Chapter Four

Oral Histories from Around the World

Oral history narratives feature complex and inspiring views of female empowerment. Between 2016 and 2022, several graduate and undergraduate students and I interviewed activists who had developed local projects that relate climate change to food insecurity, domestic violence, financial instability, gender inequity, inadequate healthcare and education, and environmental degradation. As the previous chapter indicated, to achieve maximum effectiveness, local projects must be integrated into transnational advocacy networks (TANs). To demonstrate the many ways this occurs, this chapter features ten cases of oral history interviews – four from Central America, two from Southeast Asia, two from Europe, and two from Africa.

The chapter is not, nor can it be, a conventional narrative because it presents ten different cases, each of which, in themselves, encompasses numerous actors – interviewers, interviewees, auxiliary figures, and me as author – the integrating voice so to speak. As a result, the names of organizations that the focal organization is networked into may be overwhelming. As you are reading, perhaps you could imagine how climate change entrepreneurs developed networks of connections to help them address female empowerment. It is precisely these networks that sustain the organizations for whom they worked. Naturally they used different strategic approaches. As you become engaged in learning about each set of experiences, I hope the names and acronyms contained in the stories – as part of the activists' voices – are not be too difficult to follow. As a guide, please refer to the Appendix for a breakdown, by case study, of actors and affiliations.

The reflexive (i.e., two-way) narratives for each of the ten case studies are below. To properly represent these exchanges, the names of the interviewees are in **bold** type, and the names of the interviewers are in ALL CAPS. As for naming conventions, I use the interviewers' first names after initially identifying their first and last names. The names of the interviewees (one of which is a pseudonym) vary, depending on how they were referenced in the actual interviews.

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1. *Fragments of Hope* (*FOH*)/Belize

After a category four hurricane, Iris, hit Belize on October 8, 2001, scientists and conservationists began to focus on coral reef restoration. As a young girl growing up in California, **Amelia** (a pseudonym) had developed a fascination with sea life. She swam with dolphins in Southern Belize and eventually made a permanent move to Belize. At first, she was a volunteer and then became a tour guide and dive master instructor. She had attended college in California and, 20 years later, after she had relocated to Belize, continued her graduate studies in biodiversity conservation in her adopted country.

JAMIE SOMMER (who at the time was a postdoctoral student and my co-author of several scholarly publications) and AIDEE SAUCEDO DAVILA, an international relations specialist from Mexico, learned about Amelia's work through the United Nations Framework Convention for Climate Change's (UNFCCC's) *Women for Results* awards program. Amelia's project focused on coral reef restoration (Fig. 12). In the fall of 2018, when they were fellows at the United Nations Center for Constitutional Research in Brussels, Jamie and Aidee interviewed Amelia via Skype. She explained her initial activities as follows:

> Working with others, I wanted to begin [coral reef] restoration trials in 2002 but it took four years to convince people that it might work or that it was necessary. So, we didn't get our first research grant until 2006. We first did transplant trials and, in 2013, formed and registered *Fragments of Hope* as a non-profit in Belize. In 2015, we formed a partner non-profit in the United States.

It is interesting to note that, while coral reef restoration is popular today, when Amelia and her colleagues first began their work, many Belizeans didn't

Fig. 12. Photo of *FOH*. Copyright © Courtesy of *FOH*.

understand the threat of losing coral reefs until the United States declared the *Caribbean Acroporidae* an endangered species. It was then that local funders gave them money for a trial transplant program. She said:

> There was a delay because most people thought that either it wasn't necessary not realizing that the corals were in danger, that we still had a lot of corals, or they thought that it wouldn't work because the corals had died from diseases and things like this. So, they thought that the corals would just die again, and it would be a waste of time. Since then, we still have many skeptics about, oh, you know, can we really restore, reach the scale of it, you know, all these kinds of things. So, there has been roadblocks along the way and that is why we were unable to receive funds for four years.

Prior to forming *FOH*, Amelia and her colleagues wrote many small grants for the Placencia Tour Guide Association and for the (mostly male) fisher's cooperative. At the time, jobs in marine tourism paid well and Amelia had expanded her role in this male-dominated field through grant writing for tour guide and dive master training programs. By 2013, the number of female dive masters and instructors increased to about ten and many women scientists began to serve on the FOH's advisory board. In the interview, Amelia provided several examples:

> We also collaborate with a lot of women scientists; for example, Iliana Baums who was a geneticist at Penn State. Claire Paris did the larvae spawning modeling at the University of Miami. Maya Trotz who is an environmental engineer at University of South Florida, and, in Belize itself, Beverly Wade was the Fisheries Administrator. We've had a super great relationship with the Belize Fisheries Department since day one. There used to be a woman as Minister of Environment. There are women in Belize who are heading other NGOs: The Southern Environmental Association is run by a woman, The Audubon Society is run by a woman, and TIDE (the Toledo Institute for Development and Environment in Belize) is run by a woman. So, we have a lot of females in marine conservation who are associated with FOH researchers.

From the beginning, it appears that women were a bridge between male-dominated fishery and tourism organizations and the natural sea world. Amelia and her associates continued to develop transnational advocacy relationships with institutions in the Global North and, in Belize, maintained contact with organizations that were directed by women. She and her colleagues also found ways to train local women to expand operations and "build capacity" through female empowerment, as described below:

> Well, I don't know if we've helped women become leaders, but we certainly helped them get capacity building and training. And

> one of the motivations for that as well is that many Belizeans cannot afford formal, higher tertiary level education. And so for that reason, we focused on community members for sort of community research or training because people who grew up in the sea are more familiar with all the marine organisms and it's easier to train them on simple survey protocols than it is, for example, we've had many, you know, Master's level interns even from inland Belize or other parts of the world and they may have a fancy degree but they don't have that actual experience. So, we've been focused on building capacity for coastal community stakeholders who live here and then we pay them after they train. It's not full time, but at least it is a supplementary income.

One important feature of FOH is that it nurtured at least one generation of women who pursued advanced degrees to learn how to raise public awareness in schools and other educational forums. From Amelia, Jamie and Aidee learned how women used their advanced degrees to educate the public. She provided several examples:

> There are a few women who have been inspired to go on to get their degrees. So, for example, we've just hired Monique Vernon, she lives in Placencia, and has a bachelor's degree in Natural Resources Management from the University of Belize. She was inspired by our work as a high school student participant and now she's our Outreach Officer. We also have a woman, Ruth Gutierrez, who was in the same high school project with us with the coral restoration and she has just completed her master's program overseas and is involved in marine conservation. And then we have another woman, Abigail Parham-Garbutt, from Independence, who did her master's program when I did, and she is currently new to our programs in primary schools here and she's a junior college instructor. We have a few other women who are exemplary leaders. For example, Abigail is leading this program called *Sandwatch* – a UNESCO program that we've been running in primary schools here for several years. Last year she was able to attend the train-the-trainers workshop in Trinidad and is now implementing the *Sandwatch* program with us under a GEF/SGP/Oak Foundation grant. So, I think there are [a] few other women that have gone on to get higher education and become some sort of leaders themselves.

FOH sought to increase the public's awareness of climate change under the guise of tourism. And, in 2008, it encouraged junior college students or mentees to seek jobs in the Belizean government and integrate their new knowledge into the tourism industry. She stated:

> Now people hopefully know about the EIA's – environmental impact assessments – people are familiar with that now since the

> cruise ship port that was built here; they're familiar with the gaps that are not addressed and they're also aware of issues with dredging permits, and mangrove regulations, things like that … people's knowledge is much better. They have better understanding about our existing regulations and where there may be shortfalls.

Fragments of Hope continued to write grants for physical exchanges to strengthen ties between people within the Global South, particularly in Jamaica and Mexico, and to support female empowerment through South–South exchanges. Amelia described the process as follows:

> We did an exchange with Jamaicans this year and with Mexican reef restoration practitioners and multiple scientists. Even Ken Nedimyer who founded Coral Restoration Foundation [and is globally recognized as a father of reef restoration] was on the trip, so that just finished … we post all of our trips on *Facebook* because it's easier than updating our website. We do have some articles, from external journalists. We had an article in the *Guardian* and an independent photojournalist who did his first article on a lionfish roundup, sponsored with private donated money, and became interested in the women angle.

Fragments of Hope also tapped into an emerging business initiative to help improve the environment. For example, it worked with a private entrepreneur, Luis Garcia, and his company, *Eco Friendly Solutions*, to introduce the first ever recycling campaign in Belize. Amelia talked about how her organization supported local initiatives, as follows:

> He has come up with a machine that can crush plastic and glass and make construction bricks or pavers for your driveway out of the crushed plastic and glass. So, we've been sponsoring semi-regular recycle pick-ups, so that he can use them. And he also collects used cooking oil to run his truck for recycling pickups. And so, we've been trying to run a campaign where we don't use plastics, for example, on our field trips. We either use the biodegradable products or we've also invested in reusable plates and cups that we can just wash, reuse for lunch and for meetings on our Caye trips. So that is just another small side campaign about trying to eliminate plastics, which is directly related to climate change in the sense that they are made from fossil products, right?

Other board members worked with women in local communities to assess water quality and with women scientists from the United States – for example, Dr. Maya Trotz and Christy Prouty from the University of South Florida – to design wastewater treatment programs. At the time, it was unusual for women scientists as well as women in poor communities to become involved. Over the years, Fragments of Hope advocated for both, despite significant challenges. For example, it was difficult to involve women in conservation projects who needed

childcare and a living wage. From the beginning, the program established a policy not to use international volunteers but instead to train and pay members of the coastal community. Still, Amelia noted several existing challenges:

> There are sometimes jealousy issues or lack of cooperation issues from other women in power or seeking power. Also, there is a real struggle because many of the women we target and work with are single mothers who often have trouble getting appropriate childcare when we have extended trips. For example, we went to Jamaica to do an overnight trip out to the cays; but we don't have options for childcare. We have not addressed this issue and we're not quite sure how to overcome it because, even if we began to budget additional money for childcare, as you probably know, it's not a problem you can just throw money at. You must find the appropriate caretaker. We've noticed this for a while now and we're not quite sure how to address it, especially for a single mother that doesn't have a partner to assist her.

In her interview with Jamie and Aidee, Amelia stated that she decided to devote her life to this work. She began her career in Belize as a tour guide/diver because she loved the sea and attended graduate school to find solutions to climate-related biodiversity losses. In the process, she helped establish Global North–North and Global South–South connections and promoted women and the environment through social media. The challenges were: (1) giving educated women a chance to develop careers, (2) providing a way for disadvantaged women in coastal communities to earn money, (3) alerting and educating the public about the disastrous effects of climate change, (4) linking her coral reef project to other environmental eco-friendly projects, and (5) working with like-minded social entrepreneurs as well as government institutions.[1]

As the program developed, Amelia stated that she stopped attending international climate change conferences, preferring to work at home (pre-COVID), because Fragments of Hope already had developed the partnerships it needed to continue work in Belize:

> I mean – look at the numbers: Twenty-four international meetings with a crazy climate carbon footprint and what has really changed after these meetings? … I've worked really hard to build my home and my life here, so I don't like to be away for more than four days, but I have caveats: for example, I'm taking *Fragments of Hope* members with me to the Gulf and Caribbean Fisheries Institute in San Andres, Colombia in November. And the reason is to help develop informal exchanges. We've been to San Andres three times already, for restoration work and now there's a larger group, so we'll have an informal exchange opportunity. Things like that.

> Like the Jamaican exchange, we make exceptions, but these giant meetings, you know, we just don't do them anymore.

Postscript: In 2023, Amelia lamented that coral reef restoration had become trendy: "It's the new yoga." She worries that the field has become overcrowded. Still, she noted, her colleague, Monique Vernon, established an internationally recognized recycling project, *Mr. Goby and Friends*; continues to support Luis Garcia's recycling initiative; and works with another women-led organization, the *Crocodile Research Coalition*. Also, in Placencia, Mariko Wallen established the *Women's Seaweed Farming Association* and, to promote government-led environmental projects, her colleague, Beverly Wade, now works in the Office of the Prime Minister.

2. *Todos Juntos MealFlour* Project/Guatemala

In 2021, **Andrea Monzón Juárez**, the director of the *o Todos Juntos* ("all together") *MealFlour* project,[2] received a Gender Just Climate Solutions (GJCS) award through the United Nations Framework Convention for Climate Change (UNFCCC). I interviewed her about the project to learn about her role and the entrepreneurs who started it. Prior to the interview, I found several articles that described the founders of the project: In 2016, three students at the University of Chicago had created the *MealFlour* project concept.[3] In 2019, Monzón became the co-director with one of the University of Chicago students as the other co-founder of a non-profit organization to implement the project in local communities and promote better nutrition through the sustainable farming of protein-rich mealworms. During our interview in the fall of 2021, Monzón discussed the various ways empowering communities could prevent the serious health problems related to protein deficiency and addressed the interconnected issues of low income and environmental impact.

