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Rwanda: Gender Empowerment & Agroecology

Gender Empowerment and Agroecology in Rwanda

By the end of 2018, over 820 million people in the world went to bed hungry. Food insecurity, or irregular access to healthy and safe food, is biggest in Eastern Africa (30.8% of its population), and in every continent on the planet, women are more food insecure than men (“World Hunger”). 43% of women in developing countries work in agriculture (“Women in Agriculture”). If agriculture empowered women, there would be less hunger and poverty, better food and economies in the world (“Equal Harvests” 1; “Women Infographic” 2). An examination of the country of Rwanda follows.

Rwanda is in East-Central Africa. It is small and landlocked and has a population of 121,916,434. 17.6% of the population is urban, and 82.4% is rural (“Rwanda Population”). Since 1955, there has been an increasing trend for rural people to move to the cities (“Rwanda Demographics”), especially to Kigali, which is Rwanda’s largest and capital city. Rwanda has a total land area of 24,668 km. 47% of this land is arable, 10% is permanent crops, 17.4% is a permanent pasture, and 18% is forest (“Rwanda Learning Tour” 10-11). The average farm size is 1.483 acres (Block 2020), whereas the average size of a Canadian farm is 778 acres (“Snapshot of Canadian agriculture” Table 2). Two-thirds of all food grown in Rwanda is for survival. Such farmers have less than 0.5 acres of land each. Rwanda’s main agricultural production includes coffee, tea, pyrethrum (insecticide made from chrysanthemum flowers), bananas, beans, sorghum, potatoes, and livestock. Its largest exports are coffee, tea, hides, and tin ore (“Rwanda Learning Tour” 10-11).

Rwanda is a republic under an executive president with multiple democratic systems that include the Liberal Party, the Party for Progress and Concord, the Rwandan Patriotic Front, and the Social Democratic Party. Paul Kagame is the Chief of State President (“Rwanda Learning Tour” 11). Since 2003, Rwanda has had the most women parliamentarians in the world (now at 61%) (Abouzeid).

Grasslands cover Rwanda’s countryside, which has many small farms, rolling hills, and rugged mountain areas and a chain of volcanoes. Its high elevation makes for a temperate climate, with a daily temperature of 23°C. There are two rainy seasons: February to May and September to December, with daily downpours and lots of sun. Although its average rainfall is 80 centimetres (31 inches) per year, climate change means less rain, more problems with drought, and long dry spells (“Rwanda Learning Tour” 10).

In 2012, the average family size in Rwanda was 4.3 persons (“Household Size” 12). Traditional beehive-shaped grass thatched houses are still common in the rural areas, whereas cities and urban areas have many kinds of houses (Block 2020). Typical Rwandan food is neither spicy nor hot. Most meals are simple, and made from local foods such as cassava, beans, sweet potatoes, millet, plantains, and corn. Country people do not eat very much meat. People keep cows for “status” in their communities. City people eat more meat, especially beef and chicken. Some people also catch and eat fish. Supper is the biggest meal. Snack foods include bananas, mangos, pineapple, and papaya (“Customs and Cuisine”).

79.5% of Rwandans work in agriculture, mostly in subsistence farming. Although the average annual salary is \$700 USD, 35.7% of Rwanda’s population lives on less than \$1.00/day (“Rwanda Learning Tour” 11). Most people have Community Based Health Insurance (CBHI) and it is free for the poor. Community health workers (CHWs) also go to the villages to treat the sick, which makes health care

more available to the poor (“How Rwanda Brought”). Education has been free for all children since 2003; however, as the children get older, many leave school early, which means that fewer students finish high school or go on to university (Nkurunziza). Although there are many new schools and classrooms, and there is a big push for “smart schools”, especially in the cities, 32 % of the population cannot read or write (Trines).

51% of Rwanda’s population has electricity access, either through the national grid (37%) or through off-the grid systems (14%) (“Electricity Access”). Improved roads exist; however, Rwanda’s rural road network remains mostly unpaved and often not accessible during the rainy seasons, which makes it very difficult for farmers to take their food and products to sell in the market (*Transport Sector Strategic Plan 2013 4-5, 28*). 64% of its population has access to basic sanitation services and 57% have access to safe drinking water (“Water, Sanitation and Hygiene”). There are lots of mobile phones, but not everyone has electricity to charge them, which means they have to pay to charge their phone in a public place that has electricity (Fivenson).

