

WOMEN-LED SOLUTIONS FOR DROUGHT RESILIENCE



United Nations
Convention to Combat
Desertification



Food and Agriculture
Organization of the
United Nations

Acknowledgments

The Research Team

This study was conducted by Lorena Aguilar, International Consultant, under the overall supervision of Karen Elizabeth Bernard, UNCCD Gender Policy Officer

Lead Author: Lorena Aguilar

Reviewers

UNCCD: Daniel Tsegai, Sasha Alexander, Mirja Stoldt, Corinna Voigt

FAO: Mauro Bottaro, Lucia Gerbaldo, with the collaboration of Maureen Vargas (consultant)

External peer reviewers:

Jackeline Siles, International Union for Conservation of Nature (IUCN); Beth Roberts, Landesa; Janet Macharia, consultant; Arianne Hidalgo, United Nations Development Programme (UNDP); Verona Collantes, Global Environment Facility (GEF); Camilla Steinboeck, World Overview of Conservation Approaches and Technologies (WOCAT); Venge Nyirongo, UN Women; Nathalie van Haren, Both ENDS; Judith Rosendahl, German Agency for International Cooperation (GIZ)

This study has been generously funded by the International Drought Resilience Alliance (IDRA), Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and the Government of Canada.

The views expressed in this document do not necessarily reflect the opinions of the Parties to the UNCCD.

Graphic design: indigo Kommunikationsdesign/Philine Rath based on designs by Javier Acebal

Cover photo: Benedicte Kurzen/NOOR for FAO

Citation: UNCCD and FAO. 2024. *Women-led solutions for drought resilience*.

Platz der Vereinten Nationen 1, D-53113 Bonn, Germany

ISBN on-line: 978-92-95118-94-2

ISBN print: 978-92-95118-03-4

This publication is available for download at: www.unccd.int

© 2024 UNCCD. All rights reserved.

Disclaimer: The designations employed and the presentation of material in this information product do not imply the expression of any opinion whatsoever on the part of the United Nations Convention to Combat Desertification (UNCCD) concerning the legal or development status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. The mention of specific companies or products of manufacturers, whether or not these have been patented, does not imply that these have been endorsed or recommended by the UNCCD in preference to others of a similar nature that are not mentioned. The views expressed in this information product are those of the authors or contributors and do not necessarily reflect the views or policies of the UNCCD. This publication was funded by the European Union. Its contents are the sole responsibility of the UNCCD and do not necessarily reflect the views of the European Union.



