ownership of land in any of the countries. In Antigua and Barbuda, a lack of gender-disaggregated data on land ownership prevents a full analysis of land ownership in the agricultural sector at the national level. For Barbados and Grenada, women lag behind men in

<sup>48</sup> International Bank for Reconstruction and Development / The World Bank, *Women, Business and the Law 2020*.



ownership of land at the national level. Surveys done for this research shows mixed results for land ownership across the three countries (see Boxes 3–5).

Whilst women lag in ownership of land, their educational levels are comparable to men in the sector (Chart 1). Also, from the focus group discussions, 100% of the men and women reported owning bank accounts either singly or jointly.

Owning assets, especially land (the primary means of production in agriculture), is an important leverage point for empowerment in climate risk financing and insurance. Studies of other economically productive activities have shown that when women are empowered economically, their families and communities' positive effects are powerful. Women's lack of land ownership in the agriculture sector and ownership of smaller subsistence farms make them more vulnerable to the impacts of natural disasters, as do their lack of coping mechanisms and overall lack of agency in the agricultural sector.

Gender imbalance in ownership of assets and resources, especially land, is an important factor, which can be reduced through gender-responsive and specific insurance products. Gender-responsive insurance products would secure women's investment, increase their investment capacity and increase access to credit.

### 3.9 Participation and Practices

Overall, women's participation in the agricultural sector is below men's (see Section 2.3.1). From the focus group discussions, women identify men and women's societal norms as barriers to women's participation in the sector. Agriculture is often seen as labour-intensive work to be done by men.

In terms of crop production, survey results suggest that there are only minor differences in women and men farmers' practices in all three focus countries (see Boxes 3–5). This means that there are no serious implications concerning different climate risk finance insurance needs. However, the scale of production, which is related to the land's ownership and size, differs between men and women. This implies different vulnerability levels to natural hazards and climate change-related events, with women more likely to be affected during and thus in more need of insurance. In the FGDs, women expressed concerns that the size of their farms makes insurance inaccessible to them.

Due to their pre-existing higher levels of poverty, women are also likely to be impacted more than men, including their lower coping and adaptive capacities (for example, personal savings to re-start production). For matrifocal households and single-female headed households, the impacts of natural hazards will negatively affect the family. Gender-responsive climate risk insurance should account for this difference in vulnerability and impact in the design of products. Proportionality should be reflected in the design of insurance products to ensure that insurance is accessible for all production scales.



## 4. CONCLUSIONS AND RECOMMENDATIONS

### 4.1 Need and Requirement for Parametric Insurance for Women Farmers

With 89% of women surveyed reporting the loss of crops and livestock due to climate-related extreme events, it can be argued that there is a need for PI among small-scale women farmers in the focus countries. The effects of climatic activities are particularly great on households' livelihoods headed by women, with households where women are the single head or “breadwinner” being the most vulnerable. Even in cases where women are not the head of household figuratively, they are the ones in control of the household finances, and any impacts on their livelihood activities affect the family unit. As such, PI can be an important social protection measure for families engaged in farming activities.

The research has shown that men and women have different approaches to farming and taking the risk. For men farmers, given their “single-role” in the household of productive activity, acquiring insurance seems easier. Having lost assets to climatic events, they recognise the risk of not having insurance is high because of the increased possibilities of extreme climatic events in the Caribbean region. On the other hand, women are balancing several roles (productive, reproductive and community) in addition to farming. They acknowledge that the destruction of their crops and livestock by climate events is possible. Still, they have to consider the “investment” in insurance against providing for their families' well-being. Whilst not being averse to insurance, they face the dilemma of balancing their strategic and practical needs. For women, this is a challenge and a barrier in accessing PI. Women and men may, in theory, have equal access to insurance; however, in practice, women are disadvantaged due to their triple roles in society.

Women view the prevailing gender stereotypes in society, rooted in socio-cultural norms that affect women's participation in agriculture, as barriers to their access to insurance. These include lack of access to financial credit and not seen as "serious" farmers. For young women farmers, they face these barriers based on gender *and* age.

## 4.2 Recommendations

The following recommendations are based on a *Pro-Poor Approach*. The overarching theme is enhanced dialogue among governments, insurance service providers, (micro) finance institutions, grassroots and civil society groups to ensure, among other things, that gender roles and differentiated social needs are considered when designing insurance products, and that such products are packaged and presented in ways that are gender-responsive initially, and gender transformative eventually, within the local culture and context.