It is interesting to note that Monzón became the field director after the *MealFlour* concept was developed in the United States.[4] In the summer of 2015, an undergraduate student from the University of Chicago, Joyce Lu, researched and taught nutrition and reproductive health in Quetzaltenango, Guatemala. While working at *Primeros Pasos*, a local clinic, Lu took part in a nutritional supplement initiative to use different types of protein-enriched flours for baked goods and learned that most of the flours had to be shipped into the region, which turned out to be financially unsustainable. Nine months later, in May 2016, Lu and two other graduating seniors who also had worked as summer interns on international development projects, Gabby Wimer and Elizabeth Frank, developed a social enterprise back in the United States, which they called *MealFlour*.[5] The trio combined their experiences and selected Quetzaltenango as the site for the pilot program where Lu had developed local contacts (see Fig. 13).

Lu had learned that indigenous populations of Guatemala had a high rate of chronic malnutrition and that roughly 70% of kids under the age of five were

malnourished. [According to the World Food Program, Guatemala also is one of the ten countries most vulnerable to natural disasters and the effects of climate change.] Thus, the three women decided to develop a social enterprise to improve nutrition and increase food security in ways that are environmentally sustainable and adaptable to climate change. They noted that the growing edible insect movement helped their project gain acceptance as an affordable, and environmentally sustainable solution. In essence, raising insects was cheap, and required minimal space, food, and water. To jumpstart the pilot project, the trio entered competitions in the fall of 2016 and raised $20,000 in seed funding for *MealFlour*. They won the Bay Area Global Health Innovation Challenge,[6] the University of Chicago's College New Venture Challenge,[7] and the Clinton Global Initiative University Resolution Project Fellowship.[8]

In developing their vision of using mealworms to address the problem of malnutrition, the students aimed to situate food production onsite to reduce transportation costs. In addition, they integrated protein-rich mealworms into their own diets, noting that health-food markets in the United States had begun to sell mealworms, which had been used by pet owners to feed reptiles, birds, and fish. Lu was aware that most people in the West are averse to entomophagy (i.e., the practice of eating insects). However, Lu noted that flying ants are considered a delicacy in Guatemala and she believed that the population would accept mealworms as part of their diet.

Fig. 13. Map of Quetzaltenango in Guatemala the Site of the *MealFlour* Project. (Quetzaltenango is due west of Guatemala City.) *Source*: Wikimedia Commons. Licensed under the Creative Commons Attribution 3.0 Unported License.

While mealworms[9] (*Tenebrious molitor*) are not indigenous to the Quetzaltenango region, the trio found that constructing mealworm farms would be relatively easy because the farms don't take up a lot of space – they are vertical structures one square foot around, in which two to six-tiered compartments separate the insects at different stages of the life cycle – and would be inexpensive to maintain. It takes about a month for mealworm "cells" to be harvested, roasted, and ground to produce one pound of flour per week. The *MealFlour* team developed a cookie recipe, and Wimer experimented with using mealworms in tortillas and oatmeal. They also identified a local bakery to help make new mealworm dishes and offer product tastings.

To introduce a microfranchise model, they devised a plan for local families to pay a fee (or receive a loan) to learn how to build space-efficient mealworm farms from recycled materials, which they believed would be key to the program's success. An article in *Lancet* described the reasons other nutrition schemes had failed:

> Programmes that focus on providing families with nutritional supplements are not financially sustainable because communities become dependent on aid. Furthermore, supplements are not environmentally sustainable because of the packaging waste associated with processing, along with greenhouse gas emissions from the transportation required to deliver them to beneficiaries. Attempts to avoid supplement disbursements by helping families maintain livestock as a source of protein are costly.

Aware that economists were skeptical about the efficacy of microfinance in reducing poverty, the students' solution was to tailor *MealFlour* to specific community needs and style of communication. They believed that poor communication with loan recipients was the primary reason microloans failed in the past. According to Wimer, they aimed to "really talk to the community and make sure that [the business] is structured in a way that makes sense for them."

Therefore, Andrea Monzón Juárez was crucial to *Todos Juntos* ("all together"), which was registered as a non-profit organization in Guatemala and the United States. In many ways, her education reflected climate-related challenges in the region. She stated:

> I studied six years at the university to get the degree of Zootecnia, in the Veterinary Faculty in San Carlos University. I am a type of geneticist and animal nutritionist. Then I studied two more years to formulate and design projects for social development. I have training in the field of gender, sexual and reproductive rights, heritage conservation in museums, popular education, community organizing, conservation projects; and this year I began to study for a master's degree in Food and Nutrition Security, but I could not continue because of the cost of payments and tuition, so maybe wait for the next year.

When raising animals became difficult for Candelária communities in Quetzaltenango, Monzón focused on teaching women how to raise mealworms to

provide them with an affordable and environmentally sustainable source of protein. [Roasted mealworms are 55% protein, release no methane (in contrast to cows, which are responsible for 30% of global methane emissions), and require little water (2,000 times less than cows). The farms reduce waste because they can be built from upcycled materials such as jerry cans or water containers, and mealworms eat organic waste such as banana peels. [For a video of the process, see https://youtu.be/JhmnzoKt6bc.]

The University of Chicago students knew that they needed to appeal to women in local communities. According to Frank:

> One of our biggest concerns was finding out where to start. Insects are eaten in 80% of countries around the world, including parts of Guatemala, but raising mealworms in this way is something new. When we pitched the concept to the group of women from a community in Candelaria and gave them samples of the mealworm products, they were excited to learn more and wanted to try out farming themselves.

As the pilot project proceeded, they recruited five women from a nutrition program at *Primeros Pasos*, the local clinic/NGO where Lu had worked in 2015. The partnership with *Primeros Pasos* gave the *MealFlour* team a venue for their 6-week training course on how to build mealworm farms in which multiple units can be combined to increase production, how to take care of the mealworms, and how to process the mealworms into a powder.

In 2018, exit surveys showed that all five of the local women farmers who were recruited for the pilot projects had maintained their farms and steadily improved their mealworm farming skills; and that four of the women who had increased their production began preparing mealworm dishes for their families. To the extent possible, the women involved their children – mostly girls – in the mealworm farming projects. In this geographical region, although male members of the community migrated to other places to find work, those who remained embraced the project because it provided a vital source of protein and because they were accustomed to ingesting insects as part of their diet. The women who led the project were young to middle-aged mothers who stayed at home to raise their children and farm the mealworms with the help of all members of their families (Fig. 14).

One challenge was to keep the temperature of the mealworm farms between 25.5°C and 27°C, which required adapting the process to the colder climate of Candelaria. The team formed monthly focus groups to share ideas about how to warm the farm by keeping it in the kitchen and insulating it with blankets. Monzón has continued to find long-term local partners and expand a network for information sharing on best practices for mealworm farming. She described methods for gaining acceptance within the community that included local resources as follows:

> We work alongside indigenous women in Guatemala to improve food security and nutrition while also addressing the interrelated problems of environmental sustainability and poverty. We have

Fig. 14. Photograph of Local Families Learning About Mealworm Farms.

> two projects: *MealFlour*, which helps women set up mealworm farms to ensure that they have access to an affordable and environmentally sustainable source of protein, and *Bienes Forestales*, which works to catalog local food sources to preserve indigenous knowledge that can improve food security. Together, these programs are tracked to reduce rates of malnutrition in indigenous communities and improve food sovereignty [i.e., in which the people who produce, distribute, and consume food also control the mechanisms and policies of food production and distribution] despite the growing challenges caused by climate change.

Monzón clarified that women, children, and the elderly were the majority population in the village of Huehuetenango and that male family members had migrated to other regions, including the United States, to find work. While women, children, and the elderly were unlikely to be involved in migration, still they were capable of mealworm farming, which does not require great strength or endurance. Monzón is the only professional in the field, although she talks with Wimer regularly and, as of this writing, works with two volunteers/interns, a sophomore majoring in anthropology and biology from the University of Wisconsin and a senior majoring in biology from the University of San Carlos. In my interview with her, she described how she introduced the idea of a diet rich in protein from mealworms to local families. As a result of climate change, Huehuetenango had become increasingly dry, and it was no longer possible to raise animals or any other forms of protein. At one point, she described how the project desperately needed help to develop a local campaign (with educational materials), find clients to help fund the program, and obtain more support from the local government.

The founders had organized a system for tracking the numbers of families engaged in mealworm farming and those who used the mealworm flour in daily meals. They used open-ended questions to learn more about community attitudes toward the program; and to refine and improve nutrition and income for the farmers. They analyzed anthropometric data, conducted regular focus groups and surveys, and monitored flour production and income. From March to October in 2019, *MealFlour* began its first Train-the-Trainer program in Huehuetenango with a partner organization, *Fuyndacion Contra el Hambre* (FH) [Anti-Hunger Foundation], which recruited 15 adult women and one of the women's daughters.

In 2020, Monzón managed the internship program (including two students from the University of Chicago and six students from the Universidad de San Carlos in Guatemala) and a traditional ecological knowledge (TEK) project in collaboration with the Grenadillo community.[10] During the COVID pandemic, the TEK project cataloged information for 114 indigenous edible plants, five fungi, and other endemic insects. Because food insecurity was rampant and the government instituted national curfews, lockdowns, and social distancing, Monzón was solely responsible for managing the *MealFlour* program, which produced and processed mealworm for families (as a protein alternative for women and children) and provided technical assistance. During the pandemic, she used WhatsApp, phone calls, and photographs to keep in touch with Wimer in the United States. Interns produced training videos and recorded them in indigenous Mam language and Spanish. As a result, the program in Candeleria quadrupled production in two of the mealworm farms.

In November 2021, after winning the GJCS award and attending the UNFCCC climate change conference in Glasgow, Monzón could foresee a time when I would be able to interview women farmers in Candeleria. However, at present, her focus is on developing the program with mentors from the GJCS program. She said:

> I have seen the support for some of the [GJCS] winners to grow. They have new experiences and tools to generate transformative changes for their context and lives. I know that the work is hard and many times generating opportunities for all is complicated and some issues around climate change are considered relevant in taking decisions or importance with which it will be addressed in each winners work area. I have been reflecting on this situation and am writing to you to show my interest in managing tools, experiences, and opportunities to strengthen *Todos Juntos* – that it can generate tangible changes around the theme in which we develop, which is applied research for construction of common, resilient, and fair futures for all.

It is easy to imagine that mealworm farms could address food insecurity in other regions of the world. In 2016, the founders had hoped to promote *MealFlour* in Kenya. In checking on the status of the project with Monzón in the summer of

2022, it was clear that implementing *Todos Juntos* has progressed within Guatemala and attracted attention from other international organizations. The project expanded from 10 to 22 mealworm farms and, as she predicted, received a cash infusion to develop a direct-to-consumer business plan and marketing strategy through the Women's Environment and Development Organization (WEDO).[11] In addition, she is in the process of looking for better equipment for grinding the flour and reconfiguring storage spaces.

In addition, another UN affiliated organization, the Climate Technology Centre and Network (CTCN)[12] is negotiating on behalf of *Todos Juntos* with the Guatemalan government to get a contract to sell the meal flour. Finally, and equally important, Monzón is working with women farmers in their communities to introduce ways to reconfigure their lives and income. In my last interview with her in 2022, with MARTHA MARIA CHAVEZ MEGRETE, a doctoral student from Ecuador in Hispanic Languages and Literature Department (also at Stony Brook University) translating from Spanish into English, I learned more about how *Todos Juntos* differed from past models: In the 1960s, NGOs throughout Latin America set up Christian-based charities (e.g., Children International) to sponsor a child or a family through public appeals for monetary donations. But in the present day, *Todos Juntos* aims to empower women to learn skills and gain financial independence so that they can move away from working long hours for low wages in coffee plantations that are killing forests. However, Monzón stressed, it takes time to change the community's mindset that, for decades, believed that they needed charitable donations. And, of course, it will take time to scale up to a level where the project will have significant impact on more lives; and whether there will be any local opposition to it and if so, from whom or what interests (Fig. 15).

Fig. 15. Photograph of a Mentoring Group at the Glasgow Climate Change Conference in 2021. Andrea Monzón is Second from the Right in the Front Row. Copyright © 2021 Courtesy of Annabelle Avril, Photographer for the Women and Gender Constituency.

