

Accelerate Access to Resources – Land, Clean Energy, Water, and Sanitation

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OVERVIEW

When girls and women endure restricted access to resources such as land, renewable energy, and water and sanitation, there are far-reaching implications. Such limitations can affect their health, education, housing, and livelihood. This brief explores seven solutions highlighting gender-sensitive approaches that can accelerate much needed access to resources. These solutions include promoting clean and renewable energy, securing land and inheritance rights for women, employing a comprehensive approach for Water, Sanitation, and Hygiene (WASH), including women in all decisions related to resource management, and improving water services and Community Led Total Sanitation (CLTS).

SECTION 1: FRAMING THE ISSUE

The Sustainable Development Goals (SDGs) offer a framework for accelerating women's access to land, water, sanitation, energy, and other resources, which has the potential to alleviate poverty across the globe (see Box 2). Girls and women, in particular, will benefit from greater access to these resources through improved wealth, health, education, safety, dignity, and financial security; they will also gain opportunities to speak out and engage in decision-making. Several international agreements recognize the important link between access to resources and advancing economic prosperity.

Land is an important resource for women as a source of income and security in times of hardship; yet inheritance and land tenure law, policy, and practice generally favor men.¹ Rigid gender roles in many societies place women at the center of the family, responsible for securing household resources – such as food, water, and fuel for heating and cooking – and also serving as the primary caregivers, but they often lack the financial means to access these resources.² And given the time they must devote to meeting household needs, their opportunities for education, growing food, generating income, or caring for children – opportunities that would enhance their wealth and wellbeing and that of their family – are curtailed.³

➔ *For more, please reference the brief focused on boosting women's economic empowerment*

Increasingly, environmental stress is impacting access to resources, which disproportionately affects women.⁴ By 2030 experts predict a global water shortfall of 40%, which will further burden women who are tasked with securing water resources for the family.⁵ Furthermore, as water, firewood, and land grow scarce and women remain excluded from decisions impacting the resources that are increasingly difficult to obtain, these resources are pushed further out of the reach of women.⁶

➔ *For more, please reference the brief focused on investing in women to tackle climate change and conserve the environment.*

Lack of access to natural resources often taxes women's physical and mental health and reduces their ability to seek privacy and practice healthy behaviors. Additionally, as they are forced to go longer distances for resources, girls and women face an increased risk of sexual violence or animal attacks.⁷ The following statistics highlight the challenges all poor people, but especially women, face:

- Worldwide, less than 20% of agricultural land is held by women.⁸
- 1 in 7 people practice open defecation either because latrines are not available at home or because latrines are considered unsafe or dirty.⁹
- Girls and women collectively spend 97 billion hours annually securing a safe place to defecate.¹⁰
- 1 in 3 women experience gender-based violence.¹¹ Collecting fuel, fetching water, bathing in open water, and open defecation all can expose girls and women to sexual harassment.¹²



Accelerating access for girls and women to resources, water, and sanitation is linked to the achievement of several of the Sustainable Development Goals (SDGs) and targets, including:

SDG Goal 1: End poverty in all its forms everywhere

- **1.3** Implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable
- **1.4** By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance
- **1.5** By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social, and environmental shocks and disasters

SDG 2: End hunger, achieve food security and improved nutrition, and promote sustainable agriculture

- **2.3** By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women..., including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets, and opportunities

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- Women and children globally spend a cumulative 73 billion hours fetching water annually.¹³
- Women and children spend up to 5 hours per day gathering fuel for household needs due to a lack of access to clean cooking fuels.¹⁴
- 1-2 hour waiting times at water kiosks are common in dense urban areas, with standpipe to person ratios of 1:500.¹⁵
- 51% of schools have adequate access to water and 45% to adequate sanitation in low and middle-income countries,¹⁶ which increases the likelihood of absenteeism among adolescent girls.¹⁷