Specific recommendations are detailed below:

- I. **Enhance the consideration of gender roles and ensure PI product design and development is data-driven and relevant.** This can begin with gender-sensitive market research incorporating a differential and intersectional approach to data collection<sup>49</sup> and includes an inclusive and participatory approach to product design. For example, data could be captured on the diversity of crops/livestock that are grown/reared by men, women and both, types of crops/livestock grown/reared by age group (youth vs. elderly) as well as capturing data to build customer profiles (see *example in Box 6 below*). Target customers could also be directly involved by using focus groups and surveys to ensure needs and preferences are accurately captured. Such research could better mainstream gender into policy and programmes, including better gender mainstreaming in PI.

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<sup>49</sup> Gender Based Analysis Plus approach is widely used by the Government of Canada to capture more robust and accurate data. Regionally, Colombia has also adopted this approach to better inform

## Box 6: Profile of Female Farmer Insurance Customer

### Profile of Female Farmer Insurance Customer

- Want basic affordable and easy to understand product
- Information packaged in accessible, easy to hear formats
- Prefer discussions with insurance providers rather than other mediums
- Focus on providing for her family needs
- Full use of banking services
- Technologically savvy
- Medium financially literate
- Balancing strategic and practical needs
- Grievance redress mechanism to handle issues
- Limited access to finance, including but not limited to their perceived professionalism/eco-friendly practices over larger outputs
- In need of improving their entrepreneurial skillsets

- Notes from the survey and focus groups: In all three countries, the share of women farmers that think that insurance companies are not easy to talk to and that they cannot purchase insurance on their own is higher compared to that of men farmers, possibly indicating differentiated/additional access barriers. These barriers could be a consequence of *gender roles* but may also be linked to *how and what women-farmers cultivate/rear*. With regard to the gender roles and an emerging matter in focus group discussions, there is differential demand on limited (*monetary*) resources available to women and men. Women farmers view acquiring PI as an investment into the '*unknown*' (*notwithstanding having lost crop or livestock to climate change disasters*) and is therefore regarded as secondary to other roles (*such as feeding their children, mortgage, and other household obligations*), which are considered to be more immediate needs. Concerning what farmers cultivate, though women and men farmers have been found to cultivate/rear the same crops/livestock generally, women farmers exhibit a wider diversity in the crops they grow than men farmers. As such, they may require more suitable and bespoke PI options.<sup>50</sup>
- Related pro-poor principles: Build solutions that effectively address the risk exposure and vulnerabilities at the individual, local and regional levels, taking into consideration differentiated gender realities; develop customised, evidence-based solutions – building on impartial advice following from needs assessments – to ensure value for money.

<sup>50</sup> See example of small-scale women farmers in Ghana - Chapter 1.2., Integrating Gender at the micro-level



**II. Create gender-specific and culturally relevant information on PI and distribute it through trusted channels to raise awareness and understanding of PI.** Building strategic partnerships to reach underserved and vulnerable groups is important. Partnerships between trusted grassroots and civil society groups, key stakeholders such as microfinance institutions, and insurance companies can ensure that women are adequately represented in financial education and marketing materials resulting in a balanced portrayal of (*potential*) women PI clients. The aim is to ensure that potential and existing women clients are able to relate to the insurance product. In addition, training could be considered for both clients and PI providers. For the clients, especially women farmers, this could focus on entrepreneurial skills to encourage higher consideration of sustainability and resilience issues. For PI providers, this could mean building public-facing staff's capacity to understand and communicate PI options most relevant to women farmers.

- *Notes from the survey and focus groups:* Research and survey data suggest that the majority of farmers in all three countries have lost crops or livestock due to disasters, but very few have or have ever had insurance, especially women farmers. In all three countries, a major reason for the limited PI uptake is lack of awareness. In fact, men and women farmers in all three countries think there is scope to make PI more accessible, especially through education and sensitisation efforts. This education and sensitisation can be done through the Ministry of Agriculture outreach and field programmes since they are already in sync with the country's national policy frameworks related to climate change and disaster risk reduction. PI insurance can be built into the education awareness initiatives.
- *Related pro-poor principles:* Make use of institutions embedded within national policy frameworks and/or driven by ultimate target groups to implement risk finance and insurance solutions; Public-Private Partnerships should guarantee that pooled resources generate synergies leading to the implementation of innovative and impactful risk finance and insurance approaches.<sup>51</sup>