3. *FUNDAECO*/Guatemala

In the spring of 2021, one of my students at Stony Brook University, ERIN BYERS, asked if she could help me research women's empowerment and climate change. [While her plan had been to secure a summer internship abroad, the COVID pandemic had limited her options.] Thus, we developed an "internship" experience that included conducting *Zoom* interviews with program directors who had received UNFCCC awards. One of the projects she selected was *FUNDAECO* in Guatemala, which received the GJCS award in 2019. Searching the internet, Erin found a story about **Karen Dubois** (aka **Karen Aleida DuBois Recinos**)[13] a director for one of the *FUNDAECO* programs, "Women and Girl, Healthy and Empowered" (*Mujer y Niña, Sanas y Empoderadas*; Fig. 16). She initially emailed Karen to learn more about how *FUNDAECO* empowered indigenous women to take ownership of their health and the community's well-being and educated and empowered young girls in the community; and then sent Karen the interview questions in advance of the *Zoom* appointment. The following, in italics, is Erin's account of the interview:

Karen grew up in Guatemala City, Guatemala and attended a high school there where she hoped to one day to become a teacher. Her training as a teacher included working with NGOs, which is where she first contacted FUNDAECO and had her first interest in working with rural communities. She went to college for social work, then shifted to focus on community organizing and community project development. In college, she focused on the discussion, analysis, and reflection of how to maintain preservation of protected areas.

She noted that these "protected areas" are different than an American person would think, as most of their protected areas are highly inhabited, and people interact closely with the nature they are working to preserve. The American

Fig. 16. Photographs of Karen Aleida DuBois Recinos and the "I See the Opportunity" *FUNDAECO* Game. Copyright © 2020 Courtesy of *FUNDAECO*.

model, as she put it, was a challenge to overcome and required a reframing of the approach to protected areas in Guatemala. She then refocused the approach to amplify community groups – which included both indigenous and non-indigenous groups. A main problem was that funding was coming from international organizations, and that funding was unequal between men and women when it did come in.

To re-center herself, she asked what the basic needs of the community were. The answer was: healthcare, first and foremost. Women's access to healthcare centers ranged from traveling anywhere from 0 to 60 kilometers to get to basic health services. A priority going forward was women's health, especially reproductive health. Initially, the group wanted to establish 20 healthcare centers, but started more realistically with three. The community welcomed the centers, but faced issues with patriarchal norms in leadership structures, which manifested in the form of wanting services of doctors but not being as interested in family planning services. This is when the group began to work to coordinate local members to employ the health centers, with an emphasis on midwife training. Importantly, community members who were educated (sometimes just elementary education level), those with language abilities worked as translators between staff and indigenous community members. An important distinction Karen made was between maternal/infant deaths, which, when this happened without a midwife, would be blamed on the mother entirely, but when it happened with a midwife present, would be more understood.

The midwives are integral and respected community members who have received training in traditional midwifery. Some of the midwife training included works to increase hygiene, administer vaccines, identify infections, etc. Further, an emphasis was put on creating a network of connection between the midwives so they could use each other as systems of support. Ancestral practices and approaches to delivering were used by the midwives and have been passed down through generations.

On a more technical level, she has worked to coordinate international funding which has since come from the European Union. Now, they have increased their presence from three to thirty-three healthcare centers. Subsidies from international organizations help keep the price of supplies and medicine low. FUNDAECO encourages the community health centers to become self-sufficient and will typically provide start-up costs but hope to one day leave the center to be run by local community members.

The centers are also important for domestic violence training. At first, Karen said there was a desire to take every case of domestic violence to court, but they soon found that this could easily put the woman at a greater threat than she faced before. They shifted their priorities to a more holistic approach and empowered women with simple language they could use to fight domestic violence.

Many young people today may identify with Karen's desire to help vulnerable populations, which is why her story is so powerful: After receiving a college degree in an urban environment, she focused on applying her education in

social work to "community organizing" in rural areas. In addition to Karen's motivation to help make the world a better place, Erin learned about "goodwill" efforts outside of the United States as well as cultural differences in which indigenous people in Guatemala's Catholic and patriarchal society are isolated in government-controlled nature preserves. It is significant that Karen initially had focused on educating indigenous populations about reproductive health with support of an international organization. Then, as she became more involved, she re-focused on the social and structural issues that result in gender-based violence. In Guatemala, it was reported that every day, 1,500 underage girls are forced to marry and denied educational opportunities.[14] While this figure may not be too reliable –as it would amount to half-a-million a year in a country with a population of just 18.5 million – still, it is not surprising that the subject of gender-based violence inspired Erin and her classmates to learn more about this in other regions of the world, including Africa. She and four other students developed a website to raise awareness among her cohort.[15]

4. *ENDA*/Colombia

In addition to the interview with Karen in Guatemala, Erin chose to learn more about the *ENDA* (an acronym for "Environment and Development Action,") project based in Colombia, which had received a GJCS award in 2019. She first contacted **María Victoria Bojacá Penagos (Vicky)**, the General Director of Sustainability, Equity, and Environmental Rights and, with Martha Maria Chavez Megrete, a doctoral student from Ecuador in Hispanic Languages and Literature Department (also at Stony Brook University), conducted an oral history interview in Spanish and English.

In reviewing Martha's English translation, I found some words – such as "collectives," "cooperatives," "political awareness," "pillars of human rights," "solidarity," and "communal social fabric" – difficult to understand the full scope of their meaning in the context of Colombian culture. In Latin America, perhaps Jesuit institutions incorporated these words into "liberation theology," which had influenced Vicky's commitment to women's rights in climate change adaptation. Significantly, Martha and Erin first interviewed Vicky and then, to provide more perspective, interviewed an older community activist who remained in her neighborhood for 30 years, **Graciela Quintero Medina**. Below is my synopsis of these two interviews.

(A) María Victoria Bojacá Penagos (Vicky)

Vicky grew up in a small town in rural Colombia and majored in industrial engineering and public policy at the Technical and Pedagogical University of Colombia. In the 1980s, she became an active member of student movements and was particularly interested in "the collectives." She wanted to address the tremendous gap between rich and poor because many of her classmates grew up poor – without much food or education.

After graduation, she began to work with a Jesuit group to help underserved communities in areas near Bogotá. She focused on teaching women the fundamentals of financial management so that they could become independent and establish community restaurants and workshops for textiles and handicrafts. Vicky then became involved in the feminist movement in Colombia where she met the director of *ENDA* Colombia who hired her to work with women's groups on environmental and social issues. Her first job was with a women's cooperative, financed by *Geneva Third World*, in which she organized teams to construct houses, and manage organic (compost) and inorganic (plastics which they transformed into irrigation hoses and granular pieces) recycling projects. While it is not clear how many women were involved, we do know that, after six years, the women Vicky worked with had become financially independent and she moved to another region.

Her next job was working with families whose sole livelihood was recycling. She taught them how to form collectives and fight for women's and human rights. The networks spanned Latin America through literacy programs and political awareness campaigns. It took 20 years for the Colombian government to recognize the women's collective and pay a set rate per kilo for recycled material. From Martha's translation below, it seems to me that Vicky had well-developed political sensibilities:

> This was a big bridge from being invisible to be seen as a formal actor. The collective continues to advocate for public policies that increase health and education, especially relating to solid waste management. This was an end to one of the biggest cycles of her [Vicky's] life. Her work with ENDA encompassed three main pillars – rights, sustainability, and gender awareness.

Vicky often used slogans in her advocacy work. Throughout her career at *ENDA*, she worked with victims of armed conflict, including "peasants, youth, and women from underprivileged areas." She continued to challenge public policy to advance basic human rights for women – for better education and access to water, housing, and food sovereignty – through political education campaigns. For example, *ENDA* began to work with a women's collective from one of the most densely populated areas of Bogotá, Colombia (~1.6 million people) that also has one of the most visible and drastic wealth gaps in the country. The common denominators were that all the people they worked with built their own houses and were inspired by the Jesuit liberation theological principles of IAP (i.e., research, action, and participation). Their aim was to link the IAP women in Bogotá with the *Women of the World*, a Paris-based group that works on projects such as public policy awareness with young people.

Vicky also works with women in the *Hunsuhua* indigenous group who inhabited the land in the pre-colonial Spanish era. This group consists of nine local organizations, in total 131 women and 21 men, and is organized by

functional areas – recycling, food safety (based on home terrace gardening), early child development assistance for the neighborhood, cultural activities (such as organizing festivals especially for youth and preparing potluck meals with traditional dishes), women's handicrafts from recycled materials, and youth groups advocating for political rights.

Vicky and the women with whom she worked were not subject to threats and/or actual violence from right-wing forces. In fact, many of the *Hunsuhua* women had been displaced years before, as they were essentially "dumped" (my wording) into urban poverty belts in Bogotá where they built their own homes and were the sole providers for their young children and extended family members. To help them, Vicky worked with *ENDA* on a microcredit project called the *Communal Bank*, which had been established in Venezuela under the pillars, "trust and solidarity." *Communal Bank* was the group that won the GJCS award in Colombia.

Vicky spoke about how these women had been displaced for generations and were forced by necessity to organize in the "middle-of-nowhere." They developed a strong sense of belonging and community, while struggling for basic rights such as "water and life," long before they connected with international groups interested in environmental impacts and climate change. Before the COVID pandemic, these women had survived for generations – through grandparents and great-grandparents – in an informal economy: Their managerial leadership formed the communal social fabric that existed as small, entrepreneurial businesses. In their interview write up, Erin and Martha noted:

> Oral history is important, or else the sense of belonging, knowledge of appropriation, and the importance of collective advocacy would've been lost. The recovering of historical memory can involve several activities such as grandparents narrating to their grandchildren, mural painting and within the communal tourism, a focus on explaining the social construction of the neighborhood as a collective.

When Erin and Martha interviewed Vicky, the GJCS project had ended and it was in its third round of funding from the French Development Agency, which runs *Women of the World*. *ENDA* continued to improve the livelihoods of the *Hunsuhua* community through a sustainable development model with a gender focus on empowering women economically, socially, and politically. Financial independence and the effective management of resources feature women preserving the environment and contributing to climate change mitigation.

Like the *Fragments of Hope* project in Belize, tourism was an important source of income. Vicky described the *Hunsuhua* region as located on a mountain peak with a panoramic view of the city. The ongoing environmental projects provided an ideal vantage point and a clean environment. *ENDA*'s next stage was to construct a social and solidarity-based economy with a gender focus through the *Women of the World*'s international network, with members from Mali, Senegal, and Bolivia – all groups with whom *ENDA* seeks to create partnerships. In addition, they have connected with groups in other countries where *ENDA* operates as well as an association called *Neighborhoods of the World*.

In contrast to the work in Belize, which did not benefit from large international conferences, *ENDA*-Colombia thrived on international activities by taking two or three female leaders from the *Hunsuhua* community to the annual *Women of the World* conference to enable them to exchange ideas and receive training. Obviously, each regional organization makes choices on how best to support the women, which may include local and/or global initiatives. Through the international "Solidarity Market" event, indigenous women sell products including dehydrated, medicinal herbs and creams from their communal gardens (that often are cultivated on the rooftops of their dwellings) and handicrafts. In fact, Vicky learned about the GJCS award at the "Solidarity Market" through the French chapter of the *WECF* (Women Engaged for a Common Future). At the same time, *ENDA* continued to build strong local networks to advocate for women's rights, including women's groups from city hall, urban agriculturists, youth culture networks, and recyclers from Vicky's community.

In their interview, Erin and Martha noted that they learned about how patriarchal, chauvinistic societal norms existed throughout Latin America, which included domestic violence against women – especially targeting women who choose to work outside of the home. As part of its mission, *ENDA* works with children and parents to educate them on gender equity to get rid of "toxic mindsets" as the children get older. Vicky acknowledged that older women are not likely to change, and that *ENDA* needs to make better use of social media to reach younger audiences and create strategic international alliances: "You cannot stay isolated and achieve a social, political, and cultural transformation." It is quite possible that more interviews could be conducted to ascertain how decision-making occurs in communities like Vicky's. A mosaic of oral histories could answer the question of whether, in communities or collectives, there are individual charismatic women who emerge as leaders to whom the others look to for guidance and inspiration (Fig. 17).

Fig. 17. Photographs of María Victoria Bojacá Penagos (Vicky) and Recycling in Bogotá. Copyright © 2020 Photographs Courtesy of *ENDA*.