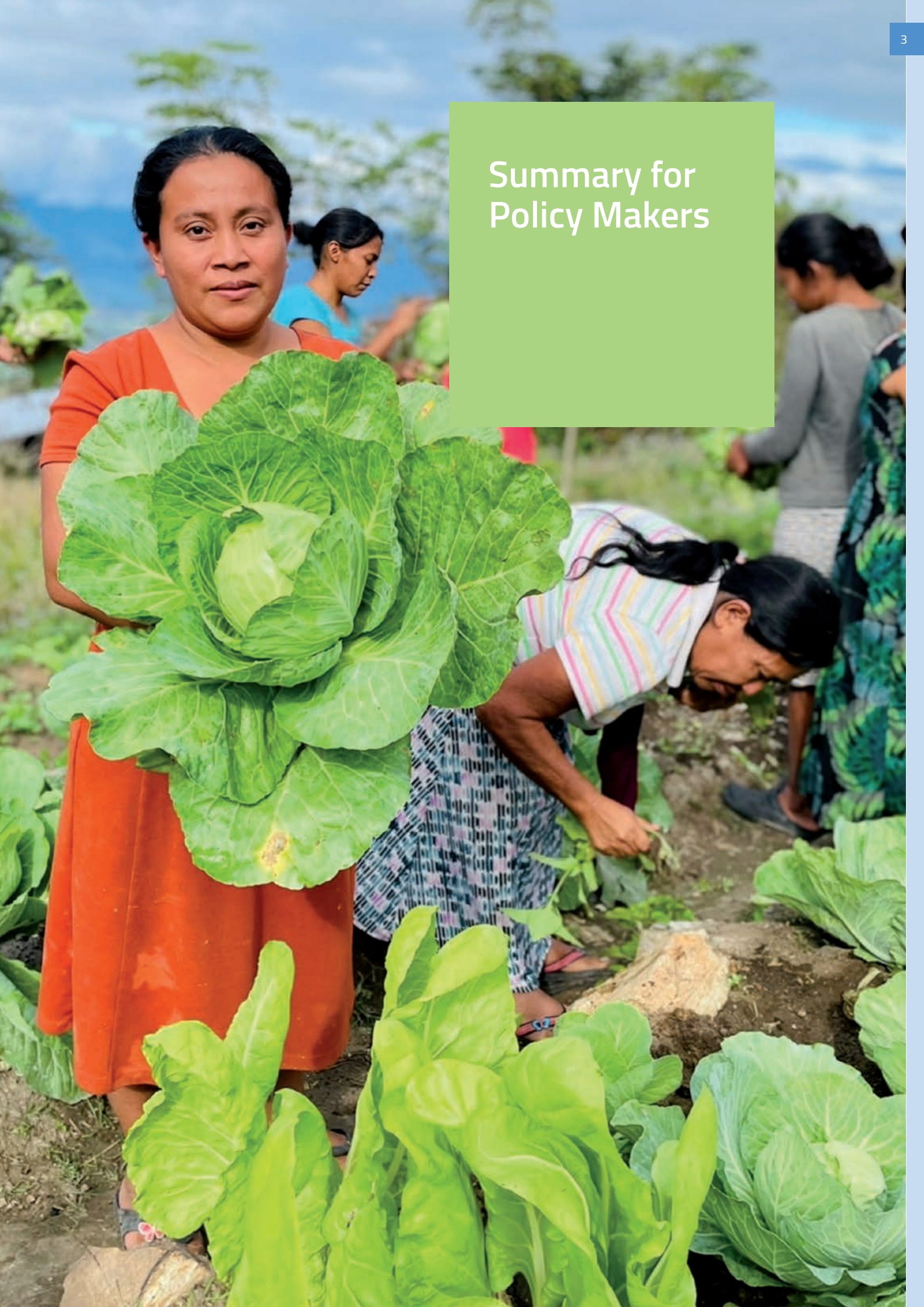
Supported by



On behalf of



Summary for Policy Makers



Foreword

Most vulnerable and most resilient to drought? Women-led solutions for drought resilience and adaptation

Having been confronted with drought from an early age, I grew up watching my mother manage the meagre resources that nature in the Sahel was so stingy with. Along with her fellow mothers, they measured the extent to which food, plants, fish and livestock were precious assets for sustaining their families, or at least keeping them going.

And then came the drought in the Sahel in the early 1970s, which changed everything. Far from giving in, women took matters into their own hands, gradually taking the place of the men who had no choice but to leave their families behind to seek a better life in neighbouring communities. Although often considered to be more vulnerable than men, women showed unimaginable resilience, developing a spirit of survival not only for themselves, but above all to save their loved ones from the worst.



Over time, I came to realise that the heroism of our mothers in the Sahel, while exceptional, was not unique. This study proves that all over the world, often the most 'vulnerable' women are, in fact, the most resilient. Is this a paradox or the expression of extraordinary courage, the proverbial mothers' bravery?

Faced with a global climate crisis, communities in every corner of the world are currently grappling with unprecedented heat-waves. The combination of climate change and human interventions is exacerbating drought, land erosion and degradation, hampering agricultural production and precipitating the most vulnerable communities to hunger and poverty, if not starvation and death.

Underlying societal vulnerabilities are further exacerbating these impacts. Women are more susceptible to the impacts of drought and also have less capacity to reduce drought risks and cope positively with them. Additionally, gender inequality is a risk multiplier.

As a result of different aspects of their identity -- age, disability status, ethnicity, migration status, socio-economic status -- the risks that women and girls face compound, further reducing their power or capacity to face challenges and often rendering women overlooked, unheard or under-valued. In the context of drought, risks are heightened by women's lack of land ownership and exclusion from related decision-making processes, circumstances that leave them unable to draw on their firsthand experience working on and managing land to influence its management, protection or restoration, and making them more vulnerable to adverse impacts.

Concerted efforts are needed to empower women and place them at the forefront of initiatives to combat drought and desertification and to engage them as leaders, alongside men, to influence and make decisions about land use and the best approaches to overcome drought and land degradation. Women represent just under half of the world's population as well as nearly half of the world's agricultural workforce, producing 60–80% of the food grown in developing countries¹. Despite their critical role, it is alarming to note that fewer than one in five landowners is female². Without land rights, and with women appointed to lead just 12% of the environment-related ministries at the national level worldwide,³ women are not properly included at the table to help make decisions on land use and management. Lamentably, women's perspectives are not sufficiently integrated into decisions on measures to address the impacts of drought, desertification, and climate change.

The exclusion of a considerable portion of the world's population from these essential decision-making processes is not without consequence. Rather, the exclusion of women – who have considerable firsthand experience managing and nurturing land – is a key element leading to catastrophic consequences. Up to 40% of the land on earth is currently considered degraded.⁴ And over 15% of disaster-related damages and losses worldwide are due to drought. These impacts are resulting in immense hardship, poverty and deprivation for communities worldwide.