**III. Work to make PI premiums affordable.** One avenue to achieve affordability is to adopt a similar approach to that taken in Guatemala (see *Box 1, Section 1.2.*) to encourage partnerships among financial institutions (*such as rural banks and microfinance institutions*) with the aim of embedding PI insurance into financial instruments and loans (including for the purchase of farmland) to small-scale farmers (e.g. credit-linked insurance). A particular focus can be placed on enhancing access for women farmers. Discounts could also be considered based on crop/livestock type that are most commonly grown/reared by women farmers. PI providers could also consider bundled insurance approaches based on what is important to women, covering climate risks with other risks important to them. Rural banks and local financial institutions are more likely to form a relationship with their customers, including women customers; to be aware of their specific needs, and to be able to design products to reflect such needs. Farmers are also more likely to trust the local agencies. Partnerships among financial institutions could also provide avenues for disseminating information and incentives to help small-scale farmers adopt measures that reduce risk and strengthen resilience against natural disasters. Public-private partnerships between insurance companies, financial institutions and national disaster risk response and reduction

<sup>51</sup> InsuResilience Global Partnership, "Pro-Poor Principles of the InsuResilience Global Partnership," [https://www.insuresilience.org/wp-content/uploads/2019/06/insuresilience\\_propoor\\_190529-2.pdf](https://www.insuresilience.org/wp-content/uploads/2019/06/insuresilience_propoor_190529-2.pdf).



agencies would be integral to these efforts.

- *Notes from the survey and focus groups:* Based on the survey and focus group results, making premiums affordable is crucial to PI uptake across the board, and more so for women small-scale farmers.
- *Related Pro-Poor Principles:* Resources should be allocated on the basis of transparent targeting mechanisms, ensuring that support reaches the poor and vulnerable (including consolidating adaptive social protection); work to ensure accessibility for poor and vulnerable farmers, who may need predictable and long-term financial support, especially through considering adaptive social protection programs, also in the form of Public-Private Partnerships, as a delivery vehicle.<sup>52</sup>
- **Improve institutional credibility.** Institutional credibility is a major factor in the uptake of insurance in the region. Caribbean countries, including the three focus countries, have suffered the collapse of major insurance companies with consumers, including a large number of women and farmers, suffering enormous financial losses. Companies offering PI will need to be reputable and stakeholder-centric, gender-responsive and with devolved structures and mechanisms. This will inspire confidence in the company. Partnerships that involve local organisations, government, private investors and donor agencies may offer some confidence, especially if linked to trusted NGOs or donor agencies that work in the agricultural sector, such as the Food and Agriculture Organization or the Inter-American Institute for Agriculture. These institutions also have a gender action plan that includes actions for gender mainstreaming in their activities.
- *Related Pro-Poor Principles:* Make use of institutions embedded within national policy frameworks and/or driven by ultimate target groups to implement risk finance and insurance solutions; embed solutions that respond to existing governance structures and market conditions, share responsibilities across stakeholders and promote collaboration.<sup>53</sup>

IV. **Establish gender-responsive Grievance Redress Mechanisms.** It is essential that structures and mechanisms for the implementation of PI include gender-responsive Grievance Redress Mechanisms (GRMs). These mechanisms should be accessible, simple, relatable, proportional and provide resolutions in the shortest time possible, especially in relation to claims and payouts. The GRMs should also build on local and cultural conflict resolution norms and practices and be linked to the implementing institutions' monitoring and evaluation mechanisms. The mechanisms should be designed to be especially accessible to women and other vulnerable social groups.