(B) Graciela Quintero Medina

Vicky introduced Erin and Martha to a local *ENDA* community leader, Graciela Quintero Medina, who founded and has worked in her neighborhood recycling collective for over 37 years. In fact, she may be one of the charismatic leaders mentioned above. Graciela attended Catholic school and received an advanced education in program administration. It is not clear if there were key role models in the Catholic church who inspired her. Like Vicky, she mentioned her allegiance to liberation theology as a fourth-generation follower of self-management and independence outside of traditional structures and government bureaucracies. Graciela explained that the collective in Bogotá established a community preschool in the neighborhood to lessen the child-care burden for working women – certainly something Belizean women in the *Fragments of Hope* project would have welcomed – with about 275 children in the program. In addition, the collective established an arts and cultural center to link economic development to environmental activism. Fourteen of these self-sufficient communities – with women in leadership positions – hold their own elections that are separate from traditional state-run elections. The community decides which candidate best represents "the spirit of collectivism and community benefit." Graciela emphasized that women are more sensitive to "the defense of life and land" and, as elected officials, are devoted to their communities.

In terms of environmental activism, Erin's and Martha's interview revealed how community groups protected a local preserve from becoming an urban center, defended water marshes, stopped construction on a low mountain range, and preserved the legacy of seeds. The indigenous women pass down the knowledge of crop cultivation through generations. Graciela wanted Martha and Erin to know that the women she works with are committed to "deconstructing rigid, patriarchal frames that dominate Colombia." Rather than promoting women to higher positions than men, Graciela advocates for equality between sexes where men and women work side-by-side to make progressive strides toward a better future.

While Andrea Monzón Juárez in Guatemala doesn't use the same slogans as Vicky and Graciela in Colombia, both *Todos Juntos* and *ENDA* have created programs to empower females in indigenous communities in regions that were affected by climate change: In Guatemala, women cultivated mealworms on land that could no longer be farmed and where men had left the region to find work elsewhere; in Colombia, women used recycled goods to earn money to support communities of family members. In both cases, they were uplifted for being "keepers of the seeds" through innovative programs that provided financial incentives to improve their lives. As previously mentioned, we don't know of any religious leaders – in Catholic, Protestant, or indigenous folk religions – who may have guided these communities. While Graciela mentioned her allegiance to liberation theology, she didn't mention by name any actual clerics – priests, nuns, etc. – as participants or leaders.

5. *Improved Cookstoves (ICS)*/Vietnam

When I first began to research Asian women's political participation in climate change adaptation in the summer of 2016, I identified Vietnam as a country of interest because international organizations established "gender mainstreaming" in programs as a strategy for lowering emissions in Asia's forests.[16] These programs used the only women's organization in Vietnam, the Vietnam Women's Union (WU), as a base to reach women who gathered firewood to cook for their families. The WU has 13 million members in 10,472 local women's unions in communes and towns throughout the country and is part of the communist party–state power structure. It is known to be effective in organizing women and interacting with policymakers and members of the National Assembly. In learning about the forestry program, I wondered if women in Vietnam were unique because, throughout Southeast Asia, cultural traditions often prevent women from participating in public life. I also wondered if elite women in family-run enterprises were less-restricted than non-elite women who had fewer resources and suffered the most in terms of coping with seasonal and periodic weather changes and natural disasters.

To answer this question, I had planned to determine how Vietnamese women's participation in climate change programs was influenced by reinforced traditional roles, diverse livelihoods, and income-generating jobs.[17] To develop my research questions, I interviewed a program manager, **Kalpana Giri**, who was involved in introducing the improved cookstoves to women in a rural district in the North Central Coast region of Vietnam in the Con Cuông District on contract through the USAID.[18] At the time of our interview, Kalpana had completed her field work and was a fellow at the Stockholm Environment Institute.[19]

Kalpana had received a PhD in forestry from the University of Natural Resources and Applied Life Sciences, in Vienna, Austria, and was working with marginalized women to address environmental issues. While she was trained in the male-dominated field of forestry, she shifted her focus to promote gender mainstreaming and social equity.[20] Like the three women from the University of Chicago's *MealFlour* project, Kalpana did not live in the community. To help women who suffer from climate change, she used her advanced education to evaluate international projects. One key difference between Kalpana and the three *MealFlour* women relates to the stages of their careers: Kalpana had a doctorate with years of work experience in international organizations, whereas the *MealFlour* team had just completed their undergraduate studies and were interested in entrepreneurial social enterprises.[21] Through her field experiences in the field of forestry, Kalpana recalled how she began to understand the importance of outsider actors in developing programs. She shared her field observations to assist me in framing my research as follows:

> So, in most of the cases, men are actually leading the work. There must be people from outside the community who introduce that idea. Perhaps [you should] start from that point – who got

> the idea, was there any apprehension about involving women, why did they decide to get in, and then what happened after women became involved.

Kalpana was devoted to developing connections with the WU – a politically powerful "stakeholder" – and engaging in what she referred to as "cultural diplomacy." As outsiders, her team approached both men and women to "ask" for their thoughts on whether women should be involved: Would it make sense to develop programs for women who cook and gather wood and herbs for fuel? Once everyone agreed that women must be involved to implement a solution that would ease their workload, the gender mainstreaming program (to ensure the participation of men and women) could then proceed. Kalpana referred to this as a "process of engagement" to alleviate resistance from women's families. She explained:

> I think that the trick was involving them to work on the technical aspect (that is, using improved cook stoves instead of traditional cookstoves or plants that yield growth in a short span of time for uses of fuel.) Plus, we [facilitators] helped groom their presentation skills, negotiations skills, and leadership skills so that they could address the technical issues. We wanted to get rid of the sense of silos.

The facilitation team focused on evaluating the whole "intervention" – a term that has become standard lingo for ensuring that an entire community is involved in changing widely accepted practices. This was especially important because women usually were tasked with organizing campaigns on gender awareness and not allowed to give input on the type of cookstove that would be the most useful for them – or anything that would expand their traditional roles. According to Kalpana, her team sought to place women at the center of the technical intervention; and hoped that communities would respect women for their technical expertise and not just their organizational and communication skills. Their project in the Con Cuông district involved about 300 women – about 40% of the community.

Her team worked with women who had the equivalent of a middle-school education and were politically astute and informed about government programs and priorities: "They are educated by experience." In framing my research questions, I wondered whether the women already were respected in their communities or if they held positions that would easily allow them to lead the cookstove project. Kalpana's team was focused on enriching women's knowledge base and not on assessing their social positions. Kalpana stated that "leadership" didn't focus on increasing the women's social status. She explains:

> It's more about how the group functions in society. After working in Vietnam, I realized that the women are very strong and vocal. The society still favors the son. If you look at practice, the divisions are not that bad. When you go into the communities, you do

> not get the sense that the women are poor – like in the sense that they are deprived of a presence in public spheres/meetings. When we go into the community, we encounter women who are very enthusiastic. My sense is that engagement is the thing that mobilized women even in the traditional sectors. They're not fearful at all. They only feel deprived when they have to talk about technical issues. They don't know the sectors enough. Knowing about climate change and information about disasters actually helps them position themselves better within the technical meetings.

I wonder if the legacy of war in which several million Vietnamese died – proportionately more men – created an opening for generations of more confident and assertive women's leadership. Or if the rhetorical gender equality of communist societies – belied, to be sure, by continuing patriarchal practices – played a role.

Kalpana's team worked with the WU to convince people in the community to negotiate with those who do the cooking (mostly women) to use fuel-efficient biomass cookstoves (See Fig. 18.). While still using wood for fuel, biomass cookstoves purportedly decreased acute and chronic health risks and alleviated time burdens on women and children. The team trained women to demonstrate how the cookstoves worked in individual households. Some of the women also learned how to maintain and repair the cookstoves and, according to Kalpana, this increased their status in eyes of the state. For example, local male government leaders invited them to attend forestry or climate change meetings to provide "legitimate input" into the forest management decisions that were being made in Nghe Province. She observed the following:

> Suddenly, they felt that they were important. You know like sometimes you may feel like what you know is marginalized. So, when they bridged that gap, it was an acknowledgment of the skills that they had learned. It was more about legitimating that they know about these issues … recognition that they should be involved because of the roles they performed or skills they developed.

Most of the women who were involved in the program were middle-aged with children and elders to take care of. As a result, Kalpana acknowledged, they did have challenges in "juggling" their public and private lives. When husbands complained, the women responded that the new cookstoves saved time. Still, women struggled because they were solely responsible for managing the entire household.

I found it interesting that, while Kalpana described herself as a forester who wanted to work on gender issues, she hoped to capture stories of women who were empowered because of their newly acquired technical expertise. The testimonials that appeared in her final evaluation report mostly lauded the benefits of the new cookstoves. However, one quote from the report revealed the precarious nature of changing family roles and responsibilities:

> Before, my husband did not support me joining any local WU activities because we do not receive any benefits from that. For example, we have not received loans from WU or saplings or rice except some fish from before. My husband said: "If you don't benefit from the meetings, why do you keep going to them?" This time it was a big honor for me to get the stove and this was a proof to my husband that this is the benefit I received from attending the local WU meeting. But it turned into this bad result [because the stove cracked], so my husband is still unhappy about me joining the local WU meetings.[22]

In our interview, Kalpana stated that this project did not include "rigorous calculations," which is different from the present day when both governmental and non-governmental oversight (and ongoing funding) must be accompanied by quantitative analysis. In talking about how women were engaged and "loved" the new work when they witnessed how the "intervention" benefited them, I wondered if Kalpana truly assessed the effectiveness of the intervention: "That's what they said to us. They enhanced their positions in the eyes of the decision makers, so that was pretty good." I interviewed her when she – and many mainstream international organizations with whom she worked – were just figuring out how to link gender issues and social change issues to climate change. Kalpana's original 2014 report on this project discussed the fact that, with a 37% poverty rate, people's main motivation for acquiring the cookstove was for economic gain and not environmental benefits – which the authors noted was very common in the international development field.[23] After the project ended, Kalpana then designed a leadership program in Vietnam for "gender champions," hoping that the program would last for at least two years.[24] At the time, she had been working in the field for six or seven years, was interested in developing "concept models or proposals," and seemed to be moving away from field work.

Kalpana's following reflection on her own career trajectory, below, revealed the ways some highly educated professionals pursue international development work in large organizations:

> When I first began work as a forester, I wasn't focused on gender issues until I took a course on gender and social issues. After that, it was pretty easy for me to have that lens and understand why foresters often don't see the social issues inside the forestry work that they do. It's quite challenging for me to convince them but I enjoy doing that because it's more about opening perspectives and giving spaces for alternative wisdom as well.

Another layer, however, is that technological advancements are still evolving, which was the case with the biomass cookstoves Kalpana's team was promoting.[25] It turned out that these cookstoves needed vast improvements to effectively alleviate harm to the environment.

Fig. 18. Photographs of the *ICS* and Kalpana Giri. Copyright © 2016 Courtesy of USAID.

In reflecting upon Kalpana's work in Vietnam, I wondered if Joyce Lu, Gabby Wimer, and Elizabeth Frank (from the *MealFlour* project) eventually would pursue a similar path (of working within international organizations) *or* if they would continue as entrepreneurs in creating social enterprises to uplift women and address climate change. As the literature suggests, those in the Global North – such as Lu, Wimer, Frank, and Giri – are in the best position to bolster "outward facing advocacy networks." And, for feminists in the Global South, there are a range of interesting career paths (such as those pursued by Andrea Monzón Juárez and Karen Aleida DuBois Recinos in Guatemala; Graciela Quintero Medina and María Victoria Bojacá Penagos (Vicky) in Colombia; and in early stages of the *Fragments of Hope* project in Belize) that make use of women's abilities to be grounded in local communities, relate to other initiatives in the Global South, and become empowered by transcending national boundaries.

6. Female Activists/Thailand

Kalpana mentioned one renowned female entrepreneur in Thailand, Wandee Khunchornyakong, who founded a solar energy business and provided jobs for women across Thailand. "Dr. Wandee" had received a doctorate from Suan Dusit Rajabhat University, a graduate degree from Naresuan University, and a graduate degree from Kasem Bundit University in Thailand. Even though she had worked for years as a solar power management executive, banks initially would not loan her money because it was too risky to invest in a woman-owned company. Thus, she used her own house and land as collateral and eventually secured loans from multilateral banks to begin her first solar farm in 2010.[26] In 2013, Dr. Wandee was named *Women Entrepreneur of the Year* in the Asia Pacific Entrepreneurship Awards and, in 2014, received the Momentum for Change (MfC) *Women for*

Results award through the UNFCCC. She gained a reputation for empowering women especially in rural areas in several Southeast Asian nations who managed solar energy farms. Dr. Wandee established over 30 solar farm projects in over 10 (out of 76) provinces across Thailand, mostly in the rural northeast.