SECTION 2: SOLUTIONS AND INTERVENTIONS

Restricted access to resources has cross-cutting implications, affecting the health, education, land tenure, housing, culture, self-determination, and human rights of affected individuals and communities. Within this multi-sectoral landscape, a one-size approach will not suffice. This brief explores seven solutions that encompass gender-sensitive approaches and can be scaled up to make a real impact for women:

- Engage women in efforts to advance access to affordable, safe, and renewable sources of clean energy throughout homes and communities
- Improve and enforce secure land rights and inheritance rights for women
- Include women in decision-making related to resource management
- Employ the comprehensive approaches for water, sanitation, and hygiene (WASH) framework
- Improve water services
- Promote Community Led Total Sanitation (CLTS)
- Implement comprehensive WASH services in schools, including provisions for menstrual hygiene management (MHM)

Engage Women in Efforts to Advance Access to Affordable, Safe, and Renewable Sources of Clean Energy throughout Homes and Communities

Every home needs a safe, reliable, renewable, and clean source of energy for cooking, lighting, heating, and productive uses. Access to clean, affordable, and safer household lighting can save money, improve health, reduce the risk of fires, and contribute to livelihoods, as women are able to invest the time they save collecting fuel in more productive pursuits.¹⁸ Access to clean and safe household lighting also allows women to reduce spending on lighting alternatives like kerosene, candles, and battery torches—channeling more financial resources to their household and children's needs.¹⁹

➔ *For more, please reference the brief on investing in women to tackle climate change and conserve the environment.*

Though robust empirical data are not available to quantify the gains of rural electrification, experience suggests that when a household or community has access to electricity and improved cookstoves, the economy and people's quality of life improve.

To accelerate the path to universal access to household energy, it is key to integrate women's needs and opinions into every aspect of the value chain – from research, design, and production to marketing, sales, and distribution.²⁰ Experience shows that without women's opinions and input, products do not meet their needs. Engaging women also creates livelihood opportunities for them in the cooking fuel value chain as suppliers of agricultural waste for cooking fuel and producers of charcoal briquettes. Support should be provided to women-led micro- and small enterprises that sell cookstove products and employ women as marketing agents, distributors, and after-sales service providers. As household energy managers, women are in a unique position to connect with their peers, increase awareness, and deliver energy products and services.²¹

To increase access to household lighting for communities off the grid, the private sector must create and market affordable household lighting products, such as solar products, for lower-income populations. One approach is to support pay-as-you-go lighting schemes, in coordination with credit and savings cooperatives or microfinance institutions; these enable households to pay off the cost of lighting systems in installments equal to their usual expenditure on kerosene or candles.²² Public-private partnerships can also explore new approaches to increase the demand for household solar lighting by giving women the opportunity to use the solar lights at home before purchasing them.

Case Study: The Barefoot Approach – Women Barefoot Solar Engineers of Africa

The Women Barefoot Solar Engineers of Africa work to improve the lives of the rural poor living in remote villages off the energy grids.²³ These women, many of them grandmothers and most of them illiterate, work in the 21 least developed countries in Africa, helping to supply their communities with clean, low-cost household lighting from solar energy.²⁴ Since 2005, over 140 women from Africa have trained at the Barefoot College in India.²⁵ Within six months, these women learned how to fabricate, install, and maintain solar-powered



SDG Goal 5: Achieve gender equality and empower all women and girls

- **5.a** Undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance, and natural resources, in accordance with national laws

SDG 6: Ensure access to water and sanitation for all

- **6.1** By 2030, achieve universal and equitable access to safe and affordable drinking water for all
- **6.2** By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations

SDG 7: Ensure access to affordable, reliable, sustainable, and modern energy for all

- **7.1** By 2030, ensure universal access to affordable, reliable, and modern energy services

SDG 11: Make cities inclusive, safe, resilient, and sustainable

- **11.1** By 2030, ensure access for all to adequate, safe, and affordable housing and basic services and upgrade slums



household lighting systems and were capable of transforming the lives of over 2,000 families in solar-electrified villages in Africa.²⁶