Rwanda’s many hills and high acidic soils are great for growing tea. Its high population density, which is the highest in East Africa, means there are many people to work in agriculture. This fact is especially good for growing coffee, which involves much work by hand. Also, many cooperatives have formed over the last 25 years, which has helped coffee farmers to keep more money than before (“Rwanda Learning Tour” 10, 14).

Agriculture is the backbone of Rwanda’s economy. 80% of its population farms, and agriculture makes up 30% of its Gross Domestic Product (GDP). Erosion, destructive rains, and severe environmental degradation means lands in Rwanda are declining in productivity. With a total land area of 2.6 million ha that is less than 47% arable, and the pressure of a growing population (2.8% \approx 26 million by 2050, or 1000 people per km²), the government has recognized its double problem of food security and environmental sustainability (Paul et al.).

Small-holder farmers face the biggest problems. Most have “kitchen gardens” of only 0.5 acres or less to support themselves. Much of the land is hilly, overgrazed, and deforested; and the rains do not come as expected or needed. (Block; Mukamazimpaka). Although the Rwandan standard of living greatly improved from 2006-2011, especially in the Northern Province, 46% of households are below the minimum amount of 2500 kcal per day, with Southern and Eastern Rwanda being the most food insecure (Paul et al.). Further, getting food to and from the markets is very expensive as Rwanda is land-locked. Imported fuel adds to the production costs of trying to transport food on rural roads that are often not all-season or paved (*Transport Sector Strategic Plan 2013 2, 4, 5*).

The last 25 years in Rwandan history has also affected men and women very differently. After a 100-day civil war in 1994, “You had the majority of the dead—men. The majority of the fugitives—men. The majority of the prisoners—men. Who will run the country?” These words, said by Rwandan human rights lawyer Alice Urusaro Karekezi (Abouzeid), describe the starting place of a country following the “absolute disruption” of all social, economic, and political institutions after the genocide (Meader & O’Brien). The role Rwandan women used to play before colonization, one where the mothers used to mentor kings, and where rural women used to hold communities together when the men were away, has influenced the post-genocide pro-women policies that have reshaped the values and expectations for women in the public. For example, before the genocide, women could not grow coffee. Now, they can be landowners and parliamentarians (Abouzeid).

Closing the gender gap in Rwanda is still a work in progress, however, as many men still expect the women to do much of the unpaid care work. This issue affects rural women and those living in poverty

most. On average, Rwandan women spend 5 hours each day doing such unpaid work, compared to the men, who spend 1.5 hours doing it. These same women farmers spend 5.5 hours each day on farming and other activities to make money. Added to the 5 hours they also spend doing unpaid care work, means that these women do not have much time to better their livelihoods. As well, 80% of these women participate in food crop farming and 6% participate in cash crop farming (*The Impact of Unpaid Care* 7-8).

Growing food sustainably for a growing population on less available farm lands while also empowering rural women farmers seems like an impossible task. There is a grassroots solution to this challenge called agroecology. This way of farming gives priority to local food security, environmental sustainability, biodiversity, and social justice. It also considers what is best for individual communities and incorporates local knowledge and expertise (“Agroecology: A Viable Path”; “Women Seed Change”). At the same time, it is very important that women farmers have the right kinds of spaces where they can learn, share, and take part in their chosen activities. Most importantly,

Agroecology is about independence and autonomy. Autonomy means independence and self-reliance. When peasant families can rely on their own saved seeds, diverse food production, and low input agro-ecological production methods then they have an option to live outside the vicious cycle of loans, expensive inputs, and dangers to their health from chemicals. Agroecology is fundamentally about delinking peasants from corporate or external inputs and bringing self-reliance. (Khadse 21)

Working with what is available to decrease a farmer’s workload has to fit the environment and her needs. For example, in a joint project between several international food organizations, rural Rwandan women learned how to build rain harvesting systems. This idea has given the women and their farming cooperatives more time for other things as they no longer need to spend so much time getting water for their daily needs and farms (“Empowering Women Farmers”).