<sup>52</sup> Ibid

<sup>53</sup> Ibid

Table 7: Summary of Action Issues Related to PI in Study Countries

<b>Gender Issue</b>	<b>Objective to Address Issue</b>	<b>Desired Outcome</b>	<b>Key Stakeholders Involvement to Achieve Objective</b>
<b>Barriers in accessing PI products as a consequence of gender normative roles and narrow or generic PI options</b>	Enhance consideration of gender roles and ensure PI product development is data-driven	Inclusive and participatory approach during the design phase of PI products leading to the mainstreaming of gender in PI as well as to the development of relevant (bespoke) PI products for women and men farmers	Policy Makers NGOs National Gender Bureaus Gender Representative Organizations Farming cooperatives Insurance companies Financial institutions
<b>General lack of awareness of PI products resulting in a lack of uptake, especially among women farmers</b>	Create gender-specific and culturally relevant information on PI and distribute through trusted gender-responsive channels.	More informed farmers and PI providers that are better able to respond to the needs of women farmers	Policy Makers NGOs National Gender Bureaus Gender Representative Organizations Farming cooperatives Insurance companies Financial institutions
<b>Competing demands on financial resources due to women's multiple gender roles in the household, especially women-headed households.</b>	Work to make PI premiums affordable based on what is important to women (e.g., bundling PI with other types of insurance or financial instruments such as loans)	Increased uptake of PI, especially among women small-scale farmers	Policy Makers NGOs National Gender Bureaus Gender Representative Organizations Farming cooperatives Insurance companies Financial institutions
<b>Widespread lack of trust in insurance companies (both men and women) coupled with issues of approachability for women</b>	Improve institutional credibility by partnering with trusted stakeholders (NGOs or donor organisations), develop gender actions plans that address differentiated needs in product development	Increased trust in PI providers and enhanced uptake of PI products among farmers, especially women farmers	Policy Makers NGOs National Gender Bureaus Gender Representative Organizations Farming cooperatives Insurance companies Financial institutions
<b>Lack of gender-responsive Grievance Redress Mechanism</b>	Improve channels for women to address related concerns to PI Establish gender-responsive Grievance Redress Mechanisms	Increased satisfaction among women farmers with and trust in PI service providers through the timely resolution of grievances	Policy Makers NGOs National Gender Bureaus Gender Representative Organizations Farming cooperatives Insurance companies Financial institutions

## 4.3 Additional Research Needs

This research represents one of the first examinations into the topic of gender and parametric insurance in the Caribbean. Therefore, it is limited both in its scope and the sample size as well as focus countries. There is, therefore, a need for additional research to achieve a full examination of the topic. It is therefore recommended that additional research should focus on the following:

1. Further examination of the topic in additional Caribbean countries, especially those in which the agricultural sector plays an important role in the economy, such as Guyana and Jamaica, should be a next step. Case Studies on countries or particular countries should be done as part of the research next steps.
2. Gender audits should be conducted of the main agents involved in parametric insurance in the Caribbean region. This should include government disaster agencies, other governmental agencies, insurance providers, designers of products and delivery channels. In short, a gender audit should be done on the parametric value chain in the region.
3. A gender action plan for Parametric insurance should be developed using further detailed research and case studies done on the topic. This plan should guide the mainstreaming of gender in parametric insurance in the study countries and the wider Caribbean region. The gender action plan should consist of a comprehensive number of actions, timeline and associated budget for its implementation.

## 5. BIBLIOGRAPHY

- Akter, Sonia, Timothy J. Krupnik, Frederick Rossi, and Fahmida Khanam. "The Influence of Gender and Product Design on Farmers' Preferences for Weather-Indexed Crop Insurance." *Global Environmental Change* 38 (2016): 217-29.
- Barnett, Barry J., and Olivier Mahul. "Weather Index Insurance for Agriculture and Rural Areas in Lower-Income Countries." *American Journal of Agricultural Economics* 89, no. 5 (2007): 1241-47.
- Born, Lorna, Charles Spillane, and Una Murray. "Integrating Gender into Index-Based Agricultural Insurance: A Focus on South Africa." *Development in Practice* 29, no. 4 (2019): 409-23.
- Brooks, Lauren. "The Caribbean Catastrophe Risk Insurance Facility: Parametric Insurance Payouts without Proper Parameters." *Arizona Journal of Environmental Law & Policy* 2 (2011): 135.
- Caribbean Catastrophe Risk Insurance Facility (CCRIF). *The Caribbean Catastrophe Risk Insurance Facility Annual Report 2018-19*. Grand Cayman, Cayman Islands: CCRIF SPC. <http://www.ccrif.org/en/publications/annual-report/ccrif-spc-annual-report-2018-2019>, 2019.
- . *CCRIF Strategic Plan 2018–2021*. Grand Cayman, Cayman Islands: CCRIF SPC. <https://www.ccrif.org/en/publications/strategic-plan/ccrif-strategic-plan-2018-2021>, 2020.
- Caribbean Development Bank (CDB). *Country Economic Review Mid-Year Update 2019*. St. Michael, Barbados: <https://www.caribank.org/publications-and-resources/resource-library/economic-reviews/country-economic-review-mid-year-update-2019>, 2019.
- Carter, Michael, Alain De Janvry, Elisabeth Sadoulet, and Alexander Sarris. *Index-Based Weather Insurance for Developing Countries: A Review of Evidence and a Set of Propositions for up-Scaling*. France: Foundation for studies and Research on International Development (FERDI), Development Policies Working Paper 111, 2014.
- Collier, Benjamin, Jerry Skees, and Barry Barnett. "Weather Index Insurance and Climate Change: Opportunities and Challenges in Lower Income Countries." *The Geneva Papers on Risk and Insurance - Issues and Practice* 34, no. 3 (2009): 401-24.
- Delavallade, Clara, Felipe Dizon, Ruth Vargas Hill, and Jean Paul Petraud. *Managing Risk with Insurance and Savings: Experimental Evidence for Male and Female Farm Managers in West Africa*. Washington, DC: Policy Research Working Paper; No. 7176. World Bank Group. <https://openknowledge.worldbank.org/handle/10986/21393>, 2015.
- Giné, Xavier, Dean Karlan, and Muthoni Ngatia. *Social Networks, Financial Literacy and Index Insurance*. Washington, DC: World Bank. <https://openknowledge.worldbank.org/handle/10986/21814>, 2013.