While Kalpana had tried to implement gender mainstreaming programs in Thailand, she simply could not find an institution comparable to that of the Vietnamese Women's Union. She stated:

> One of the good things about Thailand is that there are many women who work in businesses. If we can tap them and sensitize them, I think there's a lot of potential to do that. But in our project, we had to get state approval. The state institutions in Thailand clearly told us that gender is not an issue. We can't mention gender.

One reason gender mainstreaming is controversial in Thailand is related to the 2014 ousting of Thailand's first female prime minister, Yingluck Shinawatra, who was charged with using her position to help her family's business deals. (To avoid a five-year prison sentence, she fled Thailand in 2017 and continues as chairwoman and legal representative of Shantou International Container Terminals Ltd located in southern China.) Even more controversial is the current monarchy of Thailand under King Vajiralongkorn who succeeded his highly respected father, King Bhumibol Adulyadej (r. 1946–2016). Vajiralongkorn is a misogynist playboy who often lives in Germany. In 2020, widespread protests throughout the country erupted against his reign.

Thailand's Intended Nationally Determined Contribution (INDC) through the UNFCCC did not include a commitment to gender equality and, instead, focused on the religious and ritualized connection between the Thai monarchy and the environment, and the importance of family and community. Ironically, in 2020, Thailand had the worst drought in four decades; Chiang Mai became known as the "most polluted city in the world" due to its growing smog problems; and central Thailand, particularly Bangkok, was threatened by rising sea levels. Clearly, the Thai government needs to respond to the effects of climate change, but it has not identified women as equal partners with men in finding solutions.

Because the kingdom of Thailand did not embrace women's rights in the UNFCCC's Nationally Determined Contribution (NDC) declaration, I was surprised that between 2014 and 2015, the *Life, Social and Lifestyle* section of *The Bangkok Post* published ten stories, all written by one reporter, KARNJANA KARNJANATAWE, on female climate change activists.[27] Among them were women who stood up against coal-fired power stations, dam projects, wastewater plant projects, excessive logging, and gold mines that had destroyed the fishing industry. These women were not high-profile public figures like Dr. Wandee. In fact, Karnjanatawe described a few of them as "housewives turned activists." Because *The Bangkok Post* is published in English, it mostly captures readers who are well-educated, urban, and middle-class; and appeals to an international audience.

In researching the newspaper's archives up to 2022, I did not find any other feature stories on female activists before or since 2014–2015. In fact, the only other human-interest story about a woman environmentalist was in 2020, which featured a renowned Harvard-educated female architect, Korchakorn Voraakhom, in an article filed by *Agence France-Presse* (a private international news agency headquartered in Paris) aptly titled "Meet Thailand's Secret Weapon in [the] Climate Change Battle." Thus, it is probably true that narratives on less prominent women who champion the environment (and criticize the government) are rarely part of public discourse. Thus, I use the ten stories written and published by the *Bangkok Post* via Karnjana Karnjanatawe, to make the point that there may be many women, currently invisible, from different socioeconomic and educational backgrounds who clearly expressed emotional connections to the land, confronted entrenched "patriarchal" attitudes especially in rural communities, and recognized the importance of the work they were doing for future generations.

In a research study published in 2018, a colleague, Jamie Sommer, and I focused on the extent to which the women featured in the *Bangkok Post* stories interacted with (and were supported by) local and international organizations to improve the environment and adapt to the negative effects of climate change.[28] This was our only way of tapping into women's roles in Thailand. It seems that a single journalist, Karnjana Karnjanatawe, with the support of a sympathetic editor, published a number of stories in a newspaper that most literate Thai would not be able to read in any case. The stories themselves are interesting, to be sure, but don't tell us the extent of such activism throughout the country as a whole. Moreover, the feature articles are so brief: They tell us only the barest outlines of these activist women, what they sought to do and what they accomplished.

The *Bangkok Post* stories seem to be intended to demonstrate that, despite significant hardships, women have a "moral responsibility" to improve Thailand's rural environment.[29] Below are brief descriptions of Karnjanatawe's human interest stories that illustrate the range of women's experiences, emotions, and ideas. To put it another way, the "fluff" stories seem to be the only way to understand how women's roles *could be* expanded in the future. The map in Fig. 19 shows where the women in the feature stories were located.

Nantarika Chansue was inspired by her father to pursue a scientific education at one of Thailand's most prestigious universities, Chulalongkorn University. She received financial support for her research from a prestigious international organization, the International Union for the Conservation of Nature (IUCN), and the University of Salzburg in Austria. Based near Bangkok, she advocated for the Zoo and Wildlife Society of Thailand, which apparently receives minimal financial support from the Thai government. It was clear that without international networks, Chansue would not have been able to advocate for the environment.

In responding to environmental degradation in their local communities, **Korn-uma Pongnoi** and **Maliwan Nakwirot** led protests against national governmental agencies and private companies that had prioritized economic

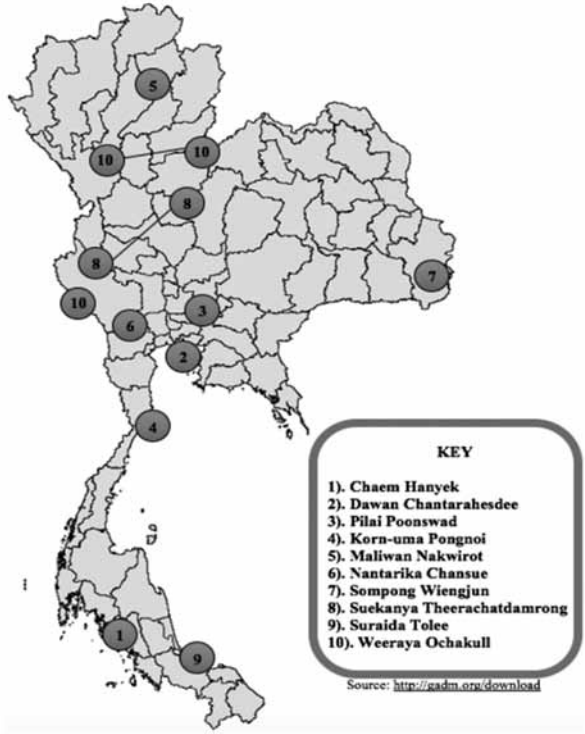

Fig. 19. Map of Location of Female Activists in Thailand. *Source*: Christoff and Sommer (2018, p. 276).

development over the health and welfare of the people. Pongnoi's husband had been murdered for his environmental activism, and she carried on his legacy; and Nakwirot protested against coal-fired power plants after she, her son, and many members of her community developed breathing problems. *The Bangkok Post* described them as "timid housewives" who became empowered community leaders.

In the male-dominated field of forestry, **Weeraya Ochakull** became a forest ranger and patrolled national territories in protected land areas to prevent farmers from engaging in illegal logging. As a government employee, Ochakull could not become involved in helping poor communities because "protecting our forests" meant that the farmers inevitably would suffer from not being able to expand the boundaries of their communities. On the other hand, **Suekanya Theerachatdamrong** had a different reason for becoming active: her family suffered from water polluted by toxins, which motivated her to join a network that connected 480 communities nationwide (titled "The Community of Networks on Social and Political Reform") and support Rangsut University's Central Institute of Forensic Science to push back against politicians and government bureaucrats.

Pilai Poonswad was the only one of the ten women who developed networks that included domestic *and* international non-governmental organizations. She was a scientific researcher who devoted her life to preserving the ancient hornbill species; and developed close connections with international environmental organizations through the Rolex award and with colleagues at Meijo University in Japan. She traveled throughout Asia and Africa, including the Wildlife Sanctuary in Malaysia. At the national level and within Thailand, Poonswad worked with Mahidol University, the Thailand Hornbill Project, KhaoYai National Park, the National Center for Genetic Engineering and Biotechnology, and the PTTE (a national energy company that promotes sustainability). Poonswad focused her attention at the national level and purposely remained distant from local officials who offered some protection to poachers and illegal loggers.

On the other hand, **Sompong Wiengjun**, a fisherwoman, did not ally with international organizations. Although the World Commission on Dams recognized her activism and commitment, Wiengjun stayed in her rural community and, from there, worked with national level organizations (such as the Assembly of the Poor, the People's Movement for a Just Society, the Four Regions Slums Network, and the Northern Farmers Federation). She remained neutral about foreign involvement in national development. In fact, the work Wiengjun pursued required challenging politicians and institutions, including the Electricity Generating Authority of Thailand. In this case, the Thai government had blocked environmental protection strategies.

Finally, **Chaem Hanyek**, **Dawan Chantarahesdee**, and **Suraida Tolee** were keenly aware of the need to connect local communities to national and international environmental organizations. Hanyek's objectives coalesced around preserving the community forest, respecting the ancestral homeland, and attracting tourism. Chantarahesdee also focused on the "centuries-old community" and had a keen sense of how to negotiate between opposing interest groups at the national level and effectively challenge international organizations such as the Asian Development Bank and Japan's Overseas Economic Cooperation Fund. (It's not surprising that Chantarahesdee majored in political science at Ramkhamhaeng University.)

Suraida Tolee had a transnational religious affiliation: As a Muslim, she expressed her commitment to "Allah [who] gives us natural resources." While her life is extremely difficult – her son was beaten unconscious by the police, and she was forced to live in a forest to avoid arrest – Tolee developed important alliances against the Thai-Malaysian gas pipeline and gas-based industries. Originally, she worked for the governmental Tambon Administrative Organization (TAO) and subsequently became vice president of the Sea Conservation Association of Chana.

In sum, the *Bangkok Post*'s featured stories represent forms of political activism that are not reflected in women's narratives in Belize, Guatemala, Colombia, and Vietnam where our oral history narratives focused on how women worked at local levels to address problems that were made worse by weather-related disasters. However, these countries all confront colonialism and patrilinear power structures. On the other hand, glimpses of these few women environmentalists

in Thailand demonstrate that transnational advocacy networks exist to support social change and challenge the status quo: In-person interviews about social, economic, and political disparities do exist … even though they are buried in the "lifestyle" section.

7. *Progetto Quid* [Project Quid]/Italy

In the middle of the spring 2020 semester, my university – Stony Brook University – transitioned from in-person to online learning. COVID had sickened students who had families in Queens, a borough in New York City, which had one of the highest fatality rates in the United States. One of my first-year students, LEIO KOGA, who lived in the New York suburbs near our deserted campus, was supposed to help me organize a seminar on the *Bhungroo* irrigation project. Instead, we responded to the pandemic by devising a project that would enable her to research women's roles in climate change adaptation and conduct *Zoom* interviews with a few professors at our university and previous awardees in Italy and Uganda through the UNFCCC's *Women for Results* program. One of those interviews was with **Valeria Valotto**, in Verona, Italy, then Vice President of *Progetto Quid*.

As a first-year student exploring different majors, Leio wanted to learn about "how individuals 'at the top' impact the way an organization runs." To develop her interview questions for the UNFCCC awardees, she first talked to two professors, one in history and the other in sociology and reported the following:

> If Dr. Hinely (a historian) and Dr. Sommer (a sociologist) were looking at the same issue of women's leadership roles, Dr. Hinely would study past cases to try and find parallels between the time frames of the past and present, whereas Dr. Sommer would look at the current family and societal dynamic that influences a woman's ability to have power.