Improve and Enforce Secure Land Rights and Inheritance Rights for Women

Promoting women's land rights is an effective long-term solution to advancing opportunities for women and enhancing community health and wellbeing.²⁷ When women have secure rights to land, their status improves and they are better equipped to care for themselves and their families and break out of poverty.²⁸ Evidence shows that when women have rights to land there is an increase in the role they play in household decision-making, which can lead to better health outcomes, decreased vulnerability to HIV and domestic violence, increased education for children, better nutrition, and food security.^{29,30}

Case-study: The Greatest Predictor of Poverty in India is Landlessness

An estimated 18 million families in rural India are landless and tens of millions more have insecure rights to the land they rely on. Their long-term insecurity and inability to protect and secure the land they depend on is a major predictor of poverty, seeds conflict, and hinders economic growth.³¹ Since 2000, Landesa has been working to change this reality. By partnering with state and central government leaders, Landesa strives to create opportunity, incentive, and security through strengthening land rights. Landesa supports the creation of policies that strengthen girls and women's land rights, raise legal awareness, and grant homestead and farmlands to rural women.³² By working with Indian state government officials and central government leaders, Landesa has reached more than one million families.³³ Increasingly, leaders in India's poorest states are recognizing that insecure land tenure is a significant hurdle to development and stability. Already, the governments of Bihar, West Bengal, Odisha, Karnataka, Andhra Pradesh, Telangana, and Uttar Pradesh have launched programs to bolster women's and girls' land rights.³⁴

Include Women in Decision-making Related to Resource Management

To implement effective and sustainable resource management programs, women must be engaged in the decision-making process, as they are most affected by resource inequities. Gender plays a defining role in how individuals utilize and benefit from natural resources, which are closely linked to livelihoods for the vast majority of people.³⁵ Failing to recognize the unique challenges and opportunities women face – especially in conflict settings, which includes the risk of physical insecurity linked to their role in collecting natural resources – has the potential to further perpetuate inequalities regarding natural resource rights, access, and control.³⁶

Case Study: Bringing Women to the Table in South Sudan

Following the establishment of the Republic of South Sudan in 2011, SOS Sahel, an international NGO working in partnership with local groups, implemented a resource-based conflict reduction program providing women and youth with natural resource management and conflict resolution skills.³⁷ Women pastoralists in the region have a reputation for being extremely influential as peacebuilders, but they had been excluded from decision-making processes.³⁸ SOS Sahel engages women and marginalized groups, encouraging traditional leaders to incorporate them into formal decision-making processes.³⁹ Through education tools and sessions provided to women in the communities, steering groups with women representatives were developed, and community structures were registered as legal bodies in accordance with Sudanese regulations.⁴⁰

Employ the Comprehensive Approaches for Water, Sanitation, and Hygiene (WASH) Framework

Sustainable solutions for girls and women require comprehensive approaches – approaches that facilitate access to water, sanitation, and hygiene (WASH) services. Yet there is no one size fits all solution. Each intervention needs to be adapted to fit the contextual realities of the community. Decades of WASH programming experience dictates that the first steps to success involve conducting an explicit analysis of the needs on the ground and identifying a hypothesis of change before any action is taken.⁴¹ Many major development organizations working in WASH have identified a wide range of factors that should be considered before they can analyze local strengths and weaknesses and design an appropriate intervention that encompasses the broader needs of the community.⁴² Such comprehensive frameworks are vital to ensuring sustainable gains over the long term.⁴³

Comprehensive frameworks consider three domains around which interventions are developed and implemented:⁴⁴

1. Access to supplies and services, such as water supply, sanitation systems, latrines, handwashing stations, soap, water treatment supplies and equipment, fecal sludge management services, menstrual hygiene products, etc.;
2. An enabling environment that incorporates supportive policies, strengthened institutional capacity, private sector involvement, organizational support from government and civil society, adequate financing, partnerships, and cross-sectoral collaboration;
3. Demand creation and hygiene promotion activities for social and behavior change, through interpersonal communication, mass media, community theatre, community mobilization, sanitation marketing, social norm change, and habit formation.