Ensuring women's empowerment to address land degradation, and achieving women's land rights, are intertwined and imperative. Research shows that women landowners and women politicians make decisions that prioritize land health and preservation.⁵ Securing women's rights to land and actively engaging them in decisions on its restoration would not only support drought recovery, it would also help meet the nutritional needs of communities worldwide, staving off hunger and malnutrition, and advancing gender equality.

This publication provides glimpses of pervasive land degradation, notably in dryland regions, and reveals the great value and ingenuity that women often bring to tackle drought, in favour of land restoration, sustainability, and gender equality. It features a compilation of case studies from around the world, showcasing initiatives and women's collectives that are helping close the gender gap in drought-prone locations and regions. Women leaders variously draw on ancestral knowledge, science-based technical solutions and also their daily experiences to apply innovative approaches for building resilience against drought.

These case studies demonstrate that women are truly catalysts for change in the fight against desertification. Acknowledging women's creative contributions to drought management is an essential first step, alongside ensuring women's land ownership and their participation in the development and implementation of policies that favour drought planning, preparedness, mitigation and response. Ensuring that women's perspectives are equally heard and integrated into all decisions and measures taken is vital to guarantee that these measures benefit all land users. Selected gender-responsive case studies and innovative, women-led practices are shared here to inspire stakeholders around the world, draw motivation from women leaders globally, for consideration in diverse communities.

The ingenuity and resourcefulness of women combatting drought around the world is boundless. Whether in the Africa's Sahel region, in Northern Kenya, in Iran, in Peru or in Morocco, women have proven their resilience and their ability to overcome the most inextricable conditions to keep their families thriving.

If this lesson in courage and self-sacrifice doesn't open our eyes, our minds and our wallets to investing in women-led drought resilience, what else could motivate us?

Ibrahim Thiaw

Executive Secretary

United Nations Convention to Combat Desertification

1 UNCCD 2023. "[World leaders urged to prioritize women's land rights at the UN](#)". 16 June 2023

2 Ibid.

3 United Nations 2023. "[Securing Women's Land Rights for Increased Gender Equality, Food Security and Economic Empowerment](#)". UN Chronicle. 15 June 2023.

4 Ibid.

5 See, for example: UNCCD 2023. "[World leaders urged to prioritize women's land rights at the UN](#)". 16 June 2023. See also: United Nations 2023. "[Securing Women's Land Rights for Increased Gender Equality, Food Security and Economic Empowerment](#)". UN Chronicle. 15 June 2023.



Drought: A global ecological and socio-economic challenge

Drought is one of the major impediments to development. Worldwide, droughts cause over 15 per cent of disaster-related damages and losses, unleashing severe hardship for women and men in affected communities. Drought occurs against a backdrop of multiple crises – such as insecurity, conflicts and displacement – that compound and lead to a **multi-dimensional** humanitarian crisis.

According to the Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report (AR6), the impacts of droughts have intensified due to extreme events and underlying societal vulnerabilities. Anthropogenic climate change has increased the likelihood, severity, and societal effects of droughts (primarily agricultural and hydrological) in many regions. As a result, risks vary across communities and societies and among people within those societies, depending, for example, on intersecting inequalities and context-specific factors, such as culture, gender, religion, ability, disability, or ethnicity.⁶

In a compendium of drought-related data compiled by the United Nations Convention to Combat Desertification (UNCCD), *Drought in Numbers*⁷, the data reveals that drought is on the rise, as the number and duration of droughts has increased by 29% since 2000.

The pioneering study by the United Nations Convention to Combat Desertification (UNCCD) on the “differentiated impacts of desertification, land degradation and drought on women and men” demonstrated that women in general are more vulnerable to drought than men.⁸ This vulnerability is reflected along two dimensions: women are more susceptible to drought impacts such as food insecurity, malnutrition, famine, water scarcity, and related risks⁹ and have less capacity to reduce drought risks and cope positively with them. Gender inequality can thus be understood as a risk multiplier.

Furthermore, droughts affect people in vulnerable situations within countries – including the poor, children, women, Indigenous or other ethnic minorities – in different ways, and their vulnerability to droughts and land degradation depends on demographics and social roles, among other aspects of identity.¹⁰

By analysing innovative gender-responsive and transformative approaches from communities around the world, the study aims to shed light on initiatives that have an impact on closing the gender gap in drought-prone places and regions, so that these interventions can be properly valued, scaled up and replicated, and potentially attract resources to scale up gender-responsive, women-led interventions.

