

GENDER & CLIMATE CHANGE ADAPTATION: Empowering Women in Agriculture and Forestry

Across the globe, women are engaged in agriculture, forestry and other livelihood activities that are directly affected by climate change, yet their unequal access to education and resources (natural and economic) can render them more vulnerable to climate impacts than men. The Rainforest Alliance recognizes the important role that women play in their communities' efforts to adapt to climate change, and we actively work to support their empowerment and inclusion in decision-making and implementation processes. Our projects help provide women with equal access to education, technical assistance and training on adaptation practices, which are fundamental to helping them build more resilient livelihoods for themselves, their families and their communities.

Gender and Climate Change Vulnerability

A person's gender alone does not determine vulnerability to climate change. Poverty, wealth, race, age and a host of other factors can have a much greater influence than gender when it comes to adaptation, and generalizations about women and climate change should be avoided. There are, however, differing factors that can affect the relative decision-making power afforded to men and women. A nuanced evaluation of these differences sheds light on the disadvantages women may face when it comes to coping with changing climatic conditions:

- **Access to education, information and training.** The ability to understand and manage climate change risks depends heavily on accessing new tools and best practices for adaptation, but women in developing countries are often denied equal access to these resources. Despite the fact that women make up 50 percent or more of the agricultural workforce in some countries, they have less access to land, education, training, technology, technical assistance and financial services, which means they have fewer opportunities to improve their production practices and tap into the global marketplace.¹ Men are more likely to be granted this access and are therefore better positioned to prepare for climate impacts.²



¹ Food and Agriculture Organization of the United Nations (2011). *The State of Food and Agriculture 2010 - 2011. Women in Agriculture: Closing the Gender Gap for Development*, <http://www.fao.org/docrep/013/i2050e/i2050e.pdf>.

² CARE International (2010). *Climate Change Brief: Adaptation, Gender and Women's Empowerment*, http://www.care.org/sites/default/files/documents/CC-2010-CARE_Gender_Brief.pdf.



OUR MISSION

The Rainforest Alliance works to conserve biodiversity and ensure sustainable livelihoods by transforming land-use practices, business practices and consumer behavior.

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- **Economic opportunities and independence.** In some communities, cultural norms restrict women to household roles, making them dependent on male family members for their economic survival. The greater economic freedom afforded to men in those communities can help to mitigate the financial burdens brought on by climate change. If their farms are no longer viable, male farmers may seek out alternative livelihoods, but it may be deemed inappropriate or impossible for women to obtain a similar level of independence.³ Even if they were able to seek opportunities for additional income, women may not be allowed to make decisions concerning their earnings because men are more likely to control the use of a family's income.
- **Decision-making structures and institutions.** Women may have less decision-making power, both at home and within their communities, and therefore fewer opportunities than men to manage their family's resources or influence the policies that govern community assets. Given that gender biases are often embedded within institutions and power structures, and information and assistance is often targeted to men⁴, women may also be challenged by a lack of institutional support. Such disadvantages increase the risk that policies related to adaptation will overlook their well-being and rights.²

Why Women Must Be Included in Adaptation Efforts

Women possess an invaluable skillset and knowledge base that can only work to benefit adaptation efforts worldwide. When provided with the necessary tools, women can spark positive changes that reach well beyond their communities. For instance, if given access to the same production resources as men, it is projected that women could increase their farm yields by 20 to 30 percent, which would boost agricultural output by up to four percent and reduce the global poverty rate by up to 17 percent.⁵

Climate change increasingly presents challenges for women in developing countries in a variety of areas:

- **Agricultural production.** Women constitute an average of 43 percent of the agricultural workforce in developing coun-

tries, and more than 50 percent in parts of Africa and Asia.¹ Climatic changes can affect yields and the viability of crops; without better access to education, financial resources and the training necessary to make production more resilient, women will increasingly struggle to adapt.

- **Household food security & water.** Climate change can jeopardize the food and water supplies of communities that are already at risk of malnutrition and food shortages. Women are often responsible for collecting and storing food, as well as feeding their families and managing water supplies for domestic activities.⁵ To build their adaptive capacity, women need access to education and training to help them make better-informed decisions regarding food and water management.
- **Utilizing forest resources.** In smallholder and rural communities in developing countries, women are often dependent on forests for fuelwood, food and other natural resources, such as medicinal plants. As rising temperatures and unpredictable precipitation alter the health and structure of these forests, the availability of forest resources may be further compromised, increasing the burden on women in a variety of ways—for example, by requiring them to travel farther to collect food, fiber or medicines. If the important roles that women maintain within forest communities are not taken into account, the strategies that are developed to protect forests (and their ecosystem services) may not adequately address the daily challenges faced by women.