Relevant International Agreements that underscore girls' and women's access to resources, water, and sanitation as a human right:

- United Nations Conference on Environment and Development (Earth Summit) 1992
- Millennium Development Goals (2000-2015)
- International Decade for Action "Water for Life" (2005-2015)
- Sanitation and Water for All Partnership (2010)
- Sustainable Energy for All (2011)
- Sustainable Development Goals (2015-2030)



All three domains are interrelated and together promote major changes in behavior. Consider menstrual hygiene management as an example. It requires access to products and services, including pads, adequate supplies of water for washing, and a private place to change and bathe.⁴⁵ And improved sanitation behaviors call for access to sanitation facilities, but they may also require microfinance loans to purchase latrines over time and fecal sludge management services to sustainably maintain the facilities.^{46,47}

The second pillar, an enabling environment, requires governments to enact policies that focus on providing sanitation and water services for communities and ensuring that WASH services are included in the education budget.^{48,49} Best practice around water and sanitation services includes strengthening community governance and calling for fair representation of women.⁵⁰ Going back to the menstrual hygiene management example, an enabling environment might include eliminating taxes on feminine hygiene products.⁵¹ Finally, having ready access to WASH products and services and a supportive enabling environment does not ensure individuals and communities will consistently and correctly perform improved WASH practices. It is critical to change behavior by creating demand.

Case Study: Multi-Sector Approach to Reducing Malnutrition

In Bangladesh, the *Strengthening Household Ability to Respond to Development Opportunities* program adopted a multi-sectoral approach to improving the nutritional status of mothers and children in four remote rural areas.⁵² The framework focused on enhancing the literacy and leadership skills of girls and women, educating them about sound health and nutrition practices, and installing wells for access to safe drinking water; these interventions led to better health within the communities and a reduction in malnutrition.⁵³ And by incorporating the importance of proper WASH practices, the percentage of mothers who wash their hands before food preparation rose from 60% to 94%; households with access to safe, clean water rose from 57% to 71%; and the percentage of people with access to a sanitary latrine rose from 13% to 54%.⁵⁴

Improve Water Services

When women spend less time fetching water, they gain more productive time that can be dedicated to focusing on their children, growing food, or pursuing education or economic opportunities.⁵⁵ And when women do not need to trek long distances to fetch water, they also avoid associated risks, such as gender-based violence and animal attacks.⁵⁶ Beyond that, there are multiple health benefits linked to reducing the time they spend fetching water. A 15-minute decrease in time spent walking to a water source is associated with a 41% average reduction in diarrhea prevalence, an 11% reduction in under-five mortality, and improvements in the nutritional status of children – a likely result of more water being available in the household.⁵⁷

Comprehensive national water strategies should be developed and include the construction, operation, maintenance, and rehabilitation of water points.⁵⁸ The optimal number of beneficiaries and optimal distance from households within the service area must be explicit; past recommendations define reasonable access as no more than 1 km from the dwelling.⁵⁹ Water strategies should also clearly address access in informal settlements and peri-urban areas and develop an acceptable definition at the country level for time invested in fetching water outside the dwelling. The role of women in fetching and treating water, or irrigating, should be systematically tracked to monitor changes and improvements and to better understand how improved water services change a woman's status in the household and in society.