Insuralex. "2020 Parametric Insurance in Latin America: An Overview."  
<https://insuralex.com/parametric-insurance-latin-america-report>.

InsuResilience Global Partnership. "Pro-Poor Principles of the InsuResilience Global Partnership."  
[https://www.insuresilience.org/wp-content/uploads/2019/06/insuresilience\\_propoor\\_190529-2.pdf](https://www.insuresilience.org/wp-content/uploads/2019/06/insuresilience_propoor_190529-2.pdf).

International Bank for Reconstruction and Development / The World Bank. *Women, Business and the Law 2020*. Washington, DC: World Bank Group. <https://wbl.worldbank.org/en/wbl>, 2020.

Markovic, Tom, and Steve Harry. "Parametric Insurance: A Tool to Increase Climate Resilience." Marsh & McLennan Companies, <https://www.mmc.com/insights/publications/2018/dec/parametric-insurance-tool-to-increase-climate-resilience.html>.

Miles, K., and M. Wiedmaier-Pfister. Integrating Gender Considerations into Different Models of Climate Risk Insurance (CRI). Bonn, Germany: InsuResilience Global Partnership, 2019.

Miranda, Mario, and Dmitry V. Vedenov. "Innovations in Agricultural and Natural Disaster Insurance." *American Journal of Agricultural Economics* 83, no. 3 (2001): 650-55.

Munich Climate Insurance Initiative (MCII). Success Factors: Agricultural Insurance for Development: Advancing Climate Risk Insurance Plus (Acri+). Germany: The Munich Climate Insurance Initiative, 2019.

Ogurtsov, Victor A., Marcel A.P.M. van Asseldonk, and Ruud B.M. Huirne. "Purchase of Catastrophe Insurance by Dutch Dairy and Arable Farmers." *Review of Agricultural Economics* 31, no. 1 (2009): 143-62.

Prabhakar, SVRK, Gattineni Srinivasa Rao, Koji Fukuda, and Shinano Hayashi. "Promoting Risk Insurance in the Asia-Pacific Region: Lessons from the Ground for the Future Climate Regime under Unfccc." In *Climate Change Adaptation in Practice: From Strategy Development to Implementation*, edited by Philipp Schmidt-Thomé and Johannes Klein, 303-23: John Wiley & Sons, 2013.

Rawwida Baksh and Associates. *Country Gender Assessments (CGAs) Synthesis Report*. Wilkey, St. Michael, Barbados: Caribbean Development Bank (CDB), 2016.

Smith, Vincent H, and Joseph W Glauber. "Agricultural Insurance in Developed Countries: Where Have We Been and Where Are We Going?". *Applied Economic Perspectives and Policy* 34, no. 3 (2012): 363-90.

UN Women. "Constitution Order of Antigua and Barbuda 1981."  
<https://constitutions.unwomen.org/en/countries/americas/antigua-and-barbuda>.





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