With this information, Leio proceeded to develop interview questions to learn more about the "digital divide and lack of recognition from the global community." Her interview with Valeria Valotto focused on how *Quid* became a women-led non-profit organization to create a fashion brand, *Progetto Quid*, and provide stable employment in the fashion industry for disadvantaged and vulnerable populations, which included women who had suffered domestic abuse, those who had completed prison terms for drug and alcohol-related crimes, and migrant sex workers from Nigeria and the Ivory Coast. Before the interview, Leio learned how *Quid* used discarded designer fabric to make fashionable clothing. In her TED talk, the original creator, Anna Fiscale, stated that she chose to become an entrepreneur at 25-years old instead of "joining the world of international organizations." Obviously, her career path was quite different from, for example, Kalpana Giri, who worked in Vietnam implementing gender mainstreaming programs for USAID. In her TED talk,[30] "The Fragility Factor: from societal challenge to social wealth," Fiscale presented her vision of "redesigning people

and fabrics" to redefine fragility not as an individual weakness, but as a universal strength. In 2013, Fiscale registered *Quid* under Italian law as a social enterprise.[31]

Leio investigated several sources to learn about *Quid*'s production and design process, described below:

In 2012, Quid created clothes for their own brand. While the original idea was to re-style unsold pieces of clothing, the team soon discovered that fashion companies actually had a surplus of leftover cloth. Furthermore, this cloth was for top fashion brands, which guaranteed high-quality, which allowed Progetto Quid to create high-quality pieces as well (Komatsu 6). Fiscale and her team then created two types of products using the leftover scrap: the first was clothing branded only Progetto Quid, and the second was co-branded clothing made in collaboration with partner companies (Progetto Quid 3). Currently, Quid produces their own Progetto Quid collections which are sold in the 6 stores located across Italy, on their online store, and in over 90 multi brand stores. In addition, Quid creates "co-branded products for other brands that then distribute [the products] in their own distribution channels." (Houston 3)

Although Quid focuses on providing women who struggle with disabilities or who are inmates, ex-convicts, or recovering addicts, Quid is willing to hire anyone who strives for a new beginning and is categorized as a disadvantaged or vulnerable worker under Italian law ("About Quid 2019"). This includes "victims of human trafficking, victims of domestic violence, migrants, refugees and asylum seekers, people who are not in employment, education, or training (known as NEETs), and long-term unemployed individuals" ("About Quid 2019"). As of 2019, Quid employs 130 people from ages 19-65 and from 14 different countries. ("About Quid 2019")

Leio's *Zoom* interview with Ms. Valotto, who was based in Verona, revealed how important it was for *Quid* to (1) understand the social and economic landscape of the geographical region where they operate, (2) develop an expertise in the legal aspects of hiring migrants from the Global South – both men and women who support their families, and (3) develop jobs in the fashion industry, an industry that unfortunately generally indulges in unethical labor practices. Ms. Valotto's work strikes me as a kind of Human Relations part of the project – like HR offices in universities, corporations, government, etc. Below is Leio's analysis of her interview with Ms. Valotto, and her brief assessment of the long-term success of *Quid*'s business model:

According to Ms. Valotto, demographic challenges in the Verona region in Italy have changed over time. The first change is the increasing number of migrants and asylum seekers. In general, Verona is one of the most diverse areas along with the Lombardy region. With diversity comes tension and resistance to diversity in the form of politics and discrimination, such as workplace discrimination. Migrant workers have less upward mobility opportunities, but this depends on education and language proficiency. Migrant families, and especially migrant children often struggle with their education because their parents may not be able to support them without proper skills or language fluency. The social divide is also apparent, not just between social classes, but within families and specifically the gender divide. In migrant families, the man is considered the breadwinner, which leaves the woman to stay at home and take care of the children. This setup is tough for women, who

have little money of their own, little independence, and barely any free time to fulfill their own dreams. This is one of the reasons why Quid targets women as their main employees, in order to give them a chance to make their own money and pursue the things they truly want to. These challenges also reflect the demand for more work integration social enterprises such as Quid.

Ms. Valotto pointed out that Quid has been very responsive to the change in demographics, specifically regarding the influx of migrants in the Verona region in recent years. Under Italian law, Quid is a Type B social cooperative, which means that at least 30% of their employees must be categorized as "protected." Currently, 34% of Quid's employees are considered part of the protected category of workers, and 37% of their employees are considered disadvantaged workers. The rest of their workers are people who have a regular history of employment (Fig. 20).

The first change they made to their employment team was extending opportunities to young men, mostly asylum seekers, after realizing how many migrants were

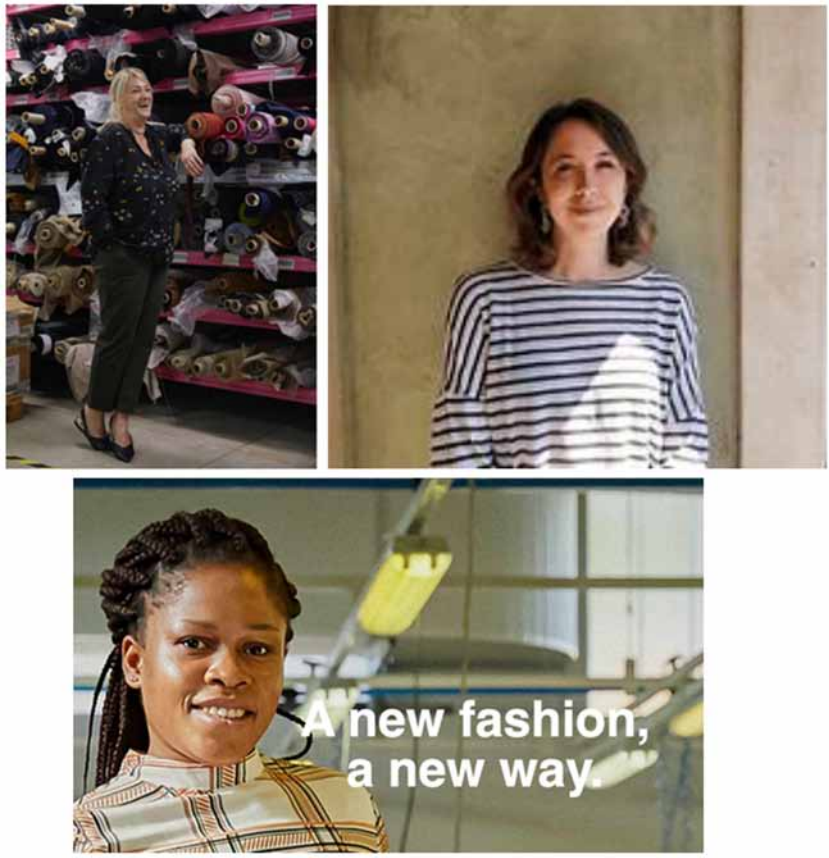

Fig. 20. Photos of Progetto Quid – Valeria Valotto (Middle). Copyright © 2020 Courtesy of Progetto Quid.

coming into the Verona region. In general, Quid has created more work opportunities and apprenticeship opportunities in collaboration with the refugee welcome center to respond to the new demand for job opportunities. In addition to this effort, last February, Quid decided to launch their own welfare program to help their employees in a number of areas. This is part of a new strategy Quid developed in recent years, after they realized that connecting their employees to services or support that helps them realize what makes them happy is more important than just financial empowerment, and also has increased the likelihood of their employees to continue to work for Quid. Some of their services within their welfare program includes digital literacy support, where employees can access online procedures for subsidies, a welfare officer that helps with housing and paperwork, and a social counselor.

Within Italy, it is possible for Quid to expand its organization to Milan and the region around Milan, another fashion hub with similar demographic issues to the Verona region. After speaking with Ms. Valotto, it is clear that in order for the social enterprise to succeed, the area of implementation must be known for and already have a thriving fashion industry. Quid's main clients are small to medium social enterprises and multinational companies, as the leftover fabric that Quid uses comes from these groups. Therefore, without a solid developed fashion industry dominating the region and the guarantee of leftover fabric, Quid's business model may not succeed. On an EU scale, Portugal, Spain, and Greece have strong manufacturing companies, and therefore it could be possible to replicate Quid's business model in these countries. These three countries also have similar demographic issues related to socioeconomics, as well as migrants seeking asylum and work.

In developing her research paper, Leio and I talked about whether Quid's business model could be transferred to countries in the Global South. A chunk of the Global South population is migrating – or seeks to migrate – to the Global North. In other words, would the founder and creator, Anna Fiscale, be able to address the "fragility of human life as part of our ecosystem" in regions that are most vulnerable to climate change disasters? Leio provided the following assessment of Ms. Valotto's reflection on the possibility of setting up operations in Bangladesh:

Without a reputation for fashion and a strong industrial society, it is likely that Quid's business model would falter in the global south. However, in posing this question to Ms. Valotto, she said that if it were possible for Quid to maintain a substantial amount of leftover fabric and ship it to and from a country such [as] Bangladesh, it would be possible to extend beyond Europe. The fast fashion industry creates a significant amount of waste and causes serious environmental problems such as water pollution. It is known to be an unregulated industry in terms of the environmental consequences. In Bangladesh, there is also an intersection between the fast fashion industry and disadvantaged women as there is in Verona. Economically, Bangladesh is considered a developing region, with 10.4% of the employed population below $1.90 PPP a day ("Basic Statistics, Asia and the Pacific"). In such a situation, women especially are left in a predicament; they have no choice but to find jobs in unethical industries, such as the fast fashion industry, to make money. These workers are forced to work in terrible conditions; wages paid to workers in the industry are insufficient to live on, factories typically violate building, safety, and sanitation laws (Hayashi

201), and workers are not guaranteed a long-term working contract (Stafford). If Quid created a factory based in Bangladesh, this could have a powerful impact on the lives of the women, and even men currently working in clothing factories.

Quid will have access to unused fabric that could be used to create the same unique, sustainable, and ethical collections that are currently being made in Italy if there is a demand for high quality clothing and designer brands. Their two-tier model of redesigning vulnerable women's access to the job market while redesigning fashion – could be integrated into Bangladesh using the same or similar units: production and packaging, logistics, finance and administration, styles, retails, and communication (Valotto 3). Of course, there are many factors that must be taken into consideration, such as the lack of demand for designer clothes in Bangladesh. Therefore, the clothes should be sold in small quantities in Bangladesh, and the majority of the collections sold in Verona or directly online. Not only would this allow the workers to earn their fair wages, but it would allow them to also gain recognition for their work, and for the changes in workers' rights that should be made in the entire nation.

At the end of the spring semester, Leio decided to look for a program at a university that would allow her to study labor law. She had learned that part of a university education is to explore beyond the classroom, just as Erin Byers did in Guatemala and Colombia. Erin and Leio formulated their own projects, which I believe led them to consider the ways young people respond to challenges in today's world. Leio wrote:

> I would like to say that I am interested in inspiring those of my generation to follow their dreams in terms of making the world a better place, especially for those who are underserved. Also, I want my readers to know that, after my freshman year at Stony Brook University, where I originally intended to major in political science, I realized that I want to study legal issues pertaining to human rights – in the hopes that I will be able to work as a litigator. Taking steps into what I believe is the right direction for me in order to make the world a better place, I decided to transfer to Cornell University and begin my sophomore year studying industrial and labor relations, which would allow me to learn about labor law and workers' rights as "human rights," and address the challenges of disadvantaged groups such as women and immigrants.

Postscript: As it turned out, after working as an undergraduate research assistant for the Gender Justice Clinic at Cornell Law School – and authoring several legal memoranda on violations of human rights by the United States Peace Corps in collaboration with the American Council of Civil Liberties Union (ACLU) – Leio decided to pursue a Master in Human Rights and Humanitarian Affairs at Sciences Po in Paris beginning in the fall of 2023. She continues to explore ways to combine law, investigative journalism, international human rights, sustainable development, and women and security. Clearly, career paths are not linear and we all need to be open and flexible to empower women and ameliorate the effects of climate change.

8. Solar Age Project/Türkiye

In 2021, the same year that Andrea Monzón Juárez won the GJCS award for *Todos Juntos* to set up mealworm farms in Guatemala, **Lucie Gamond Rius**, accepted the GJCS's technical solutions award for the non-profit, *Imece*, who established the *Solar Age Project* in Türkiye to help refugee women from Syria produce and use solar batteries. Her project established a 10-day theoretical and practical training course in solar energy and trained 20 refugee women to build EFE (*Energy For Everyone*) solar batteries that were sold on the local market. In addition, the EFE batteries were intended to equip refugees "on the move" with flashlights to send SOS signals and charge mobile phones to facilitate communication. This was a significant initiative because, as of 2019, there were over four million displaced persons in Türkiye and only 5% in official settlement camps. Also, to provide a sense of community within the unofficial settlements, the *Solar Age Project* offered education and language classes for refugee children.