Empowering women is an important part of service delivery. Women must be involved in planning water service provision and be represented on governing bodies. Furthermore, women should be supported to become involved in WASH service delivery, granting them income generating opportunities. Evidence suggests that communities with water and sanitation user groups that include women function more effectively and sustainably.⁶⁰

Promote Community Led Total Sanitation (CLTS)

Community Led Total Sanitation (CLTS) is a facilitated participatory process to inspire rural communities to abandon the accepted practice of open defecation, without reliance on external subsidies to build toilets. When facilitated effectively, CLTS ignites a sense of shared disgust and shame within the community as members realize they are literally ingesting one another's feces so long as open defecation continues.⁶¹ This often leads to the spontaneous decision by most households to build latrines and engages social norms to spur community action to shame violators and sustain improvements in latrine use and sanitation practice. The do-it-yourself approach to latrine construction fosters local innovation, often resulting in communities becoming open defecation free within 3-6 months.⁶²

Bringing sanitation options closer to the home is a critical improvement for women in the community, who may have to walk long distances to find a site that is private, which puts them at risk of gender-based violence.⁶³ Having sanitation available within the home can ease multiple burdens on women. It saves them time and energy, ensures their dignity, reduces their exposure to violence, and improves their nutritional status, which in turn has a positive impact on their reproductive health and pregnancy outcomes.^{64,65}

Over time, implementers have expanded and innovated the concept of CLTS to incorporate a range of actions for improving health outcomes, including the promotion of handwashing with soap and supporting sanitation marketing to engage private sector contributions.⁶⁶ CLTS also opens the door to conversations about topics once considered taboo. Women can discuss health risks related to unsafe menstrual hygiene management (MHM). And once they understand the issues and potential pitfalls, men and boys want to assist their wives and sisters. By starting these conversations in the home, it becomes easier for women to participate in community discussions, as well as in decisions that will impact their health, instill dignity, and help to change social and cultural norms.⁶⁷

Case Study: WASHplus Program in Mali

WASHplus integrated a WASH/nutrition program in the Mopti region of Mali to reach women of reproductive age and their children in 180 villages in three districts with high rates of stunting.⁶⁸ In addition to motivating villages to collectively abandon open defecation and increasing demand for low-cost sanitation, the program places a strong emphasis on improving nutrition and hygiene practices, including handwashing, water treatment, exclusive breastfeeding, and dietary diversity through a range of behavior change approaches.⁶⁹ Trained community health workers visit communities to educate women on WASH and also screen for undernourished children who are referred to the community health/nutrition centers for treatment.⁷⁰

Implement Comprehensive Water, Sanitation, and Hygiene (WASH) Services in Schools, Including Provisions for Menstrual Hygiene Management (MHM)

Keeping girls in school produces better educated women who tend to plan their families, have healthier and better educated children, and are paid higher wages.⁷¹ A systematic review of research found that girls' attendance in formal school is positively associated with delayed sexual initiation, marriage, and



childbirth, lower rates of HIV/AIDS, and improved gender equality.⁷² One critical pathway to increasing girls' school attendance is investing in WASH in schools,⁷³ as the lack of such facilities in schools is cited as a global obstacle to quality education.⁷⁴ Introducing WASH facilities and programs in schools would attract pupils and reduce absenteeism.⁷⁵ Furthermore, parents prefer to put children in schools with proper sanitation facilities.⁷⁶

A comprehensive school WASH program includes access to water, sanitation, and hygiene facilities, hygiene education, and menstrual hygiene management (MHM).⁷⁷ Facilities should be gender-segregated, with roughly 25 girls per toilet and 50 boys per toilet, and have a functioning water point that is safe for drinking and handwashing.⁷⁸ The absence of gender-segregated toilets is especially challenging for menstruating adolescents, who can miss up to a week of school a month.⁷⁹ Many eventually drop out.⁸⁰ Ensuring that menstrual hygiene management programs are effective requires more than building girl-friendly facilities. Schools should also integrate puberty education for girls and boys, educating teachers, families, and communities about menstrual hygiene to break taboos and cultural constraints.⁸¹ Girls should also have a say in types of facilities and menstrual products that would best serve their needs at school, leading to a more "girl-friendly" school that is a source of empowerment and pride.⁸² The positive impact in schools may spill over to communities. A school WASH program in Zambia, for example, led to households installing latrines and handwashing facilities, children teaching parents better hygiene, and former taboo topics such as open defecation and menstruation being discussed openly.^{83,84}