-
- 6 Intergovernmental Panel on Climate Change (IPCC), 2022. *Climate Change 2022: Impacts, Adaptation and Vulnerability*. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [H.-O. Pörtner, et al. (eds.)]. Cambridge and New York: Cambridge University Press.
- 7 United Nations Convention to Combat Desertification (UNCCD) 2022. *Restoration for readiness and resilience*. Bonn, Germany. *Drought in numbers | UNCCD*. Drought in numbers | UNCCD.
- 8 Aguilar, L., 2022. Study on the differentiated impacts of desertification, land degradation and drought on women and men. UNCCD. Germany. Available at: <https://www.unccd.int/sites/default/files/2022-11/Gender%20study%20.pdf>.
- 9 Ngigi, M.W., U. Mueller and R. Birner, 2017. *Gender differences in climate change adaptation strategies and participation in group-based approaches: An Intra-household analysis from rural Kenya*. *Ecol. Econ.*, 138, 99–108, doi:10.1016/j.ecolecon.2017.03.019 and Musinguzi, L., et al., 2018. *The role of gender in improving adaptation to climate change among small-scale fishers*. *Climate and Development*, 10(6), 556–576, doi:10.1080/17565529.2017.1372262.
- 10 Aguilar, L., 2022. Study on the differentiated impacts of desertification, land degradation and drought on women and men. UNCCD. Germany. Available at: <https://www.unccd.int/sites/default/files/2022-11/Gender%20study%20.pdf>.

Key findings of this study



Drought is one of the costliest and deadliest disasters on a global scale.

Worldwide, droughts cause over 15 per cent of disaster-related damages and losses, unleashing severe hardship for women and men in affected local communities.

Evidence to date indicates that, in general, women are more harshly impacted by drought than men.

The impacts of droughts, as slow onset extreme climate events, have intensified in recent years due to climate change trends and underlying societal vulnerabilities. As a result, risks vary across communities and societies and among people within those societies, depending on intersecting inequalities and context-specific factors, such as age, gender, ethnicity, (dis)ability, location, socio-economic status, migration status, culture, and religion.

Gender inequalities are socially constructed drivers of risk.

Therefore, efforts towards gender-responsive outcomes related to drought resilience and adaptation need to tackle the structural nature of the challenge and the multiple and intersecting forms of discrimination that women face.

Addressing women's land rights is imperative to combat desertification and drought.

Gender equality is not possible without securing women's rights to land. The lack of secure tenure limits women's decision-making power regarding land use. It also reduces women's access to extension services and training, and it hinders women's access to finance as banks require collateral for loans and credit.

There is a wide body of evidence on effective approaches to strengthen women's rights to land and property.

According to the research, several of the case studies explore innovative options to enhance land tenure for women by supporting their access to common land, fostering collective access to resources, establishing legal aid clinics that strengthen women's property rights, and registering land titles for married couples.

Inspiring examples of women-led solutions that support drought resilience are found all over the world.

These include practices to manage and conserve water made scarce by drought, strategically use drought-resistant seeds and crops, develop adaptations through innovative income generating activities, devise alternatives to unsustainable soil management for recovery of drought-impacted soils, and leverage climate information services.

Many of the most successful women-led approaches entail technical, science-based approaches and capacities.

Therefore, it is crucial that women have equal access to scientific training, study, and certification opportunities so that their full potential for contributing to the application of science to combat drought can be realised.

Ancestral knowledge and traditional practices held by women on drought adaptation techniques are immensely effective and should be facilitated and exchanged for further development and wider application.

Drought and environmental degradation often increase women's and girls' unpaid care, domestic and communal work.

Therefore, there is an urgent need to adopt gender-responsive approaches and actions (i.e. recognise, reduce, and redistribute unpaid care work) in drought planning, drought preparedness and drought response, through National Drought Plans.

The most gender-transformative examples of women-led solutions for drought resilience involve women taking on nontraditional roles and jobs, acting as multipliers of knowledge, leveraging weather-related climate information services, and working in groups, collectives, or associations to pool resources and increase negotiating power.

Ensuring women's equal and active participation in drought management is a first step in the right direction.

This includes women's participation and engagement in the development and implementation of policies regarding drought planning, preparedness, and response, to ensure that their perspectives are equally heard and integrated into all decisions taken. Additionally, the case studies reveal that establishing women's groups to act collectively has been recognised as a vital adaptation strategy.

Approach taken for identifying and analysing women-led solutions to drought

UNCCD acknowledges that, to reduce societal vulnerability to droughts, the prevailing structures of reactive, post-hazard management approaches must be overcome and moved towards proactive, risk-management approaches that build resilience to drought at the local, national, and regional levels.