Having studied in Istanbul for several years and after graduating from the Sorbonne with a graduate degree in International Humanitarian Law, Lucie established a chapter of *Imece Inisifiyati* in France to support projects in Türkiye. *Imece Inisifiyati* (translated as "solidarity and initiative") is a small non-profit organization based in Izmir "to support, educate, and empower displaced people in the forgotten settlements of Türkiye." It had expanded its operations in France and Germany to coordinate a network of a few hundred volunteers from Japan, Argentina, and Brazil who help distribute food, teach basic language skills and health care to refugee children, and train refugee women in technical skills to enable them to make a living in the historic coastal town of Çeşme in Izmir Province. The *Solar Age Project* was inspired by The Barefoot College in India, a community-based organization that has been providing basic services and solutions to problems in rural communities since 1972 – to help communities become self-sufficient and sustainable. Most recently, it focuses on solar energy, water, education, health care, rural handicrafts, people's action, communication, women's empowerment, and wasteland development.[32] Similarly, the *Solar Age Project* in Türkiye is only one of eight programs within *Imece Inisifiyati* that addresses climate change and women's financial independence.[33]

My interview with Lucie is the first of potentially many oral history interviews to understand how this project evolves to nurture trust and build support within refugee camps that are not officially recognized by the Turkish government. In fact, another one of the eight *Imece Inisifiyati* programs, the "Online Solidarity Seminars" offered in the summer of 2022, includes social entrepreneurs, storytellers, and filmmakers who may document the experiences of those who contribute to and benefit from the *Solar Age Project*. Collecting oral histories from refugee women in camps near the historic coastal town of Çeşme in Izmir Province (in the Çiftlikköy neighborhood) in Türkiye and from the numerous volunteers who support Imece's ideal, "Empathy Makes Us Human," is in line with the reflexive feminist methodologies I introduced in the previous chapter. *Imece's* programs are a significant departure from the Christian-based organizations Andrea Monzón Juárez refers to in Guatemala because *Imece* brings together the stories

of those who volunteer to work in the programs and those who receive assistance. Furthermore, *Imece*'s principles of empathy seem to align with that of *Quid* in Italy, as Anna Fiscale describes herself as an environmental and social "fragility entrepreneur."

In our interview, Lucie discussed the many moving parts within *Imece* and how this has affected the *Solar Age Project*. As a small-scale project that employs at most a dozen full-time staff, *Imece* responds to emergencies within the refugee population who live in shelters without electricity, water, food, and warm clothing. In the following passage, Lucie elaborated:

> It really depends on which program we are talking about because we are currently doing a lot of [winter] distributions in the settlements and so it's thousands of women and children it's approximately like 8,000 families.
>
> In the livelihood program, approximately 200 women participated and that included the first aid program on how to access Turkish health services and the basic vocabulary women need to know when they go into the emergency room and don't know how to say that they are pregnant or this kind of things.
>
> […] The Solar Age Project also has different steps. I think it was 150 women who did the first step but really less women in the second step also because we introduced two different solar batteries – the old version and new one and for the new one there's maybe 10 or 15 women who did it.

While Lucie and her colleagues wanted to teach the women about solar energy in places where they could bring their children and learn how to assemble the solar batteries, they also had to find them alternative sources of work. She described the workflow as follows:

> Our workshop is divided in two parts – one for the solar batteries and the other where we do work for enterprises in Izmir who need small electrical things to be built. They give loads of material, the women build it, and then they pay us. So, one part of our operation is for the solar batteries and the other part is for more independent and constant work. The ladies who come to work already have the technical training and we have a workspace for them.

To develop their operation, Lucie and other full-time staff in *Imece* participated in a six-month incubator training program through a French non-profit, *Singa*,[34] that provides support for building a business specifically for projects that serve migrants. At the same time, *Imece* maintains a distance from the Turkish government because most migrants are not formally registered. *Imece* is careful about the organizations it works with and, except for *Doctors without Borders*,[35] it eschews connections with well-known international organizations while

maintaining contacts with small local doctors and businesses. At times, the Coast Guard asks *Imece* to donate food and supplies but, in general, the UN Refugee Agency (UNHCR)[36] provides those services. Like *Quid*, the *Solar Age Project* does not target large-scale international organizations for funding, even though they obviously need cash infusions to support their programs (Fig. 21).

Lucie also expanded her description of the work she does to include other invisible populations such as the historically nomadic Dom communities that face a great deal of discrimination in Türkiye today. *Imece* is committed to providing food and health services outside of the Turkish government. She stated:

> They were already having a nomadic lifestyle in Syria and were already living in quite a precarious situation but now, even more, they are refugees in another country and a marginalized population … so they're not registered. Because they are agricultural workers, they go "under shield" [underground] and they are working but with very low salaries and then they go to another place for a month and then they move on. The registration in Türkiye is blocked for the Dom people so it's difficult to go to a hospital. They don't know how to read or write.

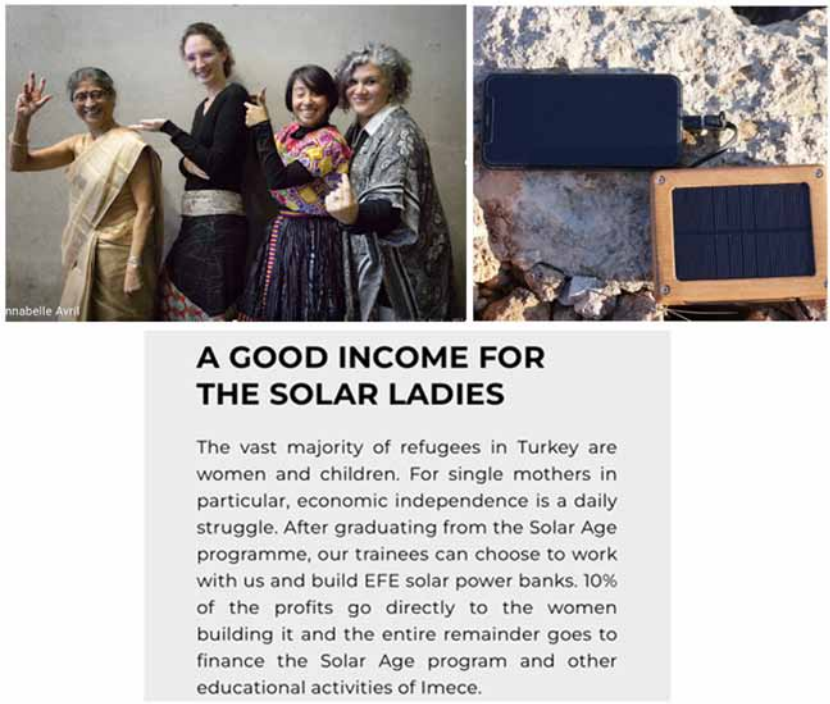

Fig. 21. Photographs of Lucie (second from the left) at the Gender Just Climate Solutions Awards (2021); to the Right, Solar-powered Banks. Copyright © 2021 Courtesy of Annabelle Avril, Photographer for the Women and Gender Constituency.

The reason this is important is because it is consistent with *Imece*'s approach of responding to individuals who need emergency relief. In contrast to the UNHCR and *Doctors without Borders*, which have larger scale operations, *Imece* seeks to build a communal "village" near Çeşme for staff, volunteers, and a few migrant families. According to Lucie:

> [We figure out] which family needs more help … as we are small and we are in close contact with the people we are working with, we are really adapting the situation we could have people calling to tell to say OK my child has a handicap, and she needs to access school and we would work on her specific situation.

Finally, it is worth noting that spanning out in many different directions to help different types of Syrian refugees takes a great deal of energy. My interview with Lucie revealed how much she loves her work and that she (and others) are overextended and exhausted. She stated:

> I have so much energy but, right now, we are just so tired – I mean the whole permanent team is so tired that we decided to have volunteers stay more six months … we're trying to provide them with accommodations. Right now, people stay between three and six months. We provide them with the accommodation and ask them to pay for their food because we cannot pay.

Postscript: Lucie updated the numbers in another interview with me in December, 2022. It turns out that the *Solar Age Project* shifted focus away from Syrian refugees and toward refugee women from the Congo and Cameroon who also were living in camps in Türkiye. A total of 48 of these women participated in the project and 30 have completed the entire training program and earn a living helping to assemble the solar batteries and doing other types of electronics piecework. She and other staff members continue to work with nomadic Dom families: With funding from a German foundation, they are converting a bus into a schoolhouse so that Dom children have a warm and secure place to learn. The *Solar Age Project* also received funding to establish a woodworking shop where women learn to build frames for the solar batteries. As of December 2022, to provide aid to earthquake victims, *Imece* has distributed 320 batteries, free-of-charge, to women in Türkiye, Bosnia, and Ukraine. And it continues to find ways to help migrant women who are victims of violence. Instead of staying in Türkiye full-time, Lucie splits her work into three-month increments in Türkiye and France, which allows her to identify women's needs in various geographical regions. I imagine that this helps her (and others) rejuvenate after working on "the front lines."

The remaining two case studies, in Africa, one in Uganda and the other in Tunisia, furthers our understanding of how other diverse settings create an intricate mosaic of experiences that do not provide a direct line to women's empowerment. Nevertheless, the web of connections in the oral history interviews may energize social change for communities to survive in the face of new challenges.

9. RUCODE/Uganda

In the spring semester of 2020, LEIO KOGA structured her independent study research to learn about the way women's empowerment in climate change adaptation programs differed in the Global North and the Global South. For the Global North, her case study, previously discussed, was *Progetto Quid* in Italy. After examining approximately one hundred projects on the Women and Gender Constituency's (WGC's) listserv and thirteen other projects promoted by the UNFCCC's *Women for Results* program – she selected a project from the Rural Country Development Organization (*RUCODE*) in Uganda, "Women's Empowerment for Resilience and Adaptation Against Climate Change." One of the reasons she selected it was that, like *Quid* in Italy, RUCODE aimed to develop a two-tiered business model – to support women's empowerment and environmental sustainability.

Leio interviewed **Mazumira Menya**, who had helped establish RUCODE in the local districts of Kamuli, Buyende, Iganga, Kaliro, and Jinja in 2004. Prior to that, Mr. Menya had worked as a field officer with the United Nations' World Food Program (WFP) between 1998 and 2000 and graduated from Makerere University with a master's degree in computer science and information management while working as a project manager for VEDCO (Volunteer Efforts for Development Concerns) between 2001 and 2004. With other students and colleagues who lived in the region, he started RUCODE to introduce modern organic farming methods and a microcredit lending system and, to address social problems, implement programs to eliminate domestic violence. By 2016, RUCODE had received international recognition from the UNFCCC and a small grant from the United Nations Development Program (UNDP)[37] to:

> […]support resource-poor women communities in the rural areas in the river Nile Basin in Busoga, build a sustainable model to combat land degradation, protect and preserve natural resources in wetlands in order to mitigate climate change over a long period of time and also improve on their livelihoods through value-chain production and marketing of wetland products, increased commercial competitiveness, maximizing profit benefits, increasing household incomes and attracting communities away from wetland crop production in order to preserve and protect the wetlands.[38]

From her interview, Leio learned that, in Uganda, paradoxically perhaps, women's empowerment could only occur when men took the lead, as Mr. Menya described, to alter women's roles and enable them to become financial managers rather than continue solely as rural laborers. This was a radical departure from the male-dominated framework throughout Africa. In essence, these new programs gained international recognition via transnational advocacy networks: RUCODE's "Women's Empowerment for Resilience and Adaptation Against Climate Change" program garnered the financial support of international development organizations, including the UNDP-GEF, CARE International, Plan

International, CORDAID Netherlands, and USAID. (See the glossary for more information.)

In the oral history interview, Leio noted Mr. Menya's frustration – that the developed world didn't recognize RUCODE's groundbreaking achievements, which would lead to more research to better understand the social impact of environmental programs that involve women in Sub-Saharan Africa. In her final report, Leio cited the following statistics on the program:

[… that it was] a women-led association, representing more than 250,000 women, who pooled together their individual savings to generate a fund of USD 2,875,752 … women involved in this initiative borrow from this pool of savings to invest in innovative, scalable and replicable activities that catalyze action toward a low-carbon and highly resilient future"[39] *As a significant departure from traditional roles, women gain control over the land that they are using and can own property by generating their own income … during the past five years, more than 1,800 hectares of wetland has been conserved … more than 34,000 energy-saving stoves have been constructed in thousands of households, reducing deforestation by 8%.*

She also described Mr. Menya's reflection on obstacles that were not in official reports or documents, which included the struggles women faced in gaining financial freedom – that the Ugandan government did not enforce anti-corruption laws that could help women get training and assume higher-order responsibilities to become involved in all aspects of the business. He also noted the revolving door created by donors and how this affected female independence. Mr. Menya wanted Leio to know that international partnerships had to have strategies that could effectively measure success and, as a result, provide more financial support. Here is that part of Leio's analysis:

Women and children are most affected by these changes, and rural women especially have less financial freedom. Policy changes at the district level are another issue. Even though the government in Uganda is responsive to the agenda of the social enterprise, the lack of government enforcement of policies at the local level severely hinders the ability of rural women to participate in business sales and marketing. Essentially, women have the cutting edge in agricultural output and production, but when it comes to marketing, the percentage of women involved is very minimal, and policies tend to correspond more toward men. The financial difficulty for women lies in the fact that for women to have a profit margin, they must participate in all parts of the value chain: production, marketing, and export. Women are only involved in production; and RUCODE is working to change that to include women in all three parts of the value chain.