Women’s access to cooking fuel also impacts the extra hours they work. 89.1% of farm households in Rwanda use firewood (*The Impact of Unpaid Care* 12). There is a real need to find alternatives to firewood and more efficient ways of cooking that are simple, not too expensive, and appropriate. These are discussions and decisions that need to happen by and with the women, and improving women’s agency empowers women farmers (“Women Infographic” 2; “Equal Harvests” 1-2). For example, not everyone has the same electricity access. Advocacy work by and with these women is necessary, so that local and government authorities understand why spending money on public electricity infrastructure is so important. This would also help everyone in rural communities to have better electricity access.

In developing nations, many men have been moving to the cities to make money, which means that the women do the farm work (Khadse 15). This fact also means that the women have less time to access agricultural extension services. The government pays for these services and programs, which help and educate farmers. In Rwanda, 53% of men farmers and 46% of women farmers have received such services (*The Impact of Unpaid Care* 12). In order for more farmers to be able to access these services, women need time to attend (Mukamazimpaka) and there must be talk between men and women about gender issues on the farm. For example, there needs to be more discussion about what kinds of services women need to improve the farm jobs that they do (“Women Infographic” 2; “Equal Harvests” 1-2).

Founder and director of the Rwanda Women’s Network, Mary Balikungeri, says that more work is necessary to bring Rwandan men into the gender-empowerment dialogue. Men need to be a part of the solution, which is finding a way together to lessen women’s unpaid care work (Abouzeid). When applied to farming, such liberation of women’s time means better support for families and increased food security for the nation.

There also needs to be agricultural investment for groups of women farmers where they can be leaders and fully participate (“Women Infographic” 1-2; “Equal Harvests” 1-2). An excellent example of this involves the story of Kenyan farmer Lucy Anyango who uses Conservation Agriculture (CA) techniques such as minimum tillage and earlier planting to increase her crop yields. CA practices have maximized her income and given her the ability to get more training and teach other women in the community about CA. Her documentary story demonstrates the importance of women’s agency and being able to make important choices about what she does on her farm. Lucy received support and CA training from Canadian Foodgrains Bank (CFGFB) member World Renew. Her success story informs the international community about the importance of supporting women farmers at the grassroots level (*Common Strength*). Currently, there are two CA related CFGFB projects in Rwanda. While not structured exclusively for women, these CA projects are designed to target household food insecure and resource poor smallholder farmers. As women are largely responsible for such farms, most of the project participants are women (Block 2020).

Including strong roles for agricultural groups of women is now part of Rwanda’s agricultural policy, which requires women to more fully participate in cooperatives (Meader & O’Brien). Collective action, where women farmers can learn, manage money, or market, is essential (“Women Infographic” 2: “Equal Harvests” 2). Women farmers in Rwanda’s cooperatives express a high level of trust and satisfaction in cooperatives, which has given them greater access to markets and more stable incomes. Such an approach to food policy in developing nations is promising; however, more time will show whether it is sustainable (Meader & O’Brien).

The agroecology grassroots model also helps to meet 15 of the 17 UN Sustainable Development Goals (SDGs) (“Women Seed Change”). With 10 years left for the world’s UN member agencies to meet its agenda of ending poverty, protecting the planet, and ensuring peace and prosperity, empowering farm women in the developing world is essential (“The Sustainable Development”).

Since Rwanda has serious problems with soil quality, lack of rain, and soil erosion, a possible solution for this involves increasing crop yields with agroecology technologies that rely on planting shrubs along field contour lines. The shrubs, which are like a live fence, help to keep soil and water in place. When the shrubs are cut or trimmed, the cut shrub material is used for mulch which helps in further soil conservation (Rushemuka). Many smallholder farmers use straw mulch. It is cheap and easy to use. The straw also helps with bug control (Mukamazimpaka). Another traditional Rwandan farming practice that could aid in land conservation is crop rotation where farmers plant a sequence of crops on the same land. This practice improves soil quality, and helps to reduce pests and weeds (Ndikumana). To conserve water and help deal with drought, a simple irrigation technique that involves unglazed clay pots called ollas, is currently being used in a CFGFB supported nutrition project in Rwanda’s Eastern Province, which is especially dry. The pots are sunk into the garden beds with just the necks sticking out and then they are filled with water. The water slowly seeps out through the clay pots, which gives much-needed water to the garden plants. The practice is an ancient one and is used elsewhere in drought prone areas in the world, and is especially suited to the kitchen gardens of smallholder women farmers (Block 2020).