³ United Nations Development Programme (2011). *Discussion Paper Series: Africa Adaptation Programme Experiences, Gender and Climate Change: Advancing Development through an Integrated Gender Perspective*, <http://www.africa.undp.org/content/dam/rba/docs/Reports/AAP%20Discussion%20Paper%20En.pdf>.

⁴ Arora-Jonsson, Seema (2011). *Virtue and Vulnerability: Discourses on Women, Gender and Climate Change*. *Global Environmental Change*, 21:744-751.

⁵ Verband Entwicklungspolitik Niedersachsen (VEN) (2009). *The Role of Women in Adapting to Climate Change in Tanzania*, <http://www.genderccl.net/fileadmin/inhalte/Dokumente/news/Tanzania.pdf>.



Our Efforts to Support Women's Empowerment

The Rainforest Alliance is committed to helping women access education, training and technical assistance related to climate change and sustainable resource management, and we support the direct engagement of women in actions that will enable them to build more resilient livelihoods. We provide women with training on climate-smart practices in forestry and agriculture, facilitate climate change education for them and strive to ensure that all of our projects and programs incorporate the participation of women and safeguard their rights by applying developed and recognized Social and Environmental Safeguards (SES), such as those advocated through the Social & Biodiversity Impact Assessment Manual⁶, wherever feasible.

Advancing Climate-Smart Practices

- We encourage the adoption of Climate-Smart Agriculture (CSA) and provide women with education and training on how to meet the requirements of Rainforest Alliance certification. As embodied by the Sustainable Agriculture Network (SAN) standard, CSA strategies take into account the critical role that women play within households and on farms, and can help them understand complex issues such as food security, and climate change risks and vulnerabilities.
- To date, women represent more than 180,000 (over a third) of local, full-time workers on Rainforest Alliance Certified™ farms. On a daily basis, these women implement practices that are designed to protect native ecosystems, avoid deforestation, maintain healthy soils, conserve water and decrease the use of energy, water and agrochemicals, all of which can help to increase a farm's resilience. By incorporating shade trees, for example, farmers can create more favorable production systems that help to buffer vulnerable crops from swings in temperature and rainfall. The Rainforest Alliance supports CSA as part of its core strategy, working with farmers to expand on the practices embodied by the SAN standard, which includes improving erosion control and water harvesting, and establishing emergency plans to deal with extreme weather events.
- The SAN standard also aims to create a safe and equitable working environment for women by protecting their rights and strictly prohibiting discrimination and forced labor. Furthermore, it states that men and women must have equal training opportunities and receive equivalent compensation when completing the same type of work. Sexual harassment, extortion, abuse and other types of physical or psychological measures aimed at intimidating or disciplining workers are prohibited. A study has shown that the certification process

has had positive impacts on the decision-making power of women. In an assessment of more than 300 Nicaraguan coffee farms certified under three different certification schemes, the research found that Rainforest Alliance Certified farms showed the greatest involvement of women in production and household decision-making.⁷

- The Rainforest Alliance also implements targeted climate adaptation activities through donor-funded projects and key partnerships with the business community, and actively engages and empowers women via these projects. In partnership with Taylors of Harrogate, for example, we are helping coffee farmers in Uganda build resilience to changing climatic conditions through the implementation of regionally appropriate practices. Beatrice Kakai (pictured left), a coffee farmer and mother of six, has greatly improved yields on her farm by adopting CSA practices, such as planting shade trees to prevent soil erosion, and her neighbors and friends now seek her advice on how to improve their own farms.⁸
- And in the Napo region of Ecuador, we are working with farmers to improve their production of naranjilla, a local fruit, through the design of suitable agroforestry systems. As part of these efforts, we have implemented a comprehensive strategy that is aimed at actively engaging women in the project. Not surprisingly, they are proving to be crucial project leaders and are very motivated about maintaining high-quality naranjilla production. Half of the project's pilot sites are managed by women, each of whom owns her own plot of land.

Promoting Sustainable Forestry and REDD+

The Rainforest Alliance promotes the implementation of sustainable forestry practices that are in accordance with Forest Stewardship Council (FSC) principles and criteria. The forest conservation practices associated with FSC certification improve the health and functioning of forest systems and promote increased resilience among women and men alike—requiring landowners and managers to protect and restore natural water bodies and water quality, safeguard native species, mitigate losses in biodiversity and establish forest management systems that encompass a mosaic of species, sizes, ages, spatial scales and regeneration cycles, which enhances environmental and economic resilience. FSC criteria also require the fair treatment of workers and gender equality within certified operations.