Case Study: SPLASH in Zambia

SPLASH (Schools Promoting Learning Achievement through Sanitation and Hygiene), a USAID/Zambia funded WASHplus activity, brought clean drinking water, sanitation, and hygiene education to primary schools in Eastern Province.^{85,86} By providing a cleaner and safer learning environment, SPLASH aspired to improve the health, learning, and performance of pupils and teachers.⁸⁷ Activities centered on providing safe water and adequate sanitation and adopting better hygiene practices.⁸⁸ As part of the menstrual hygiene management component, girls' latrines were equipped with washrooms and schools were encouraged to stock sanitary pads and other hygiene consumables, such as soap and toilet paper.⁸⁹ The SPLASH program saw an anecdotal increase in enrollment and a 26% reduction in student absenteeism.^{90,91}

SECTION 3: THE BENEFITS OF INVESTMENT

The results of a global cost-benefit analysis of water supply and sanitation depict the costs and benefits of investing in all water and sanitation improvements.⁹² In developing regions, the return on a US\$1 investment ranged from US\$2 to US\$5.5, depending on the intervention.⁹³ The main contributor to these economic benefits was the time saved through better access to water and sanitation services, which accounted for over 70% of the overall economic benefits.⁹⁴

Though comparable data for household energy has not yet been calculated, an analysis by the World Health Organization suggests an average of US\$91 billion in annual economic benefits could be accrued if half the people cooking with solid fuels switched to liquefied petroleum gas.⁹⁵ Societal benefits would take the form of improvements in health and a reduction in time spent collecting fuel.⁹⁶

Investing in efforts to improve women's access to and use of land also leads to positive impacts on local economies.⁹⁷ When women have secure land rights, their earning can increase significantly, impacting their ability to open bank accounts, save money, build credit, and make investments.⁹⁸ Furthermore, when women are empowered, their children are empowered too – a ripple effect that contributes to breaking cycles of poverty.⁹⁹ Women face a serious gender gap in accessing productive resources such as land, credit, water, and technologies.¹⁰⁰ Closing this gap could lead to increasing agricultural yields on women's farms by between 20-30%, lifting 100 to 150 million people out of hunger.¹⁰¹

➔ *For more, please reference the brief focused on boosting women's economic empowerment.*

If done effectively, investing in access to water, sanitation, and household energy can better engage half the population and spur economic productivity. A gender lens approach can augment the positive impact of access to resources that benefits everyone—women, local communities, and low and middle-income countries.

SECTION 4: CALLS TO ACTION

There is ample evidence to verify that the cross-cutting strategies outlined above have the potential to open access to resources and open opportunities for the women who struggle to acquire them. When adapted to address the specific contexts of each community, these approaches not only empower women, but they also improve the health and wealth of societies as a whole.

In order to power progress for all, many different constituents must work together—governments, civil society, academia, media, affected populations, the United Nations, and the private sector—to take the following actions for girls and women:

- Engage women in efforts to advance access to affordable, safe, and renewable sources of clean energy in homes and communities.
(Most relevant for: governments, civil society, academia, affected populations, the United Nations, and the private sector)
- Establish clear legal and regulatory frameworks to protect women's secure rights to land and inheritance.
(Most relevant for: governments, civil society, and the United Nations)
- Improve access to water, sanitation, and hygiene (WASH) and work with communities and schools (rural and urban) to become open defecation free.
(Most relevant for: governments, civil society, the United Nations, and the private sector)
- Ensure schools have adequate WASH facilities and provide education on menstrual hygiene management.
(Most relevant for: governments, civil society, and the private sector)
- Practice girl- and woman-centered design to strengthen access to natural resources, land, water, sanitation, and affordable, clean energy.
(Most relevant for: governments, civil society, the United Nations, and the private sector)
- Support women's development, control, ownership, and inheritance of assets – including secure land tenure, natural resources, capital, and technology.
(Most relevant for: civil society, governments, and the private sector)



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