Rwanda’s women farmers grow most of the food crops. They know what grows best and where. They know about such things as rainfall in different parts of the country. They are the traditional keepers of seeds and knowledge. These farmers need support so that they can continue to grow local seeds, which also encourage biodiversity (Block 2020). Such support must include ways to increase agricultural yields sustainably (*The Impact of Unpaid Care* 2, 14; “Agroecology: A Viable Path”; “Women Seed Change”; Block 2017, 2020; Mukamazimpaka). As 80% of the food in Rwanda is produced by smallholder farmers,

increased productivity, however small, still impacts the entire country, the continent of Africa, and ultimately the planet.

Women farmers in Rwanda need to know the specific fertility of their farming lands. With this information, they can refine what seeds would be most appropriate for food and cash crops. Although these women know the climate and general rainfall patterns very well, climate change presents unique challenges. These farmers need to know about strategic measures. For example, the farmers struggle with heavy rains and prolonged droughts. They must have access to the ability to learn about best practices in dealing with such challenges and how to apply them to their farming needs. The farmers must also have the means to be able to do so (Mukamazimpaka).

Empowering women farmers, whether they be in Rwanda or elsewhere, is an ongoing journey. Doing so via the agroecology grassroots movement offers hope in a world faced with ever-increasing global hunger.

Works Cited

- Abouzeid, Rania. "How Women Are Stepping up to Remake Rwanda." *National Geographic*, National Geographic, 15 Oct. 2019, www.nationalgeographic.com/culture/2019/10/how-women-are-remaking-rwanda-feature/.
- "Agroecology: A Viable Path for Rural Women's Empowerment." *SeedChange*, SeedChange, 11 Oct. 2019, weseedchange.org/publications/agroecology-a-viable-path-for-rural-womens-empowerment/.
- Block, Rick. Interview. Conducted by Rwaida Hussein, 12 May 2020.
- Block, Rick. "Rwanda Project Leaders Learning Tour – Reflection". February 2017. PDF file. www.dropbox.com/s/hgmr2e81pyv1975/Reflection-Rwanda%20LT.pdf?dl=0.
- Common Strength*. Produced by Winnie Adisa and Meagan Silencieux. Canadian Foodgrains Bank, 2020. foodgrainsbank.ca/campaigns/woman-to-woman/.
- "Customs and Cuisine of Rwanda." *Dining for Women*, diningforwomen.org/customsandcuisine/customs-and-cuisine-of-rwanda/. Accessed 26 May 2020.
- "Electricity Access". Republic of Rwanda Ministry of Infrastructure, 2020, www.mininfra.gov.rw/index.php?id=312.
- "Empowering Women Farmers in Rwanda to Grow Better Crops, Better Food and Incomes." *UN Women*, 12 Oct. 2018, www.unwomen.org/en/news/stories/2018/10/feature-empowering-women-farmers-in-rwanda.
- "Equal Harvests: How Investing in Agricultural Development Can Empower Women. Policy Brief from the Canadian Foodgrains Bank". Canadian Foodgrains Bank, foodgrainsbank.ca/wp-content/uploads/2015/06/women-brief-web.pdf.
- Fivenson, Adam. "Digital Insights Rwanda: How Do Rural Youth Use New Technologies?" *Digital @ DAI*, 4 Apr. 2017, dai-global-digital.com/rwanda-digital-insights.html.
- Household Size and Composition around the World 2017. Data Booklet*. United Nations, www.un.org/en/development/desa/population/publications/pdf/ageing/household_size_and_composition_around_the_world_2017_data_booklet.pdf.
- "How Rwanda Brought Its Healthcare System Back to Life." *Irish Examiner*, 14 Nov. 2017, www.irishexaminer.com/viewpoints/analysis/how-rwanda-brought-its-healthcare-system-back-to-life-462763.html.
- Khadse, Ashlesha. "Women, Agroecology & Gender Equality." *Focus on the Global South*, 18 Sept. 2017, focusweb.org/publications/women-agroecology-gender-equality/.