To strengthen the knowledge on gender and intersectional issues, UNCCD has produced several policy-relevant studies and publications to raise awareness and facilitate discourse on a new and transformative vision for land management policy, planning, governance, and practice at global and national scales. For example, together with UNCCD's knowledge partner, World Overview of Conservation Approaches and Technologies (WOCAT), a tool¹¹ for the assessment of gender-responsive sustainable land management (SLM) was co-developed, piloted in 15 countries, and the results were presented at the 15th session of the Conference of the Parties (COP15) where gender-responsive SLM profiles were identified.¹²

In this context, and in response to Decision 24/COP.15, which approved a "roadmap to guide and accelerate the implementation of the Gender Action Plan through gender-responsive and transformative approaches", the UNCCD Secretariat issued a call to identify examples of women's essential role in SLM in drought-prone locations and regions to give visibility to women-led initiatives that can be expanded, replicated, and scaled up. A total of 87 case studies were received (Table 1). Of the total, 35 were selected for presentation in this report.¹³

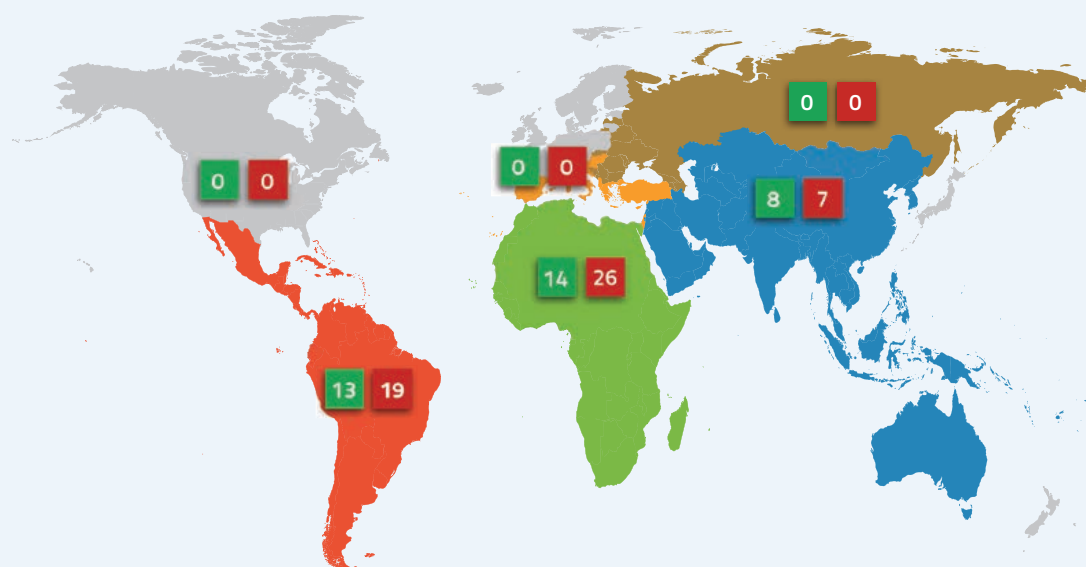
11 <https://www.unccd.int/news-stories/stories/unccd-and-wocat-collaborate-improve-slm-gender-responsiveness>.

12 UNCCD, 2022. Group Profiles on Gender-responsive Sustainable Land Management (SLM) Technologies. Bonn, Germany: UNCCD. Available at: <https://www.unccd.int/resources/publications/group-profiles-gender-responsive-sustainable-land-management-slm>.

13 Criteria for not selecting 52 of the cases included incomplete information, elaborated as proposals for funding, project not implemented, and non-relevance to drought and drylands, among others.

Case studies received from UNCCD annex countries

	ANNEX I Africa	ANNEX II Asia	ANNEX III Latin America and the Caribbean	ANNEX IV Northern Mediterranean	ANNEX V Central and Eastern Europe	NON-ANNEX countries	TOTAL	GRAND TOTAL RECEIVED
Accepted	14	8	13	0	0	0	35	87
Not selected	26	7	19	0	0	0	52	



The following pages present a detailed examination of the value, usefulness, and significance of the actions conducted throughout the case studies, which impact the structural causes of gender inequality while enhancing the resilience and adaptation capacity of all community members in drylands and drought-prone areas, despite their sex, age, class, ethnicity, and other identity factors.

Country Examples



Causes of gender inequalities

Gender inequalities are socially constructed drivers of risk. Therefore, efforts towards gender-responsive outcomes related to drought resilience and adaptation need to tackle the structural nature of the challenge and the multiple and intersecting forms of discrimination that women face. Gender inequalities are manifested in five structural nodes, which the report outlines as follows:¹⁴

The practices are analyzed in relation to five drivers of gender inequality: (1) inequitable control of, and access to, natural resources (including land); (2) a lack of, or limited access to, markets, capital, training, technical assistance, financial services, and technologies; (3) patriarchal, discriminatory, and violent norms and laws; (4) the gendered division of labour and the unequal social and economic organisation of care; and (5) the concentration of power and hierarchical relations in the public and private spheres.