Another challenge is the lack of institutional capacity. As important as donors are to implement RUCODE's project, they usually come with their own goals that may not align with RUCODE's, or the donor after them. For example, one donor comes to help RUCODE develop 3–4 yards of land for output, but they come with their own goals that they want out of the project. When that donor leaves, another donor comes with its own agenda, and the previous project cannot be continued. Therefore, it is very difficult to simultaneously promote RUCODE's vision and connect the projects with a donor.

The money which women borrow from their pool of funds, about $5–$10 per week, is not enough for investing in enterprises. It's not enough to attract

Fig. 22. RUCODE in Uganda: Women's Empowerment for Resilience and Adaptation Against Climate Change. Mr. Menya is in the audience to the left. Copyright © 2020 Courtesy of RUCODE.

external financial institutions and banks. Furthermore, the lack of connection between women who are involved in climate change adaptation and mitigation across the world is a barrier that RUCODE hopes to break by continuing to expand their project and gaining worldwide recognition through international competitions (Fig. 22).

In the interview with Mr. Menya, Leio gathered some basic information on how RUCODE decided to work with a prestigious American-based non-profit and policy organization, Innovations for Poverty Action (IPA),[40] which has helped over twenty countries in the Global South assess the effectiveness (or impact) of programs that aim to reduce poverty. Further interviews with Mr. Menya may yield more information on the actual measures used – especially in IPA's expertise in conducting randomized controlled trials (RCT). However, what is important here is that IPA's assessments have led RUCODE to establish a track record of data collection that helped Mr. Menya gain external support to finance their projects and more recognition on a global scale. It is likely that conducting oral history interviews with Ugandan women involved in these projects would help the public learn more about how women became empowered by taking on leadership roles. Perhaps the oral histories would demonstrate RUCODE's objectives. Leio provided the following analysis:

With greater financial stability, RUCODE can be upfront with their potential collaborators about their own social mission and what they want from a partnership: an organization that will connect green energy and the protection of the environment to women's empowerment, help to measure the reduction of carbon emissions, and would be willing to publish or share information about RUCODE to the public. With these components, RUCODE can be recognized for the efforts they are taking, because currently, many of their achievements are failing to be acknowledged by groups outside of Uganda.

Leio also asked Mr. Menya whether RUCODE's strategies could be used in other developing countries in the Global South. As noted early in this chapter, Dauvergne and Shipton's study of transnational advocacy suggests that South–South NGOs are more effective than North–South NGOs in building solidarity and confronting exploitative practices. Here is Leio's analysis:

After speaking with Mr. Menya, it was clear that RUCODE could be replicated in the East African region beyond Uganda, including countries such as Ethiopia and Somalia. This is a region where women need support – financially and socially – and with this demand, there is a great possibility to take on the challenge through RUCODE's efforts. Additionally, the culture across East Africa is relatively similar, allowing an easy integration of methods such as agro-market development for small farm holders. With very similar socio-economic challenges spread across the East African region, expanding RUCODE into this region is an achievable goal. However, this would require even more funding from external institutions, as well as a long-term partnership with an organization that has the tools to measure RUCODE's impact on carbon emission reductions.

Mr. Menya also mentioned that RUCODE's strategy could be replicated in India. This effort would also require a significant amount of funding and guidance, but there are parallels in the climate change vision in both Uganda and India,[41] *as well as the need for financial support for women in local villages. With the large gap in socio-economic status between its citizens, India has some regions struck by poverty.*[42] *Climate change poses a particularly larger threat to these regions, and is especially dangerous for women, who are more likely to have less access to resources. There is also a heavy reliance on agricultural output to provide household income, similar to Uganda, and these factors create a gap that can be filled by RUCODE's initiatives. There is already some evidence of this in India; social enterprises and NGOs are being created that utilize almost identical methods to take on climate change while simultaneously empowering local women. Another factor that should be taken into consideration is the impact of European colonialism on both Uganda and India that has shaped these regions in different ways. While there are overlaps in the culture of both regions because of the European foundation, these regions have formed their own unique cultures which must be taken into consideration when implementing organization outside of the original location. From a general perspective, the presence of a patriarchal system and society, which creates marginalization of women in many aspects, is a problem that is found in both regions, and can be resisted in corresponding ways. Thus, it appears to be likely that RUCODE will be able to expand into this region and improve the lives of local villagers, including men, women, and children.*

Leio's oral history interview supports Dauvergne and Shipton's thesis that Global North NGOs must adjust their roles to function as "outward facing advocacy networks" rather than presenting as paternalistic authorities. Furthermore, it provides a present-day example of the ethical framework that Bottigheimer discusses in her work on medieval fairy tales – that women's narratives *do* change over time, and that there *is* a correlation between women's loss of reproductive rights and their exclusion from the moneyed economy, which restricts their chances of pursuing an independent livelihood. Finally, as a student embarking on a career in labor law, it is significant that Leio's oral history interview on women's social and environmental vulnerabilities brings fresh perspectives that I have no doubt she will fully develop in the future.

10. AEEFG/Tunisia

The last oral history interview, conducted by YASMEEN WATAD, an undergraduate at Stony Brook University, focuses on an initiative that began in Tunisia in 2011 after the Tunisian Revolution in which environmental science expert, **Semia Gharbi**, established the Association for Environmental Education for Future Generations (AEEFG) as a regional hub for the International Pollutants Elimination Network (IPEN). In the fall of 2021, Yasmeen became particularly interested in Semia's work because of her family roots in the Arab world. Originally interested in irrigation projects in Gaza, Yasmeen's extensive research, with the help of a seasoned reference librarian, didn't turn up any climate change projects that dealt with women's empowerment.[43] It turned out that coming up empty handed was indicative of the state of the field. In fact, the Middle East and North African (MENA) region had been underrepresented in the UNFCCC.

Several months after Yasmeen conducted her research, in June 2022, I was asked to be a keynote speaker at a conference co-sponsored by Oxfam International and Kvinna till Kvinna [Woman to Woman] (a Swedish foundation that promotes women's rights in more than 20 war- and conflict-affected countries in the Middle East, Africa, Europe, and the South Caucasus) titled "The Common Agenda: Understanding the link between Gender Equality and Climate Justice." In preparing my speech, I recognized that MENA programs were just beginning to emerge on the international stage: I had been asked to present a definition of climate justice, which I explained it as including four components: (1) an equitable sharing of burdens and benefits, (2) dismantling systems and practices, (3) respecting intergenerational equity, and (4) including underrepresented groups. I also quoted the internationally recognized Bangladeshi environmental scientist and researcher at Syracuse University, Dr. Farhana Sultana: "Climate justice fundamentally is about paying attention to how climate change impacts people differently, unevenly, and disproportionately, as well as redressing the resultant injustices in fair and equitable ways."[44]

In her sophomore year at Stony Brook University, Yasmeen was studying Catharine MacKinnon's work on radical feminism and how laws and policies that enable men, and thus govern women, could be rewritten.[45] She concluded that the only way to liberate women was to acknowledge their role in reproduction and grant them compensation and accommodation in the workplace.[46] As she moved toward declaring a major in political science and considering law school, Yasmeen signed up to take courses on "Gender issues and the Law," "Women, Islam and Political Change," and "Racism and Ethnic Relations." Her *Zoom* interview with Semia Gharbi was part of an independent study research project in the fall of 2021 in which she hoped to assess the potential of gender and climate change initiatives to change the lives of women in Tunisia and, more broadly, the Global South.

Yasmeen's oral history of Semia offered candid reflections on women's empowerment that one would not otherwise find in scholarly research studies

or official reports from international organizations. Semia focused on figuring out the best way to educate women and youth in Tunisia and complement the United Nations' "sustainable development goals." To influence policy makers, she worked with the help of the Tunisian Ministry of Education to restructure curriculum – from grade schools through universities – in the life sciences, environmental studies, and geology to show the value of eliminating lead in paint, amalgam in dentistry, pesticides, and hazardous chemicals in makeup products. In addition, Yasmeen found that, in 2018, Semia began working with the Women Environmental Programme (WEP) that is supported by the European Union through the Women2030 project. She reflected on why climate change programs are fragmented and do not provide long-term solutions to those who need the most help. Below is Yasmeen's analysis:

Semia Gharbi, originally from Tunis, Tunisia, is an environmental science expert and educator. She has a strong multidisciplinary background in education and the environment: she has received a bachelor's degree in life sciences and geology, as well as a master's degree in environmental science from Faculty of Sciences in Tunis in 1996. Her interest stemmed from 1993, when her university launched its first environment program, and she found it different from other programs in terms of the deep analysis and knowledge set needed. As a result, she started an environmental internship position, which began her career. Focusing as an educator, a long-standing goal Semia has is to implement education for the youth and future generations. In an interview with her, she stressed that education is a key platform to change the minds and attitudes to change behaviors of citizens. Formal education is a key vector to change students' vision toward environmental issues.

She is the president and founder of the AEEFG, established in 2011 after the Tunisian Revolution. The AEEFG is IPEN's Regional Hub for the MENA region. IPEN is a global network of NGOs and public interest organizations. The AEEFG aims to use the teachings of life science, environment, and geology to raise students' awareness of sustainable development goals. The AEEFG's main impact is on the elaboration of projects and to influence decision makers. The most prominent projects include working on eliminating lead in paint, amalgam in dentistry, pesticides, and hazardous chemicals in makeup products.

Semia is a teacher-consultant and has personally spurred several projects working toward a better, environmentally healthy life for women and youth. Prior to the AEEFG's founding, she taught geology and was called for consulting positions. The AEEFG is partnered with the Ministry of Education of Tunisia, which lets them work in schools with college students to spread awareness on hazardous chemicals through university programs [and] changing school curriculums.

Firsthand, she explains that she links her work to gender issues by focusing on initiatives to bring a toxic free future for women. Her worldview maintains that women and men complement each other in all aspects of life. They exist in different frameworks and have their own roles in the workplace. Executing a gender-just approach to solving environmental problems, Semia worked with the WEP as part of the Women 2030 project[47] *to train 40 women in Tunisia on gender for 2.5 years since 2018. By changing the approach to environmental problems, good practices can be instilled in communities.*

These initiatives are supposed to contribute to a greater understanding of the global environment, but it could be argued that these instances show us just how vast and difficult to grasp the global environment is. While Semia does some work on an international scale, the majority of her efforts are centered toward national change. Her initiatives show the tiny aspects of change that contribute to the well-being of the planet.

Semia says repeatedly that climate change is transverse and stretches across many integrated sectors. In her experience, she has seen the issue of climate change approached as a fragmented piece, rather than integrated. She insists that education is the focal point of it all: learning from people on the ground and their stories, so in turn the "experts" learn more about them. Sending out grants and donations to communities struggling from the effects of the environmental crisis isn't an effective method to send a message and teach them. When you show people that the problem is related and detrimental to their human health and economic/financial situations, better practices become instilled. What can be taken away from this is that the global environment is an interconnected topic that places a bigger burden on women of color in the Global South (Fig. 23).

In Yasmeen's oral history analysis, the transnational advocacy network that Semia is involved in links Tunisia to climate change programs in which women play a substantial role but do not focus on empowering women. Instead, Semia aims to involve young Tunisians to promote basic changes and raise awareness about, for example, the detrimental effects of lead-based paint through the Ministry of Health. (The literacy rate in those from 15 to 24 years old is 97%.) However, with a failing economy under Tunisia's autocratic president, Kais Saied, chaos likely will ensue. Ironically, in the not-too-distant past, analysts at the Carnegie Endowment for International Peace asserted that the United States could learn from Tunisia, which instituted electoral gender quotas into law and, in 2017, passed landmark legislation to prohibit violence against women.[48] (In 2014, Tunisia passed gender parity laws in which women were guaranteed equal rights

Fig. 23. Photograph of Semia Gharbi (*AEEFG*). Copyright © 2020 Courtesy of the AEEFG.

under the Constitution.) However, Saied's appointment of Tunisia's and the Arab world's first female prime minister, Najla Bouden Romdhane, was intended to legitimize Saied's repressive rule. One wonders how deep this ruse goes: In 2022, three Tunisian ecofeminists had established three different organizations to introduce innovative ways to support women and promote environmentalism – *BlueTN* (Mayssa Sandli), *She is the Goal* (Soumaya Razgallah), and *Chai Kbir* (Mayssem Marzouki).[49] Though these women's organizations are promoted through *UN Women Arab States*, their initiatives do not extend to other countries and regions of the world. Given the country's political instability, it is not surprising that Semia continues to focus on educating young Tunisians.