Beyond FSC certification, the Rainforest Alliance also works to advance additional REDD+ (Reducing Emissions from Deforestation and forest Degradation plus forest conservation) strategies that effectively incorporate the rights and voices of women, address social concerns (such as human rights and poverty alleviation) and adhere to the principles of Free Prior and Informed Consent (FPIC). In conjunction with our partners in the Mexico-REDD+ Alliance—which works to increase the capacity of community stakeholders, civil society and the government

⁶ The Climate Community & Biodiversity Alliance (2011). *Social and Biodiversity Impact Assessment Manual*, <http://www.climate-standards.org/2011/11/22/social-and-biodiversity-impact-assessment-manual>.

⁷ Ruerd, Ruben, and Guillermo Zuniga (2011). How Standards Compete: Comparative Impact of Coffee Certification Schemes in Northern Nicaragua. *Supply Chain Management: An International Journal*, Vol. 16 Iss: 2, pp.98 – 109, <http://www.emeraldinsight.com/journals.htm?articleid=1912270&show=abstract>.

⁸ Rainforest Alliance (n.d.). *Taylors of Harrogate: Climate Smart Farming in Uganda*, <http://www.rainforest-alliance.org/multimedia/uganda-coffee-taylors>.

to implement REDD+ policies in Mexico—we have trained more than 1,800 women in sustainable forestry, REDD+ and other climate-smart practices.

In Peru's Tres Islas community, we have been working to introduce improved forest management practices and deliver dedicated technical assistance and training to address deforestation drivers, which include the expansion of the agricultural frontier and illegal encroachment for mining. The harvesting of non-timber forest products can promote food security and contribute to reducing rural poverty, while also diversifying income streams, thereby improving a community's adaptive capacity.⁹



The women of Tres Islas are involved in the management and harvesting of non-timber products such as palm fruits, and participate in workshops that focus on sharing their experiences in community forestry. Similarly, female community leaders in Peru's Madre de Dios region are being trained to participate in roundtable discussions on the use and management of their natural resources. And in the country's Palma Real community, we are working with women to strengthen the viability of their incipient basketry business, which uses tamshi (*Heteropsis flexuosa*) fiber. Through training and participation in national fairs, the women of Palma Real have already seen significant increases in their sales and revenue.

Educating the Next Generation

In countries such as Ghana, Guatemala, Honduras, Mexico and Peru, the Rainforest Alliance has engaged hundreds of female teachers and students in educational workshops on climate

⁹ International Fund for Agricultural Development (2008). *Gender and Non-Timber Forest Products: Promoting Food Security and Economic Empowerment*, <http://www.ifad.org/gender/pub/timber.pdf>.



change. Teachers have learned how they can implement our environmental education program within their classrooms, using a locally adapted curriculum that enhances the ability of all students, regardless of gender, to understand climate science and the ways that climate change might affect them.

As a result, Ruth Mayrena Morales Puga (pictured above), a teacher in the indigenous community of Paso Caballos, in Guatemala's Petén region, has noticed a shift in how her community views the environment, natural resources and the role of women. Previously, girls were leaving school at a young age—even before the 6th grade—but now, according to Puga, “they are participating in different environmental education activities and putting into practice something very important, which is taking care of our natural resources.” Perhaps even more striking is another change she noted: “Parents are trusting their daughters, giving them the chance to study and letting them take advantage of new opportunities.”¹⁰

Although improving education and providing CSA and sustainable forestry training are steps in the right direction, more needs to be done to help women become less vulnerable to climate change. The Rainforest Alliance is committed to expanding our global efforts to help women adapt and build more climate-resilient livelihoods—by advancing sustainable financing activities to support the implementation of climate-smart practices by female-operated farms and forestry enterprises; promoting adaptation policies and programs that account for the rights and interests of women and other vulnerable groups; and providing women with further training and equitable access to education and adaptation tools.

¹⁰ Rainforest Alliance (2014). *In Guatemala, Environmental Education Inspires Change and Empowers Women*, <http://thefrogblog.org/2014/02/03/in-guatemala-environmental-education-inspires-change-and-empowers-women>.

For more information about the Rainforest Alliance's climate work, please visit www.rainforest-alliance.org/work/climate

Photos: Christian Mensah, William Crosse, Taylors of Harrogate, Rainforest Alliance