Key lessons learned within the context of each of these drivers are provided alongside promising practices, offering insight into effective pathways forward. At the centre is the need to address the structural inequalities underlying each of the drivers, consider the multiple and intersecting forms of discrimination that women face, and move towards more proactive, risk-management approaches that build resilience to drought, rather than react to it in the aftermath of environmental hazards. Evident in land tenure, decision making power, and access to training, financial services, and technology, gender inequality prevents women from fully realising their potential in land management and renders them more susceptible to drought and its impacts. Yet, as the promising practices compiled in this report show, women are leading efforts globally to combat drought and preserve land, supporting communities and economies.

Inequitable control and access to natural resources: Fewer than 20 per cent of all landholders globally are women, hindering their ability to make decisions on how that land is used or managed, obstructing their access to loans and credit due to the absence of secure tenure and land titles for collateral, and limiting their access to extension services and training. Despite this, women perform 43 per cent of global agricultural labour, rendering their livelihoods highly susceptible to climate change and related environmental hazards, like drought. Young, low-income rural women are especially vulnerable.

Equitable land governance and secure land tenure can help address this inequality. A first step is at the **policy level** – supporting women’s access and rights to land and recognising women as farmers, pastoralists, and forest managers to support their inclusion and active engagement in decision making spaces. Global campaigns, such as the **HerLand** and **Stand for Her Land (S4HL)** campaigns, are raising awareness of these issues, promoting women and girls’ contributions to sustainable land management, and supporting land rights for women and girls worldwide, including through the integration of women’s land rights in legislation and practice.

¹⁴ Economic Commission for Latin America and the Caribbean (ECLAC), 2017. For the four identified by ECLAC, one of the nodes has been broken down to include: inequitable control of, and access to, natural resources (including land) and a lack of or limited access to markets, capital, training, technical assistance, financial services and technologies.

Country examples



Despite these efforts, case studies from **Argentina, Bangladesh, Senegal and Uganda** show that, even where women are afforded legal land rights, their access to them may be hindered, necessitating additional measures to support their access. For example, in **Bangladesh**, where land is typically acquired through inheritance, leaving women with less access than men despite equality in property rights under the national constitution, S4HL is supporting civil society organisations (CSOs) to work alongside government agencies, to build political will in favour of women's land rights. To change inequality in behaviours and norms in

Senegal, moreover, men are engaged as champions of rural women's land rights to help promote and inspire positive change. In **Argentina** and **Uganda**, local CSOs provide legal support, advice, and advocacy to enable women prevented access to their land to access their land rights.

Women-led cooperatives can also support women's use and control of land and sustain their livelihoods. In **Niger**, female members of the cooperative, CERNAFA, combine their resources in order to buy shared land and equipment. Each member contributes 10 per cent of her onion production to the cooperative and these onions are then sold during periods when costs are higher, using the profits to support members and their livelihoods through the purchase of seeds, acquisition of new plots, provision of equipment, and site maintenance.

A lack of or limited access to markets, capital, training, technical assistance, financial services, and technologies: Women, especially marginalised groups of women, are less able to access new technology or credit and to invest in sustainable land management, rendering them more susceptible to climate shocks, including droughts. Where women are not recognised as land owners, farmers or value chain actors, moreover, they are often further excluded from extension services and training. Without the technology to ease their workload and the knowledge or skills to improve their effectiveness, they tend to work longer hours and rely on men or hired labour, lending to fewer crop yields and less income.

The most successful case studies intentionally support access to goods and services and reduce barriers to women's adaptive capacity in the face of drought and other climate change impacts. Women-led solutions support the retention of ancestral knowledge and traditional practices, water conservation and management, the strategic use of drought-resistant seeds and crops, innovative income-generating activities, alternatives to conventional or unsustainable soil management, recovery of drought-impacted soils, and leveraging of climate information services.

Country examples



The case studies in **Australia**, **Iran**, **Nigeria**, and **Uganda** demonstrate the efforts of local organisations, women's groups, and women leaders in supporting women's access to vital information, knowledge and support. In **Nigeria**, information is disseminated via the radio, providing critical information and education to even the most remote and isolated communities. Local farmers, agricultural experts, and supply chain partners are invited to share their knowledge, expertise, and experience on the radio, promoting water conservation and improved irrigation technologies, and providing climate information services. This approach has proved