- Meader, John-Elliott, and O'Brien, David. "Placing Rwanda's Agriculture Boom: Trust, Women Empowerment and Policy Impact in Maize Agricultural Cooperatives." *Food Security*, Springer Netherlands, 26 July 2019, link.springer.com/article/10.1007/s12571-019-00944-9.
- Mukamazimpaka, Selaphine. Interview. Conducted by Rwaida Hussein. 24 June 2020.
- Ndikumana, Gabriel. Interview. Conducted by Rwaida Hussein. 1 September 2020.
- Nkurunziza, Joseph. "Free Education in Rwanda: Just One Step towards Reducing Gender and Sibling Inequalities." *Education Research International*, Hindawi, 22 Nov. 2012, doi.org/10.1155/2012/396019.
- Paul, B.K., et al. "Agricultural Intensification Scenarios, Household Food Availability and Greenhouse Gas Emissions in Rwanda: Ex-Ante Impacts and Trade-Offs." *Agricultural Systems*, Elsevier, 8 Mar. 2017, www.sciencedirect.com/science/article/pii/S0308521X17301749.
- Rushemuka, Pascal. "Agroecological Solutions: Integrating Conservation Agriculture and Agroforestry to Boost Rwanda's Crop Intensification Program Summary and Key Facts." *ResearchGate*, Conference: Rwanda National Policy Forum, At Kigali, Mar. 2019, www.researchgate.net/publication/332014233_Agroecological_solutions_Integrating_conservation_agriculture_and_agroforestry_to_boost_Rwanda's_Crop_Intensification_Program_Summary_and_key_facts.
- "Rwanda Demographics". *Worldometer*, www.worldometers.info/demographics/rwanda-demographics/. Accessed 25 May 2020.
- "Rwanda Learning Tour January 6-13, 2017". Participant Handbook. Canadian Foodgrains Bank, 2017. PDF file. www.dropbox.com/s/06g8mbk4659l8ik/Rwanda-Guide2017.pdf?dl=0.
- "Rwanda Population (LIVE)." *Worldometer*, www.worldometers.info/world-population/rwanda-population/. Accessed 25 May 2020.
- "Snapshot of Canadian agriculture. Chapter 1: Number of farms in 2011", Statistics Canada, 6 Nov. 2018, www150.statcan.gc.ca/n1/pub/95-640-x/2011001/p1/p1-01-eng.htm.
- The Impact of Unpaid Care Work and Agroecology on Women's Economic Empowerment in Bangladesh, Ghana, and Rwanda*. ActionAid, Jan. 2019, powerproject.actionaid.org/wp-content/uploads/2019/05/Baseline-Summary-Report-FINAL-PRI-NT-FILE.pdf.
- "The Sustainable Development Agenda – United Nations Sustainable Development." United Nations, 2020, www.un.org/sustainabledevelopment/development-agenda/.
- Transport Sector Strategic Plan for EDPRS2*. Republic of Rwanda Ministry of Infrastructure, Aug. 2013, docs.igihe.com/IMG/pdf/transport__ssp_june_2013.pdf.
- Trines, Stefan. "Education in Rwanda." *WENR*, 15 Oct. 2019,

wenr.wes.org/2019/10/education-in-rwanda.

“Water, Sanitation and Hygiene.” *UNICEF Rwanda*,
www.unicef.org/rwanda/water-sanitation-and-hygiene#:~:text=Water,30 minutes of their home.&text=Even if water is available,- from water-borne diseases. Accessed 29 May 2020.

“Women in Agriculture Closing the Gender Gap for Development.” *FAO*, 2011,
www.fao.org/publications/sofa/2010-11/en/.

“Women Infographic.” *Canadian Foodgrains Bank*, 8 Feb. 2019,
foodgrainsbank.ca/wp-content/uploads/2016/06/infographic-women.pdf.

“Women Seed Change.” *SeedChange*. September 2019.
weseedchange.org/wp-content/uploads/2019/09/SeedChange-WSC_brochure-web.pdf.

“World Hunger Is Still Not Going down after Three Years and Obesity Is Still Growing – UN Report.”
World Health Organization, World Health Organization, 15 July 2019,
www.who.int/news-room/detail/15-07-2019-world-hunger-is-still-not-going-down-after-three-years-and-obesity-is-still-growing-un-report.