effective, with nearly 40 per cent of women listeners trying at least one climate change adaptive practice as a result of the radio programme. In **Uganda**, women are equipped with the knowledge and skills to interpret and disseminate climate information and to provide their communities with localised weather forecasts, early warning alerts, and advisories on climate-smart agricultural practices and disaster preparedness measures. Farmers – particularly women – who receive this information make better informed decisions on crop planning, water management, and livelihood diversification. Also in Uganda, a weather update centre provides farmers with accurate, timely weather information to support their agricultural activities, while a mobile van equipped with a projector delivers training sessions to farmers in remote areas. In **Iran**, a female professor trains women on a technique that utilises mycorrhizal fungi to enhance soil quality and restore vegetation, thereby mitigating the adverse effects of drought and desertification. This not only builds the capacity of local women, it also engages and empowers them as local leaders of positive change in their communities and environment. In **Australia**, a nationwide mentoring programme builds resilience and leadership skills, with emphasis on women, in drought-prone areas, equipping women with the skills needed to support their communities.

The benefits of improved access to knowledge and information is evident in the innovative approaches women are using to address water shortage and other challenges facing their communities in **Guatemala**, **India**, **Peru** and **Venezuela**. In **Peru**, a group of pastoralist women are linking modern and traditional knowledge with academia, to address water shortages. Using an ecohydrological monitoring system, including 14 weather stations and 72 groundwater observation wells, the women monitor the groundwater level, to ensure year-round growth of vegetation and facilitate rapid response, where necessary, supporting alpacas and, in turn, pastoralists. Also in various communities of **Peru** and in **Venezuela**, rainwater is being stored to ensure uninterrupted access to water for both human and agricultural usage. Similarly, in **India**, a water management system is being used to address water scarcity issues in agricultural areas, by collecting and storing rainwater underground during monsoon periods and, then, accessing this water during dry periods, thereby ensuring continuous crop irrigation and supporting farm productivity, food security, and resilience. In **Guatemala**, women's savings and credit groups have been formed, and provide space for training, awareness-raising and education opportunities and enable women to build savings and apply it to their homes and communities. In addition, microinsurance protects agricultural and commercial activities from excess rain and drought.

Patriarchal, discriminatory, and violent norms and laws: In most economies of the world, at least one law restricts women’s economic equality, and not a single country in the world provides equal opportunity in employment for women. Although women play a critical role in the biodiversity of drylands and hold vital information to help mitigate and respond to drought, discriminatory norms and practices prevent women from actively engaging in decision-making spaces and developing solutions. Certain groups of women and girls may face further discrimination, as a result of intersecting inequalities and context-specific factors, such as age, ethnicity, (dis)ability, location, socio-economic status, migration status, culture, and religion. Further, women and girls, particularly those who face marginalisation due to these and other factors, are among the most physically, economically, and socially vulnerable to climate-related disasters. Women, girls, and people who identify as part of the LGBTQI+¹⁵ community also face heightened risk of violence, harassment, and trafficking within their homes, when collecting water, and in disaster settings, including droughts.

Country examples



Albeit deeply entrenched and difficult to overcome, as we see in **Brazil, Costa Rica** and **Kyrgyzstan**, patriarchal, discriminatory, and violent norms and laws can be minimised. In **Brazil**, women use logbooks to track the produce they grow in their home gardens and tabulate the monthly monetary value of their activities, providing their families with evidence of their contributions to their households and enabling them to share their knowledge with other women through local women’s groups, strengthening their individual capacity and building community. In **Kyrgyzstan**, a group of women is cultivating medicinal herbs on

degraded lands, enabling women to be directly involved in reviving affected land while gaining a sustainable source of income. Supporting and integrating women in nontraditional employment is a strategic action, often led by women themselves. In **Costa Rica** and **Senegal**, women are shifting gender norms through their engagement in traditionally male-dominated domains, like firefighting and beekeeping.

¹⁵ LGBTQI+ stands for lesbian, gay, bisexual, transgender, queer, intersex, plus those who identify within the LGBTQI community but for whom “LGBTQI” does not accurately reflect their identity.

Gendered division of labour and unequal social and economic organisation of care: The survival of individuals, families, societies, and economies depends on care work.¹⁶ Yet, women and girls are shouldering the bulk of this vital labour. When paid and unpaid work are combined, women work longer hours than men, with the gaps even wider in drylands and drought-prone areas. Globally, women and girls devote three times as much time on unpaid care and domestic work, in comparison to men and boys. Climate change and disasters, such as droughts, exacerbate women's and girls' already disproportionate responsibility for care and domestic work, further obstructing their access to paid work and other needs and rendering them more vulnerable to poverty and hardship. This has economic consequences not only for individual households; it also restricts the economies of countries.

Care work must be at the centre of any development model in favour of global sustainability. Actions must reduce women's workloads, adapt to their schedules and availability, and actively – and equitably – engage men in care responsibilities as well. Women's access to decision-making and planning processes, as well as their right and access to ownership of land other production assets, must also be facilitated. And, data must be collected to identify and address gender gaps.

Country examples

Efforts in **Angola**, **Cambodia**, and internationally are helping render the division of labour and care work more equitable. Programming in **Angola** recognises that family diet and nutritional status impact women's participation in project activities, given that women are typically expected to care for ill family members. The critical need for indicators to measure national performance against gender targets is evident in **Cambodia**, the only country to identify actions with indicators to gauge its progress towards reducing women's unpaid care and domestic work. Given the gendered division of labour and unequal social and economic organisation of care hinders women's advancement, targeted measures in line with the 3R framework (recognise, reduce, and redistribute unpaid care work) integrated into initiatives to combat drought can help foster gender equality and enable responsibilities to be shared more equitably. The **Great Green Wall Initiative**, under UNCCD in alliance with UN Women, is helping make strides in this regard.

Concentration of power and hierarchical relations in the public and private spheres: The concentration of power and hierarchical relations in the public and private spheres make it difficult for the voices, perspectives, and experiences of women to be heard and integrated into public policy and practice. Even at the Conference of Parties (COP), there is an evident dearth of women at the table. At the 15th COP, for example, women represented a mere 27 per cent of delegates and 46 of the 134 delegations had no women at all.

¹⁶ Care work encompasses hands-on care for people; the provision of necessary goods and services for people; caring for animals, plants, and common spaces on which households depend, domestic work; communal work, like childcare, which supports personal and household care.

Country examples

Efforts are under way in favour of gender balance in decision-making. The **Special Rapporteur Report** on human rights obligations relating to the enjoyment of a safe, clean, healthy, and sustainable environment further emphasises the need for the perspectives of women and girls to be integrated into climate and environmental decisions influencing the future of humanity. As we see in major financing mechanisms, like the **Green Climate Fund**, **Global Environment Facility (GEF)**, **Global Mechanism**, and **Adaptation Fund**, the requirement to ensure women's participation in drought-related initiatives can help shift change in favour of all, supporting gender equality and improving drought management and response. Nonetheless, even where women are equally represented, measures must be in place to support their active inclusion and engagement and ensure their voices are heard. At a UNFCCC climate conference, for example, women were equally represented among registered delegates, but nevertheless men still spoke three-quarters of the time.

Measures must promote women's leadership, ensure women's equal participation in drought management, and shift norms, by enabling women to take on non-traditional roles and jobs and by empowering women through collectives and associations, where they can pool resources and increase their negotiating power. The benefits of engaging women as leaders of initiatives and as members of women's groups and cooperatives are evident in **Benin**, **Burkina Faso**, **Chile**, **China**, **Ethiopia**, and **Morocco**, where women are leading efforts to revitalise degraded land. In **Morocco**, female engineers are revitalising land and training other women to build their capacities in sustainable and regenerative agricultural techniques, helping improve food security while nurturing the land and empowering local communities.

Likewise, in **China**, women are leading and being mobilised to reforest land and prevent further desertification, using traditional land management techniques like water conservancy, afforestation, and soil conservation, as well as through an innovative rotational grazing technique and rural cooperatives. In **Ethiopia**, reportedly one of the most gender-unequal countries in the world, women's cooperatives are helping combat hunger by restoring degraded land, diversifying their sources of income, and investing in milk processing equipment. In **Chile**, a women-led, community-based group is bringing women together to identify solutions to the impacts of mega-drought, climate change, water scarcity, and soil degradation. Similarly in **Benin** and **Burkina Faso**, women cooperatives are supporting landscape regeneration and sustainable management.



CLOSING OBSERVATIONS

No country is immune to drought and its impacts on food, water, and energy security, forced migration, and natural resource conflicts. Regrettably, no amount of human planning, preparation, or scientific research can completely avoid their impacts. However, preventing social catastrophes is within our collective human capacity.

The onus is on all of us to unlock the potential of half of the world's population. Disregarding the potential of half of the world's population is not merely illogical, even absurd, it is unproductive in economic terms and dangerous in the face of climate change. With women providing countless diverse strategies for adapting to droughts, dismissing this wealth of capability would constitute a monumental oversight in our collective pursuit of addressing climate and land challenges – a misstep that we simply cannot afford.

If there were only one smart investment that countries could make to adapt to droughts, it would be to enhance gender equality and the empowerment of women and girls. However, it must be understood that promoting gender equality and the empowerment of women and girls goes far beyond just 'allowing women to sit at the table'. The scientific community has now widely acknowledged that inequalities are socially constructed drivers of risk and that efforts toward gender-responsive outcomes related to drought resilience and adaptation need to tackle the structural nature of the challenge and the multiple and intersecting forms of discrimination that women face.

